Project/Performance Site Location(s)

-	e Site Primary Location	local or tribal	ing an application as an individual, and not on behalf of a company, state, I government, academia, or other type of organization.
Organization Name:	PECO Energy Comp	pany	
UEI:			
* Street1: 2301 I	Market St		
Street2:			
* City: Philad	delphia		County:
* State: PA: Pe	ennsylvania		
Province:			
* Country: USA: 1	UNITED STATES		
* ZIP / Postal Code:	19103-1338		* Project/ Performance Site Congressional District: PA-003
Project/Performanc Organization Name:			ing an application as an individual, and not on behalf of a company, state, I government, academia, or other type of organization.
-			
Organization Name:			
Organization Name:			
Organization Name: UEI: * Street1:			
Organization Name: UEI: * Street1: Street2:			I government, academia, or other type of organization.
Organization Name: UEI: * Street1: Street2: * City:			I government, academia, or other type of organization.
Organization Name: UEI: * Street1: Street2: * City: * State: Province:			I government, academia, or other type of organization.
Organization Name: UEI: * Street1: Street2: * City: * State: Province:			I government, academia, or other type of organization.
Organization Name: UEI: * Street1: Street2: * City: * State: Province: * Country: USA:			

Application for Federal Assistance SF-424							
* 1. Type of Submissi Preapplication Application Changed/Corre	ion: ected Application	Ne Co	e of Application: w ontinuation wision		If Revision, select appropriate letter(s): Other (Specify):		
* 3. Date Received: 04/04/2023		4. Appli TA1-1	cant Identifier: 68-E	_			
5a. Federal Entity Ide	entifier:]	5b. Federal Award Identifier:		
State Use Only:							
6. Date Received by	State:		7. State Application	n Id	lentifier:		
8. APPLICANT INFO	ORMATION:						
* a. Legal Name: PI	ECO Energy Com	pany					
* b. Employer/Taxpay	ver Identification Nur	nber (EIN	I/TIN):	2	* c. UEI: CVUTQN757LF8		
d. Address:							
* Street1: Street2: * City: County/Parish: * State: Province: * Country: * Zip / Postal Code:	* Street1: 2301 Market St Street2: * City: Philadelphia County/Parish: * State: PA: Pennsylvania Province:						
e. Organizational U	19103-1338			—			
Department Name:]	Division Name:		
f. Name and contact information of person to be contacted on matters involving this application:							
Prefix: Ms. Middle Name: * Last Name: Suffix:							
Title: Director,	(b) (6)			_			
Organizational Affiliation:							
* Telephone Number: (b) (6) Fax Number:							
* Email: PECO.IIJA@exeloncorp.com							

* 9. Type of Applicant 1: Select Applicant Type: 0: For-Profile Organization (Other than Small Business) Type of Applicant 2 Select Applicant Type: 	Application for Federal Assistance SF-424
Type of Applicant 2: Select Applicant Type: Type of Applicant 3: Select Applicant Type: 'Type of Applicant 3: Select Applicant Type: 'Type of Applicant 3: Select Applicant Type: 'Other (specify): '10. Name of Federal Agency: National Energy Technology Laboratory 11. Catalog of Federal Domestic Assistance Number: 81.234 CFDA Title: Still Infrastructure Deployment and Resilience '12. Funding Opportunity Number: Ipp:-rok-0002740 'The: Bill Grid Resilience and Innovation Partnerships (GRIP) 13. Competition Identification Number: Iffe: Tife: Idea: 14. Areas Affected by Project (Citles, Counties, States, etc.): I263-zom ef424.xlsx Add Attachment Delete Attachment View Attachment Attach supporting documents as specified in agency instructions.	* 9. Type of Applicant 1: Select Applicant Type:
Type of Applicant 3. Select Applicant Type:	Q: For-Profit Organization (Other than Small Business)
Other (specify): Other (specify): National Energy Technology Laboratory Il. Gatalog of Federal Agency: National Energy Technology Laboratory Il. Gatalog of Federal Domestic Assistance Number: [31.254	Type of Applicant 2: Select Applicant Type:
Other (specify): Other (specify): National Energy Technology Laboratory Il. Gatalog of Federal Agency: National Energy Technology Laboratory Il. Gatalog of Federal Domestic Assistance Number: [31.254	
*10. Name of Federal Agency: National Energy Technology Laboratory 11. Catalog of Federal Domestic Assistance Number: §1.254 Grid Infrastructure Deployment and Resilience *10. Finding Opportunity Number: DE-FOA-0002740 *TRic: BIL Grid Resilience and Innovation Partnerships (GRIP) 11. Competition Identification Number: Tel: Image: State and Innovation Partnerships (GRIP) 11. Competition Identification Number: Image: State and Innovation Partnerships (GRIP) 12. Competition Identification Number: Image: State and Innovation Partnerships (GRIP) 13. Competition Identification Number: Image: State and Innovation Partnerships (GRIP) 14. Areas Affected by Project (Clites, Counties, States, etc.): 12:3-IOW_sf424.xlsx Add Attachment View Attachment * 15. Descriptive Title of Applicant's Project: PBCO OREARTE Plan: Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia Attach supporting documents as specified in agency instructions.	Type of Applicant 3: Select Applicant Type:
*10. Name of Federal Agency: National Energy Technology Laboratory 11. Catalog of Federal Domestic Assistance Number: §1.254 Grid Infrastructure Deployment and Resilience *10. Finding Opportunity Number: DE-FOA-0002740 *TRic: BIL Grid Resilience and Innovation Partnerships (GRIP) 11. Competition Identification Number: Tel: Image: State and Innovation Partnerships (GRIP) 11. Competition Identification Number: Image: State and Innovation Partnerships (GRIP) 12. Competition Identification Number: Image: State and Innovation Partnerships (GRIP) 13. Competition Identification Number: Image: State and Innovation Partnerships (GRIP) 14. Areas Affected by Project (Clites, Counties, States, etc.): 12:3-IOW_sf424.xlsx Add Attachment View Attachment * 15. Descriptive Title of Applicant's Project: PBCO OREARTE Plan: Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia Attach supporting documents as specified in agency instructions.	
National Energy Technology Laboratory 11. Catalog of Federal Domestic Assistance Number: 81.254 Grid Infrastructure Deployment and Resilience * 12. Funding Opportunity Number: DE-FOA-0002740 * Tide: BIL Grid Resilience and Innovation Partnerships (GRIP) 13. Competition Identification Number: Tite: 14. Areas Affected by Project (Cities, Counties, States, etc.): 1263-LOW_sf424.xlsx * 16. Descriptive Title of Applicant's Project: PECO CREATE Plan: Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia	* Other (specify):
National Energy Technology Laboratory 11. Catalog of Federal Domestic Assistance Number: 81.254 Grid Infrastructure Deployment and Resilience * 12. Funding Opportunity Number: DE-FOA-0002740 * Tide: BIL Grid Resilience and Innovation Partnerships (GRIP) 13. Competition Identification Number: Tite: 14. Areas Affected by Project (Cities, Counties, States, etc.): 1263-LOW_sf424.xlsx * 16. Descriptive Title of Applicant's Project: PECO CREATE Plan: Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia	
11. Catalog of Federal Domestic Assistance Number: 81.254 GFDA Tide: Crid Infrastructure Deployment and Resilience * 12. Funding Opportunity Number: DE-POA-0002740 * Title: BIL Grid Resilience and Innovation Partnerships (GRIP) 13. Competition Identification Number: Image: Competition Identification Number: <	* 10. Name of Federal Agency:
81.254 CFDA Title: Crid Infrastructure Deployment and Resilience * 12. Funding Opportunity Number: DE-F0A-0002740 * Title: BIL Grid Resilience and Innovation Partnerships (GRIP) 13. Competition Identification Number:	National Energy Technology Laboratory
CFDA Title: Grid Infrastructure Deployment and Resilience * 12. Funding Opportunity Number: DE-FOA-0002740 * Title: BIL Grid Resilience and Innovation Partnerships (GRIP) 13. Competition Identification Number: Title: Title: 1263-LOW_sf424.x1sx Add Attachment Delete Attachment View Attachment * 15. Descriptive Title of Applicant's Project: PECO CREATE Plan: Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia	11. Catalog of Federal Domestic Assistance Number:
Grid Infrastructure Deployment and Resilience * 12. Funding Opportunity Number: DE-F0A-0002740 * Title: BIL Grid Resilience and Innovation Partnerships (GRIP) 13. Competition Identification Number: Title: Title: Ite:	81.254
* 12. Funding Opportunity Number: DE-FOA-0002740 * Title: BIL Grid Resilience and Innovation Partnerships (GRIP) 13. Competition Identification Number: Title: Title: 14. Areas Affected by Project (Cities, Counties, States, etc.): 1263-LOM_sf424.xlsx Add Attachment Delete Attachment View Attachment * 15. Descriptive Title of Applicant's Project: PECO CREATE Plan: Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia	CFDA Title:
DE-FOA-0002740 * Title: BIL Grid Resilience and Innovation Partnerships (GRIP) 13. Competition Identification Number:	Grid Infrastructure Deployment and Resilience
*Title: BIL Grid Resilience and Innovation Partnerships (GRIP) 13. Competition Identification Number: 14. Areas Affected by Project (Cities, Counties, States, etc.): 1263-LOW_sf424.xlsx Add Attachment Delete Attachment View Attachment 15. Descriptive Title of Applicant's Project: PECO CREATE Plan: Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia	* 12. Funding Opportunity Number:
BIL Grid Resilience and Innovation Partnerships (GRIP) 13. Competition Identification Number:	DE-FOA-0002740
13. Competition Identification Number:	* Title:
Title: 14. Areas Affected by Project (Cities, Counties, States, etc.): 1263-LOW_sf424.xlsx Add Attachment Delete Attachment View Attachment * 15. Descriptive Title of Applicant's Project: PECO CREATE Plan: Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia Attach supporting documents as specified in agency instructions.	BIL Grid Resilience and Innovation Partnerships (GRIP)
14. Areas Affected by Project (Cities, Counties, States, etc.): 1263-LOW_sf424.xlsx Add Attachment Delete Attachment * 15. Descriptive Title of Applicant's Project: PECO CREATE Plan: Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia Attach supporting documents as specified in agency instructions.	13. Competition Identification Number:
14. Areas Affected by Project (Cities, Counties, States, etc.): 1263-LOW_sf424.xlsx Add Attachment Delete Attachment * 15. Descriptive Title of Applicant's Project: PECO CREATE Plan: Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia Attach supporting documents as specified in agency instructions.	
1263-LOW_sf424.xlsx Add Attachment Delete Attachment View Attachment * 15. Descriptive Title of Applicant's Project: PECO CREATE Plan: Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia Attach supporting documents as specified in agency instructions.	Title:
1263-LOW_sf424.xlsx Add Attachment Delete Attachment View Attachment * 15. Descriptive Title of Applicant's Project: PECO CREATE Plan: Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia Attach supporting documents as specified in agency instructions.	
1263-LOW_sf424.xlsx Add Attachment Delete Attachment View Attachment * 15. Descriptive Title of Applicant's Project: PECO CREATE Plan: Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia Attach supporting documents as specified in agency instructions.	
1263-LOW_sf424.xlsx Add Attachment Delete Attachment View Attachment * 15. Descriptive Title of Applicant's Project: PECO CREATE Plan: Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia Attach supporting documents as specified in agency instructions.	
* 15. Descriptive Title of Applicant's Project: PECO CREATE Plan: Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia Attach supporting documents as specified in agency instructions.	14. Areas Affected by Project (Cities, Counties, States, etc.):
* 15. Descriptive Title of Applicant's Project: PECO CREATE Plan: Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia Attach supporting documents as specified in agency instructions.	Add Attachment Delete Attachment View Attachment
PECO CREATE Plan: Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia Attach supporting documents as specified in agency instructions.	
Greater Philadelphia Attach supporting documents as specified in agency instructions.	* 15. Descriptive Title of Applicant's Project:
	Attach supporting documents as specified in agency instructions.

Application for Federal Assistance SF-424							
16. Congressional Districts Of:							
* a. Applicant PA-003	* b. Program/Project PA-003						
Attach an additional list of Program/Project Congressional Distric							
	Add Attachment Delete Attachment View Attachment						
17. Proposed Project:							
* a. Start Date: 10/01/2023	* b. End Date: 09/30/2028						
18. Estimated Funding (\$):							
* a. Federal (b) (4)							
* b. Applicant							
* c. State 0.00							
* d. Local 0.00							
* e. Other 0.00							
* f. Program Income 0.00 * g. TOTAL (b) (4)							
* g. TOTAL (b) (4)							
* 19. Is Application Subject to Review By State Under Exe							
a. This application was made available to the State und							
b. Program is subject to E.O. 12372 but has not been s	elected by the State for review.						
C. Program is not covered by E.O. 12372.							
* 20. Is the Applicant Delinquent On Any Federal Debt? (I	f "Yes," provide explanation in attachment.)						
If "Yes", provide explanation and attach	Add Attachment Delete Attachment View Attachment						
	nents contained in the list of certifications** and (2) that the statements ny knowledge. I also provide the required assurances** and agree to						
comply with any resulting terms if I accept an award. I am subject me to criminal, civil, or administrative penalties. (a aware that any false, fictitious, or fraudulent statements or claims may U.S. Code, Title 18, Section 1001)						
× I AGREE							
	where you may obtain this list, is contained in the announcement or agency						
specific instructions.							
Authorized Representative:							
Prefix: * Fir	rst Name: (b) (6)						
Middle Name: (b) (6)							
* Last Name:							
Suffix:							
* Title: Manager, (b) (6)							
* Telephone Number: (b) (6)	Fax Number:						
* Email: PECO.IIJA@exeloncorp.com							
* Signature of Authorized Representative: (b) (6)	* Date Signed: 04/04/2023						

BUDGET INFORMATION - Non-Construction Programs

Grant Program Catalog of Federal **Estimated Unobligated Funds** New or Revised Budget Function or Domestic Assistance Activity Number Federal Non-Federal Federal Non-Federal Total (a) (b) (c) (d) 1. BIL - Grid 81.254 \$ \$ \$ Resilience and Innovation Partnership (GRIP) DE-FOA-0002740 Topic Area 1 40101(c) 2. 3. 4. 5. \$ \$ Totals \$

SECTION A - BUDGET SUMMARY

Standard Form 424A (Rev. 7- 97) Prescribed by OMB (Circular A -102) Page 1

SECTION B - BUDGET CATEGORIES

6. Object Class Categories	GRAN	T PROGRAM, FUNCTION OR A	ACTIVITY	Total
	(1) (2)	(3)	(4)	(5)
	BIL - Grid Resilience and Innovation Partnership (GRIP) DE-FOA-0002740 Topic Area 1 40101(c)			
a. Personnel	(b) (4)			
b. Fringe Benefits				
c. Travel				
d. Equipment				
e. Supplies				
f. Contractual				
g. Construction				
h. Other				
i. Total Direct Charges (sum of 6a-6h)				
j. Indirect Charges				
k. TOTALS (sum of 6i and 6j)				
7. Program Income				

Prescribed by OMB (Circular A -102) Page 1A

	SECTION C - NON-FEDERAL RESOURCES								
	(a) Grant Program		(b) Applicant	(c) State	(d) Other Sources	(e)TOTALS			
8.	BIL - Grid Resilience and Innovation Partner FOA-0002740 Topic Area 1 40101(c)	ership (GRIP) DE-	(b) (4)						
9.									
10.									
11.									
12.	TOTAL (sum of lines 8-11)		(b) (4)						
		SECTION	D - FORECASTED CASH	NEEDS	1				
		Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	_		
	Federal Non-Federal	(b) (4)							
15.	TOTAL (sum of lines 13 and 14)								
	SECTION E - BU		-						
	(a) Grant Program			FUTURE FUNDING	PERIODS (YEARS)				
			(b)First	(c) Second	(d) Third	(e) Fourth			
16.	BIL - Grid Resilience and Innovation Partne FOA-0002740 Topic Area 1 40101(c) (Budget 1		(b) (4)						
17.									
18.									
19.			(b) (4)						
20.	20. TOTAL (sum of lines 16 - 19)								
		SECTION I	F - OTHER BUDGET INFOR	MATION					
21.	21. Direct Charges: 22. Indirect Charges (b) (4)								
23.	23. Remarks: Subrecipients cost share is included in Section C (b) Applicant of this form. PECO will cover indirect costs separately/internally and will not submit for reimbursement.								

Authorized for Local Reproduction

Standard Form 424A (Rev. 7- 97) Prescribed by OMB (Circular A -102) Page 2

DISCLOSURE OF LOBBYING ACTIVITIES

Complete this form to disclose lobbying activities pursuant to 31 U.S.C.1352

OMB Number: 4040-0013 Expiration Date: 02/28/2025

1. * Type of Federal Action:	2. * Status of Federal Action:	3. * Report Type:
a. contract	a. bid/offer/application	a. initial filing
b. grant	b. initial award	b. material change
c. cooperative agreement	c. post-award	
d. loan		
e. loan guarantee f. loan insurance		
4. Name and Address of Reporting	Entity:	
* Name PECO Energy Company		
* Street 1 2301 Market Street	Street 2]
*City Philadelphia	State PA: Pennsylvania	Zip 19103-1338
Congressional District, if known: PA-003		
5. If Reporting Entity in No.4 is Suba	wardee, Enter Name and Address of	Prime:
6. * Federal Department/Agency:		ogram Name/Description:
Department of Energy (DOE)	Grid Infrastructur	re Deployment and Resilience
	CFDA Number, if app	licable: 81.254
8. Federal Action Number, if known:	9. Award Amo	unt, if known:
DE-FOA-0002740	\$	
10. a. Name and Address of Lobbyin	g Registrant:	
Prefix Mr. * First Name Matthew	Middle Name	
*Last Name Miller		′
* Street 1 10 South Dearborn Street	Street 2	
* City Chicago	State IL: Illinois	Zip
b. Individual Performing Services (inc	luding address if different from No. 10a)	
Prefix First Name	Middle Name	
* / act Name		
N/A		
* Street 1	Street 2	
* City	State	2ip [
reliance was placed by the tier above when the trans		pursuant to 31 U.S.C. 1352. This information will be reported to
the Congress semi-annually and will be available for \$10,000 and not more than \$100,000 for each such the	public inspection. Any person who fails to file the required d failure.	isclosure shall be subject to a civil penalty of not less than
* Signature: (b) (6)		
Zhleme:		e Name
* First Nar	(b) (6)	
* Last Name (b) (6)		Suffix
Title: Director, PECO Strategy	Telephone No . (b) (6)	Date: 04/04/2023
Federal Use Only:		Authorized for Local Reproduction Standard Form - LLL (Rev. 7-37)



CREATE Plan

Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia

Applicant Name: PECO Energy Company (PECO)¹

Funding Announcement Number: DE-FOA-0002740

Concept Paper Identification No: TA1-168-E

 Topic Area 1: Grid Resilience Grants (Bipartisan Infrastructure Law (BIL) Section 40101(c))
 Teaming Partners: City of Philadelphia, Pennsylvania Department of Environmental Protection Energy Programs Office, Pennsylvania Department of Transportation, Fund for the School District of Philadelphia, Philadelphia Industrial Development Corporation, Urban Affairs Coalition, and Greater Philadelphia Chamber of Commerce

Business/Administrative Point of Contact	Technical Point of Contact
(b) (6)	(b) (6)
Director, PECO Strategy	VP, PECO Projects & Contracts
PECO.IIJA@exeloncorp.com	PECO.IIJA@exeloncorp.com

CREATE incorporates targeted improvements and partnerships across PECO's service territory, which includes Bucks, Chester, Delaware, Montgomery, Philadelphia, and York counties.



¹ Exelon, PECO's parent company, has signed onto Outage Data Initiative Nationwide (ODIN), a voluntary program to promote increasing standardization of outage data.

Project Overview

Background

PECO Energy Company (PECO or the Company), a subsidiary of Exelon Corporation, is headquartered in Philadelphia and is Pennsylvania's largest electric and natural gas utility, employing over 2,800 people and delivering power to nearly 1.7 million electric customers in southeastern Pennsylvania. With a history of more than 140 years of service to the Greater Philadelphia region, PECO has a long-standing commitment to deliver safe, reliable, and resilient energy to the customers and communities it serves.

PECO hopes to further this commitment through an investment in additional critical energy infrastructure and community-based initiatives to Create a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia, hereafter referred to as "CREATE" or the "Plan."

The objective of CREATE is to catalyze a generational transformation of southeastern Pennsylvania's energy landscape, centered around Lower South Philadelphia, through a combination of targeted, resilience-focused infrastructure investments and comprehensive community-based collaborations. The Plan will advance the objectives of the Department of Energy's (DOE) Grid Resilience and Innovation Partnership Program (GRIP) (Topic Area 1 – 40101(c)) by reducing the likelihood and consequence of impacts to the electric grid due to extreme weather and rising sea levels.

Lower South Philadelphia is an innovation and economic development hub key to the region's continued inclusive growth. The area is located at the confluence of the Delaware and Schuylkill rivers, forming one of the oldest industrial, trade, and transportation centers in the United States. With an international airport, deep water port, interstate highways, passenger and freight rail connections, nearby research universities, national security assets, and 2 of the largest economic redevelopment centers in the country, the area is uniquely positioned to serve as a life sciences, intermodal trade, logistics, and innovation hub for the Northeast Corridor. This low-lying area sits at less than 10 feet of elevation and is vulnerable to climate-driven flooding and other extreme weather events, creating the need for infrastructure modernization that ensures the resilience of this area. Adjacent to this center of economic activity are densely populated, diverse, urban neighborhoods with high concentrations of poverty that require access to a clean environment, education, transportation, and job training to participate in the future growth and vitality of this area.

Project Goal

The End of Project Goal is to enhance service resilience and reliability, with a concentrated focus on disadvantaged communities (DACs) across the PECO service territory – 43% of localized, distribution grid benefits and climate resilience improvements will go towards Justice40 DAC customers. All of PECO's 1.7 million customers, 30% of whom reside in DACs, will

benefit from additional upgrades along (b) (4) . CREATE will support more than (b) (4) opportunities across the region and align with PECO's (b) (4) diverse supplier spend target. DOE grant funding will comprehensively address future grid vulnerabilities, reduce carbon emissions through the retirement of legacy diesel generators and the reduction of backup diesel generator usage in Center City Philadelphia, and add (b) (4) distribution capacity for future electrification growth, such as new electric vehicle (EV) charging stations.

PECO has identified 3 critical success factors to achieve the goals outlined above:

- 1. **People**: Community support for its infrastructure projects, availability of a skilled labor workforce, and PECO's technical expertise to deliver innovative solutions. (*See Qualifications and Experience and the Community Benefits Plan for more detail*)
- 2. **Technology**: Innovative technology that supports PECO's Climate Resilience Strategy, achieves deployment at-scale, and leads to additional private sector investment. (*See Innovation Impacts and Innovation Risk Mitigation for more details*)
- 3. **Process**: Robust project management practices built upon PECO's 140-year experience of designing, building, and commissioning electric infrastructure (*See Project Management for more details*)

DOE Funding Impact

PECO invested over \$6.5 billion in electric infrastructure upgrades between 2013 and 2022. However, PECO recognizes the upward pressure on customer bills created by large-scale investments, requiring the Company to balance the pace of investments with affordability impacts. DOE grant funding will allow PECO to pursue incremental resilience upgrades while limiting the associated customer bill impact.

PECO currently has (b) (d) million budgeted (as shown in the Report on Resilience Investments) for targeted component upgrades of the Conowingo and Amtrak ROWs and underground infrastructure in Center City Philadelphia. DOE grant funding will allow PECO to build upon these foundational investment plans, include innovative technologies mentioned in the "Innovation and Impacts" section below, and embark on new scopes of resiliency work, including the Lower South Philadelphia Substation, Substation Flood Mitigation, Campus Microgrid, and partnerships including Clean and Resilient Community Schools, and Pennsylvania Department of Transportation (PennDOT), all of which are components of CREATE. (See Relevance, Outcomes, and Grid Benefits for individual component details)

In concert with CREATE, PECO will make fully self-funded investments to connect new transmission lines to the Lower South Philadelphia Substation and will seek to improve structures and foundations along sections of the Conowingo ROW to support the proposed conductor replacement.

Community Benefits (Job Quality, Equity, and DACs)

Economic models forecast that the roughly \$250 million in capital investment associated with CREATE will have a total employment impact of (b) (4). Through the CREATE Plan, PECO pledges to work with a broad range of leading community partners, including the Greater Philadelphia Chamber of Commerce, the Philadelphia Urban Affairs Coalition (UAC), the Energy Coordinating Agency (ECA), Opportunities Industrialization Coalition (OIC), the Philadelphia Energy Authority (PEA) and the Greater Philadelphia Chamber of Commerce to establish or support programs that focus on providing training and development opportunities to individuals from DACs. The Company will give priority consideration to entities that consider graduates of these programs and the workforce development programs of other community-based organizations that serve DACs.

PECO intends to use both Company and contractor labor for the implementation of CREATE. PECO's approximately 1,300 non-management field craft personnel and call center employees are represented by the International Brotherhood of Electrical Workers Local 614 (IBEW 614). In addition to craft employees, a majority of PECO's Contractors of Choice are represented by trade unions as well. In April 2021, PECO and IBEW 614 ratified a labor agreement that continues to provide PECO's represented workforce with a competitive wage and benefits package.

Approximately (b) (4) the customers directly benefitting from the localized, distribution grid resilience components of the CREATE Plan live in DACs. In addition, all of PECO's 1.7 million electric customers will broadly benefit from proposed upgrades at our Storm Response Center and along (b) (4) (b) (4) of those customers live in DAC's.

CREATE also incorporates extensive labor and community engagement provisions, including the establishment of a new Environmental Justice Advisory Committee and the Clean and Resilient Community Schools initiative, as well as leveraging PECO's extensive education, workforce development and diverse vendor programs in support of the Plan. (*See Community Benefits Plan for more details*)

Potential Long-term Constraints on Natural Resources

PECO has determined that the CREATE Plan is not expected to have a significant impact on the communities' access to natural resources.

To identify and prevent adverse environmental impacts and avoid potential long-term constraints on natural resources, PECO has and will continue to leverage its Environmental Management System (EMS), which received ISO 14001 Certification in 2008. ISO 14001 Certification is the globally recognized "gold" standard for promoting effective, systematic management of environmental risks and opportunities. Built on the "Plan, Do, Check, Act" model, EMS enables PECO to systematically manage environmental risks and opportunities; improve environmental performance by clarifying environmental accountabilities, roles, and responsibilities; integrate environmental concerns and performance improvement into business decision-making and planning; improve business performance as environmental costs are better managed, planned for, and reduced over time; and increase credibility and strengthen relationships with external stakeholders.

Climate Resilience Strategy

The CREATE Plan will advance PECO's "Path to Clean" by implementing clean energy technology, enabling additional electrification capacity, and retiring diesel gas generators. Path to Clean outlines the Company's commitments to reduce operations-driven emissions by 50% by 2030, partner with customers and communities to help them meet their climate goals, and achieve net-zero operations-driven emissions by 2050. In addition, PECO has committed to (1) make significant investments to modernize its energy infrastructure to increase resilience in the face of intensifying weather patterns, (2) develop more efficient ways to manage and modernize the grid through innovation, and (3) advocate for energy efficiency, solar, and transportation electrification policies that advance clean and affordable energy access for all.

PECO also continues to leverage its industry leading emergency response facilities to respond to impacts from extreme weather events and provide mutual assistance support to other utilities throughout the country. Further, the proposed Campus Microgrid battery will both harden PECO's Berwyn Storm Response Center facility and provide valuable insights for future microgrid resilience implementations at the Company and across the region.

Technical Description, Innovation, and Impact

Relevance, Outcomes and Grid Benefits

PECO reviewed the objective and goals of CREATE, outlined in the Project Overview, to ensure alignment with the eligible uses and technical approaches authorized and prioritized under Topic Area 1 in the FOA. CREATE will address 2 critical grid challenges that can impede the transition to a clean, resilient, and equitable energy future: (1) limits on large-scale electrification capacity, and (2) climate-vulnerable and aging infrastructure. Addressing these challenges will require a multi-component approach to provide additional capacity on some of PECO's constrained distribution circuits and reduce outage frequency and duration in areas vulnerable to extreme weather events. This, in turn, will enable continued customer-driven electrification and deployment of distributed energy resources (DER) technologies such as solar, battery storage, and EVs.

CREATE Components

The CREATE Plan is seeking to drive resiliency, reliability, and capacity improvements across southeastern Pennsylvania to improve the lives of citizens and businesses. The Plan is comprised of 7 grid components that will allow PECO to address time-sensitive climate resilience needs in light of recent weather events and maximize the impact of federal funding in

this economic center, which serves the 4-state Delaware Valley metropolitan region of the U.S. CREATE components will address vulnerable areas of PECO's service territory that are susceptible to the types of severe weather events that impact families, communities, and businesses, and meet Section 40101(c) eligible uses (A), (B), (C), (F), (H), (K), and (L). (See Innovation and Impacts for more details on alignment with eligible uses)

Lower South: (b) (4)

The Lower South component of CREATE will add a

new substation to be located at the Navy Yard that will reduce the forecasted peak load form on the Packer and Southwark Substations and improve the reliability of electricity supply to the Navy Yard due to its proximity. The additional capacity will also enable the continued expansion and electrification of key drivers of economic growth in this area, including the Navy Yard, Bellwether District, PhilaPort, Philadelphia International Airport (PHL), and Lower Schuylkill Master Plan.

(See letters of support from the City of Philadelphia, PHL, PIDC, and Sysco Corporation. The Innovation Risk Mitigation section also contains more details on economic growth areas)

Philadelphia Underground Risk Mitigation Initiative (PURMI): (b) (4)

component of CREATE will rejuvenate (b) (4) infrastructure in Center City Philadelphia by retiring 100-year-old cable and replacing communications platforms with underground real-time monitoring equipment. These upgrades will minimize the time required to troubleshoot disruptions and reduce the frequency and duration of outages.

Substation Flooding Mitigation: PECO's Grays Ferry and Pencoyd Substations experienced a 100-year flood event caused by Hurricane Ida in 2021. (b) (4)

component of CREATE will relocate the entire Pencoyd Substation to a more climate-resilient location, eliminating equipment damage from a 500-year flood event. The new substation will have an increased voltage and improve the resilience and reliability of adjacent circuits. Additionally, this component will relocate an existing spare autotransformer from the Grays Ferry Substation, eliminating the risk of equipment damage from a 500-year flood event. This relocation includes the design and construction of a new foundation to support 3 spare transformers, the restoration of a rail spur for transformer deliveries, and the inclusion of a physical perimeter to meet PECO security requirements.

. The PURMI

. This

Amtrak: PECO has an agreement to utilize an Amtrak ROW along the Northeast corridor spanning from the Pennsylvania-Delaware state line to central Philadelphia. As part of CREATE, PECO is proposing to upgrade aging Amtrak ROW foundations, overhead conductors, and transmission structures. The Amtrak component will extend the life of existing transmission circuits by over 50 years and (b) (4) while maintaining existing ground line clearance.



Conowingo and Amtrak ROW are interconnected with the PJM grid, thus providing interregional resilience benefits.

The Campus Microgrid: This component will implement innovative smart energy technology at PECO's Berwyn, Pennsylvania Storm Response Center to support resilient storm response activities during a distribution system outage. The advanced microgrid controller functionality and **(b) (4)** will allow for the retirement of 3 legacy diesel backup generators and underground fuel tanks and support a seamless transition to the microgrid's backup power within 1 second in the event of a grid power loss. This deployment of advanced grid technologies to support critical emergency response infrastructure will provide a template for future application of these technologies at the corporate, regional, and industry levels.

PennDOT: In partnership with PECO, PennDOT will execute a pilot program to deploy (b) (4) systems that will provide enhanced resiliency for its critical traffic monitoring equipment and communications control system, preventing highly disruptive outages during extreme weather events. PECO recognizes that outages from extreme weather events can impact other essential infrastructure networks and have multiple disruptive effects on the larger community. Successful demonstration of this pilot will provide visibility to critical points in the region's transportation network and deliver insights on the scaling potential of this technology, including identifying optimal battery sizes, duration capacities, equipment protection, and system integration requirements.

(See CBP for details on community benefits, including Clean and Resilient Community Schools)

Feasibility

PECO has conducted extensive planning and a comprehensive review of the execution, technology, stakeholder, and financial risks for all components of CREATE. At the beginning of the planning phase, PECO identified 3 critical success factors, outlined in the Project Goals section of the Project Overview, to ensure the successful implementation of the CREATE Plan: People, Technology, and Process. (*See Project Management and Qualifications and Experience sections for more details on the critical success factors*)

Between 2013 and 2022, PECO invested over \$6.5 billion in non-storm, electric capital, including reliability and resilience infrastructure investments. Approximately \$275 million of this investment was executed under PECO's Long-Term Infrastructure Improvement Plan (LTIIP) and focused on the replacement of aging infrastructure and storm hardening through reconstructing facilities to make them less susceptible to the impact of extreme weather conditions.

Additionally, PECO has experience working with the DOE on execution, compliance, and oversight of large infrastructure projects, particularly the DOE's \$200 million grant to support PECO's \$406 million Smart Grid/Smart Meter (SGSM) project that deployed more than 600,000 advanced meter infrastructure (AMI) meters, a comprehensive bidirectional communications infrastructure, advanced supervisory control and data acquisition, grid-connected network devices, IT system enhancements, and customer-side technology demonstrations. Since then, PECO has continuously scaled-up its investment in the innovative use of its AMI infrastructure, completing AMI meter installation for all 1.7 million of its electric customers and 500,000 gas customers.

Innovation and Impacts

To transform the southeast Pennsylvania region, guide it towards a resilient, clean, and equitable energy future, and advance the objectives of Topic Area 1, CREATE must implement state-of-the-art technology that exceeds industry standards and current-state grid technology.

Lower South²: The new Lower South Philadelphia Substation will be equipped with fire monitoring and fire-resistant technology, which will reduce the impact of a substation fire. The consequences of extreme weather events will be addressed by weatherizing critical substation equipment and elevating it above the 500-year floodplain. The substation will provide greater capacity and resilience to critical national security infrastructure and relieve capacity constraints at adjacent substations that serve vital infrastructure customers and neighborhoods with a high percentage of DACs. The new substation's location within the Navy Yard will eliminate approximately 20 miles of old underground cables serving this area. The Lower South component will also include a partnership project with Philadelphia Industrial Development Corporation (PIDC) to develop a business case for a resilient electric supply solution serving multiple life sciences companies that will include multiple back-up sources and ride-through

² Investments consistent with IIJA Section 40101(c) eligible uses (A), (B), (C), and (K)

capability to ensure smooth transition to alternate sources and enable future private sector investment.

PURMI³: PECO plans to rejuvenate underground assets in Center City Philadelphia through the following innovative engineering solutions: upgrading monitoring and control technologies, redesigning system configuration, and adding infrastructure access points, all of which would minimize the time required to troubleshoot disruptions. In addition, PECO will repackage and install additional duct banks to prepare for future load growth within Center City Philadelphia to support EV charging stations and other sources of electrification. This component will accelerate and inform PECO's evaluation of potential strategies for upgrading the aging underground distribution infrastructure in PECO's service territory. PURMI also incorporates additional breakdowns, switching points, and hand holes at the secondary taps, avoiding community-disruptive street digs to locate faults. These upgrades will significantly increase grid resilience by reducing the frequency and duration of outages.

Substation Flood Mitigation⁴: Advanced technologies and hardening measures used to reduce the consequence of disruptive events will include the following: traveling wave fault locators to improve restoration efforts and reduce outage durations, a 13kV switchgear housed indoors for climate resilience and hardening of the 13kV distribution system, 13kV circuit breakers with remote racking capabilities to enhance operational safety, fire-resistant walls between the power transformers, new microprocessor relays with monitoring and control technologies on both the 13kV distribution and 230kV transmission systems, and 5 miles of new overhead optical ground wire (OPGW) to increase communication capacity through a critical fiber path.

Amtrak⁵: The transmission facilities serving numerous DACs, including the City of Chester, where more than 30% of residents live in poverty, will be completely rebuilt with HTLS conductors, to enable additional capacity, harden power lines against extreme weather events, and reduce the risk of power outages. PECO will coordinate this work with Amtrak's own planned upgrades along the ROW. DOE funding will support PECO's effort to execute work on a compressed timeline to align with Amtrak's engineering and construction schedule.

Conowingo⁶: With a maximum output of 572MW, the Conowingo Hydroelectric Station in Darlington, Maryland supplies emissions-free electricity to PECO's service territory. PECO has identified upgrading the Conowingo Transmission ROW facilities as a priority component of CREATE, including (b) (4)



⁴ Investment consistent with IIJA Section 40101(c), eligible uses (B), (C), and (K)

⁵ Investment consistent with IIJA Section 40101(c), eligible uses (A), (F), (K), (L), and (M)

⁶ Investment consistent with IIJA Section 40101(c), eligible uses (A), (F), (K), (L), (M)

Campus Microgrid⁷: The proposed Campus Microgrid component will add a (b) (4) at PECO's Storm Response Center in Berwyn, Pennsylvania, one of PECO's most critical operations and storm response centers. Integrating this battery storage system with the existing microgrid controller will allow for the hardening of critical systems, improve restoration response during extreme weather events, and enable the retirement of 3 diesel backup generators. The Campus Microgrid will also provide valuable insight through developing, testing, and evaluating these advanced energy technologies and serve as a model blueprint for the hardening of other critical operation and emergency response centers in PECO's territory. DOE funding would support PECO's mission to deploy innovative technology, supporting similar resilience upgrades in the future.

PennDOT⁸: This component includes the deployment of battery storage devices to harden existing equipment such as traffic monitoring and communication devices at critical locations on State highways. The battery storage facilities will enable these PennDOT devices to continue uninterrupted operation after disruptive weather events, supporting critical public safety functions and providing a potential model for similar deployments across the State.

Support of State, Local, Tribal, Regional and National Resilience

CREATE is designed to advance the environmental, energy resilience, and economic goals established by State and local policy leaders while achieving the objectives of the IIJA and GRIP.

State Level: In 2012 Pennsylvania enacted legislation permitting utilities, including electric distribution companies, to seek approval of Distribution System Improvement Charges (DSIC) to allow recovery of eligible costs under utility LTIIP⁹. Since then, PECO has received approval for a DSIC and 2 electric LTIIP plans: (1) LTIIP I (2016-2020), which included an additional \$274.3 million invested to deploy advanced equipment and reinforce the electric system; and (2) LTIIP II (2021-2025), which includes a planned investment of \$1.36 billion to reduce the frequency and duration of outages, support grid modernization, and improve reliability. CREATE's planned investments and improvements are both separate from and incremental to the Company's planned LTIIP II investments. (*See Report on Resilience Investments for more information on the investment breakdown*)

More recently, Pennsylvania established its Climate Action Plan 2021 which outlines a pathway to reaching Pennsylvania's GHG reduction goals: 26% from 2025 levels and 80% by 2050.¹⁰ CREATE will assist Pennsylvania's efforts to achieve its ambitious greenhouse gas reduction

⁷ Investment consistent with IIJA Section 40101(c), eligible use (H), and (K)

⁸ Investment consistent with IIJA Section 40101(c), eligible use (H), and (K)

⁹ Act 11 of 2012. 66 Pa.C.S. § 1353 (a). The General Assembly of the Commonwealth of Pennsylvania, 14 Feb. 2012, https://www.legis.state.pa.us/WU01/LI/LI/US/HTM/2012/0/0011..HTM

¹⁰ 2021 Pennsylvania Climate Action Plan. Pennsylvania Department of Environmental Protection, Sep. 2021, http://www.depgreenport.state.pa.us/elibrary/GetDocument?docId=3925177&DocName=2021%20PENNSYLVANI A%20CLIMATE%20ACTION%20PLAN.PDF%20%20%3cspan%20style%3D%22color:green%3b%22%3e%3c/span%3e %20%3cspan%20style%3D%22color:blue%3b%22%3e%28NEW%29%3c/span%3e%209/21/2023

goals by providing additional hosting capacity for charging in South Philadelphia and for electrification projects in both Center City Philadelphia and the Lower South Philadelphia economic development region. The CREATE Plan is supported by Governor Shapiro, Pennsylvania's U.S. senators, and the region's House delegation, and the bipartisan leaders of the General Assembly's utility oversight committees. (See Community Partnership Documentation)

City Level: Philadelphia has committed to achieving carbon neutrality by 2050 and released its Climate Action Playbook establishing the City's first Environmental Justice Commission.¹¹ The Climate Action Playbook outlines three sustainability actions that the City will prioritize: (1) reducing Philadelphia's contribution to climate change; (2) utilizing nature as a solution to climate pollution, and (3) adapting to a changing climate to prepare Philadelphia for more severe weather events in the future. These initiatives are being implemented simultaneously with the City's efforts to establish an integrated transportation infrastructure vision for the Lower South Philadelphia region, which is complementary to CREATE, supporting decarbonization efforts and fostering economic development. The CREATE Plan enjoys the support of the City of Philadelphia, the suburban counties where work will be executed, labor, community, and local business organizations. (See Community Partnership Documentation)

Local Level: 42 suburban municipalities and counties within PECO's service territory have passed "Ready for 100" resolutions supporting the transition to 100% renewable energy. In addition to their support for enhanced access to clean energy solutions, these suburban municipalities are vulnerable to climate-driven extreme weather, which has led to 8 of the 10 most destructive storms in PECO's more than 100-year history occurring in the last 12 years. Hurricanes Irene (2011), Hurricane Sandy (2012), Ice Storm Nika (2014), Derecho (2020), Tropical Storm Isaias (2020), and Hurricane Ida (2021) all resulted in hundreds of thousands of customer outages, requiring massive resource deployments. CREATE will support climate resilience in PECO's service territory by relocating or replacing vulnerable infrastructure and supporting community-level clean energy investments through additional hosting capacity.

Innovation Risk Mitigation

CREATE reduces innovative technology risk and enables significant private sector investment by renewing aging infrastructure and adding load capacity across PECO's territory, thus providing opportunities for deploying sustainable energy solutions, economic expansion, and additional private sector investment. PECO has established partnerships with local stakeholders who will leverage CREATE's solutions to deploy EV charging solutions and DERs that will contribute to a more resilient grid throughout South Philadelphia and targeted areas in PECO's service territory.

Specific regional growth projects that the Lower South component will enable include:

¹¹ *Philadelphia Climate Action Playbook*. The City of Philadelphia Office of Sustainability, Jan. 2021, https://www.phila.gov/media/20210113125627/Philadelphia-Climate-Action-Playbook.pdf

- The Navy Yard: PIDC has led the remarkable redevelopment of the former military facility into a community of 15,000 employees and 150 employers. Future plans call for \$6 billion of new investment over the next 20 years, resulting in an estimated 12,000 new jobs. The Navy Yard development team has pledged over \$1 billion to diversity, equity, inclusion, and accessibility hiring initiatives while planning and building out the 109-acre project¹².
- The Bellwether District: Hilco Redevelopment Partners (Hilco), a nationally recognized leader in brownfield transformation, is reinventing the former Philadelphia Energy Solution refinery into a 1300-acre, state-of-the-art campus. Hilco will remediate and redesign the site into a green, sustainable development and economic engine for Philadelphia. As an employment hub, it will generate an estimated 19,000 new jobs over 15 years¹³.
- *PhilaPort:* PhilaPort is an essential economic driver, not only in Philadelphia, but also across the region, providing employment opportunities and enabling trade. Because electrification will be a critical element supporting the port's continued growth, \$3.5 billion in future anticipated capital investment is planned.
- *Philadelphia International Airport:* Philadelphia International Airport is embarking on an ambitious cargo expansion plan that will nearly triple capacity and stimulate the region's economic development. This expansion is expected to have an estimated employment impact of 28,000 new jobs¹⁴.
- Lower Schuylkill Master Plan: The Lower Schuylkill Master Plan envisions a 21st-century industrial district for the 3,700-acre area that integrates exciting opportunities for new and growing businesses with sustainable features. This project is projected to attract over \$860 million in private investment and an estimated 6,500 new jobs while establishing an integrated green network with 5 miles of new trails and 46 acres of new green space in an underserved area of Philadelphia. The development capacity is more than 6 million square feet of space, and the estimated economic impact is \$63 billion¹⁵.

The CREATE plan will also provide numerous benefits to reduce technology risk, achieve further deployment at scale, and increase private sector investments.

 Renewed infrastructure, installed as part of the Substation Flood Mitigation, PURMI, Conowingo, and Amtrak components, will support load growth, allowing for EV charging stations and DER integration. PURMI will also add new underground access points, supporting future implementations of automated equipment, and providing opportunities to coordinate with other infrastructure systems in Philadelphia's underground network.

 ¹² The Navy Yard | Philadelphia, PA. Retrieved March 27, 2023, from https://navyyard.org/who-we-are
 ¹³ Hilco Redevelopment Partners. The Bellwether District | Next Starts Here. Retrieved March 27, 2023, from https://www.thebellwetherdistrict.com/

¹⁴ Brown, F. (2021, June 14). *PHL Announces Significant Air Cargo Expansion Strategy*. PHL.org. Retrieved March 27, 2023, from https://www.phl.org/newsroom/cargo-expansion

¹⁵ The Lower Schuylkill Master Plan. PIDC Philadelphia. Retrieved March 27, 2023, from

https://www.pidcphila.com/images/uploads/resource_library/LSMP_ExecSummary.pdf

- The Amtrak upgrades will support future operations at a higher voltage, creating
 opportunities for follow-on investments by PECO after the GRIP's 5-year execution
 window. These potential follow-on investments could include substation upgrades and
 system configuration updates necessary to increase the Amtrak line's transmission
 capacity, enabling increased transmission of reliable electricity into nearby DACs.
- Berwyn's Campus Microgrid will provide a demonstration of DER and automated equipment, further bolstering PECO's emergency response facilities and offering a template for first responder organizations throughout the region. A strong storm response center will take a proactive approach to reduce storm-related damages and lower overall investment risk for new grid technology. The Campus Microgrid will serve as a model, providing valuable insights for future implementations at the corporate, regional, and industry levels.

Workplan

Project Objectives

The objective of CREATE is to catalyze a generational transformation of southeastern Pennsylvania's energy landscape through a combination of targeted infrastructure investments and comprehensive community-based collaborations to reduce the likelihood and consequence of impacts to the electric grid due to extreme weather and rising sea levels. The expected outcomes are two-fold:

Grid Outcomes

- Lower South: Reduce forecasted peak load from (b) (4) on adjacent circuits. Produce a resilient electric supply business case for the Navy Yard economic innovation center.
- **PURMI**: Rejuvenate (b) (4) infrastructure in Center City Philadelphia and retire 100-year-old cable to reduce outages and high-impact manhole events.
- Substation Flood Mitigation: Eliminate outages from water intrusion to substation switchgear building, control house and critical spare power transformers during a 100-year or 500-year flood event. Reconstruct rail spur to support timely shipping of 3 spare substation transformers for emergent transformer failures.
- Amtrak: Rebuild (b) (4) and extend the life of existing PECO transmission circuits by 50+ years to reduce outage events. Rebuild two 230kV circuits with high temperature low sag (HTLS) conductor to increase existing line ratings by over 50% while maintaining existing ground line clearance.
- Conowingo: (b) (4)

- **Campus Microgrid**: Ensure continued operations at PECO's Berwyn Storm Response Center during extreme weather events by enabling islanding mode and transition to backup power within 1 second.
- **PennDOT**: Maintain power and communications to ensure visibility into transportation infrastructure during extreme weather events at 2 critical transportation hubs.

Community Outcomes

- **Clean and Resilient Community Schools:** Deploy (b) (4) in funding for communitybased climate resilience and clean energy investments at Title 1 public schools.
- Establish Environmental Justice Advisory Committee: Create a standing forum for discussion of energy impacts and opportunities with grassroots representatives of DACs.
- Workforce Development Programs: Link CREATE employment opportunities to training programs and convene annual meetings to connect workforce development boards, training programs, and employers.
- Vendor Diversity Initiative: Align with PECO's commitment to work to ensure (b) (4) vendor contracts will be executed with MWBE qualifying businesses.

(See CBP for more details on community outcomes)

Technical Scope Summary

To meet the Plan's objective, CREATE must address 2 critical grid challenges that can impede the transition to a clean, resilient, and equitable energy future: (1) limits on large-scale electrification capacity and (2) climate-vulnerable and aging infrastructure. This will be achieved by:

- Lower South: Constructing a new substation in Lower South Philadelphia elevated above a 500-year floodplain and developing a business case that includes feedback from stakeholders, recommended engineering solutions and cost, and proposed funding mechanisms for a Life Sciences Resiliency Campus at the Navy Yard.
- **PURMI**: Upgrading underground monitoring and control technologies in Center City Philadelphia.
- **Substation Flood Mitigation**: Demolishing and rebuilding the Pencoyd Substation with higher transmission voltage and above the 500-year floodplain. Relocating a critical spare autotransformer above the 500-year floodplain at Grays Ferry Substation.
- **Amtrak**: Replacing or rebuilding aging foundations, overhead conductors, and transmission structures. Utilize new HTLS conductor to increase ratings.
- Conowingo: (b) (4)
- **Campus Microgrid**: Installing (b) (4) system and integrating it into the existing microgrid controller.
- **PennDOT**: Deploying backup batteries at 2 critical transportation hubs.

(See CBP for community benefits scope, including Clean and Resilient Community Schools) (See Project Schedule and Milestone Summary for performance periods and decision points)

Work Breakdown Summary (WBS) and Task Description

The 4-step WBS below is consistent with PECO standard project and program management practices. Please refer to the Statement of Project Objectives (SOPO) for a detailed description of each task and subtask. All components, except for PURMI and the Clean and Resilient Community Schools partnership, will follow Tasks 2, 3, and 4 sequentially as execution progresses over time. Because the construction of PURMI lies in the center of the City of Philadelphia, PECO will determine a specific scope of 2 to 3 city blocks at the beginning of each budget period to be completed within the same budget period. (*See Community Benefits Plan (CBP) for the Clean and Resilient Community Schools work plan timeline*).

Task 1.0 – Project Management and Compliance Oversight (All Budget Periods)

PECO will perform project management activities to include project planning and control, subcontractor control, financial management, data management, management of supplies and/or equipment, risk management, environmental compliance (NEPA), and reporting as required to successfully achieve the overall objectives of the Plan and strict compliance of federal grant requirements. The following 4 subtasks will be performed routinely throughout the 5-year execution period and cover all budget periods.

Subtask 1.1 – Project Management Plan (PMP) Subtask 1.2 – National Environmental Policy Act (NEPA) Compliance Subtask 1.3 – Cybersecurity Plan (CSP) not applicable to 40101(c) Subtask 1.4 – Annual Pre-Continuation Briefing(s) Subtask 1.5 – Periodic Progress Review with Community Stakeholders

Task 2.0 – Preliminary Design and Permitting

PECO will develop a preliminary project diagram, review the conceptual design with stakeholders, acquire property, obtain necessary permits, and identify and order long lead material and equipment. To ensure the completion of the Conowingo transmission upgrade component within the DOE's 5-year grant performance period, PECO has started Subtask 2.1 and plans to complete the entirety of Task 2 by end of 2023.

Subtask 2.1 – Perform Preliminary Project Diagram and Acquire Property Subtask 2.2 – Complete Conceptual Design and Obtain Required Permit

Task 3.0 – Detailed Design

PECO will perform a detailed component design, procure vendor drawings and submittals, obtain approvals, and permits from regulatory agencies and state/local governments, award contracts, and order all equipment and material required for construction. Community stakeholders will also be engaged to review PECO's detailed design. To align the Company's

schedule with Amtrak's planned construction timing, PECO completed Task 2 in 2022 and plans to start Subtask 3.1 prior to the DOE's 5-year grant performance period.

Subtask 3.1 – Perform Detailed Design and Obtain Approvals Subtask 3.2 – Complete Procurement and Award Contracts

Task 4.0 – Final Construction

PECO will perform the required construction based on its detailed design, electrify the equipment, and close out the components once successfully completed. This also includes the Clean and Resilient Community Schools Partnership execution.

Subtask 4.1 – Complete Construction, Equipment Installation and Testing Subtask 4.2– Energize Equipment, Place In-Service, and Complete Post Construction Documentation

Milestone Summary and Go/No-Go Decision Points

Milestones

PECO will demonstrate the Plan's progress and accomplishments through quarterly milestones that will be reviewed and evaluated at the end of each quarter. These milestones will serve as guidelines to ensure that the Plan is on-track and progressing toward its End of Project Goals. PECO will obtain specific documentation, such as progress reports, contract sign-off, and regulatory approvals listed in the Milestone Summary and Go/No-Go Decision Points table below, to verify the success of each SMART milestone. PECO will share this documentation upon the DOE's request and during annual pre-continuation reports.

Go/No-Go Decision Points

As part of annual pre-continuation briefing with the DOE, PECO leadership will perform annual, Plan-wide Go/No-Go decision meetings to determine if the CREATE Plan should proceed. These meetings will consist of a thorough review of the schedule, scope, and budget. This review process will include an evaluation of component and community benefits milestones and End of Project Goals to ensure that the Plan continues to advance the objectives of the DOE's GRIP Program and deliver benefits and economic opportunities to workers, local communities, and DACs. The agenda, details, and reporting methods of the Go/No-Go decision meetings will be finalized in the Project Management Plan and shared with the DOE within 30 days of an award.

Below is the comprehensive list of all Milestones and Go/No-Go decision in the CREATE Plan.

Mile	stone	Summary and Go/No-Go Decision Points	Component(s)	#
	Q1	Complete Project Management Plan*	All	1
	Q2	Acquire property and receive property purchase agreement	SFM, Lower S.	2
		Go/No-Go: Submit annual Pre-Continuation Briefing for budget period 1	All	3
H	Q3	Receive approval from Pennsylvania Public Utility Commission*	Conow., Amtrak	4
Year 1		Award contract to battery supplier	Campus Microgrid	5
Ye	isk is	Year 1 scope energized*	PURMI	6
	Q4	Complete Opportunity Youth, MWBE Vendor, and Workforce Plan. Host EJAC Steering Committee kick-off. *	СВР	7
	2	Finalize Clean & Resilient Community Schools Sub-Recipient Contract*	Clean Schools/CBP	8
	Q1	Conceptual design for Year 2 scope completed	PURMI	9
		Award contract for detailed design/engineering services	SFM	10
	Q2	Deploy battery storage devices on existing equipment*	PennDOT	11
	Q3	Collaborate with customers/stakeholders on detailed design on substation	Lower S.	12
r 2	1000	Go/No-Go: Submit annual Pre-Continuation Briefing for budget period 2	All	13
Year 2		Complete construction on Amtrak Line 1 and Conowingo Circuit 1*	Conow., Amtrak	14
>		Year 2 scope energized*	PURMI	15
		Complete civil and electrical design	Campus Microgrid	16
	Q4	Complete detailed substation design*	Lower S.	17
		Complete PIDC Subrecipient business case	Lower S.	18
	27 27	First Clean & Resilient Community Schools grants awarded	Clean Schools/CBP	19
	Q1	Conceptual design for Year 3 scope completed	PURMI	20
	Q2	Complete receipt of all approvals and permits*	SFM, Lower S.	21
	de co	Go/No-Go: Submit annual Pre-Continuation Briefing for budget period 3	All	22
m	02	Review with customers/stakeholders and commence construction	Lower S.	23
Year 3	Q3	Battery equipment ready for electrical, communications, and control work	Campus Microgrid	24
		Complete construction on Amtrak Line 2 and Conowingo Circuit 2*	Conow., Amtrak	25
	Q4	Year 3 scope energized*	PURMI	26
		Host Regional Environmental Justice Forum	СВР	27
	Q1	Conceptual design for Year 4 scope completed	PURMI	28
	Q2	Review with customers/stakeholders on progress	Lower S.	29
4	02	Go/No-Go: Submit annual Pre-Continuation Briefing for budget period 4	All	30
Year 4	Q3	Complete testing of battery energy storage system and place in service*	Campus Microgrid	31
ž		Complete and energize Circuit 3*	Conowingo	32
	Q4	Year 4 scope energized*	PURMI	33
		Complete full funding of Clean & Resilient Community Schools budget*	Clean Schools/CBP	34
	Q1	Conceptual design for Year 5 scope completed	PURMI	35
2	Q2	Complete installation of substation devices*	SFM	36
Year	Q3	Issue final progress report on customer/stakeholder engagement	Lower S.	37
Ye	Q4	Complete Lower South, SFM, CBP, and PURMI Year 5 scope*	Lower S., PURMI, SFM, CBP	38
100214	i. It	cates a SMART Milestone		
*	India	ales a sivianti milestone		

End of Project Goal

PECO's End of Project Goal is to enhance service resilience and reliability for its customers, with a concentrated focus on DACs across PECO's service territory – (b) (4) ocalized distribution grid benefits and climate resilience improvements will go towards Justice40 Disadvantaged Community (DAC) customers. All of PECO's 1.7 million customers – (b) (4) which are in DACs – will benefit from upgrades to PECO's Berwyn Campus Storm Response Center and (b) (4) extending the usable life by more than 50 years. CREATE will support more than (b) (4) opportunities across the region and align with PECO's (b) (4) certified diverse supplier spend target. DOE grant funding will comprehensively address future grid vulnerabilities, reduce carbon emissions through the retirement of legacy diesel generators and the reduction of backup diesel generator usage in Center City, and add (b) (4) of increased distribution capacity for future EV charging capabilities.

2	Y	'ear	1 (0	(TR)		Year	2 (QT	R)	Y	Year 3 (QTR) Year 4 (QTR)			Year 5 (QTR)							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Project Mgmt	1		3				13				22				30					
Component	s																			
Lower S.*		2					12	17/ 18		21	23			29					37	38
PURMI				6	9			15	20			26	28			33	35			38
SFM		2				10				21								36		38
Campus MG			5					16			24				31					
Conow.			4					14				25				32				
Amtrak			4					14				25								
PennDOT*						11														
Community	Ber	nefit	s Pla	an (Se	e CBI	for i	nore	detail	s)								5. 			w.
Clean Schools /CBP*				7/8				19				27				34				38
/CBP* Image: CBP (CBP) Legend Task 1: Project Management Task 2: Project Planning, Preliminary Design, and Permitting Task 3: Details Design Task 4: Final Construction * Involves Subrecipients # Milestone Reference Number (Red) Indicates a Go/No-Go																				

Project Schedule

Buy American Requirements

Based on M-22-11, the Buy America requirements of the BIL do not apply to DOE projects in which the prime recipient is a for-profit entity. Because PECO is a for-profit entity, the Buy America requirements do not apply. However, PECO is committed to supporting the procurement of domestic equipment and supplies in support of the CREATE program.

Project Management

Management Approach

PECO will leverage its proven model for effective project management, timely execution, and budget performance for all infrastructure investment projects. PECO's Chief Operating Officer is responsible for the governance, oversight, support, and performance of all projects, ensuring performance and financial management. PECO's Vice Presidents (VPs) of Technical Services, Transmission and Substation Operations, Project Management, and Regulatory Policy and Strategy (collectively, the Executive Sponsors), will be responsible for executing all components of CREATE, bringing decades of leadership experience in a broad range of senior operational roles throughout the organization. These Executive Sponsors will identify a full-time lead project manager who will be responsible for coordinating all workstreams incorporated in the Plan. PECO's project managers are required to meet strict qualifications imposed by its parent company Exelon. The lead project manager, which is subject to those qualifications, will convene weekly meetings of all project principles to track progress toward goals and deliverables, monitor budgets, identify risks, and ensure program integration.

PECO will also establish a dedicated compliance office under the leadership of its VP of Project Management, which will be responsible for DOE grant funding budget performance, updating the DOE on scheduled conference calls and meetings, and submitting annual pre-continuation briefing documents.

For the CREATE Plan's subrecipient projects (PennDOT, PIDC and Clean and Resilient Community Schools), PECO's community impact leads will provide updates on milestone progress and budget performance from subrecipients and work with PECO's DOE funding compliance office to include in overall CREATE plan update to the DOE.

PECO will complete all oversight in accordance with the PMP, consistent with the applicable Federal Assistance Reporting Checklist and Instructions. PECO and its subrecipients will complete all financial management practices and associated tracking in accordance with the PMP.

Management Structure

To ensure achievement of overall objectives, PECO, along with its subrecipients, will leverage the management structure in the following diagram during the execution of the Plan.

Over the 5-year project window, the PECO CREATE Compliance PMO will facilitate annual, program-wide Go/No-Go reviews with DOE. (*See Milestone Summary and Go/No-Go Decision Points*)

Technical and Management Aspects of Management Plan

PECO will adhere to all elements of the PMP and ensure that all project management practices, systems, and communication procedures align with DOE requirements. The lead project manager will coordinate weekly internal core team meetings and monthly internal team meetings with the Plan's participants, as needed. The CREATE Team will be encouraged to raise any concerns or issues with their Plan components during these meetings. In the event of a project change, consistent with PECO standards and expectations, the lead project manager will identify project variances from targeted performance early in the evaluation process to allow time for



course correction. All subrecipients, subcontractors and other participants actively performing work will be required to prepare weekly status/financial reviews for all scope elements, with the goal of identifying deviations from the planned schedule and budget as early as possible so they can be corrected.

Reducing Perceived Risk and Enabling Private Sector Investment

PECO recognizes that significant infrastructure and community projects contain inherent risks such as supply chain, labor, permitting, land and ROW, among others. PECO has established a Project Risk Register containing a comprehensive risk inventory that is updated regularly and reviewed to evaluate risks and mitigation strategies.

The following are examples of mitigation plans for some common risks:

- Supply Chain Risk: Leads for each CREATE component will identify long lead time equipment once a detailed design is complete and will work closely with the supply procurement team to place a timely order of key equipment.
- *Permitting, Land and ROW*: PECO has engaged landowners such as the PIDC who has indicated its support for CREATE. PECO has obtained letters of support from the City of

Philadelphia and all county governments where permitting, land and ROW acquisition will be required. (*See Community Partnership Documentation*)

• Labor: PECO's Project Management Office (PMO) uses a competitive sourcing process to attract and retain diverse contractors and suppliers, while leveraging long-term strategic contracts to obtain optimal pricing for resources. The PMO also meets with PECO's contractor community monthly to maintain strategic partnerships and ensure alignment on safety, diversity, and customer priorities supporting PECO's immediate and long-range capital work plans. The PMO routinely shares long-range work plans with internal stakeholders to ensure roles are adequately staffed for work plan expansion.

Quality Assurance/Quality Control (QA/QC)

PECO will deploy its standard QA/QC process, including but not limited to: (1) adherence to all scope and process elements; (2) review of all deliverables by relevant personnel (e.g., technical experts, executive sponsors, compliance office) prior to deliverable completion; (3) review of all data by the compliance office, prior to finalization, and for data sets collected over time, at least a monthly review by the compliance office; and (4) identification and review of QA/QC issues or concerns in the monthly meeting lead by the compliance office.

Technical Qualifications and Resources

Qualifications and Experience

PECO's project managers have working knowledge of PMO methodology and possess a diverse knowledge base in areas such as organization, planning, communication, problem-solving, leadership, budgeting, conflict management, negotiating, and team building. Consistent with Exelon policy, the lead project manager is required to hold a Project Management Institute (PMI®) certification, which serves as a globally recognized endorsement of project management knowledge and experience. Senior project managers, who will be utilized for CREATE, are required to have the Certified Associate Project Management (CAPM®) credential, which validates knowledge of the principles and terminology of PMI® standards and best practices in project management.

Additionally, PECO's President and Chief Executive Officer, Mike Innocenzo, served as the SGSM VP throughout the majority of PECO's 2009 Smart Future Greater Philadelphia, bringing direct experience with the execution and compliance responsibilities associated with federally supported infrastructure projects.

CREATE's Executive Sponsors have the following experience:

- (b) (6) , VP of Technical Services, oversees the overall management of PECO's Central Engineering, Vegetation Management, and Investment Strategy departments.
- (b) (6) VP of Transmission and Substation Operations, oversees the safe and reliable operation of PECO's electric transmission system, including transmission and

- substation construction, operation and maintenance, and NERC Reliability Standards Compliance.
- (b) (6) , VP of Projects and Contract Controls, oversees project management, construction, and capital spend.
- (b) (6) , VP of Regulatory Policy and Strategy, oversees the Company's regulatory strategy, policy and regulatory affairs, acting as PECO's interface with the Pennsylvania Public Utility Commission.

Experience with Teaming Partners

CREATE has the support of all critical teaming partners identified on the cover page of this Technical Volume. As the electric utility serving the City of Philadelphia and its surrounding counties for more than a century, PECO has extensive experience dealing with all these organizations, as well as with the broader communities served by the Company.

For example, PECO has extensive experience with the City of Philadelphia, including key departments such as Streets, Licenses and Inspections, Labor, Planning and Development, Emergency Management, and Sustainability. PECO places a priority on collaboration with the City and all municipalities in its service territory. PECO is working with the City to align strategies for the Lower South Philadelphia electric infrastructure enhancements with broader infrastructure planning being led by the City and key governmental and private sector organizations operating in this area. Similarly, the PURMI component requires extensive coordination with City agencies and operators of other forms of infrastructure located within the Center City underground network, including the City-owned natural gas and water companies.

PIDC is a public-private industrial development corporation that owns and operates the Navy Yard redevelopment and other City-owned properties. In addition to other functions, PIDC operates the electric infrastructure within the Navy Yard's footprint, distributing power delivered through PECO substations. PECO has partnered with the PIDC and Navy Yard management team for decades, helping meet the energy capacity and reliability needs of this area, even before its rapid growth and geographic challenges have made collaboration essential. PECO has assisted PIDC in the development of its Energy Master Plan to transform the property into a state-of-the-art microgrid, incorporating DERs and enhanced resilience.

PECO will work directly with Amtrak to coordinate infrastructure upgrades, as part of the Amtrak component of CREATE, with the railway's existing plan to upgrade service infrastructure along the East Coast. PECO also has decades of experience coordinating with PennDOT on project execution and collaborated closely with the Department on developing the battery storage pilot.

In addition, PECO works with several Exelon-approved vendors and technology partners on a regular basis and anticipates utilizing such vendors as a part of the CREATE implementation. While PECO is still in the detailed design phase of the Plan, it has engaged in conversations with critical path vendors such as (b) (4) for power transformer equipment.

Equipment and Facilities

PECO leveraged its 3 critical success factors - People, Technology, and Process - described in the Project Overview to perform a comprehensive risk analysis of access to equipment and facilities. As a result, the Company is confident in the execution of CREATE within the GRIP Program execution period. Through established vendor relationships, including industry-leading diverse vendor programs, PECO's Supply and Investment Strategy organizations have already begun planning for the acquisition of equipment and facilities needed to implement the project components incorporated into CREATE.

Most CREATE components are located on PECO-owned property. As such, PECO will be able to leverage its existing equipment and facilities for those portions of the Plan. For components on property owned by third parties, such as the Lower South and PURMI, PECO will leverage its External Affairs, Transmission, and Substation, Project Management, Real Estate, and other departments to engage the appropriate community stakeholders to secure landowner consent. PECO and the PIDC have initiated discussions on the location and characteristics of the Lower South component, building on long-standing discussions between the organizations of future capacity needs for the property. Regarding access to the Center City underground to complete the PURMI, PECO will coordinate with relevant City departments, other entities that may own underground infrastructure in proximity, and customers to develop minimally disruptive work strategies and schedules.

Key Personnel Qualifications and Time Commitment

PECO has leveraged lessons learned from previous project experience to carefully estimate and plan the resources required to deliver CREATE on time and on budget. Planned resources include support across project management, technical design and engineering, construction and contractors, workforce development, and community engagement. PECO's PMO will provide the leadership and time needed to drive tracking and accountability across commitments outlined in this application including the program schedule, budget, SMART milestones and goals, and community and grid benefits.

A Corporate Community Impacts Team, comprised of Governmental and Community Impact leads, will include dedicated resources to evolve and implement an impactful CBP over the duration of the Plan's performance period and beyond. This team will drive broad and frequent feedback from local stakeholders that will be fastidiously communicated and incorporated to improve local project impacts.

Key individuals from PECO's centralized planning and management team are identified below. More details about personnel can be found in the Budget Justification Workbook in this application, which outlines direct project labor estimates of approximately 45,500 hours over the course of the Plan execution period. In addition, specific roles and labor hours are not listed for any planned contracted design, construction, and staff augmentation for GRIP compliance activities, which total over \$196 million. *(see section 6.0 of CBP for additional resource time commitments)*

Name	CREATE Plan Role	Title
(b) (6)	Governmental Lead	Senior Manager, State Government Affairs
	Financial Control	Director, Finance
	Lower South Stakeholder Engagement	Senior Manager, Economic Development
	Project Manager	Principal Project Manager
	Technical Expert	Principle Engineer
	Environmental Compliance	Senior Manager, Environment
	Supply	Director, Diverse Business Empowerment
	Technical Expert	Manager, Transmission Substation Engineering
	Community Impact Lead	Director, Corporate Community Impact
	PennDOT Lead	Acting Senior Manager, Traffic Operations Division
	Clean and Resilient Community Schools Lead	Vice President of Development
, ,	PIDC Lead	Director Smart Grid & Sustainability

DOE Services

If grant funding is awarded, PECO and all its identified partners have the additional planning, policy, financing, data management, and technology resources required to complete the scope of work on time and on budget. PECO will keep in close communication with the DOE to provide progress reporting and follow the DOE's feedback. However, PECO does not anticipate needing technical services from the DOE, NNSA, or FFRDCs.

U.S. DEPARTMENT OF ENERGY

ENVIRONMENTAL QUESTIONNAIRE

I. INSTRUCTIONS

The proposer shall prepare this Environmental Questionnaire (EQ) as accurately and completely as possible. Supporting information can be provided as attachments. The proposer must identify the location of the project and specifically describe the activities that would occur at that location. The proposer must provide specific information and quantities, regarding air emissions, wastewater discharges, solid wastes, etc., to facilitate the necessary review. In addition, the proposer must submit with this EQ a FINAL copy of the project's statement of work (SOW) or statement of project objective (SOPO) that will be used in the contract/agreement between the proposer and the U.S Department of Energy (DOE).

II. <u>QUESTIONNAIRE</u>

A. PROJECT SUMMARY

1.	Solicitation/Project Number:	DE-FOA-0002740	Proposer:	PECO Energy	Company
			COMPOSION SCHOOL STREET WAS		

2. <u>This</u> Environmental Questionnaire pertains to a: 🔀 Recipient or Prime Contractor 🔲 Sub-recipient or Subcontractor

Telephone Number:

- 3. Principal Investigator: (b) (6)
- 4. Project Title: PECO CREATE plan ("The plan")
- 5. Expected Project Duration: ⁵ years
- 6. Location of Activities covered by <u>this</u> Environmental Questionnaire: (City/Township, County, State): Philadelphia, Philadelphia, Pennsylvania
- 7. List the full scope of activities planned (only for the location that is the subject of this Environmental Questionnaire). The proposed projects in The Plan are in the preliminary design phase; specific locations and construction activities have not yet been finalized. During project planning and execution, PECO will utilize its Project Environmental Checklist Procedure (see attached EN-PE-08012.docx) to ensure compliance with all applicable environmental requirements.
- 8. List all other locations where work would be performed by the primary contractor of the project and subcontractor(s). Each of the following must have an individual Environmental Questionnaire.

Subcontractor or sub-recipient	Location of activities for this project	

9. Identify and select the checkbox with the predominant project work activities under Group A, B, or C

Group A

Routine administrative, procurement, training, and personnel actions. Contract activities/awards for management support, financial assistance, and technical services in support of agency business, programs, projects, and goals. Literature searches and information gathering, material inventories, property surveys; data analysis, computer modeling, analytical reviews, technical summary, conceptual design, feasibility studies, document preparation, data dissemination, and paper studies. Technical assistance including financial planning, assistance, classroom training, public meetings, management training, survey participation, academic contribution, technical consultation, and stakeholders surveys. Workshop and conference planning, preparation, and implementation which may involve promoting energy efficiency, renewable energy, and energy conservation.

STOP! If all work activities related to this project can be classified and described within categories under Group A, proceed directly to Section III CERTIFICATION BY PROPOSER. No additional information is required. If project work activities are described in either Group(s) B or C; then continue filling out questionnaire.

NETL F 451.1-1/3 Revised: 12/3/2014 Reviewed: 12/3/2014 (Page 2)

U.S. DEPARTMENT OF ENERGY

ENVIRONMENTAL QUESTIONNAIRE

Group B

Laboratory Scale Research, Bench Scale Research, Pilot Scale Research, Proof-of-Concept Scale Research, or Field Test Research. Work <u>DOES NOT</u> involve new building/facilities construction and site excavation/groundbreaking activities. This work typically involves routine operation of <u>existing</u> laboratories, commercial buildings/properties, offices and homes, project test facilities, factories/power plants, vehicles test stands and components, refueling facilities, utility systems, or other existing structures/facilities. Work will NOT involve major change in facilities missions and operations, land use planning, new/modified regulatory/operating permit requirements. Includes work specific to routine DOE Site operations and Lab research work activities, but NOT building construction and site preparation. DOE work typically involves laboratory facilities and lab equipment operations, buildings and grounds management activities; and buildings and facilities maintenance, repairs, reconfiguration, remodeling, equipment use and replacement.

Group C

Pilot Test Facilities Construction, Pilot Scale Research, Field Scale Demonstration, or Commercial Scale Application. Work typically involves facility construction, site preparation/excavation/groundbreaking, and/or demolition. This work would include construction, retrofit, replacement, and/or major modifications of laboratories, test facilities, energy system prototypes, and power generation infrastructure. Work may also involve construction and maintenance of utilities system right-of-ways, roads, vehicle test facilities, commercial buildings/properties, fuel refinery/mixing facilities. This work may require new or modified regulatory permits, environmental sampling and monitoring requirements, master planning, public involvement, and environmental impact review. Includes work specific to DOE Site Operations and Lab operation activities involving building and facilities construction, replacement, decommissioning/demolition, site preparation, land use changes, or change in research facilities mission or operations.

B. PROPOSED PROJECT ALTERNATIVES

1. If applicable, list any project alternatives considered to achieve the project objectives.

C. PROJECT LOCATION

1. Provide a brief description of the project location (physical location, surrounding area, adjacent structures).

The Plan includes proposed project work in the Southeast Pennsylvania region. City, state and zip codes are listed in the LOW.xlsx attachment.

2. <u>Attach</u> a project site location map of the project work area.

See attachment ENV_PECO_Map

D. ENVIRONMENTAL IMPACTS

NEPA procedures require evaluations of possible effects (including land use, energy resource use, natural, historic and cultural resources, and pollutants) from proposed projects on the environment.

1. Land Use

ź

ı.	Characterize present land use where the proposed project would be located.						
	✔ Urban	~	Industrial	~	Commercial		Agricultural
	✓ Suburban	~	Rural		Residential		Research Facilities
	Forest		University Campus		Other:		

Identify the total size of the facility, structure, or system and what portion would be used for the proposed project.
 To be determined during detailed design.

U.S. DEPARTMENT OF ENERGY

ENVIRONMENTAL QUESTIONNAIRE

c. Describe planned construction, installation, and/or demolition activities, i.e., roads, utilities system right-of-ways, parking lots, buildings, laboratories, storage tanks, fueling facilities, underground wells, pipelines, or other structures.
 No construction would be anticipated for this project.

The Plan will involve various construction activities associated with redesigned electrical infrastructure and will likely include demolition activities.

d. Describe how land use would be affected by operational activities associated with the proposed project.

No land areas would be affected.

Land use will be consistent with the current activities on each of the sites and will minimally disrupt/disturb the current use at each of the sites.

e. Describe any plans to reclaim areas that would be affected by the proposed project.

✓ No land areas would be affected.

We will not be reclaiming land areas based on the construction activities.

f. Would the proposed project affect any unique or unusual landforms (e.g., cliffs, waterfalls, etc.)?
 No
 Yes (describe)

PECO does not anticipate that any unique or unusual landforms will be impacted by this work. Additional information will be collected during detailed project siting to confirm.

g. Would the proposed project be located in or near local, state, or federal parks; forests; monuments; scenic waterways; wilderness; recreation facilities; or tribal lands? 🖸 No 🔽 Yes (describe)

PECO anticipates conducting physical inspections and assessments of all bodies of water near the project sites, including the Susquehanna, Delaware and Schuylkill Rivers.

2. Construction Activities and/or Operation

🖸 No

a. Identify project structure(s), power line(s), pipeline(s), utilities system(s), right-of-way(s) or road(s) that will be constructed and clearly mark them on a project site map or topographic map as appropriate.

PECO anticipates construction of electrical infrastructure, although specific locations and project details are not finalized. See LOW and ENV_PECO_Map for anticipated locations.

Yes (describe and identify location, and estimate surface area disturbed)

b. Would the proposed project require the construction of waste pits or settling ponds?

с.	Would the proposed project affect any existing body of water? INO Yes (describe)
	PECO anticipates only nominal impacts, such as storm-water runoff associated with construction. Water body impacts will be evaluated more fully during project design.
d.	Would the proposed project impact a floodplain or wetland? No Yes (describe)
	A portion of the project may be conducted in a regulated floodplain. None of the work is planned in any waterway or expected to impact wetlands, pending further assessment.
e.	Would the proposed project potentially cause runoff/sedimentation/erosion?
	Proposed work may require state and county storm-water permitting and/or implementation of erosion and sedimentation controls for subsurface utilities and substation construction.
f.	Would the proposed project include activities located on perma-frost, near fault zones, or involve fracturing, well drilling, geologic stimulation, sequestration, active seismic data collection, and/or deepwater operations? Image: No mathematical content of the set

U.S. DEPARTMENT OF ENERGY

ENVIRONMENTAL QUESTIONNAIRE

g.	Would the proposed project involve any of the following: nanotechnology; recombinant DNA or genetic engineering; facility decommissioning or disposition of equipment/materials; or management of radioactive wastes/materials?
3.	Biological Resources
a.	Identify any State or Federally listed endangered or threatened plant or animal species potentially affected by the proposed project.
	During project design and prior to construction, PECO will assess any federally or state the catened and endangered species and will develop mitigation plans as needed.
6.	Would revy designated critical habitat be affected by the proposed project?
	PECO will conduct an assessment of habitat during the siting of the work. If critical habitats are identified, the project siting and scope may require modification.
	Describe any impacts that construction would have on any other types of sensitive or unique habitats. No planned construction Image: No habitats Image: None Image: Image: Image: Image: Image: None
	PECO will conduct an assessment of habitat during the siting of the work. If sensitive or unique habitats are identified, the project siting and scope may require modification.
d.	Would any foreign substances/materials be introduced into ground or surface waters, soil, or other earth/geologic resource because of project activities? How would these foreign substances/materials affect the water, soil, biota, and geologic resources? No Yes (describe)
	If foreign substances are encountered during demolition of existing structures, they will be removed and disposed according to standard practices.
e.	Would any migratory animal corridors be impacted or disrupted by the proposed project? 🔽 No 🔲 Yes (describe)
	PECO will conduct a biological and habitat assessment during project siting to identify any migratory animal corridors that may be impacted or disrupted.
4.	Socioeconomic and Infrastructure Conditions
a.	Would local socio-economic changes result from the proposed project? In No I Yes (describe)
	PECO anticipates that The Plan will allow for additional economic development by community partners.
b.	Would the proposed project generate increased traffic use of roads through local neighborhoods, urban or rural areas? No Yes (describe)
	A temporary increase in traffic will likely occur during construction activities.
c.	Would the proposed project require new transportation access (roads, rail, etc.)? Describe location, impacts, costs. No Yes (describe)
d.	Would the proposed project create a significant increase in local energy usage? No 🔽 Yes (describe)
	The proposed work includes the upgrade of electrical infrastructure to accommodate increased electrical load projected by future large scale industrial/residential electrical users.
ENVIRONMENTAL QUESTIONNAIRE

5. Historical/Cultural Resources

Describe any historical, archaeological, or cultural sites in the vicinity of the proposed project; note any sites included on a. None the National Register of Historic Places. PECO will assess historical, archaeological and cultural resources during project siting in accordance with the National Historic Preservation Act and related state requirements. Would construction or operational activities planned under the proposed project disturb any historical, archaeological, or b. No planned construction No historic sites Yes (describe) V No Impact (discuss) cultural sites? PECO does not anticipate that its project construction or operational activities will disturb any historical, archaeological, or cultural sites and will assess further. Has the State Historic Preservation Office been contacted with regard to this project? c. PECO will coordinate with the State Historic Preservation Office as required during the above mentioned assessments in 5a/5b. d. Would the proposed project interfere with visual resources (e.g., eliminate scenic views) or alter the present landscape? No Yes (describe) There is no proposed new construction outside of an existing commercial/industrial area, to be further assessed during detailed design and project siting. Would the proposed project be located on or adjacent to tribal lands, lands considered to be sacred, or lands used for e. traditional purposes? Describe any known tribal sensitivities for the proposed project area.

Based on current knowledge, The Plan's project areas are not within known tribal lands, lands considered to be sacred, or lands used for traditional purposes.

6. Atmospheric Conditions/Air Quality

a. Identify air quality conditions in the immediate vicinity of the proposed project with regard to attainment of National Ambient Air Quality Standards (NAAQS). This information is available under the Green Book Non-Attainment Areas for Criteria Pollutants located at <u>http://www.epa.gov/air/oaqps/greenbk/astate.html</u>

	Attainment	Non-Attainment
O ₃ - 1 Hour		Y
O ₃ - 8 Hour		¥
SO _x	~	
PM - 2.5	~	
PM - 10	~	
СО	~	
NO ₂	~	
Lead	~	

b. Would proposed project require issuance of new or modified local, state, or federal air permits to perform project related work and activities? \square No \checkmark Yes (describe)

 $\ensuremath{\texttt{PECO}}$ will evaluate permitting obligations associated with any temporary and stationary generation.

c. Would the proposed project be in compliance with local and state air quality requirements? Yes If not, please explain.

ENVIRONMENTAL QUESTIONNAIRE

- Would the proposed project be classified as either a New Source or a major modification to an existing source?
 No
 Yes (describe)
- e. What types of air emissions, including fugitive emissions, would be anticipated from the proposed project, and what would be the maximum annual rate of emissions for the project?

	Maximum per Year	Total for Project				
✓ SO _x	tbd	tbd				
✓ NO _x	tbd	tbd				
✔ PM - 2.5	tbd	tbd				
✔ PM - 10	tbd	tbd				
✔ CO	tbd	tbd				
CO ₂	tbd	tbd				
Lead						
H ₂ S						
Organic solve	nt vapors or other volatile	organic compoundsList:				
Hazardous air	pollutants List:					
Other List:						
None None						

f. Would any types of emission control or particulate collection devices be used?
 Yes (describe, including collection efficiencies)

g. How would emissions be vented?

Emissions will be vented to the atmosphere.

7. Hydrologic Conditions/Water Quality

a. What nearby water bodies may be affected by the proposed project? Provide distance(s) from the project site.

Nearby water bodies include the Susquehanna, Delaware and Schuylkill Rivers. Any affects from the project will be assessed as project details are finalized.

b. What sources would supply potable and process water for the proposed project?

Potable water will likely be provided by Philadelphia Water Department (PWD), Aqua America, or the Cecil County Water and Sewer Division. No process water is anticipated to be used.

f.

i.

j.

k.

1.

U.S. DEPARTMENT OF ENERGY

ENVIRONMENTAL QUESTIONNAIRE

Quantify the wastewater that would be generated by the proposed project. c.

		Gallons/day	Gallons/year	
	Non-contact cooling water	Currents any		
	Process water			
	Sanitary	tbd		
	Other describe:	tbd	(see 7d)	
	None			
d.	What would be the major components of <u>each</u> type of wastewater (e.g., c.	cal finas)?	No wastowato	r produced
u.	PECO anticipates that sanitary sewer wastewater and gr will be generated. Constituent components will be anal	oundwater fr	om construct	ion dewatering
e.	Identify the local treatment facility that would receive wastewater from the No discharges to local treatment facility	he proposed pro	ject.	
	As required, sanitary sewer discharge will be connecte Treatment Works (POTW) (e.g. PWD, Tredyffrin Township			Owned
f.	Describe how wastewater would be collected and treated.		No wastewate	r produced
	Sanitary wastewater will be conveyed to the POTW using interconnection. Construction dewatering will be chara	subsurface cterized pri	piping with lor to discha	an Irge.
g.	Would any run-off or leachates be produced from storage piles or waste of	lisposal sites?	🗸 No 🗌 Yes (describe source)
h.	Would project require issuance of new or modified water permits to perfo	orm project wor	k or site develop	ment activities?
	A stormwater discharge permit may be required dependin	g on the are	ea of disturb	pance.
i.	Where would wastewater effluents from the proposed project be discharg	ged? 🗌 No	wastewater prod	luced
	Sanitary wastewater will be conveyed to the POTW using interconnection. Construction dewatering will be chara	subsurface cterized pri	piping with lor to discha	an Irge.
j.	Would the proposed project be permitted to discharge effluents into an ex No Yes (describe water use and effluent impact)	cisting body of v	water?	
	A stormwater discharge permit may be required dependin	g on the are	ea of disturb	pance.
k.	Would a new or modified National Pollutant Discharge Elimination System No Yes (describe)	em (NPDES) pe	rmit be required	?
	Depending on the area of disturbance associated with t required for stormwater discharge.	he project,	an NPDES per	mit may be
1.	Would the proposed project adversely affect the quality or movement of a	groundwater?	🖌 No 🗌	Yes (describe)
	The proposed work is not anticipated to adversely affe further review will be conducted as necessary as the p			or flow,

ENVIRONMENTAL QUESTIONNAIRE

m.	Would the proposed project require issuance of an <u>Underground Injection Control (UIC)</u> permit?
	Yes (describe)
n.	Would the proposed project be located in or near a wellhead protection area, drinking water protection area, or above a
	sole source aquifer or underground source of drinking water (USDW)?
	No Yes (describe)

No	Yes (describe)
----	----------------

Further review will be conducted as necessary as the project proceeds.

Solid and Hazardous Wastes 8.

Identify and estimate wastes that would be generated from the project. Solid wastes are defined as any solid, liquid, semia. solid, or contained gaseous material that is discarded, has served its intended purpose, or is a manufacturing or mining byproduct (See EPA Municipal Solid Waste and Municipal Solid Waste by State).

	Annual Quantity
Municipal solid waste (e.g., paper, plastic, etc.)	tbd
Coal or coal by-products	
✓ Other Identify: Electric equipment	tbd
Hazardous waste – Identify:	
None None	

b. Would project require issuance of new or modified solid waste and/or hazardous waste related permits to perform project work activities? No Yes (explain)

Further review will be conducted as necessary as the project proceeds.

How and where would solid waste disposal be accomplished? c.

None generated

- On-site (identify and describe location)
- Off-site (identify location and describe facility and treatment) ~

All solid waste that cannot be recycled will be disposed of at an Exelon-approved waste facility.

How would wastes for disposal be transported? d.

Waste	will	be	transported	by	triaxle	trucks	per	PECO	and	Department	of	Transportation	solid
waste	proto	ocol	s.										

Describe hazardous wastes that would be generated, treated, handled, or stored under this project. Hazardous waste e. information can be found at EPA Hazardous Waste website. None

Further review will be conducted as necessary as the project proceeds to ensure compliance with applicable Hazardous Waste regulations.

f. How would hazardous or toxic waste be collected and stored? None used or produced

Further review will be conducted as necessary as the project proceeds to ensure compliance with applicable Hazardous and Toxic Waste regulations.

ENVIRONMENTAL QUESTIONNAIRE

g.	If hazardous wastes would require off-site disposal, have arrangements been made with a certified TSD (Treatment, Storage, and Disposal) facility?
	□ Not required Arrangements not yet made Arrangements made with a certified TSD facility (identify)
	Pending detailed review of any hazardous waste, appropriate arrangements for disposal will be made.
9.	Health/Safety Factors
a.	Identify hazardous or toxic materials that would be used in the proposed project. None Image: Hazardous or toxic materials that would be used (identify):
	PECO anticipates utilizing lead-acid/lithium batteries, sulfur hexafluoride in sealed electrical breakers, and lead contained in wiring. Further assessment will be performed.
b.	Describe the potential impacts of this project's hazardous materials on human health and the environment. None
	PECO does not expect any impacts to human health and environment and will take the required steps to manage and control any risks in compliance with applicable requirements.
c.	Would there be any special physical hazards or health risks associated with the project? 🔽 No 🔲 Yes (describe)
	PECO does not expect any physical hazards or health risks and will take the required steps to manage and control any risks in compliance with applicable safety requirements.
d.	Does a worker safety program exist at the location of the proposed project? INO Yes (describe)
	PECO has standard safety practices requiring training by all employees, engineers and contractors to ensure a safe working environment.
e.	Would additional safety training be necessary for any new laboratory, equipment, or processes involved with the project? No Yes (describe)
	If additional safety training is needed, PECO will utilize the necessary and appropriate vendor safety specifications and protocols.
f.	Describe any increases in ambient noise levels to the public from construction and operational activities. None Increase in ambient noise level (describe)
	PECO expects a temporary increase in ambient noise during construction and demolition activities. PECO will measure and address such increases in accordance with any applicable requirements.
g.	Would project construction result in the removal of natural or other barriers that act as noise screens?
	Further review will be conducted as necessary as the project proceeds to identify any natural or other barriers.
h.	Would hearing protection be required for workers? 🔲 No 🔽 Yes (describe)
	Contractors and PECO personnel are required to wear appropriate personal protection equipment, which may include hearing protection during construction and demolition.
10.	Environmental Restoration and/or Waste Management
a.	Would the proposed project include CERCLA removals or similar actions under RCRA or other authorities? No Yes (describe)
	PECO does not anticipate needing CERCLA removals or similar actions under RCRA or other

authorities. Consistent with above responses, materials generated from the project will be appropriately characterized and managed in compliance with applicable requirements.

ENVIRONMENTAL QUESTIONNAIRE

b.	Would the proposed project include siting, construction, and operation of temporary pilot-scale waste collection and treatment facilities or pilot-scale waste stabilization and containment facilities?
c.	Would the proposed project involve operations of environmental monitoring and control systems? No Yes (describe)
	As project details are developed, the need for environmental monitoring (such as for airborne particulates, organic vapors, or noise) will be further assessed.
d.	Would the proposed project involve siting, construction, operation, or decommissioning of a facility for storing packaged hazardous waste for 90 days or less? \checkmark No \square Yes (describe)
	On-site hazardous waste storage is not anticipated. Further assessment will be performed as necessary.
E.	REGULATORY COMPLIANCE
1.	For the following laws, describe any existing permits, new or modified permits, manifests, responsible authorities or agencies, contacts, etc., that would be required for the proposed project
a.	Resource Conservation and Recovery Act (<u>RCRA</u>): None New Required Modification Required Describe:
	Further assessment will be performed to determine any applicable RCRA compliance requirements.
b.	Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA): None New Required Modification Required Describe: Image: Compensation of the second s
	Any materials generated from the project will be appropriately characterized and managed in accordance with applicable requirements.
c.	Toxic Substance Control Act (TSCA): Image: None Image: New Required Modification Required Describe: Image: New Required Image: New Required Image: New Required Image: New Required
	Any materials generated from the project will be appropriately characterized and managed in accordance with applicable requirements.
d.	Clean Water Act (CWA): Describe: None New Required Modification Required
	Depending on the area of disturbance associated with the project, an NPDES permit may be required for stormwater discharge.
e.	Underground Storage Tank Control Program (UST): None New Required Modification Required Describe:
	PECO anticipates a potential need for Underground Storage Tanks (USTs), which will be installed and managed in accordance with the state specific UST programs.
f.	Underground Injection Control Program (UIC): 🔽 None 🗌 New Required 🔲 Modification Required Describe:
g.	Clean Air Act (CAA): None New Required Modification Required Describe:
	DECO will applying and applying compliance with applicable CMA requirements, such as not appre-

PECO will analyze and ensure compliance with applicable CAA requirements, such as re: ozone depleting substances, particulate matter, sulfur hexaflouride and combustion emissions.

ENVIRONMENTAL QUESTIONNAIRE

h.	Endangered Species Act (ESA): Describe:	✓ None	New Required	Modification Required		
	Further assessment of any endangered spotthe project.	ecies will b	e performed durin	g the siting phase of		
i.	Floodplains and Wetlands Regulations: Describe:	None None	Vew Required	Modification Required		
	A portion of the project may be located during the siting phase. No wetlands are					
j.	Fish and Wildlife Coordination Act (FWCA): Describe:	None	New Required	Modification Required		
	Further assessment regarding FWCA will	be conducted	during the sitin	g phase of the project.		
k.	National Historic Preservation Act (NHPA): Describe:	✓ None	New Required	Modification Required		
	Further assessment regarding NHPA will	be conducted	during the sitin	g phase of the project.		
1.	Coastal Zone Management Act (CZMA): Describe:	None	New Required	Modification Required		
	Further assessment regarding CZMA will	be conducted	during the sitin	ng phase of the project.		
2.	Identify any other environmental laws and regulations (Federal, state, <u>and</u> local) for which compliance would be necessary for this project, and describe the permits, manifests, and contacts that would be required.					
	PECO will comply with Chapter 105 of th Obstruction and Encroachment General Pe					
F.	DESCRIBE ANY ISSUES THAT WOULD GENI	ERATE PUBLI	C CONTROVERSY	REGARDING THE		
(PROPOSED PROJECT. None Issues that may generate public controve Lower South Substation, while not part of substation and will be open to public co Philadelphia to support PURMI construction b) (4) Vacating current business operations for	of CREATE sco omment. 2) Po ion. 3) Pote	ope, are required otential road clo ntial vegetation	to energize the new sures in the City of		
G.	WOULD THE PROPOSED PROJECT PRODUC DEVELOPMENTS PLANNED OR UNDERWAY			Γ, OR ARE OTHER MAJOR		
	No Yes (describe) Proposed electrical system upgrades and	hardoning w	ork will increase	alastriaal system		
	reliability and allow for future load gr opportunities (job growth) and public to	rowth and the	e development of	additional business		
н.	SUMMARIZE THE SIGNIFICANT IMPACTS 1	THAT WOULD	RESULT FROM TH	HE PROPOSED PROJECT.		
	□ None (provide supporting detail) □ Significant impacts (describe)					
	Environmental impacts are expected to b be associated with earth disturbance du erosion associated with stormwater, app	ring constru	ction. To mitigat	te the impacts of soil		

erosion associated with stormwater, appropriate erosion control will be implemented and depending on the area of disturbance, any appropriate permits will be obtained to ensure impacts to nearby surface water resources are mitigated.

ENVIRONMENTAL QUESTIONNAIRE

I. PROVIDE A DESCRIPTION OF HOW THE PROJECT WOULD BE DECOMMISSIONED, INCLUDING THE DISPOSITION OF EQUIPMENT AND MATERIALS.

The proposed projects have been conceptualized and will include the hardening of existing electrical infrastructure. Detailed project specifications and decommissioning plans will be developed during detailed design.

III. CERTIFICATION BY PROPOSER

I hereby certify that the information provided herein is current, accurate, and complete as of the date shown immediately below.

(b) (6) Date (mm/dd/y	yyy):03/29/2023
Title: Senior Manager of Environmental Management	
Organization: PECO, an Exelon Company	
Organization:	

IV. <u>REVIEW AND APPROVAL BY DOE</u>

I hereby certify that I have reviewed the information provided in this questionnaire, have determined that all questions have been appropriately answered, and judge the responses to be consistent with the efforts proposed.

DOE Project Manager

Signature: ______

Date (mm/dd/yyyy):

APPENDIX F – PROJECT DESCRIPTION AND ASSURANCES DOCUMENT TEMPLATE (PDAD)

Project title: CREATE Plan

Applicant Name: PECO Energy Company

Applicant Address: 2301 Market Street, Philadelphia, Pennsylvania, 19103-1380, U.S.A

Names of all team member organizations (if applicable): City of Philadelphia, Pennsylvania Department of Environmental the Protection Energy Programs Office, Pennsylvania Department of Transportation, School District of Philadelphia, Philadelphia Industrial Development Corporation, Urban Affairs Coalition, and Greater Philadelphia Chamber of Commerce

Principal Investigator (Name, Address if different than Applicant's, Phone Number, E-mail):

(b) (6) PECO.IIJA@exeloncorp.com

Business Point of Contact (Name, Address if different than Applicant's, Phone Number, E-mail):

(b) (6) ,]PECO.IIJA@exeloncorp.com

Include any statements regarding confidentiality:

The Technical Volume, Budget Justification Workbook, Locations of Work, and Report on Resilience Investments contain business sensitive, trade secrets, proprietary, or otherwise confidential information exempt from public disclosure. Both redacted and non-redacted versions of these documents are included in the application.

Federal Share: \$100,000,000 Cost Share: \$156,761,176 Total Estimated Project Cost: \$256,761,176

Item 1: Specify (mark with "X")" the FOA Topic Area and as applicable the Area of Interest (AOI):

X Topic Area 1: Grid Resilience Grants (BIL section 40101(c))
 Topic Area 2: Smart Grid Grants (BIL section 40107)
 Topic Area 3: Grid Innovation Program (BIL section 40103(b)) – Area of Interest 1 (Transmission System Applications)
 Topic Area 3: Grid Innovation Program (BIL section 40103(b)) – Area of Interest 2 (Distribution System Applications)
 Topic Area 3: Grid Innovation Program (BIL section 40103(b)) – Area of Interest 2 (Distribution System Applications)
 Topic Area 3: Grid Innovation Program (BIL section 40103(b)) – Area of Interest 3 (Combination System Applications)

TOPIC AREA 1 Specific Items:

Item 2: Specify (mark with "X")" the entity type of the applicant organization:

<u>X</u>electric grid operator

_____electricity storage operator

_____electricity generator

X transmission owner or operator

<u>X</u> distribution provider

_____fuel supplier

If further description is needed for the specified entity type, please provide below:

Item 3: Please provide the total amount (USD) of qualifying resilience investments (as outlined in

DE-FOA-00002740) that has been spent for the previous 3 years. Please also provide the time period

utilized for calculation of this amount.

Total Amount: \$294,532,000 **Time Period for Resilience Investments:** (2020-2022)

Note: Topic Area 1 applicants must submit as part of their application, a report detailing past, current, and future efforts by the eligible entity to reduce the likelihood and consequences of disruptive events. This report should include efforts over at least the previous 3 years and at least the next 3 years and any broader resilience strategy used by the applicant.

Item 4: Is the eligible entity a Small Utility as defined in DE-FOA-0002740 (sells no more than

4,000,000 MWh of electricity per year)? If NO is selected, skip to Item 7.

____Yes

<u> X </u>No

Note: If YES, applicant must provide their Form 861 for the last reporting year submitted to the Energy Information Administration (EIA).

Item 5: Per BIL section 40101(e)(2) (C) APPLICATION LIMITATIONS.—An eligible entity may not submit an application for a grant provided by the Secretary under subsection (c) and a

grant provided by a State or Indian Tribe pursuant to subsection (d) during the same application cycle.

Therefore, is the eligible entity a Subaward/Subcontract recipient for an application submitted under IIJA Section 40101(d), ALRD 2736? If "YES", please describe the differences between the GRIP FOA 2740 application [40101(c)] and the ALRD 2736 [40101(d)] applications in the box below:

____Yes

<u> X </u>No

TOPIC AREA 2 Specific

No items

TOPIC AREA 3 Specific

Item 6: Specify (mark with "X")" the entity type of the applicant organization:

_____a State

_____a combination of 2 or more States

_____an Indian Tribe

_____a unit of local government

_____a public utility commission

If further description is needed for the specified entity type, please provide below:

Item 7:

Authorized Organizational Representative (AOR): please provide name, address, phone number and email address for the authorized agent to bind the entity

Authorized Organizational Representative (AOR):

Name: (b) (6)

Address: 2301 Market Street, Philadelphia, PA, 19103, U.S.A

Phone: (b) (6)

E-mail: PECO.IIJA@exeloncorp.com

Item 8: Signature of Authorized Organizational Representative (AOR)

		1	
(b) (6)			

3/31/2023

Locations of Work (DE-FOA-0002740)						
Prime or Sub Name City State Zip Code + 4						
Prime	Project Management & Compliance	Philadelphia	PA	19103-1338		
Prime	Navy Yard Substation	Philadelphia	PA	19112*		
Prime	Hilco Redevelopment	Philadelphia	PA	19145*		
Prime	Amtrak Transmission Right of Way	Eddystone	PA	19022^		
Prime	Amtrak Transmission Right of Way	Linwood	PA	19061^		
Prime	Amtrak Transmission Right of Way	Marcus Hook	PA	19061(b)(4)		
Prime	Amtrak Transmission Right of Way	Linwood	PA	19061^		
Prime	Campus Microgrid	Berwyn	PA	19312-(b) (4)		
Prime	Conowingo Transmission Right of Way	King of Prussia	PA	19406^		
Prime	Conowingo Transmission Right of Way	King of Prussia	PA	19406^		
Prime	Conowingo Transmission Right of Way	Exton	PA	19341^		
Prime	Conowingo Transmission Right of Way	West Chester	PA	19380^		
Prime	Conowingo Transmission Right of Way	Plymouth Meeting	PA	19462- (b) (4)		
Prime	Philadelphia Underground Risk Mitigation Initiative (PURMI)	Philadelphia	PA	19102*		
Prime	Philadelphia Underground Risk Mitigation Initiative (PURMI)	Philadelphia	PA	19103*		
Prime	Philadelphia Underground Risk Mitigation Initiative (PURMI)	Philadelphia	PA	19104*		
Prime	Philadelphia Underground Risk Mitigation Initiative (PURMI)	Philadelphia	PA	19106 (b) (4)		
Prime	Philadelphia Underground Risk Mitigation Initiative (PURMI)	Philadelphia	PA	19107*		
Prime	Philadelphia Underground Risk Mitigation Initiative (PURMI)	Philadelphia	PA	19146^		
Prime	Philadelphia Underground Risk Mitigation Initiative (PURMI)	Philadelphia	PA	19147*		
Prime	Substation Flood Mitigation: Grays Ferry	Philadelphia	PA	19146^		
Prime	Substation Flood Mitigation: Pencoyd	Philadelphia	PA	19129*		
Sub	PennDOT: Critical Transportation Infrastructure Resilience	Philadelphia	PA	19131^		
Sub	PennDOT: Critical Transportation Infrastructure Resilience	Conshohocken	PA	19428-(b) (4)		
Sub	Clean and Resilient Community Schools	Philadelphia	PA	19103-4001		
Sub	PIDC: Life Sciences Resiliency Campus Business Case	Philadelphia	PA	19112-1327		

Contains Business Sensitive, Trade Secrets, Proprietary, or Otherwise Confidential Information Exempt from Public Disclosure

*Exact site to be determined

^No Zip + 4 available

Contains Business Sensitive, Trade Secrets, Proprietary, or Otherwise Confidential Information Exempt from Public Disclosure

Locations of Work (DE-FOA-0002740)				
Prime or Sub	Name	City	State	Zip Code + 4
Prime	Project Management & Compliance	Philadelphia	PA	19103-1338
Prime	Navy Yard Substation	Philadelphia	PA	19112*
Prime	Hilco Redevelopment	Philadelphia	PA	19145*
Prime	Amtrak Transmission Right of Way	Eddystone	PA	19022^
Prime	Amtrak Transmission Right of Way	Linwood	PA	19061^
Prime	Amtrak Transmission Right of Way	Marcus Hook	PA	19061-[<mark>(b) (4)</mark>
Prime	Amtrak Transmission Right of Way	Linwood	PA	19061^
Prime	Campus Microgrid	Berwyn	PA	19312- <mark>(b) (4)</mark>
Prime	Conowingo Transmission Right of Way	King of Prussia	PA	19406^
Prime	Conowingo Transmission Right of Way	King of Prussia	PA	19406^
Prime	Conowingo Transmission Right of Way	Exton	PA	19341^
Prime	Conowingo Transmission Right of Way	West Chester	PA	19380^
Prime	Conowingo Transmission Right of Way	Plymouth Meeting	PA	19462- <mark>(b) (4)</mark>
Prime	Philadelphia Underground Risk Mitigation Initiative (PURMI)	Philadelphia	PA	19102*
Prime	Philadelphia Underground Risk Mitigation Initiative (PURMI)	Philadelphia	PA	19103*
Prime	Philadelphia Underground Risk Mitigation Initiative (PURMI)	Philadelphia	PA	19104*
Prime	Philadelphia Underground Risk Mitigation Initiative (PURMI)	Philadelphia	PA	19106- <mark>(b) (4)</mark>
Prime	Philadelphia Underground Risk Mitigation Initiative (PURMI)	Philadelphia	PA	19107*
Prime	Philadelphia Underground Risk Mitigation Initiative (PURMI)	Philadelphia	PA	19146^
Prime	Philadelphia Underground Risk Mitigation Initiative (PURMI)	Philadelphia	PA	19147*
Prime	Substation Flood Mitigation: Grays Ferry	Philadelphia	PA	19146^
Prime	Substation Flood Mitigation: Pencoyd	Philadelphia	PA	19129*
Sub	PennDOT: Critical Transportation Infrastructure Resilience	Philadelphia	PA	19131^
Sub	PennDOT: Critical Transportation Infrastructure Resilience	Conshohocken	PA	19428- <mark>(b) (4)</mark>
Sub	Clean and Resilient Community Schools	Philadelphia	PA	19103-4001
Sub	PIDC: Life Sciences Resiliency Campus Business Case	Philadelphia	PA	19112-1327

*Exact site to be determined

^No Zip + 4 available

Redacted precise Zip+4 operations locations



Creating a Resilient, Equitable, and Accessible Transformation in Energy for Greater Philadelphia (CREATE)

PECO Energy Company (PECO), Pennsylvania's largest electric and natural gas utility, plans to leverage federal funding to reduce the likelihood and consequence of impacts to the electric grid due to extreme weather and rising sea levels, consistent with the core objectives of the Department of Energy's Grid Resilience and Innovation Partnership Program.

PECO's CREATE Plan, which will be managed by PECO's Vice President of Project Management (b) (4)] is centered on the "Lower South Philadelphia" economic and innovation hub and incorporates targeted resiliency and clean energy hosting capacity improvements across PECO's southeastern Pennsylvania service territory, benefitting nearly 1.7 million customers.

CREATE will address two critical grid challenges in these areas: (1) climate-vulnerable aging infrastructure and (2) limitations on large-scale electrification capacity. These challenges will be addressed by modernizing aging underground infrastructure, hardening backbone transmission facilities, relocating substation equipment away from flood-prone areas, and leveraging microgrid and battery storage technology to support utility storm response.



The CREATE Plan incorporates labor engagement, workforce training, education, supplier diversity, structured engagement with disadvantaged communities and community-based energy resiliency investments as core elements of a regionwide approach to an inclusive energy future. Working with a broad range of community partners, PECO will leverage and enhance programs that focus on introducing individuals from diverse communities to career-establishing positions in the energy industry and coordinate with CREATE contractors, vendors, and project partners to promote opportunities for graduates of these and other community-based training programs into family-sustaining careers.

Overall, CREATE provides a comprehensive platform for the Philadelphia region's energy future, delivering significant reliability and resilience benefits supporting community-based transformation and advancing energy equity in disadvantaged communities. These efforts will provide a scalable model for local climate resilience and long-term participation in the sustainable energy economy. Economic models forecast that the capital investment associated with CREATE will have a total employment impact of 2,600 jobs.





The Honorable Jennifer Granholm Secretary United States Department of Energy (DOE) 1000 Independence Avenue, S.W. Washington, DC 20585

Dear Secretary Granholm:

The Pennsylvania Department of Transportation ("PennDOT") is submitting this Letter of Commitment in support of the PECO Grid Resilience and Innovation Partnership program grant application ("CREATE Plan") and its proposed field battery storage pilot project ("Battery Pilot").

PECO and PennDOT have collaborated on the development of the Battery Pilot to identify opportunities and challenges related to the use of battery storage technologies to support critical transportation field monitoring and communications equipment. The PennDOT field network includes fiber optic lines and network HUB locations to establish communications with Intelligent Transportation System (ITS) devices that support the Southeastern Regional Traffic Management Center (RTMC). By integrating the equipment with battery storage, uninterrupted service capability, and PECO's distribution network, the field network will be able to continue to deliver critical information to PennDOT's RTMC during storm events while providing PECO with additional time to restore service.

Per this Letter of Commitment, PennDOT commits to providing non-federal cost-share to support this estimated (b) (4) Battery Pilot based on the CREATE Plan's match percentage. PennDOT has extensive experience working with field monitoring equipment and possesses the expertise necessary to execute the project while meeting all the DOE reporting and compliance obligations. Successful execution of this pilot project will provide a replicable template for deployment of battery storage technology to support critical transportation systems throughout the Commonwealth.

PennDOT has designated (b) (6) P.E., Acting Senior Manager – Traffic Operations to serve as the Department's lead for execution of the field battery storage pilot project and his resume is provided. In the event that PennDOT determines that it will not move forward with the pilot, the Department will notify PECO and the Department of Energy, and remaining funding will be reallocated by PECO to a GRIP program eligible purpose.

Thank you for your consideration.

Sincerely,

LRRA

Louis R. Belmonte, P.E. District Executive

DocuSign Envelope ID: 7276E433-DD7D-4F60-BD6E-98413E2E9E30



The Honorable Jennifer Granholm Secretary, United States Department of Energy (DOE) 1000 Independence Avenue, S.W. Washington, DC 20585

Dear Secretary Granholm:

The Fund for the School District of Philadelphia ("The Fund") is submitting this Letter of Commitment in support of the Clean and Resilient Community Schools project, proposed as part of PECO's Grid Resilience and Innovation Partnership program grant application ("CREATE Plan").

The Fund for the School District of Philadelphia is an independent 501(c)(3) not-for-profit organization that serves as a fiscal intermediary between the private sector and the Philadelphia public education system and raises funds to support increased educational opportunity for all communities. Schools in the region's disadvantaged communities face both increasing vulnerabilities due to climate change-driven extreme weather events and exceptional opportunities to serve as centers for delivering resources to these communities. As a result, PECO and The Fund have collaborated on the development of the Clean and Resilient Community Schools project to provide a focused, flexible strategy to deliver climate resiliency, energy efficiency, and clean energy deployment and education opportunities through public schools in disadvantaged communities.

Per this Letter of Commitment, subject to receipt of necessary approvals from your agency and final agreement on administrative matters with PECO, The Fund commits to providing non-federal cost-share to support the (b) (4) Clean and Resilient Community Schools project based on CREATE Plan's match percentage, as well as coordinating with PECO to seek funds from corporate funders, foundations, educational institutions, and state and local government to support the project. The Fund has extensive experience working with these organizations and the School District of Philadelphia to identify areas of greatest need and raise funds to supplement the School District's resources. Successful development of the Clean and Resilient Community Schools project will provide a scalable, sustainable structure for making a long-term commitment to climate resiliency and clean energy for public schools in the Philadelphia region.

Prior to commencing the project, The Fund will identify and designate a well-qualified person to serve as its lead for execution of this project, who will tentatively be (b) (6) The Fund's Vice President of Development. In the event that the Fund determines that there are not non-federal funds or eligible projects available to utilize the full proposed project budget, The Fund will notify PECO and the Department of Energy, and remaining funding will be reallocated by PECO to apply to other programs benefitting Disadvantaged Communities (DACs).

Thank you for your consideration.

Since 987554E86E142C

Ed Zimmermann Board Chair



Driving growth to every corner of Philadelphia

1500 Market Street Suite 3500 West Philadelphia, PA 19102 p 215.496.8020 f 215.977.9618 PIDCphila.com

March 29, 2023

The Honorable Jennifer Granholm Secretary United States Department of Energy (DOE) 1000 Independence Avenue, S.W. Washington, DC 20585

Dear Secretary Granholm:

The Philadelphia Industrial Development Corporation ("PIDC") is submitting this Letter of Commitment in support of the PECO Grid Resilience and Innovation Partnership program grant application ("CREATE Plan") and its proposed Life Sciences Resiliency Campus Business Case project ("Life Sciences Project").

PECO and PIDC collaborated on the development of the Life Sciences Project to identify opportunities and challenges related to the use of battery storage technologies to provide costeffective, shared advanced resiliency service for life sciences research facilities at the Philadelphia Navy Yard. Philadelphia is a global leader in the life sciences industry, and the Navy Yard is home to some of the most innovative gene therapy and biotechnology companies in the world. These companies' research facilities require extremely high levels of electric resiliency, and the business case analysis incorporated into the CREATE Plan is the first step in creating a replicable model for advanced resiliency campus environments.

Per this Letter of Commitment, PIDC will provide non-federal cost-share to support this (b) (4) Life Sciences Project based on the CREATE Plan's match percentage. PIDC and its project team possess the expertise necessary to execute the Life Sciences Project while meeting all the associated DOE reporting and compliance obligations. Successful execution of the Life Sciences Project will provide a replicable template for deployment of shared battery storage technology to support job creation and economic development in campus-style environments.

PIDC has designated 1 (b) (6) Director of Navy Yard Smart Grid, to serve as the organization's lead for execution of the Life Sciences Project, and his resume is provided.

Thank you for your consideration.

Sincerely,

Jam Mail

Sam Rhoads Executive Vice President & Interim President

Eligible Use ID (All) ¹	Executive Category	Historic 3-year spend (2020-2022)	Upcoming 3-Year Spend (2023-2025)
A,E,K,L	Long Term Infrastructure Improvement Plan ² (LTIIP) II Aerial Infrastructure Resiliency Areas	89,108,000	129,834,000
A,K,L	LTIIP II Customers Experiencing Multiple Interruptions (CEMI) Areas	11,814,000	13,994,000
А	LTIIP II Switchgear Replacement	-	30,667,000
А,К	Non-LTIIP ³ Hardening of Power Lines, Facilities, Substations or Other Systems	(b) (4)	
A,K,L	Non-LTIIP Weatherization Technologies and Equipment		
C,K,L	Non-LTIIP Monitoring and Control Technologies		
	PECO Resilience Sub-Total ⁴		
A, C, F, K, L	Conowingo, Amtrak and PURMI ⁵	_	
	Grand Total		

1) Eligible Use ID corresponds with the eligible uses listed in Section 40101(e). See Pub. L. No. 117-58, 135 Stat. 429, 926 (2021).

2) PECO's Long Term Infrastructure Improvement Plan, or LTIIP, is part of the Company's efforts to enhance service reliability for customers. In its first LTIIP, which was completed in 2020, PECO focused its investments on reliability-related infrastructure improvements, including storm hardening and resiliency, cable replacements, and system upgrades, from 2016 through 2020. PECO is increasing and enhancing these investments in its 2021 through 2025 LTIIP II by focusing on additional storm hardening and resiliency measures, replacing underground cable with higher risk profiles, and replacing older and degraded substation switchgear.

3) Non-LTIIP investments are those that are not part of PECO's LTIIP. The proposed LTIIP II spending is incremental to PECO's projected "baseline" investment in distribution system infrastructure in the LTIIP project categories during the 2021-2025 period. The Company classifies "baseline" investments as non-LTIIP work.

4) The investments captured above are PECO's resiliency-related investments; they include projects used to prepare for and adapt to changing conditions, including improvements to grid self-healing capabilities and the recovery and minimization of the magnitude and/or duration of extreme disruptive events. This is a subset of the eligible uses listed in the Grid Resilience and Innovation Partnership Program (GRIP) Funding Opportunity Announcement (FOA), which includes reliability and other system improvements not captured above.

5) These CREATE components meet the GRIP FOA eligible use criteria but do not fall under PECO's definition of resilience spend (see Footnote 4). PECO currently has [(b) (4) budgeted (as shown in this Report on Resilience Investments) for targeted component upgrades of the Conowingo and Amtrak Rights of Ways and underground infrastructure in Center City Philadelphia. The Department of Energy's grant funding will allow PECO to build upon these foundational investment plans, include innovative technologies mentioned in the Technical Volume, and embark on new scopes of resiliency work, including the Lower South Philadelphia Substation, Substation, Flood Mitigation, Campus Microgrid, and partnerships including Clean and Resilient Community Schools, and Pennsylvania Department of Transportation infrastructure backup batteries, all of which are components of CREATE.

Executive Category	Summary of Resiliency Investments
Long Term Infrastructure Improvement Plan ² (LTIIP) II Aerial Infrastructure Resiliency Areas	This portion of the Company's LTIIP II program focuses on the replacement of aerial infrastructure, including poles, overhead conductors, crossarms, insulators, connectors, and cutouts. The areas and targeted infrastructure are prioritized based on a higher probability of failure caused by age-related degradation, environmental exposure, and ordinary wear and tear.
LTIIP II Customers Experiencing Multiple Interruptions (CEMI) Areas	This portion of the Company's LTIIP II program focuses on customers in pocket areas served by multiple circuits and customers on single circuits that have a higher interruption history when compared to PECO's system-level reliability performance. PECO invests in inter-connecting circuits to improve operational flexibility, automated fault isolation and service restoration, and storm hardening and resiliency, leading to permanent solutions to persistent higher-than-system-level outage frequency.
LTIIP II Switchgear Replacement	This portion of the Company's LTIIP II program focuses on the replacement of switchgear in order to maintain the current strong level of reliability on the system. The switchgear being replaced contains equipment which is degrading. Keeping such switchgear in place could lead to higher maintenance expenses, an increased risk of failures, and a risk of extended outages if the switchgear equipment fails are the reasons for pursuing this area. The program will prioritize the switchgear replacements based on material condition, customers served, load supplied, risk, etc. The new switchgear is protected from the elements, which will ultimately extend the life of the assets, reduce inadvertent outages from flooding or animal intrusion, and improve reliability.
Non-LTIIP ³ Hardening of Power Lines, Facilities, Substations or Other Systems	Several programs make up PECO's non-LTIIP investments in hardening power lines, facilities, substations or other systems. First, PECO's Facility Enhancement Protection Program aims to increase a substation's resiliency by bolstering security measures. Because the security and resiliency of transmission and distribution infrastructure is critical to operations: (1) substation perimeters are and will continue to be hardened with high-security fencing materials, which mitigates risk of climbing and cutting of the fence mesh; and (2) monitoring systems are also installed to allow immediate response to security threats. Second, the Unit Tie Circuit Breaker Replacement Program replaces aging distribution-tie circuit breakers with new enclosed switchgear breakers. Finally, PECO has and will continue programs that focus on two key elements: (1) the strategic acquisition and deployment of spare transformers across PECO's service territory to improve outage response in the event of a catastrophic failure; and (2) replacement/relocation of obsolete outdoor switchgear with new indoor switchgear, which is better protected from external environmental factors and wildlife.
Systems	In addition to the foregoing, PECO makes non-LTIIP investments in new equipment and substations to reduce the risk of environmentally-driven equipment degradation and improve the resiliency of the electric grid. For example, PECO is building a robust Signal Conditioning and Data Acquisition System that will provide real-time visibility and control of the electric grid and enhance material conditioning data of the Company's equipment and storm response. PECO also invests in localized solutions to address distribution customers' reliability concerns and continually pursues new and innovative technology. An example is the Extra High Voltage upgrade to increase resiliency against severe storm events, which involves the replacement of aging transmission and substation 500 kV assets such as corroded overhead transmission conductors and insulation.
Non-LTIIP Weatherization Technologies and Equipment	These investments fund programs and projects that target customers experiencing multiple interruptions and who need focused and localized solutions to address reliability concerns. Multiple programs focus on replacing aerial infrastructure, including poles, overhead conductors, crossarms, insulators, connectors, and cutouts that have a high probability of failure caused by age-related degradation and normal wear and tear. Other investments in this category include PECO's investment in the Switchgear Replacement Program, which aims to increase substation resiliency by replacing aging, problematic outdoor switchgear with new indoor switchgear. Indoor switchgear is better protected from external environmental factors and wildlife issues, including animal intrusion, flooding, and corrosion. Thus, installing indoor switchgear will result in longer-lasting equipment, fewer inadvertent outages from flooding or animal intrusion, and a reduced risk of catastrophic failure.
Non-LTIIP Monitoring and Control Technologies	These investments fund programs and projects that focus on minimizing vegetation and wildlife-related outages impacting system resiliency; building critical infrastructure to support PECO's robust storm response; implementing new technology to enhance the distribution asset information system; modernizing the existing underground secondary network by deploying an advanced communication system; and enabling better situational awareness about the current underground assets. New research pilots are used to explore the construction and operations of microgrids which will help PECO understand the monitoring and control for future applications. PECO also has been expanding and implementing a drone program for aerial asset inspections and damage assessment to enhance storm response. Lastly, there are ongoing research and development projects to implement advanced technologies for Distribution and Transmission operational excellence.

Eligible Use ID (All) ¹	Executive Category	Historic 3-year spend (2020-2022)	Upcoming 3-Year Spend (2023-2025)
A,E,K,L	Long Term Infrastructure Improvement Plan ² (LTIIP) II Aerial Infrastructure Resiliency Areas	89,108,000	129,834,000
A,K,L	LTIIP II Customers Experiencing Multiple Interruptions (CEMI) Areas	11,814,000	13,994,000
А	LTIIP II Switchgear Replacement	-	30,667,000
А,К	Non-LTIIP ³ Hardening of Power Lines, Facilities, Substations or Other Systems	(b) (4)	
A,K,L	Non-LTIIP Weatherization Technologies and Equipment		
C,K,L	Non-LTIIP Monitoring and Control Technologies		
	PECO Resilience Sub-Total ⁴		
A, C, F, K, L	Conowingo, Amtrak and PURMI ⁵		
	Grand Total		

1) Eligible Use ID corresponds with the eligible uses listed in Section 40101(e). See Pub. L. No. 117-58, 135 Stat. 429, 926 (2021).

2) PECO's Long Term Infrastructure Improvement Plan, or LTIIP, is part of the Company's efforts to enhance service reliability for customers. In its first LTIIP, which was completed in 2020, PECO focused its investments on reliability-related infrastructure improvements, including storm hardening and resiliency, cable replacements, and system upgrades, from 2016 through 2020. PECO is increasing and enhancing these investments in its 2021 through 2025 LTIIP II by focusing on additional storm hardening and resiliency measures, replacing underground cable with higher risk profiles, and replacing older and degraded substation switchgear.

3) Non-LTIIP investments are those that are not part of PECO's LTIIP. The proposed LTIIP II spending is incremental to PECO's projected "baseline" investment in distribution system infrastructure in the LTIIP project categories during the 2021-2025 period. The Company classifies "baseline" investments as non-LTIIP work.

4) The investments captured above are PECO's resiliency-related investments; they include projects used to prepare for and adapt to changing conditions, including improvements to grid self-healing capabilities and the recovery and minimization of the magnitude and/or duration of extreme disruptive events. This is a subset of the eligible uses listed in the Grid Resilience and Innovation Partnership Program (GRIP) Funding Opportunity Announcement (FOA), which includes reliability and other system improvements not captured above.

5) These CREATE components meet the GRIP FOA eligible use criteria but do not fall under PECO's definition of resilience spend (see Footnote 4). PECO currently has [(b) (4) budgeted (as shown in this Report on Resilience Investments) for targeted component upgrades of the Conowingo and Amtrak Rights of Ways and underground infrastructure in Center City Philadelphia. The Department of Energy's grant funding will allow PECO to build upon these foundational investment plans, include innovative technologies mentioned in the Technical Volume, and embark on new scopes of resiliency work, including the Lower South Philadelphia Substation, Substation, Flood Mitigation, Campus Microgrid, and partnerships including Clean and Resilient Community Schools, and Pennsylvania Department of Transportation infrastructure backup batteries, all of which are components of CREATE.

Executive Category	Summary of Resiliency Investments
Long Term Infrastructure Improvement Plan ² (LTIIP) II Aerial Infrastructure Resiliency Areas	This portion of the Company's LTIIP II program focuses on the replacement of aerial infrastructure, including poles, overhead conductors, crossarms, insulators, connectors, and cutouts. The areas and targeted infrastructure are prioritized based on a higher probability of failure caused by age-related degradation, environmental exposure, and ordinary wear and tear.
LTIIP II Customers Experiencing Multiple Interruptions (CEMI) Areas	This portion of the Company's LTIIP II program focuses on customers in pocket areas served by multiple circuits and customers on single circuits that have a higher interruption history when compared to PECO's system-level reliability performance. PECO invests in inter-connecting circuits to improve operational flexibility, automated fault isolation and service restoration, and storm hardening and resiliency, leading to permanent solutions to persistent higher-than-system-level outage frequency.
LTIIP II Switchgear Replacement	This portion of the Company's LTIIP II program focuses on the replacement of switchgear in order to maintain the current strong level of reliability on the system. The switchgear being replaced contains equipment which is degrading. Keeping such switchgear in place could lead to higher maintenance expenses, an increased risk of failures, and a risk of extended outages if the switchgear equipment fails are the reasons for pursuing this area. The program will prioritize the switchgear replacements based on material condition, customers served, load supplied, risk, etc. The new switchgear is protected from the elements, which will ultimately extend the life of the assets, reduce inadvertent outages from flooding or animal intrusion, and improve reliability.
Non-LTIIP ³ Hardening of Power Lines, Facilities, Substations or Other Systems	Several programs make up PECO's non-LTIIP investments in hardening power lines, facilities, substations or other systems. First, PECO's Facility Enhancement Protection Program aims to increase a substation's resiliency by bolstering security measures. Because the security and resiliency of transmission and distribution infrastructure is critical to operations: (1) substation perimeters are and will continue to be hardened with high-security fencing materials, which mitigates risk of climbing and cutting of the fence mesh; and (2) monitoring systems are also installed to allow immediate response to security threats. Second, the Unit Tie Circuit Breaker Replacement Program replaces aging distribution-tie circuit breakers with new enclosed switchgear breakers. Finally, PECO has and will continue programs that focus on two key elements: (1) the strategic acquisition and deployment of spare transformers across PECO's service territory to improve outage response in the event of a catastrophic failure; and (2) replacement/relocation of obsolete outdoor switchgear with new indoor switchgear, which is better protected from external environmental factors and wildlife.
Systems	In addition to the foregoing, PECO makes non-LTIIP investments in new equipment and substations to reduce the risk of environmentally-driven equipment degradation and improve the resiliency of the electric grid. For example, PECO is building a robust Signal Conditioning and Data Acquisition System that will provide real-time visibility and control of the electric grid and enhance material conditioning data of the Company's equipment and storm response. PECO also invests in localized solutions to address distribution customers' reliability concerns and continually pursues new and innovative technology. An example is the Extra High Voltage upgrade to increase resiliency against severe storm events, which involves the replacement of aging transmission and substation 500 kV assets such as corroded overhead transmission conductors and insulation.
Non-LTIIP Weatherization Technologies and Equipment	These investments fund programs and projects that target customers experiencing multiple interruptions and who need focused and localized solutions to address reliability concerns. Multiple programs focus on replacing aerial infrastructure, including poles, overhead conductors, crossarms, insulators, connectors, and cutouts that have a high probability of failure caused by age-related degradation and normal wear and tear. Other investments in this category include PECO's investment in the Switchgear Replacement Program, which aims to increase substation resiliency by replacing aging, problematic outdoor switchgear with new indoor switchgear. Indoor switchgear is better protected from external environmental factors and wildlife issues, including animal intrusion, flooding, and corrosion. Thus, installing indoor switchgear will result in longer-lasting equipment, fewer inadvertent outages from flooding or animal intrusion, and a reduced risk of catastrophic failure.
Non-LTIIP Monitoring and Control Technologies	These investments fund programs and projects that focus on minimizing vegetation and wildlife-related outages impacting system resiliency; building critical infrastructure to support PECO's robust storm response; implementing new technology to enhance the distribution asset information system; modernizing the existing underground secondary network by deploying an advanced communication system; and enabling better situational awareness about the current underground assets. New research pilots are used to explore the construction and operations of microgrids which will help PECO understand the monitoring and control for future applications. PECO also has been expanding and implementing a drone program for aerial asset inspections and damage assessment to enhance storm response. Lastly, there are ongoing research and development projects to implement advanced technologies for Distribution and Transmission operational excellence.

ENVIRONMENTAL QUESTIONNAIRE

I. INSTRUCTIONS

The proposer shall prepare this Environmental Questionnaire (EQ) as accurately and completely as possible. Supporting information can be provided as attachments. The proposer must identify the location of the project and specifically describe the activities that would occur at that location. The proposer must provide specific information and quantities, regarding air emissions, wastewater discharges, solid wastes, etc., to facilitate the necessary review. In addition, the proposer must submit with this EQ a FINAL copy of the project's statement of work (SOW) or statement of project objective (SOPO) that will be used in the contract/agreement between the proposer and the U.S Department of Energy (DOE).

II. QUESTIONNAIRE

A. PROJECT SUMMARY

- Solicitation/Project Number: DE-FOA-0002740 Proposer: PECO Energy Company (PennDOT Subrecipient Project)
- 2. This Environmental Questionnaire pertains to a: 🗆 Recipient or Prime Contractor X Sub-recipient or Subcontractor
- 3. Principal Investigator: _____ Telephone Number: _____
- 4. Project Title: CREATE Plan: Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia (PennDOT subrecipient project)
- 5. Expected Project Duration: 5 years
- Location of Activities covered by <u>this</u> Environmental Questionnaire: (City/Township, County, State): Philadelphia, Philadelphia, Pennsylvania
- 7. List the full scope of activities planned (only for the location that is the subject of this Environmental Questionnaire):
- 8. List all other locations where work would be performed by the primary contractor of the project and subcontractor(s). Each of the following must have an individual Environmental Questionnaire.

Subcontractor or sub-recipient	Location of activities for this project
PennDOT	I-76 Corridor – Montgomery and Philadelphia County

9. Identify and select the checkbox with the predominant project work activities under Group A, B, or C

Group A

Routine administrative, procurement, training, and personnel actions. Contract activities/awards for management support, financial assistance, and technical services in support of agency business, programs, projects, and goals. Literature searches and information gathering, material inventories, property surveys; data analysis, computer modeling, analytical reviews, technical summary, conceptual design, feasibility studies, document preparation, data dissemination, and paper studies. Technical assistance including financial planning, assistance, classroom training, public meetings, management training, survey participation, academic contribution, technical consultation, and stakeholders surveys. Workshop and conference planning, preparation, and implementation which may involve promoting energy efficiency, renewable energy, and energy conservation.

STOP! If all work activities related to this project can be classified and described within categories under Group A, proceed directly to Section III CERTIFICATION BY PROPOSER. No additional information is required. If project work activities are described in either Group(s) B or C; then continue filling out questionnaire.

NETL F 451.1-1/3 Revised: 12/3/2014 Reviewed: 12/3/2014 (Page 2)

U.S. DEPARTMENT OF ENERGY

ENVIRONMENTAL QUESTIONNAIRE

Group B

Laboratory Scale Research, Bench Scale Research, Pilot Scale Research, Proof-of-Concept Scale Research, or Field Test Research. Work <u>DOES NOT</u> involve new building/facilities construction and site excavation/groundbreaking activities. This work typically involves routine operation of <u>existing</u> laboratories, commercial buildings/properties, offices and homes, project test facilities, factories/power plants, vehicles test stands and components, refueling facilities, utility systems, or other existing structures/facilities. Work will NOT involve major change in facilities missions and operations, land use planning, new/modified regulatory/operating permit requirements. Includes work specific to routine DOE Site operations and Lab research work activities, but NOT building construction and site preparation. DOE work typically involves laboratory facilities and lab equipment operations, buildings and grounds management activities; and buildings and facilities maintenance, repairs, reconfiguration, remodeling, equipment use and replacement.

Group C

Pilot Test Facilities Construction, Pilot Scale Research, Field Scale Demonstration, or Commercial Scale Application. Work typically involves facility construction, site preparation/excavation/groundbreaking, and/or demolition. This work would include construction, retrofit, replacement, and/or major modifications of laboratories, test facilities, energy system prototypes, and power generation infrastructure. Work may also involve construction and maintenance of utilities system right-of-ways, roads, vehicle test facilities, commercial buildings/properties, fuel refinery/mixing facilities, refueling facility, power plants, underground wells, and pipelines, and other types of energy research related facilities. This work may require new or modified regulatory permits, environmental sampling and monitoring requirements, master planning, public involvement, and environmental impact review. Includes work specific to DOE Site Operations and Lab operation activities involving building and facilities construction, replacement, decommissioning/demolition, site preparation, land use changes, or change in research facilities mission or operations.

B. PROPOSED PROJECT ALTERNATIVES

 If applicable, list any project alternatives considered to achieve the project objectives. The alternative considered to provide redundant power to Intelligent Transportation System (ITS) Communications Hubs was to install diesel or natural gas powered generators at each hub location.

C. PROJECT LOCATION

1. Provide a brief description of the project location (physical location, surrounding area, adjacent structures).

(b) (4)		
	All work is to occur in PennDOT's Limited Access Right-of-W	ay.

2. Attach a project site location map of the project work area.

NETL F 451.1-1/3 Revised: 12/3/2014 Reviewed: 12/3/2014 (Page 3)

U.S. DEPARTMENT OF ENERGY

ENVIRONMENTAL QUESTIONNAIRE

D. ENVIRONMENTAL IMPACTS

NEPA procedures require evaluations of possible effects (including land use, energy resource use, natural, historic and cultural resources, and pollutants) from proposed projects on the environment.

1. Land Use

a.	Characterize present land use where the proposed project would be located.	
----	--	--

- 1 Urban Industrial Suburban Rural
- Commercial Residential

Other:

- Agricultural
- Research Facilities

- Forest University Campus
- Identify the total size of the facility, structure, or system and what portion would be used for the proposed project. b. All work will occur within the ITS communications hub cabinet, which is approximately 5' tall x 5' wide x 3' deep.
- Describe planned construction, installation, and/or demolition activities, i.e., roads, utilities system right-of-ways, parking c. lots, buildings, laboratories, storage tanks, fueling facilities, underground wells, pipelines, or other structures. PennDOT's electrical contractor will remove existing UPS and batteries from the cabinets and install/wire a new UPS and lead acid batteries within the ITS communications hub cabinet. The re-arrangement and re-wiring of existing equipment to accommodate the new UPS and batteries will also be required.

ENVIRONMENTAL QUESTIONNAIRE

- d. Describe how land use would be affected by operational activities associated with the proposed project. No impact to existing land use
- e. Describe any plans to reclaim areas that would be affected by the proposed project.
 - ✓ No land areas would be affected.
- f. Would the proposed project affect any unique or unusual landforms (e.g., cliffs, waterfalls, etc.)? ✓ No □ Yes (describe)
- g. Would the proposed project be located in or near local, state, or federal parks; forests; monuments; scenic waterways; wilderness; recreation facilities; or tribal lands? □ No ✓ Yes (describe)

(\mathbf{b}) (\mathbf{A})		
(b) (4)		

2. Construction Activities and/or Operation

a.	Identify project structure(s), power line(s), pipeline(s), utilities system(s), right-of-way(s) or road	d(s) th	nat will be
	constructed and clearly mark them on a project site map or topographic map as appropriate.	1 🗸	None

b.	 Would the proposed project require the construction of waste pits or settling ponds? No Yes (describe and identify location, and estimate surface area disturbed) 				
c.	Would the proposed project affect any existing body of water?	1	No		Yes (describe)
d.	Would the proposed project impact a floodplain or wetland?	1	No		Yes (describe)

- e. Would the proposed project potentially cause runoff/sedimentation/erosion? 🖌 No 🛛 X 🗆 Yes (describe)
- f. Would the proposed project include activities located on perma-frost, near fault zones, or involve fracturing, well drilling, geologic stimulation, sequestration, active seismic data collection, and/or deepwater operations?
 ✓ No □ Yes (describe)
- g. Would the proposed project involve any of the following: nanotechnology; recombinant DNA or genetic engineering; facility decommissioning or disposition of equipment/materials; or management of radioactive wastes/materials?

✓ No □ Yes (describe)

ENVIRONMENTAL QUESTIONNAIRE

3. Biological Resources

- a. Identify any State or Federally listed endangered or threatened plant or animal species potentially affected by the proposed project.
 - None
- b. Would any designated critical habitat be affected by the proposed project? Vo 🗆 Yes (describe)
- c.
 Describe any impacts that construction would have on any other types of sensitive or unique habitats.

 □
 No planned construction
 □
 No habitats
 ✓
 None
 □
 Impact (describe)
- d. Would any foreign substances/materials be introduced into ground or surface waters, soil, or other earth/geologic resource because of project activities? How would these foreign substances/materials affect the water, soil, biota, and geologic resources?
 ✓ No □ Yes (describe)
- e. Would any migratory animal corridors be impacted or disrupted by the proposed project? 🖌 No 🗆 Yes (describe)

4. Socioeconomic and Infrastructure Conditions

- a. Would local socio-economic changes result from the proposed project? 🖌 🖌 No 🗆 Yes (describe)
- b. Would the proposed project generate increased traffic use of roads through local neighborhoods, urban or rural areas?
 ✓ No □ Yes (describe)
- c. Would the proposed project require new transportation access (roads, rail, etc.)? Describe location, impacts, costs.
 ✓ No □ Yes (describe)
- d. Would the proposed project create a significant increase in local energy usage? 🔨 🖌 No 🗆 Yes (describe)

5. Historical/Cultural Resources

a. Describe any historical, archaeological, or cultural sites in the vicinity of the proposed project; note any sites included on the National Register of Historic Places.

(b) (4)

ENVIRONMENTAL QUESTIONNAIRE

- b. Would construction or operational activities planned under the proposed project disturb any historical, archaeological, or cultural sites? □ No planned construction □ No historic sites □ Yes (describe) ✓ No Impact (discuss) All work to occur within the existing (b) (4)
- c. Has the State Historic Preservation Office been contacted with regard to this project? 🖌 🖌 No 🗆 Yes (describe)
- d. Would the proposed project interfere with visual resources (e.g., eliminate scenic views) or alter the present landscape?
 ✓ No □ Yes (describe)
- e. Would the proposed project be located on or adjacent to tribal lands, lands considered to be sacred, or lands used for traditional purposes? Describe any known tribal sensitivities for the proposed project area. No

6. Atmospheric Conditions/Air Quality

a. Identify air quality conditions in the immediate vicinity of the proposed project with regard to attainment of National Ambient Air Quality Standards (NAAQS). This information is available under the Green Book Non-Attainment Areas for Criteria Pollutants located at <u>http://www.epa.gov/air/oaqps/greenbk/astate.html</u>

8	Attainment	Non-Attainment
O ₃ - 1 Hour		×
O ₃ - 8 Hour		×
SO _x		
PM - 2.5		
PM - 10		
CO		
NO ₂		
Lead		

- b. Would proposed project require issuance of new or modified local, state, or federal air permits to perform project related work and activities?
 Vo
 Ves (describe)
- c. Would the proposed project be in compliance with local and state air quality requirements? ✓ Yes If not, please explain.
- d. Would the proposed project be classified as either a New Source or a major modification to an existing source?
 ✓ No □ Yes (describe)

ENVIRONMENTAL QUESTIONNAIRE

e. What types of air emissions, including fugitive emissions, would be anticipated from the proposed project, and what would be the maximum annual rate of emissions for the project?

		Maximum per Year	Total for Project		
	SO _x	Not applicable	Not applicable		
	NO _x	Not applicable	Not applicable		
	PM - 2.5	Not applicable	Not applicable		
	PM - 10	Not applicable	Not applicable		
	CO	Not applicable	Not applicable		
	CO ₂	Not applicable	Not applicable		
	Lead	Not applicable	Not applicable		
	H_2S	Not applicable	Not applicable		
	Organic solv	vent vapors or other volatile	organic compoundsList:		
12-31	Hazardous air pollutants List:				
	Hazardous a	ir pollutants List:			
	Hazardous a Other List	<u> </u>			

- f. Would any types of emission control or particulate collection devices be used?
 ✓ No □ Yes (describe, including collection efficiencies)
- g. How would emissions be vented? N/A

7. Hydrologic Conditions/Water Quality

- a. What nearby water bodies may be affected by the proposed project? Provide distance(s) from the project site. None
- b. What sources would supply potable and process water for the proposed project? None

NETL F 451.1-1/3 Revised: 12/3/2014 Reviewed: 12/3/2014 (Page 8)

U.S. DEPARTMENT OF ENERGY

ENVIRONMENTAL QUESTIONNAIRE

c. Quantify the wastewater that would be generated by the proposed project.

		Gallons/day	Gallons/year
	Non-contact cooling water		
	Process water		
	Sanitary		
	Other describe:		2
1	None		

d. What would be the major components of each type of wastewater (e.g., coal fines)? 🖌 No wastewater produced

- e. Identify the local treatment facility that would receive wastewater from the proposed project.
 - No discharges to local treatment facility
- f. Describe how wastewater would be collected and treated. 🖌 No wastewater produced
- g. Would any run-off or leachates be produced from storage piles or waste disposal sites? 🖌 No 🗆 Yes (describe source)
- h. Would project require issuance of new or modified water permits to perform project work or site development activities?
 ✓ No □ Yes (describe)
- i. Where would wastewater effluents from the proposed project be discharged? 🖌 No wastewater produced
- j. Would the proposed project be permitted to discharge effluents into an existing body of water?
 ✓ No □ Yes (describe water use and effluent impact)
- k. Would a new or modified National Pollutant Discharge Elimination System (NPDES) permit be required?
 ✓ No □ Yes (describe)
- 1. Would the proposed project adversely affect the quality or movement of groundwater? 🖌 No 🗆 Yes (describe)
- m. Would the proposed project require issuance of an <u>Underground Injection Control (UIC)</u> permit?
 ✓ No □ Yes (describe)
- n. Would the proposed project be located in or near a wellhead protection area, drinking water protection area, or above a sole source aquifer or underground source of drinking water (USDW)?

ENVIRONMENTAL QUESTIONNAIRE

✓ No □ Yes (describe)

8. Solid and Hazardous Wastes

a. Identify and estimate wastes that would be generated from the project. Solid wastes are defined as any solid, liquid, semisolid, or contained gaseous material that is discarded, has served its intended purpose, or is a manufacturing or mining byproduct (See <u>EPA Municipal Solid Waste</u> and <u>Municipal Solid Waste by State</u>).

	Annual Quantity
X Municipal solid waste (e.g., paper, plastic, etc.)	
Coal or coal by-products	
Other Identify:	
Hazardous waste – Identify:	
✓ None	

- b. Would project require issuance of new or modified solid waste and/or hazardous waste related permits to perform project work activities? ✓ No □ Yes (explain)
- c. How and where would solid waste disposal be accomplished?
 - ✓ None generated
 - On-site (identify and describe location)
 - □ Off-site (identify location and describe facility and treatment)
- d. How would wastes for disposal be transported? No waste anticipated
- f. How would hazardous or toxic waste be collected and stored? 🖌 None used or produced
- g. If hazardous wastes would require off-site disposal, have arrangements been made with a certified TSD (Treatment, Storage, and Disposal) facility?
 - ✓ Not required □ Arrangements not yet made □ Arrangements made with a certified TSD facility (identify)

9. Health/Safety Factors

- a. Identify hazardous or toxic materials that would be used in the proposed project.

ENVIRONMENTAL QUESTIONNAIRE

- b. Describe the potential impacts of this project's hazardous materials on human health and the environment.
 ✓ None
- c. Would there be any special physical hazards or health risks associated with the project? 🖌 No 🛛 Yes (describe)
- d. Does a worker safety program exist at the location of the proposed project? 🖌 🖌 No 🗆 Yes (describe)
- e. Would additional safety training be necessary for any new laboratory, equipment, or processes involved with the project?
 ✓ No □ Yes (describe)
- f. Describe any increases in ambient noise levels to the public from construction and operational activities.
 ✓ None

 Increase in ambient noise level (describe)
- g. Would project construction result in the removal of natural or other barriers that act as noise screens?
 □ No construction planned ✓ No □ Yes (describe)
- h. Would hearing protection be required for workers? ✓ No □ Yes (describe)

10. Environmental Restoration and/or Waste Management

- a. Would the proposed project include CERCLA removals or similar actions under RCRA or other authorities?
 ✓ No □ Yes (describe)
- b. Would the proposed project include siting, construction, and operation of temporary pilot-scale waste collection and treatment facilities or pilot-scale waste stabilization and containment facilities? Vo D Yes (describe)
- c. Would the proposed project involve operations of environmental monitoring and control systems?
 ✓ No □ Yes (describe)
- d. Would the proposed project involve siting, construction, operation, or decommissioning of a facility for storing packaged hazardous waste for 90 days or less? ✓ No □ Yes (describe)

ENVIRONMENTAL QUESTIONNAIRE

E. REGULATORY COMPLIANCE

- 1. For the following laws, describe any existing permits, new or modified permits, manifests, responsible authorities or agencies, contacts, etc., that would be required for the proposed project
- a. Resource Conservation and Recovery Act (<u>RCRA</u>): ✓ None □ New Required □ Modification Required Describe:
- b. Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA):
 ✓ None □ New Required □ Modification Required Describe:
- Toxic Substance Control Act (TSCA): None New Required Modification Required c. Describe: Clean Water Act (CWA): d. None New Required Modification Required Describe: Underground Storage Tank Control Program (UST): 🗸 New Required Modification Required None e. Describe: f. Underground Injection Control Program (UIC): None New Required Modification Required П Describe: Clean Air Act (CAA): New Required Modification Required None g. Describe: Endangered Species Act (ESA): None New Required Modification Required h. Describe: i. Floodplains and Wetlands Regulations: Modification Required None New Required Describe: Fish and Wildlife Coordination Act (FWCA): Modification Required j. None New Required Describe:

ENVIRONMENTAL QUESTIONNAIRE

- k. National Historic Preservation Act (NHPA): ✓ None □ New Required □ Modification Required Describe:
 1. Coastal Zone Management Act (CZMA): ✓ None □ New Required □ Modification Required Describe:
- Identify any other environmental laws and regulations (Federal, state, <u>and</u> local) for which compliance would be necessary for this project, and describe the permits, manifests, and contacts that would be required. None

F. DESCRIBE ANY ISSUES THAT WOULD GENERATE PUBLIC CONTROVERSY REGARDING THE PROPOSED PROJECT. ✓ None

G. WOULD THE PROPOSED PROJECT PRODUCE ADDITIONAL DEVELOPMENT, OR ARE OTHER MAJOR DEVELOPMENTS PLANNED OR UNDERWAY, IN THE PROJECT AREA?

✓ No □ Yes (describe)

H. SUMMARIZE THE SIGNIFICANT IMPACTS THAT WOULD RESULT FROM THE PROPOSED PROJECT.

✓ None (provide supporting detail) □ Significant impacts (describe)

I. PROVIDE A DESCRIPTION OF HOW THE PROJECT WOULD BE DECOMMISSIONED, INCLUDING THE DISPOSITION OF EQUIPMENT AND MATERIALS.

It is intended that the project would continue throughout the lifespan of the procured batteries (10 years). At which time, the expired batteries would be disposed of in accordance with State and Local guidelines.

III. CERTIFICATION BY PROPOSER

I hereby certify that the information provided herein is current, accurate, and complete as of the date shown immediately below.

Signature: (b) (6)	Date (mm/dd/yyyy): 03/29/23
Typed Name: (b) (6)	
Title: Acting Senior Manager – Traffic Operations	
Organization: PennDOT District 6-0	
ENVIRONMENTAL QUESTIONNAIRE

IV. <u>REVIEW AND APPROVAL BY DOE</u>

I hereby certify that I have reviewed the information provided in this questionnaire, have determined that all questions have been appropriately answered, and judge the responses to be consistent with the efforts proposed.

DOE Project Manager

Signature: _____

Date (mm/dd/yyyy):

Typed Name:

LOBBYING CERTIFICATION FORM

(applies only if Agreement is Federally Funded) [Exhibit needs to be printed, completed offline, and then scanned and attached]

Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with this federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, Disclosure of Lobbying Activities, in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed under *Section 1352, Title 31, U. S. Code.* Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than **\$100,000** for such failure.

SIGNATURE: (b)

TITLE: Deputy Secretary for Planning

DATE: March 30, 2023

Exhibit

Enclosure 1 to Management Directive 305.16 Amended

Page 1 of 1

DISCLOSURE OF LO Complete this form to disclose lobbying (See reverse for pul	g activities pursuant	to 31 U.S.C. 1352	Approved by OMB 0348-0046			
1. Type of Federal Action: 2. Status of Federal a. contract a. bid/o b. grant b. initia c. cooperative agreement b. initia d. loan c. post- f. loan insurance 4. Name and Address of Reporting Entity:	al Action: ffer/application I award award 5. If Reporting En	3. Report Type: a. initial fil b. material For Material year date of las	ling Il change Change Only: quarter st report ubawardee, Enter Name			
Prime Subawardee Tier, <i>if known</i> : Congressional District, <i>if known</i> : ^{4c} 6. Federal Department/Agency:		Prime: District, <i>if known</i> : m Name/Descripti	on:			
8. Federal Action Number, if known:	CFDA Number, <i>i</i> 9. Award Amount \$	if applicable:				
10. a. Name and Address of Lobbying Registrant (<i>if individual, last name, first name, MI</i>):		lo. 10a)	(including address if			
11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.	Signature:					
Federal Use Only:	•		Authorized for Local Reproduction Standard Form LLL (Rev. 7-97)			

INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime Federal recipient, at the initiation or receipt of a covered Federal action, or a material change to a previous filing, pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or agreement to make payment to any lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a covered Federal action. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

- 1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence the outcome of a covered Federal action.
- 2. Identify the status of the covered Federal action.
- Identify the appropriate classification of this report. If this is a followup report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last previously submitted report by this reporting entity for this covered Federal action.
- 4. Enter the full name, address, city, State and zip code of the reporting entity. Include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is, or expects to be, a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the 1st tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.
- 5. If the organization filing the report in item 4 checks "Subawardee," then enter the full name, address, city, State and zip code of the prime Federal recipient. Include Congressional District, if known.
- 6. Enter the name of the Federal agency making the award or loan commitment. Include at least one organizationallevel below agency name, if known. For example, Department of Transportation, United States Coast Guard.
- 7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans, and loan commitments.
- 8. Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g., Request for Proposal (RFP) number; Invitation for Bid (IFB) number; grant announcement number; the contract, grant, or loan award number; the application/proposal control number assigned by the Federal agency). Include prefixes, e.g., "RFP-DE-90-001."
- 9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitment for the prime entity identified in item 4 or 5.
- 10. (a) Enter the full name, address, city, State and zip code of the lobbying registrant under the Lobbying Disclosure Act of 1995 engaged by the reporting entity identified in item 4 to influence the covered Federal action.
 - (b) Enter the full names of the individual(s) performing services, and include full address if different from 10 (a). Enter Last Name, First Name, and Middle Initial (MI).
- 11. The certifying official shall sign and date the form, print his/her name, title, and telephone number.

According to the Paperwork Reduction Act, as amended, no persons are required to respond to a collection of information unless it displays a valid OMB Control Number. The valid OMB control number for this information collection is OMB No. 0348-0046. Public reporting burden for this collection of information is estimated to average 10 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0046), Washington, DC 20503.

Instructions and Summary

Award Number: DE-FOA-0002740

Date of Submission: 4/4/2023

Award Recipient: PECO Energy Company

Form submitted by: PECO Energy Company

(May be award recipient or sub-recipient)

Please read the instructions on each worksheet tab before starting. If you have any questions, please ask your DOE contact! Do not modify this template or any cells for formulas!

1. If using this form for award application, negotiation, or budget revision, fill out the blank white cells in workbook tabs a. through j. with total project costs.

2. Blue colored cells contain instructions, headers, or summary calculations and should not be modified. Only blank white cells should be populated.

3. Enter detailed support for the project costs identified for each Category line item within each worksheet tab to autopopulate the summary tab.

4. The total budget presented on tabs a. through i. must include both Federal (DOE) and Non-Federal (cost share) portions.

5. All costs incurred by the preparer's sub-recipients, contractors, and Federal Research and Development Centers (FFRDCs), should be entered only in section f. Contractual. All other sections are for the costs of the preparer only.

6. Ensure all entered costs are allowable, allocable, and reasonable in accordance with the administrative requirements prescribed in 2 CFR 200, and the applicable cost principles for each entity type: FAR Part 31 for For-Profit entities; and 2 CFR Part 200 Subpart E - Cost Principles for all o her non-federal en ities.

7. Add rows as needed throughout tabs a. through j. If rows are added, formulas/calcula ions may need to be adjusted by the preparer. Do not add rows to the Instructions and Summary tab. If your project contains more han five budget periods, consult your DOE contact before adding additional budget period rows and columns.

8. ALL budget period cost categories are rounded to the nearest dollar.

BURDEN DISCLOSURE STATEMENT

Public reporting burden for this collection of information is estimated to average 24 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Office of Information Resources Management Policy, Plans, and Oversight, AD-241-2 - GTN, Paperwork Reduction Project (1910-5162), U.S. Department of Energy 1000 Independence Avenue, S.W., Washington, DC 20585; and to the Office of Management and Budget, Paperwork Reduction Project (1910-5162), Washington, DC 20503.

	The	values in this sum	mary table are fro	Y OF BUDGET CA om entries made in			e cells require dat	a entry
Section A - Budget Summarv								
		Federal	Cost Share			Total Costs	Cost Share %	Proposed Budget Period Dates
	Budget Period 1							
	Budget Period 2	(b) (4)						
	Budget Period 3	-						
	Budget Period 4	-						
	Budget Period 5	-						
Section B - Budget Categories	Total				*			
CATEGORY	Budget Period 1	Budget Period 2	Budget Period 3	Budget Period 4	Budget Period 5	Total Costs	% of Project	Comments (as needed)
a. Personnel								
b. Fringe Benefits	(b) (4)							
c. Travel								
d. Equipment								
e. Supplies								
. Contractual								
Sub-recipient								
Contractor	(b) (4)							
FFRDC								
Total Contractua								
g. Construction								
h. Other Direct Costs								
Total Direct Costs								
. Indirect Charges								
Total Costs	5							

a. Personnel

INSTRUCTIONS - PLEASE READ!!! 1. List project costs solely for employees of the entity completing this form. All personnel costs for subrecipients and contractors must be included under f. Contractual. 2. All personnel should be identified by position title and not employee name. Enter the amount of time (e.g., hours or % of time) and the base hourly rate and the total direct personnel compensation will automatically calculate. Rate basis (e.g., rate negotiated for each hour worked on the project, labor distr bution report, state civil service rates, etc.) must also be identified. 3. If baded labor rates are utilized, a description of the costs the loaded rate is comprised of must be included in the Additional Explanation section below. DOE must review all components of the loaded labor rate for reasonableness and unallowable costs (e.g. fee or profit). 4. If a position and hours are attributed to multiple employees (e.g. Technician working 4000 hours) the number of employees for that position title must be identified. 5. Each budget period is rounded to the nearest dollar.

			E	Budget P	eriod 1	E	Budget P	eriod 2	Budget	Period 3		Budget Peri	iod 4		Budget Perio	d 5	Project	Project	
SOPO Task #	CREATE Component	Position Title	Time (Hrs)	Hourly Rate (\$/Hr)	Total Budget Period 1	Time (Hrs)	Hourly Rate (\$/Hr)	Total Budget Period 2	Time (Hrs) (\$/Hr	Budget	Time (Hrs)	Hourly Rate (\$/Hr)	Total Budget Period 4	Time (Hrs)	Hourly Rate (\$/Hr)	Total Budget Period 5	Total Hours	Total	Rate Basis
					ψυ			ψυ		\$0			\$0			\$0		\$0	
					\$0			\$0		\$0			\$0			\$0		\$0	
					\$0			\$0		\$0			\$0			\$0		\$0	
					\$0			\$0		\$0			\$0			\$0		\$0	
					\$0			\$0		\$0			\$0			\$0		\$0	
					\$0			\$0		\$0			\$0			\$0	0	\$0	
					\$0			\$0		\$0			\$0			\$0	0	\$0	
					\$0			\$0		\$0			\$0			\$0		\$0	
					\$0			\$0		\$0			\$0			\$0		\$0	
					\$0			\$0		\$0			\$0			\$0		\$0	
					\$0			\$0		\$0	D		\$0			\$0	0	\$0	
					\$0			\$0		\$0	D		\$0			\$0	0	\$0	
					\$0			\$0		\$0	D		\$0			\$0	0	\$0	
					\$0			\$0		\$0	C		\$0			\$0	0	\$0	
					\$0			\$0		\$0	D		\$0			\$0	0	\$0	
					\$0			\$0		\$0	C		\$0			\$0	0	\$0	
					\$0			\$0		\$0	D		\$0			\$0	0	\$0	
					\$0			\$0		\$0	D		\$0			\$0	0	\$0	
					\$0			\$0		\$0)		\$0			\$0	0	\$0	
					\$0			\$0		\$0	D		\$0			\$0	0	\$0	
					\$0			\$0		\$0	C		\$0			\$0	0	\$0	
					\$0			\$0		\$0	C		\$0			\$0	0	\$0	
					\$0			\$0		\$0	0		\$0			\$0	0	\$0	
					\$0			\$0		\$0			\$0			\$0	0	\$0	
		Total Personnel Costs	6 0		\$0	0		\$0	0	\$0	0 0	D	\$0	0		\$0	0	\$0	

Additional Explanation (as needed): For Lower South, there are more hours in the final budget period because PECO does not contract out testing. A range was provided for the number of resources given the change in team size per budget period.

b. Fringe Benefits

INSTRUCTIONS - PLEASE READ!!! 1. Fill out the table below by position title. If all employees receive the same fringe benefits, you can show "Total Personnel" in the Labor Type column instead of listing out all position titles. 2. The rates and how they are applied should not be averaged to get one fringe cost percentage. Complex calculations should be described/provided in the Additional Explanation section below. 3. The fringe benefit rates should be applied to all positions, regardless of whether those funds will be supported by Federal Share or Recipient Cost Share. 4. Each budget period is rounded to the nearest dollar.

Labor Type	CREATE Component	Budget	Period 1		Budget F	Period 2		Budget F	Period 3		Budget F	Period 4		Budget F	Period 5		Total Project
		Personnel Costs	Rate	Total													
				\$0			\$0			\$0			\$0			\$0	\$0
				\$0			\$0			\$0			\$0			\$0	\$0
				\$0			\$0			\$0			\$0			\$0	\$0
				\$0			\$0			\$0			\$0			\$0	\$0
				\$0			\$0			\$0			\$0			\$0	\$0
	Total:	\$0		\$0	\$0		\$0	\$0		\$0	\$0		\$0	\$0		\$0	\$0

A federally approved fringe benefit rate agreement, or a proposed rate supported and agreed upon by DOE for estimating purposes is required at the time of award negotiation if reimbursement for fringe benefits is requested. Please check (X) one of the options below and provide the requested information if not previously submitted.

A fringe benefit rate has been negotiated with, or approved by, a federal government agency. A copy of the latest rate agreement is/was included with the project application.*

There is not a current federally approved rate agreement negotiated and available.**

*Unless the organization has submitted an indirect rate proposal which encompasses the fringe pool of costs, please provide the organization's benefit package and/or a list of the components/elements that comprise the fringe pool and the cost or percentage of each component/element allocated to the labor costs identified in the Budget Justification (Form EERE 335.1).

**When this option is checked, the entity preparing this form shall submit an indirect rate proposal in the format provided in the Sample Rate Proposal at https://www.energy.gov/eere/funding/downloads/sample-indirect-rate-proposal-and-profit-compliance-audit, or a format that provides the same level of information and which will support the rates being proposed for use in the performance of the proposed project.

Additional Explanation (as necessary): Please use this box (or an attachment) to list the elements that comprise your fringe benefits and how they are applied to your base (e.g. Personnel) to arrive at your fringe benefit rate.

INSTRUCTIONS - PLEASE READ!!!

1. Identify Foreign and Domestic Travel as separate items. Examples of Purpose of Travel are subrecipient site visits, DOE meetings, project mgmt. meetings, etc. Examples of Basis for Estimating Costs are past trips, travel quotes, GSA rates, etc.

2. All listed travel must be necessary for performance of the Statement of Project Objectives.

3. Only travel hat is directly associated with this award should be included as a direct travel cost to the award.

4. Federal travel regulations are contained within the applicable cost principles for all entity types.

5. Travel costs should remain consistent wi h travel costs incurred by an organization during normal business opera ions as a result of the organizations written travel policy. In absence of a written travel policy, organizations must follow he regulations prescribed by the General Services Administration.

6. Columns E, F, G, H, I, J, and K are per trip.

7. The number of days is inclusive of the day of departure and the day of return.

8. Recipients should enter City and State (or City and Country for International travel) in the Depart from and Destination fields.

9. Each budget period is rounded to the nearest dollar.

Image: Section of the sectio	Domestic Travel International Travel Budget Period 1 Total Domestic Travel			3udget Per	iod 1			\$0 \$0	
Image: Section of the sectio	Budget Period 1 Total							\$0	
- - - -	Budget Period 1 Total						 		
	Budget Period 1 Total								
	Budget Period 1 Total							\$0	
	Budget Period 1 Total						 	\$0	
Image: Section of the sectio								\$0	
								\$0	
			E	Budget Per	iod 2				
								\$0	
								\$0	
								\$0	
								\$0	
	International Travel						 	\$ 0	
	 Dudget Devied 9 Tetal						 	\$0 \$0	
	Budget Period 2 Total Domestic Travel			Budget Pe	riad 2			Ф О	
	 Domestic Traver	-		buuyei re	nou s	1	 	\$0	
							 	\$0 \$0	
								\$0 \$0	
								\$0	
	International Travel								
								\$0	
	Budget Period 3 Total							\$0	
	 Domestic Travel			Budget Pe	riod 4		 		
							 	\$0	
							 	\$0 \$0	
							 	\$0 \$0	
	International Travel							φU	
								\$0	
	Budget Period 4 Total							\$0	
	Domestic Travel			Budget Pe	riod 5				
								\$0	
								\$0	
							 	\$0	
	 Internetion 177							\$0	
	International Travel							\$0	
	Budget Period 5 Total							\$0 \$0	
	PROJECT TOTAL						 	\$0 \$0	
Additional Expl									

Deta led Budget Jus if cat on

d. Equipment

CEL Compute Exponent in Sequent in Sequent in Bail of Cas Multical fact IDENTIFIE CONTROLLING INTERNATION OF	Image: Section of the sectio		Budget Porio	
Description Description Image: Section of the sect	Image: Control of the second		Budget Porio	Si
Description Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description	Image: Constraint of the second sec		Budget Porice Budget Porice	
Note Note <t< td=""><td>Rudert Perior</td><td></td><td>Budget Peric</td><td>Si </td></t<>	Rudert Perior		Budget Peric	Si
Description Page http:///page/page/page/page/page/page/page/pa	Image: Control of the second		Budget Porio	Si
	Image: Constraint of the second sec		Budget Porio	Si
	Image: Constraint of the second sec		Budget Porio	Si
Description Description Image: Section of the sect	Image: Constraint of the second sec		Budget Porio	Si
Note Negretical Image: Second S	Image: Constraint of the second of		Budget Porio	Si
Base for i Base for i I	Image: Constraint of the second of		Budget Porio	Si
Description Resp. Proof 1 Image Rest 1 Image Rest 1	Image: Constraint of the second sec		Budget Porio	B
Base Point Bage Point Image Point Image Point Image Point	Image: Constraint of the second sec		Budget Porio	30
Description Description Image: Construction Image: Construction Image: Construction	Image: Constraint of the second of		Budget Porio	Si
Bade Note Bade Note Image Note Image Note Image Note	Image: Constraint of the second sec		Budget Porio	Si
	Image: Constraint of the second sec		Budget Porio	Si
	Image: Constraint of the second sec		Budget Porio	B - B - B - C - B
	Image: Constraint of the second sec		Budget Porio	Si
Bage Point 1 Bage Point 2 Image Point 2 Image Point 2	Image: Constraint of the second of		Budget Porio	30
Book Book Privid Image: State St	Image:	and 2 of all and 2	Budget Porio	30
Buttor	Image:	sol 2 otal	Budget Porio	Si
Body Protof Body Protof Image: State	Image:	ool2 atal	Budget Porio	30
Budge Proid 1 Budge Proid 1 Image: State St	Image:	and a set of	Budget Porio	30 - 31 - 32 - 41 Period 3 - 50 - 50 - 50 - 50 - 50 - 50 - 50 - 50 - 50 - 50 - 50 - 50 - 50 - 50 - 50 - 50 - 50 - 50 - 50 - 51 - 52 - 53 - 54 - 55 - 56 - 57 - 58 - 59 - 50 - 51 - 52 - <
Budge Period Budge Period Image: Section of the sec	Image:		Budget Peric	Si Image: Sign of the sector of
Baile Period Bidge Period 1 Image: Period 1 Image: Period 1 <	Image:	sol2 otal	Budget Peric	30
	Image:		Budget Peric	50
Budget Period Budget Period Image: Section of the section of	Image:	ed 2 otal	Budget Peric	S0 S0 S0 -
	Image:	od 2 otal	Budget Peric	Bit Comparison
Budget Period Budget Period Image: Section of the se	Image:	od 2 otal	Budget Peric	Si Image: Signal state sta
	Image: Constraint of the sector of	od 2 otal		S0
	Image:	od 2 otal		50
	Image:	od 2 otal		30
Barbon of the second of th	Image:	od 2 otal		50
Barbar Barbar Image: State Stat	Image:	od 2 otal		S0
	Image:	od 2 otal		\$0
	Image:	od 2 otal		50 51 52 53 50 50 50 50 50 50 50 50 50 50 50 50 50
	Image:	od 2 otal		50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50
	Image:	od 2 otal		\$0
Budget Period 1 Budget Period 1 Image: Period 1 Image: Period 1	Image:	od 2 otal		50 50 41 Period 3 50 50 50 50 50 50 50 50 50 50
		od 2 otal		\$0 \$0 \$0
Budge Period 1 Budge Period 1 Image: Constraint of the second of t	Image:			\$0 \$0
Budge Proiot 1 Budge Proiot 2 Image: Provide 1 Image: Provide 1 Image: Provide 1	Budget Period			
Budget Period 1 Image: Period 1	Budget Pariod			30
Budget Period 1 Budget Period 1 Image: Period 1 Image: Period 1	Budget Period			
Budget Period 1 Budget Period 2 Budget Period 1 Budget Period 2 Budget Period 1	Budget Period			\$0
Build of the second o	Budget Pariod			\$0
Budget Period 1 Image: Period 2 90 Image: Period 2	Budget Period			\$0 \$0
Builder Period 1 Image: Period 1 Image: Period 1 Image: Period 1	Budot Feid			\$0
Builder Period 1 Builder Period 1 Image: Period 1	Budget Pariod			\$0
Budge Period 1 Budge Period 2 Budge Period 2 Budge Period 1 Budge Period 1 Budge Period 1 Budge Period 1 Budge Period 2 Budge Period 2 Budge Period 2 Budge Period 1 Budge Period 1 Budge Period 1 Budge Period 1 Budge Period 2	Budget Period		1	\$0
Budget Period 1	Budot Feriod			\$0 \$0
Budget Period 1	Budget Pario			\$0
Budget Period 1 Budget Period 1 Budget Period 1 Sol Budget Period 1 Sol Budget Period 1 Sol Budget Period 2 Sol Budget Period 1 Sol Budget Period 2 Sol Budget Period 1 Sol Budget Period 1 Sol Budget Period 1 Sol Budget Period 1 Sol	Budget Perior	1		
Budget Period 1	Budget Perior			\$0
BudgetProid 1		od 1 otal		
Budget Proid 1				
Budget Proid 1				\$0 \$0
Budget Prior 1 Budget Prior 1 Budget Prior 1 Sin				\$0 \$0 \$0 \$0 \$0 \$0 \$0
Budget Period 1 Budget Period 1 S0				\$0 \$0 \$0 \$0 \$0 \$0
Budget Period 1 Budget Period 1 Subject Period 1 Image: State				50
BudgetPriorit BudgetPrist BudgetPrist <td></td> <td></td> <td></td> <td>50 </td>				50
Budget Prior 1 Budget Prior 1 Budget Prior 1 Signature Signature Budget Prior 1				50
Budget Priol 1 0 0 0 30 0 50				\$0 50 \$0 50 \$0 50 \$0 50 \$0 50 \$0 50 \$0 50 \$0 50 \$0 50
Budget Period 1				\$0 50 \$0 50 \$0 50 \$0 50 \$0 50 \$0 50 \$0 50 \$0 50 \$0 50 \$0 50 \$0 50 \$0 50
				30
	CREA E Component Equipment Item			\$0

INSTRUCTIONS - PLEASE READ

1. Supplies are generally defined as an item with an acquisition cost of \$5,000 or less and a useful life expectancy of less than one year. Supplies are generally consumed during the project performance. Please refer to the applicable Federal regulations in 2 CFR 200 for specific supplies definitions and treatment.

2. List all proposed supplies below, providing a basis of costs (e.g. contractor quotes, catalog prices, prior invoices, etc.). Briefly justify the need for the Supplies as they apply to the Statement of Project Objectives. Note that Supply items must be direct costs to the project at this budget category, and not duplicative of supply costs included in the indirect pool that is the basis of the indirect rate applied for this project.

3. Multiple supply items valued at \$5,000 or less used to assemble an equipment item with a value greater than \$5,000 with a useful life of more than one year should be included on the equipment tab. If supply items and costs are ambiguous in nature, contact your DOE representative for proper categorization.

4. Add rows as needed. If rows are added, formulas/calculations may need to be adjusted by the preparer.

5. Each budget period is rounded to the nearest dollar.

SOPO Task #	CREATE Component	General Category of Supplies	Qty	Unit Cost	Total Cost	Basis of Cost	Justification of need
				Budg	jet Period 1		
					\$0		
					\$0 \$0		
					\$0		
					\$0		
					\$0		
					\$0		
					\$0		
		Budget Period 1 Total			\$0		
				Budg	jet Period 2		
					\$0		
					\$0		
					\$0		
					\$0		
					\$0		
					\$0 \$0		
					\$0 \$0		
		Budget Period 2 Total			\$0		
		Budget Feriou z Total		Puda	jet Period 3		
	<u> </u>			Βυαί	s0		
					\$0 \$0		
					\$0 \$0		
					\$0		
					\$0 \$0		
					\$0		
					\$0		
					\$0		
		Budget Period 3 Total			\$0		
				Budg	jet Period 4		
					\$0		
					\$0		
					\$0		
					\$0		
					\$0		
	L				\$0		
					\$0		
	<u> </u>				\$0		
		Budget Period 4 Total			\$0		
				Budg	jet Period 5		
					\$0		
					\$0		
					\$0 \$0		
					\$0 \$0		
	<u> </u>				\$0 \$0		
					\$0		
					\$0		
		Budget Period 5 Total			\$0		
		TOTAL SUPPLIES			\$0 \$0		
					ΨŪ		

INSTRUCTIONS - PLEASE READ

1. The entity completing this form must provide all costs related to sub-recipients, contractors, and FFRDC partners in the applicable boxes below.

2. Sub-recipients (partners sub-awardees): Subrecipients shall submit a Budget Justification describing all project costs and calculations when their total proposed budget exceeds either (1) \$100 000 or (2) 25% of total award costs. These sub-recipient forms may be completed by either the sub-recipients themselves or by the preparer of this form. The budget totals on the sub-recipient's forms must match the sub-recipient entries below. A subrecipient is a legal entity to which a subaward is made, who has performance measured against whether the objectives of the Federal program are met, is responsible for programmatic decision making, must adhere to applicable Federal program compliance requirements, and uses the Federal funds to carry out a program of the organization. All characteristics may not be present and judgement must be used to determine sub-recipient vs. contractor status.

3. Contractors: List all contractors supplying commercial supplies or services used to support the project. For each Contractor cost with total project costs of \$100,000 or more, a Contractor quote must be provided. A contractor is a legal entity contracted to provide goods and services within normal business operations, provides similar goods or services to many different purchasers, operates in a competitive environment, provides goods or services that are ancillary to the operation of the Federal program, and is not subject to compliance requirements of the Federal program. All characteristics may not be present and judgment must be used to determine subrecipient vs.contractor status.

4. Eederal Funded Research and Development Centers (FFRDCs); FFRDCs must submit a signed Field Work Proposal during award application. The award recipient may allow the FFRDC to provide this information directly to DOE, however project costs must also be provided below.

5. Each budget period is rounded to the nearest dollar.

SOPO Task #	CREATE Component	Sub-Recipient Name/Organization	Sub-Recipient Unique Entity Identifier (UEI)	Purpose and Basis of Cost	Budget Period 1	Budget Period 2	Budget Period 3	Budget Period 4	Budget Period 5	Project Total
										\$0
										\$0
										\$0
										\$0
										\$0
										\$0
				Sub-total	\$0	\$0	\$0	\$0	\$0	\$0
SOPO Task #	CREATE Component	Contr Name/Org	actor Janization	Purpose and Basis of Cost	Budget Period 1	Budget Period 2	Budget Period 3	Budget Period 4	Budget Period 5	Project Total

(b) (4									
 				i	i	i			
									\$0 \$0
									\$0
									\$0
									\$0
									\$0
									\$0
									\$0
									\$0
									\$0
									\$0
									\$0
									\$0
									\$0
									\$0
									\$0
									\$0
									\$0
									\$0
									\$0
									\$0
									\$0
									\$0
									\$0
									\$0
			(b) (4)						
SOPO Task #	CREATE Component	FFRDC Name/Organization	Purpose and Basis of Cost	Budget Period 1	Budget Period 2	Budget Period 3	Budget Period 4	Budget Period 5	Project Total
									\$0
									\$0
			Sub-total	\$0	\$0	\$0	\$0	\$0	\$0
			Total Contractual	(b) (4	4)				

g. Construction

PLEASE READ!!!

1. Construction, for the purpose of budgeting, is defined as all types of work done on a particular building, including erecting, altering, or remodeling. Construction conducted by the award recipient is entered on this page. Any construction work that is performed by a contractor or subrecipient should be entered under f. Contractual.

2. List all proposed construction below, providing a basis of cost such as engineering estimates, prior construction, etc., and briefly justify its need as it applies to the Statement of Project Objectives. 3. Each budget period is rounded to the nearest dollar.

SOPO CREATE **General Description** Cost **Basis of Cost** Justification of need Task # Component **Budget Period 1** \$0 **Budget Period 1 Total Budget Period 2 Budget Period 2 Total** \$0 **Budget Period 3** Budget Period 3 Total \$0 **Budget Period 4 Budget Period 4 Total** \$0 **Budget Period 5** Budget Period 5 Total \$0 TOTAL CONSTRUCTION \$0

h. Other Direct Costs

INSTRUCTIONS - PLEASE READ!!!

1. Other direct costs are direct cost items required for the project which do not fit clearly into other categories. These direct costs must not be included in the indirect costs (for which he indirect rate is being applied for this project). Examples are: tuition, printing costs, etc. which can be directly charged to he project and are not duplicated in indirect costs (overhead costs).

Basis of cost are items such as vendor quotes, prior purchases of similar or like items, published price list, etc.

3. Each budget period is rounded to the nearest dollar.

SOPO Task #	CREATE Component	General Description and SOPO Task #	Cost	Basis of Cost	Justification of need
			Budg	et Period 1	
		Budget Period 1 Total	\$0		
		Budget Period 1 Total	φυ	Budget Period 2	
				Budget Feriou 2	
		Budget Period 2 Total	\$0		
				Budget Period 3	
		Budget Period 3 Total	\$0		
		Budget i chou o rotar	ψu	Budget Period 4	
				Budget i chou 4	
		Budget Period 4 Total	\$0		
				Budget Period 5	
		Budget Period 5 Total	\$0		
		TOTAL OTHER DIRECT COSTS	\$0		

Additional Explanation (as needed): Reflects PennDOT standard project contingency. Unneeded budget will be returned to PECO for reallocation for GRIP-eligible purposes

i. Indirect Costs

INSTRUCTIONS - PLEASE READ

1. Fill out the table below to indicate how your indirect costs are calculated. Use the box below to provide additional explanation regarding your indirect rate calculation.

2. The rates and how they are applied should not be averaged to get one indirect cost percentage. Complex calculations or rates that do not do not correspond to the below categories should be described/provided in the Additional Explanation section below. If questions exist, consult with your DOE contact before filling out this section.

3. The indirect rate should be applied to both the Federal Share and Recipient Cost Share.

4. NOTE A Recipient who elects to employ the 10% de minimis Indirect Cost rate cannot claim resulting cost as a Cost Share contribution, nor can the Recipient claim "unrecovered indirect costs" as a Cost Share contribution. Neither of these costs can be reflected as actual indirect cost rates realized by the orgnaization, and therefore are not verifiable in the Recipient records as required by Federal Regulation (200.306(b)(1))

5.. Each budget period is rounded to the nearest dollar.

	Budget Period 1	Budget Period 2	Budget Period 3	Budget Period 4	Budget Period 5	Total	Explanation of BASE
Provide ONLY Applicable Rates:							
Overhead Rate	0.00%	0.00%	0 00%	0.00%	0.00%		Example: Labor + Fringe
General & Administrative (G&A)	0.00%	0.00%	0 00%	0.00%	0.00%		
FCCM Rate, if applicable	0.00%	0.00%	0 00%	0.00%	0.00%		
OTHER Indirect Rate	0.00%	0.00%	0 00%	0.00%	0.00%		
Indirect Costs (As Applicable):							
Overhead Costs						\$0	
G&A Costs						\$0	
FCCM Costs, if applicable						\$0	
OTHER Indirect Costs						\$0	
Total indirect costs requested:	\$0	\$0	\$0	\$0	\$0	\$0	

A federally approved indirect rate agreement, or rate proposed (supported and agreed upon by DOE for estimating purposes) is required if reimbursement of indirect costs is requested. Please check (X) one of the options below and provide the requested information if it has not already been provided as requested, or has changed.

An indirect rate has been approved or negotiated with a federal government agency. A copy of the latest rate agreement is included with this application and will be provided electronically to the Contracting Officer for this project. The organization does not have a current, federally approved indirect cost rate agreement and has provided an indirect rate proposal in support of the proposed costs. This organization has elected to apply a 10% de minimis rate in accordance with 2 CFR 200.414(f).

You must provide an explanation (below or in a separate attachment) and show how your indirect cost rate was applied to this budget in order to come up with the indirect costs shown.

Additional Explanation (as needed): *IMPORTANT: Please use this box (or an attachment) to further explain how your total indirect costs were calculated. If the total indirect costs are a cumulative amount of more than one calculation or rate application, the explanation and calculations should identify all rates used, along with the base they were applied to (and how the base was derived), and a total for each (along with grand total).

PLEASE READ!!!

A detailed presentation of the cash or cash value of all cost share proposed must be provided in the table below. All items in the chart below must be identified within the applicable cost category tabs a. through i. in addition to the detailed presentation of the cash or cash value of all cost share proposed provided in the table below. Identify the source organization & amount of each cost share item proposed in the award.
 Cash Cost Share - encompasses all contributions to the project made by the recipient, subrecipient, or third party (an entity that does not have a role in performing the scope of work) for costs incurred and paid for during the project. This includes when an organization pays for personnel, supplies, equipment, etc. for their own company with organizational resources. If the item or service is reimbursed for, it is cash cost share. All cost share items must be necessary to the performance of the project. Contractors may not provide cost share. Any partial donation of goods or services is considered a discount and is not allowable.
 In Kind Cost Share - encompasses all contributions to the project made by the recipient, subrecipient, or third party (an entity that does not have a role in performing the scope of work) where a value of the contribution can be readily determined, verified and justified but where no actual cash is transacted in securing the good or service comprising the cost share items section. In Kind cost share items section of space or use of equipment, etc. The cash value and calculations thereof for all In Kind cost share items must be justified and explained in the Cost Share items section below. All cost share items section below. All cost share items must be justified and explained in the Cost Share items section below. All cost share items section below. All cost share items must be justified and explained in the cost Share items section below. All cost share items must be justified and explained in the cost Share items section be

4. Funds from other Federal sources MAY NOT be counted as cost share. This prohibition includes FFRDC sub-recipients. Non-Federal sources include any source not originally derived from Federal funds. Cost sharing commitment letters from subrecipients and third parties must be provided with the original application.

5. Fee or profit, including foregone fee or profit, are not allowable as project costs (including cost share) under any resulting award. The project may only incur those costs that are allowable and allocable to the project (including cost share) as determined in accordance with the applicable cost principles prescribed in FAR Part 31 for For-Profit entities and 2 CFR Part 200 Subpart E - Cost Principles for all other non-federal entities.

6. NOTE: A Recipient who elects to employ the 10% de minimis Indirect Cost rate cannot claim the resulting indirect costs as a Cost Share contribution.

7. NOTE: A Recipient cannot claim "unrecovered indirect costs" as a Cost Share contribution, without prior approval.

8. Each budget period is rounded to the nearest dollar.

Organization/Source	Type (Cash or In Kind)	Cost Share Item	Budget Period 1	Budget Period 2	Budget Period 3	Budget Period 4	Budget Period 5	Total Project Cost Share	I
PIDC	(b) (4)								
							l.	\$0	
								\$0	
	8					5		\$0	
								\$0)
		TOTAL COST SHARE	(b) (4)						
	al Project Cost:	(b) (4)							
Additional Explanation (as	needed):								

ENVIRONMENTAL QUESTIONNAIRE

I. INSTRUCTIONS

The proposer shall prepare this Environmental Questionnaire (EQ) as accurately and completely as possible. Supporting information can be provided as attachments. The proposer must identify the location of the project and specifically describe the activities that would occur at that location. The proposer must provide specific information and quantities, regarding air emissions, wastewater discharges, solid wastes, etc., to facilitate the necessary review. In addition, the proposer must submit with this EQ a FINAL copy of the project's statement of work (SOW) or statement of project objective (SOPO) that will be used in the contract/agreement between the proposer and the U.S Department of Energy (DOE).

II. **QUESTIONNAIRE**

A. PROJECT SUMMARY

1.	Solicitation/Project Number:	DE-FOA-0002740	Proposer:	PECO	Energy	Company		
----	------------------------------	----------------	-----------	------	--------	---------	--	--

2.	This Environmental	Questionnaire pertains to a:		Recipient or Prime Contractor	X	Sub-recipient or Subcontractor
----	--------------------	------------------------------	--	-------------------------------	---	--------------------------------

- 3. Principal Investigator: (b) (6) Telephone Number: (b) (6)
- 4. Project Title: CREATE Plan: PIDC Sub-recipient Project
- Expected Project Duration: ² years
- Location of Activities covered by <u>this</u> Environmental Questionnaire: (City/Township, County, State): Philadelphia, Philadelphia, Pennsylvania
- 7. List the full scope of activities planned (only for the location that is the subject of this Environmental Questionnaire).

Evaluate resilient electric supply solutions to create a business case for future private sector investment, including multiple back-up sources and ride-through capability, to ensure the building and life sciences companies within the Navy Yard can smoothly transition to alternate sources during disruptive weather events.

 List all other locations where work would be performed by the primary contractor of the project and subcontractor(s). Each of the following must have an individual Environmental Questionnaire.

Subcontractor or sub-recipient	Location of activities for this project	

9. Identify and select the checkbox with the predominant project work activities under Group A, B, or C

Group A

Routine administrative, procurement, training, and personnel actions. Contract activities/awards for management support, financial assistance, and technical services in support of agency business, programs, projects, and goals. Literature searches and information gathering, material inventories, property surveys; data analysis, computer modeling, analytical reviews, technical summary, conceptual design, feasibility studies, document preparation, data dissemination, and paper studies. Technical assistance including financial planning, assistance, classroom training, public meetings, management training, survey participation, academic contribution, technical consultation, and stakeholders surveys. Workshop and conference planning, preparation, and implementation which may involve promoting energy efficiency, renewable energy, and energy conservation.

STOP! If all work activities related to this project can be classified and described within categories under Group A, proceed directly to Section III CERTIFICATION BY PROPOSER. No additional information is required. If project work activities are described in either Group(s) B or C; then continue filling out questionnaire.

ENVIRONMENTAL QUESTIONNAIRE

Group B

Laboratory Scale Research, Bench Scale Research, Pilot Scale Research, Proof-of-Concept Scale Research, or Field Test Research. Work <u>DOES NOT</u> involve new building/facilities construction and site excavation/groundbreaking activities. This work typically involves routine operation of <u>existing</u> laboratories, commercial buildings/properties, offices and homes, project test facilities, factories/power plants, vehicles test stands and components, refueling facilities, utility systems, or other existing structures/facilities. Work will NOT involve major change in facilities missions and operations, land use planning, new/modified regulatory/operating permit requirements. Includes work specific to routine DOE Site operations and Lab research work activities, but NOT building construction and site preparation. DOE work typically involves laboratory facilities and lab equipment operations, buildings and grounds management activities; and buildings and facilities maintenance, repairs, reconfiguration, remodeling, equipment use and replacement.

Group C

Pilot Test Facilities Construction, Pilot Scale Research, Field Scale Demonstration, or Commercial Scale Application. Work typically involves facility construction, site preparation/excavation/groundbreaking, and/or demolition. This work would include construction, retrofit, replacement, and/or major modifications of laboratories, test facilities, energy system prototypes, and power generation infrastructure. Work may also involve construction and maintenance of utilities system right-of-ways, roads, vehicle test facilities, commercial buildings/properties, fuel refinery/mixing facilities. This work may require new or modified regulatory permits, environmental sampling and monitoring requirements, master planning, public involvement, and environmental impact review. Includes work specific to DOE Site Operations and Lab operation activities involving building and facilities construction, replacement, decommissioning/demolition, site preparation, land use changes, or change in research facilities mission or operations.

B. PROPOSED PROJECT ALTERNATIVES

1. If applicable, list any project alternatives considered to achieve the project objectives.

C. PROJECT LOCATION

- 1. Provide a brief description of the project location (physical location, surrounding area, adjacent structures).
- 2. <u>Attach</u> a project site location map of the project work area.

D. ENVIRONMENTAL IMPACTS

NEPA procedures require evaluations of possible effects (including land use, energy resource use, natural, historic and cultural resources, and pollutants) from proposed projects on the environment.

1. Land Use

a.	Characterize present land use where the proposed project would be located.								
	Urban	Industrial	Commercial	Agricultural					
	Suburban	Rural	Residential	Research Facilities					
	Forest	University Campus	Other:						

b. Identify the total size of the facility, structure, or system and what portion would be used for the proposed project.

c.

U.S. DEPARTMENT OF ENERGY

ENVIRONMENTAL QUESTIONNAIRE

Describe planned construction, installation, and/or demolition activities, i.e., roads, utilities system right-of-ways, parking

- lots, buildings, laboratories, storage tanks, fueling facilities, underground wells, pipelines, or other structures. No construction would be anticipated for this project. d. Describe how land use would be affected by operational activities associated with the proposed project. No land areas would be affected. e. Describe any plans to reclaim areas that would be affected by the proposed project. No land areas would be affected. f. Would the proposed project affect any unique or unusual landforms (e.g., cliffs, waterfalls, etc.)? D No Yes (describe) Would the proposed project be located in or near local, state, or federal parks; forests; monuments; scenic waterways; g. wilderness; recreation facilities; or tribal lands? No Yes (describe) 2. **Construction Activities and/or Operation** a. Identify project structure(s), power line(s), pipeline(s), utilities system(s), right-of-way(s) or road(s) that will be constructed and clearly mark them on a project site map or topographic map as appropriate. None b. Would the proposed project require the construction of waste pits or settling ponds? I No Yes (describe and identify location, and estimate surface area disturbed) I No Yes (describe) c. Would the proposed project affect any existing body of water? d. No No Would the proposed project impact a floodplain or wetland? Yes (describe) No No Yes (describe) e. Would the proposed project potentially cause runoff/sedimentation/erosion?
- f. Would the proposed project include activities located on perma-frost, near fault zones, or involve fracturing, well arilling:
 geologic stimulation, sequestration, active seismic data collection, and/or deepwater operations?
 No
 Yes (describe)

NETL F 451.1-1/3 Revised: 12/3/2014 Reviewed: 12/3/2014 (Page 4)

U.S. DEPARTMENT OF ENERGY

ENVIRONMENTAL QUESTIONNAIRE

g.	Would the proposed project involve any of the following: nanotechnology; recombinant DNA or genetic engineering; facility decommissioning or disposition of equipment/materials; or management of radioactive wastes/materials?
3.	Biological Resources
a.	Identify any State or Federally listed endangered or threatened plant or animal species potentially affected by the proposed project.
b.	Would any designated critical habitat be affected by the proposed project? In No In Yes (describe)
c.	Describe any impacts that construction would have on any other types of sensitive or unique habitats.
d.	Would any foreign substances/materials be introduced into ground or surface waters, soil, or other earth/geologic resource because of project activities? How would these foreign substances/materials affect the water, soil, biota, and geologic resources? In No IN Yes (describe)
e.	Would any migratory animal corridors be impacted or disrupted by the proposed project? 🔲 No 🔲 Yes (describe)
4.	Socioeconomic and Infrastructure Conditions
a.	Would local socio-economic changes result from the proposed project? In No In Yes (describe)
b.	Would the proposed project generate increased traffic use of roads through local neighborhoods, urban or rural areas?
c.	Would the proposed project require new transportation access (roads, rail, etc.)? Describe location, impacts, costs.
d.	Would the proposed project create a significant increase in local energy usage? I No Yes (describe)

ENVIRONMENTAL QUESTIONNAIRE

5. Historical/Cultural Resources

- a. Describe any historical, archaeological, or cultural sites in the vicinity of the proposed project; note any sites included on the National Register of Historic Places.
- b. Would construction or operational activities planned under the proposed project disturb any historical, archaeological, or cultural sites? IN planned construction IN historic sites IYes (describe) IN historic discuss)
- c. Has the State Historic Preservation Office been contacted with regard to this project? No 🗌 Yes (describe)
- Would the proposed project interfere with visual resources (e.g., eliminate scenic views) or alter the present landscape?
 No
 Yes (describe)
- e. Would the proposed project be located on or adjacent to tribal lands, lands considered to be sacred, or lands used for traditional purposes? Describe any known tribal sensitivities for the proposed project area.

6. Atmospheric Conditions/Air Quality

 Identify air quality conditions in the immediate vicinity of the proposed project with regard to attainment of National Ambient Air Quality Standards (NAAQS). This information is available under the Green Book Non-Attainment Areas for Criteria Pollutants located at <u>http://www.epa.gov/air/oaqps/greenbk/astate.html</u>

	Attainment	Non-Attainment
O ₃ - 1 Hour		
O ₃ - 8 Hour		
SO _x		
PM - 2.5		
PM - 10		
CO		
NO ₂		
Lead		

- b. Would proposed project require issuance of new or modified local, state, or federal air permits to perform project related work and activities? 🔲 No 🔲 Yes (describe)
- c. Would the proposed project be in compliance with local and state air quality requirements? Yes If not, please explain.

ENVIRONMENTAL QUESTIONNAIRE

- Would the proposed project be classified as either a New Source or a major modification to an existing source?
 No
 Yes (describe)
- e. What types of air emissions, including fugitive emissions, would be anticipated from the proposed project, and what would be the maximum annual rate of emissions for the project?

	Maximum per Year	Total for Project
SO _x		
NO _x		
PM - 2.5		
D PM - 10		
🗋 со		
CO ₂		
Lead		
H ₂ S		
Organic solve	nt vapors or other volatile o	rganic compoundsList:
Hazardous air	pollutants List:	
Other List:		
None None		

- f. Would any types of emission control or particulate collection devices be used?
- g. How would emissions be vented?

7. Hydrologic Conditions/Water Quality

- a. What nearby water bodies may be affected by the proposed project? Provide distance(s) from the project site.
- b. What sources would supply potable and process water for the proposed project?

d.

e.

f.

g.

h.

i.

j.

k.

1.

U.S. DEPARTMENT OF ENERGY

ENVIRONMENTAL QUESTIONNAIRE

c. Quantify the wastewater that would be generated by the proposed project.

	Gallons/day	Gallons/year
Non-contact cooling water	Ganons/uay	Ganonsiyear
Process water		
Other describe:		
None		
What would be the major components of <u>each</u> type of wastewater (e.g., o	coal fines)?	No wastewater produced
Identify the local treatment facility that would receive wastewater from a No discharges to local treatment facility	the proposed pro	ject.
Describe how wastewater would be collected and treated.		No wastewater produced
Would any run-off or leachates be produced from storage piles or waste	disposal sites?	No 🗌 Yes (describe source)
Would project require issuance of new or modified water permits to perf	orm project wor	k or site development activities?
Where would wastewater effluents from the proposed project be discharg	ged? 🗌 No	wastewater produced
Would the proposed project be permitted to discharge effluents into an end of the proposed project be permitted to discharge effluents into an end of the proposed project be permitted to discharge effluents into an end of the proposed project be permitted to discharge effluents into an end of the proposed project be permitted to discharge effluents into an end of the proposed project be permitted to discharge effluents into an end of the proposed project be permitted to discharge effluents into an end of the proposed project be permitted to discharge effluents into an end of the proposed project be permitted to discharge effluents into an end of the proposed project be permitted to discharge effluents into an end of the proposed project be permitted to discharge effluents into an end of the proposed project be permitted to discharge effluents into an end of the proposed project be permitted to discharge effluents into an end of the proposed project be permitted to discharge effluents into an end of the project be permitted to discharge effluents into an end of the proposed project be permitted to discharge effluents into an end of the project be permitted to discharge effluents into an end of the project be permitted to discharge effluents into an end of the project be permitted to discharge effluents into an end of the project be permitted to discharge effluents into an end of the project be permitted to discharge effluents into an end of the permitted to discharge effluents into an end of the permitted to discharge effluents into an end of the permitted to discharge effluents into an end of the permitted to discharge effluents into an end of the permitted to discharge effluents into an end of the permitted to discharge effluents into an end of the permitted to discharge effluents into an end of the permitted to discharge effluents into an end of the permitted to discharge effluents into an end of the permitted to discharge effluents into an end of the permitted to discharge effluents into an end of the permit	xisting body of v	vater?
Would a new or modified National Pollutant Discharge Elimination Syst	em (NPDES) pe	rmit be required?
Would the proposed project adversely affect the quality or movement of	groundwater?	No Yes (describe)

NETL F 451.1-1/3 Revised: 12/3/2014 Reviewed: 12/3/2014 (Page 8)

U.S. DEPARTMENT OF ENERGY

ENVIRONMENTAL QUESTIONNAIRE

m. Would the proposed project require issuance of an <u>Underground Injection Control (UIC)</u> permit?
 No
 Yes (describe)

would the proposed project be located in or near a wellhead protection area, drinking water protection area, or above a sole source aquifer or underground source of drinking water (USDW)?
 No
 Yes (describe)

8. Solid and Hazardous Wastes

a. Identify and estimate wastes that would be generated from the project. Solid wastes are defined as any solid, liquid, semisolid, or contained gaseous material that is discarded, has served its intended purpose, or is a manufacturing or mining byproduct (See <u>EPA Municipal Solid Waste</u> and <u>Municipal Solid Waste by State</u>).

	Annual Quantity
Municipal solid waste (e.g., paper, plastic, etc.)	
Coal or coal by-products	
Other Identify:	
Hazardous waste – Identify:	
None None	

- b. Would project require issuance of new or modified solid waste and/or hazardous waste related permits to perform project work activities?
- c. How and where would solid waste disposal be accomplished?



- On-site (identify and describe location)
- Off-site (identify location and describe facility and treatment)
- d. How would wastes for disposal be transported?
- e. Describe hazardous wastes that would be generated, treated, handled, or stored under this project. Hazardous waste information can be found at <u>EPA Hazardous Waste</u> website. None

f. How would hazardous or toxic waste be collected and stored?

ENVIRONMENTAL QUESTIONNAIRE

g.	If hazardous wastes would require off-site disposal, have arrangements been made with a certified TSD (Treatment, Storage, and Disposal) facility?							
	Not required Arrangements not yet made Arrangements made with a certified TSD facility (identify)							
9.	Health/Safety Factors							
a.	Identify hazardous or toxic materials that would be used in the proposed project. None Hazardous or toxic materials that would be used (identify):							
b.	Describe the potential impacts of this project's hazardous materials on human health and the environment.							
c.	Would there be any special physical hazards or health risks associated with the project? 🔲 No 🔲 Yes (describe)							
d.	Does a worker safety program exist at the location of the proposed project? IN Ves (describe)							
e.	Would additional safety training be necessary for any new laboratory, equipment, or processes involved with the project?							
f.	Describe any increases in ambient noise levels to the public from construction and operational activities.							
g.	Would project construction result in the removal of natural or other barriers that act as noise screens?							
h.	Would hearing protection be required for workers? 🔲 No 🔲 Yes (describe)							
10.	Environmental Restoration and/or Waste Management							
a.	Would the proposed project include CERCLA removals or similar actions under RCRA or other authorities?							

No Yes (describe)

Describe:

U.S. DEPARTMENT OF ENERGY

ENVIRONMENTAL QUESTIONNAIRE

b.	Would the proposed project include siting, constructive treatment facilities or pilot-scale waste stabilization a				scale w		ction and Yes (describe)
c.	Would the proposed project involve operations of en No Yes (describe)	vironme	ntal monitorin	ng and control s	ystems?		
d.	Would the proposed project involve siting, constructing hazardous waste for 90 days or less?	ion, oper No	ation, or deco	mmissioning of cribe)	f a facili	ity for sto	oring packaged
E.	REGULATORY COMPLIANCE						
1.	For the following laws, describe any existing permits agencies, contacts, etc., that would be required for the			mits, manifests,	respon	sible auth	orities or
a.	Resource Conservation and Recovery Act (<u>RCRA</u>): Describe:	🗆 n	one	New Required		Modific	ation Required
b.	Comprehensive Environmental Response, Compensa		l Liability Act n Required	t (CERCLA):			
c.	Toxic Substance Control Act (TSCA): Describe:	🗌 N	one	New Required		Modific	ation Required
d.	Clean Water Act (CWA): Describe:	🗌 N	one	New Required		Modific	ation Required
e.	Underground Storage Tank Control Program (UST): Describe:	🗌 N	one	New Required		Modific	ation Required
f.	Underground Injection Control Program (UIC): Describe:	D No	one	New Required		Modific	ation Required
g.	Clean Air Act (CAA):	D No	one	New Required		Modific	ation Required

ENVIRONMENTAL QUESTIONNAIRE

h.	Endangered Species Act (ESA): Describe:	None None	New Required	Modification Required
i.	Floodplains and Wetlands Regulations: Describe:	None None	New Required	Modification Required
j.	Fish and Wildlife Coordination Act (FWCA): Describe:	None None	New Required	Modification Required
k.	National Historic Preservation Act (NHPA): Describe:	None None	New Required	Modification Required
1.	Coastal Zone Management Act (CZMA): Describe:	None	New Required	Modification Required

2. Identify any other environmental laws and regulations (Federal, state, <u>and</u> local) for which compliance would be necessary for this project, and describe the permits, manifests, and contacts that would be required.

F. DESCRIBE ANY ISSUES THAT WOULD GENERATE PUBLIC CONTROVERSY REGARDING THE PROPOSED PROJECT. None

G. WOULD THE PROPOSED PROJECT PRODUCE ADDITIONAL DEVELOPMENT, OR ARE OTHER MAJOR DEVELOPMENTS PLANNED OR UNDERWAY, IN THE PROJECT AREA?

H. SUMMARIZE THE SIGNIFICANT IMPACTS THAT WOULD RESULT FROM THE PROPOSED PROJECT.

 None (provide supporting detail)
 Significant impacts (describe)

ENVIRONMENTAL QUESTIONNAIRE

I. PROVIDE A DESCRIPTION OF HOW THE PROJECT WOULD BE DECOMMISSIONED, INCLUDING THE DISPOSITION OF EQUIPMENT AND MATERIALS.

III. CERTIFICATION BY PROPOSER

I hereby certify that the information provided herein is current, accurate, and complete as of the date shown immediately below.

Signature (b) (6)	Date (mm/dd/yyyy): 3/28/03
Typed Name	
Title: Senior Vice President, Navy Yard	
Organization: PIDC	

IV. <u>REVIEW AND APPROVAL BY DOE</u>

I hereby certify that I have reviewed the information provided in this questionnaire, have determined that all questions have been appropriately answered, and judge the responses to be consistent with the efforts proposed.

DOE Project Manager

Signature:

Date (mm/dd/yyyy):

Typed Name:

DISCLOSURE OF LOBBYING ACTIVITIES

Complete this form to disclose lobbying activities pursuant to 31 U.S.C.1352

Expiration Date: 02/28/2025

a. context b. coopendive agreement c. coopendive agre	1. * Type of Federal Action:	2. * Status of Feder	ral Action:	3. * Report Type:
b. genet c. coordenive agreement c. b. ninkie avend c. coordenive agreement coordenive coordenive coorden	a. contract	a. bid/offer/applica	tion	
	b. grant	b. initial award		
	c. cooperative agreement	c. post-award		
date of last report date of last report • Name and Address of Reporting Entity: Priviladelphila industrial Development Corporation • Name Philadelphila industrial Development Corporation • Street 1 1500 Markot Street • City Philadelphila • City Philadelphila • Street 1 1500 Markot Street • City Philadelphila • Street 1 1500 Markot Street • Street 2 Suite 3500 West • City Philadelphila • Street 3 Street 2 • PECO Energy Company 2301 Market Street, Philadelphila, PA 19101 • • Federal Department/Agency: 7. • Federal Program Name/Description: Department of Energy DeFOA-0002740 • CEA Number, # ##picade: 81.254 8. Federal Action Number , # Known: 9. Award Amount , # Known: 9. Award Amount , # septicade: 81.254 10. a. Name and Address of Lobbying Registrant: Buffe • Street 7 Street 2 Zp • Street 7 Street 2 Zp • Last Meme Ndd Modde Name • Street 7 Street 2	d. loan			
4. Name and Address of Reporting Entity: Prime Stabwards * Name Philadelphia Industrial Development Corporation * Sweet 1 1500 Market Street * Sweet 7 1500 Market Street * Street 7 Street 2 Sum 7 Philadelphia * Street 7 Street 7 * Federal Department/Agency: 7.* Federal Program Name/Description: Department of Energy DeFOA-0002740 CFDA Number, # spectaski: 81.254 8. Federal Action Number, # known: 9. Award Amount, # known: * State State * Name NAme * Name State * State Name State	e. loan guarantee			
Prime Stablwardes The # Lawer (Philadelphia Industrial Development Corporation Steed 1 (1500 Market Stroot Steed 1 (1500 Market Stroot Steed 2 Suite 3500 West () Philadelphia State PA 2 () () () () () () () () () () () () () (f. Ioan insurance			date of last report
*Name Philadelphia Industrial Development Corporation *Street 1 1500 Market Street Street 2 Suffer 3500 West City Philadelphia Street 2 Suffer 3500 West City Philadelphia Street 2 Suffer 3500 West City PECO Energy Company 2301 Market Street, Philadelphia, PA 19101 6. * Federal Department/Agency: Department of Energy Department of Energy Department of Energy 10. a. Name and Address of Lobbying Registrant: Posta Posta Suffer Street 1 Suffer Street 2 Suffer Street 2 Suffer Street 2 Suffer Street 3 Suffer Street 4 Suffer Street 4 Suffer Street 4 Suffer Street 4 Suffer Street 5 Suffe	4. Name and Address of Reporting	Entity:		
*Street 1 *Street 1 1500 Market Street Street 2 Street 3 Street 2 Street 3 Street 3 <td< td=""><td>Prime SubAwardee Tier if known:</td><td></td><td></td><td></td></td<>	Prime SubAwardee Tier if known:			
. City The State 2/p . City Philadelphia State 2/p . State PA 2/p 19102 . State PA 2/p 19102 . State PA 2/p 19102 . State PECO Energy Company 2301 Market Street, Philadelphia, PA 19101 7. * Federal Program Name/Description: Department of Energy Department/Agency: 7. * Federal Program Name/Description: Decomposition: Department of Energy PA 9. Award Amount, if known: 8 10. a. Name and Address of Lobbying Registrant: Profix * First Name State 9. Award Amount, if known: 9 * Street 1 State 2/p 10. a. Name and Address of Lobbying Registrant: Profix * First Name State 2/p 10 * Last Name State 2/p 2/p 10 * Last Name NAA Middo Name 10. a. Name and Address of Lobbying Registrant: 2/p 10 * City State 2/p 2/p 10 10. individual Performing Services (including adress if different from No. 100) * City * Firs	'Name Philadelphia Industrial Develop	ment Corporation	7	
	* Street 1 1500 Market Street	s	Street 2 Suite 3500 V	Vest
PECO Energy Company 2301 Market Street, Philadelphia, PA 19101	· city Philadelphia	State PA		^{<i>Zip</i>} 19102
PECO Energy Company 2301 Market Street, Philadelphia, PA 19101				
2301 Market Street, Philadelphia, PA 19101 6. * Federal Department/Agency: Department of Energy Department of En	5. If Reporting Entity in No.4 is Subay	wardee, Enter Name	and Address of Pri	me:
2301 Market Street, Philadelphia, PA 19101 6. * Federal Department/Agency: Department of Energy Department of Energy Department of Energy Defeod.cou2740 CFDA Number, #applicable: 81.254 8. Federal Action Number, if known: 9. Award Amount, if known: 9. Award Amo	DECO Energy Company			
6.* Federal Department/Agency: 7.* Federal Program Name/Description: Department of Energy DE-FOA-0002740 CFDA Number, if applicable: 81.254 8. Federal Action Number, if known: 9. Award Amount, if known: 9. Award Amount, if known: 9. Award Amount, if known: 10. a. Name and Address of Lobbying Registrant: 9. Award Amount, if known: Park *First Neme N/A *Last Name Suffix	2301 Market Street Philade	Inhia DA 10101		
Department of Energy DE-FOA-0002740 CEDA Number, if appleable: 81.254 8. Foderal Action Number, if known: 9. Award Amount, if known: 9. Award Amount, if known: 9. Award Amount, if known: 10. a. Name and Address of Lobbying Registrant: * Prefix * First Name * Last Name Suffix * City State D. Individual Performing Services (including address if different from No. 10a) Prefix * First Name * Last Name State 2 Zip * City State 2 Zip * Individual Performing Services (including address if different from No. 10a) Prefix * First Name * Last Name State * City State * Street 1 Street 2 * City State * Street 2 Zip * City State * City State	2301 Market Street, Philade	ipnia, PA 19101		
Department of Energy DE-FOA-0002740 CEDA Number, if appleable: 81.254 8. Foderal Action Number, if known: 9. Award Amount, if known: 9. Award Amount, if known: 9. Award Amount, if known: 10. a. Name and Address of Lobbying Registrant: * Prefix * First Name * Last Name Suffix * City State D. Individual Performing Services (including address if different from No. 10a) Prefix * First Name * Last Name State 2 Zip * City State 2 Zip * Individual Performing Services (including address if different from No. 10a) Prefix * First Name * Last Name State * City State * Street 1 Street 2 * City State * Street 2 Zip * City State * City State				
Department of Energy DE-FOA-0002740 CEDA Number, if appleable: 81.254 8. Foderal Action Number, if known: 9. Award Amount, if known: 9. Award Amount, if known: 9. Award Amount, if known: 10. a. Name and Address of Lobbying Registrant: * Prefix * First Name * Last Name Suffix * City State D. Individual Performing Services (including address if different from No. 10a) Prefix * First Name * Last Name State 2 Zip * City State 2 Zip * Individual Performing Services (including address if different from No. 10a) Prefix * First Name * Last Name State * City State * Street 1 Street 2 * City State * Street 2 Zip * City State * City State				
Department of Energy DE-FOA-0002740 CFDA Number, if known: 81.254 8. Federal Action Number, if known: 9. Award Amount, if known: \$ \$ 10. a. Name and Address of Lobbying Registrant: Prefix * First Name * Last Name Suffix * City State City State Dindividual Performing Services (including address if different from No. 10a) Prefix * First Name * Last Name State City State City State City State Street 1 Street 2 * City State Street 1 Street 2 * City State * City State * Street 1 Street 2 * City State * Street 1 Street 2 * City State * City State * City Street 2	6. * Federal Department/Agency:		7. * Federal Prog	ram Name/Description:
CFDA Number, if applicable: 81.254 8. Federal Action Number, if known: 9. Award Amount, if known: 9.	Department of Energy			
8. Federal Action Number, if known: 9. Award Amount, if known: \$ 10. a. Name and Address of Lobbying Registrant: Prefix * First Name * Last Name * Last Name * Last Name * Street 1 * City * Street 2 * City * First Name * Name * City * First Name * City * First Name * City * Street 1 * City * City * First Name * Niddle vame * Last Name * Street 1 * City * Street 1 * City * First Name N/A Middle Name * Street 1 * City * Street 1 * City * Street 2 * City * Street 1 * Street 1 * Street 2 * City * Street 1 * Street 1 * Street 2 * City * Street 1 * Street 2 * City * Street 1 * Street 2 * City * Street 1 * Street 1 * Street 2 * City * Street 1 * Street 1 * Street 2 * Street 1 * Street 1 * Street 2 * Street 1 * Street 2 * Street 2				
\$ 10. a. Name and Address of Lobbying Registrant: Prefix • First Name *Last Name Suffix *Last Name Suffix *City Street 2 *City Street 3 *City Street 4 *City Street 4 *City Street 2 *City Street 3 *Street 4 Street 4 *Street 5 Street 4 *City Street 5 *City Street 6 *Signature: (b) (6) *Nome Middle Name *Last Name Middle Name *Last	8 Federal Action New Low 171			
10. a. Name and Address of Lobbying Registrant: Prefix * First Name * Last Name Suffix * Last Name Suffix * City State	8. Federal Action Number, if known:		9. Award Amount	t, if known:
Prefix * First Name N/A Middle Name *Last Name Suffix *Street 1 Street 2 •City State Zip b. Individual Performing Services (including address if different from No. 10a) Prefix * First Name Prefix * First Name N/A Middle Name •'Last Name Street 2			\$	
*Lasi Name Suffix *Lasi Name Suffix *Street 1 Street 2 *City State b. Individual Performing Services (including address if different from No. 10a) Prefix *First Name *Lasi Name NiA *Lasi Name NIA *Lasi Name NIA *Lasi Name Street 2 *City State *Street 1 Street 2 *City State *City State *City State *City State *City State *Street 1 Street 2 *City State *City State Street 2 Zip *Street 1 Street 2 *City State Street 2 Zip *Street 1 Street 2 *City State Street 2 Zip *Street 1 Street 2 *City State Street 2 Zip *Information requested through this form is author	10. a. Name and Address of Lobbying	Registrant:		
Street 1 Street 2 Street 3 Street 4 Street 4 Street 1 Street 2 Street 1 Street 2 Street 1 Street 2 Street 3 Street 2 Street 4 Street 4 Street 4 Street 5	Prefix * First Name N/A		Middle Name	
Street 1 Street 2 Zip D. Individual Performing Services (including address if different from No. 10a) Prefix	*Last Name			
* City State Zip b. Individual Performing Services (including address If different from No. 10a) Prefix Zip Prefix * First Name N/A Middle Name * Last Name Street 1 Street 2 * City State Zip 11. Information requested through this form is authorized by tille 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which the transaction was riade or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annualty and Will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not provide apple subject for a civil penalty of not less than \$10,000 and not provide apple subject fails * Signature: (b) (6) *Name: Middle Name * Last Name Suffix * Last Name Middle Name * Last Name (b) (6) * Name: Suffix * Last Name (b) (6) * Itel Name Suffix * Last Name (b) (6) * Itel Name Suffix	*Street 1			
b. Individual Performing Services (including address if different from No. 10a) Prefix * First Name * Lasi Name N/A * Last Name State * City State * City State * City State * Street 1 Street 2 * Street 1 Street 3 * Street 1 State * Street 2 State * Street 3 State * Street 4 State			reet 2	
Prefix * First Name N/A Middle Name * Lasi Name Suffix	City	State		Zip
*Last Name *Last Name Suffix *Street 1 Stroot 2 *City State Zip 11. Information requested through this form is authorized by tille 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when the transaction way frade or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and out more than \$10,000 and out more than \$10,000 for each such fails * Signature: (b) (6) * Name: Middle Name * Last Name Middle Name * Last Name (b) (6) Title: Senior Vice President, Navy Yard Telephone No (b) (6) Date:	b. Individual Performing Services (inclu	ding address if different from No.	10a)	
* Street 1 * City State 2ip 11. Information requested through this form is authorized by tile 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when the transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and out more tha	Prefix First Name N/A		Middle Name	
*City *City State Zip 11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when the transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$10,000	*Last Name		Suffix	
11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when the transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not not be than \$10,000 and not not be subject to a civil penalty of not less than \$10,000 and not not be subject to a civil penalty of not less than \$10,000 and not not be subject to a civil penalty of not less than \$10,000 and not not be subject to a civil penalty of not less than \$10,000 and not not not be subject to a civil penalty of not less than \$10,000 and not not not be subject to a civil penalty of not less than \$10,000 and not not not head \$100,000 for each such tail. * Signature: (b) (6) *Name: Middle Name * Last Name Suffix * Last Name Suffix * Last Name (b) (6) Title: Senior Vice President, Navy Yard Telephone No (b) (6) Date:	*Street 1	S	troot 2	
 * Signature: (b) (6) *Name: (b) (6) *Last Name (b) (6) Title: Senior Vice President, Navy Yard Telephone No (b) (6) 	*City	State		Zip
*Name: *Last Name (b) (6) Title: Senior Vice President, Navy Yard Telephone No (b) (6) Date: 3/3/3/3/3/3/3/3/3/3/3/3/3/3/3/3/3/3/3/	the Congress semi-annually and will be available for p	ction was made or entered into. T ublic inspection, Any person who	his disclosure is required sure	uppt to 3111 CC 1252 This information will be uppeded to
*Name: *Last Name (b) (6) Title: Senior Vice President, Navy Yard Telephone No (b) (6) Date: 3/8/23	* Signature: (b) (6)			
(b) (6) Output Title: Senior Vice President, Navy Yard Telephone No (b) (6) Date:			Middle Nan	ne
Title: Senior Vice President, Navy Yard Telephone No (b) (6) Date: 3/3/33	* Last Name		Suffix	
		Telephone No	b) (6)	Date: 22223
Standard Form - LLL (Rev. 7-97)	Federal Use Only:			Authorized for Local Reproduction

Instructions and Summary

Award Number: DE-FOA-0002740

Date of Submission: 4/4/2023

Award Recipient: PECO Energy Company

Form submitted by: PECO Energy Company (May be award recipient or sub-recipient)

Please read the instructions on each worksheet tab before starting. If you have any questions, please ask your DOE contact! Do not modify this template or any cells for formulas!

1. If using this form for award application, negotiation, or budget revision, fill out the blank white cells in workbook tabs a. through j. with total project costs.

2. Blue colored cells contain instructions, headers, or summary calculations and should not be modified. Only blank white cells should be populated.

3. Enter detailed support for the project costs identified for each Category line item within each worksheet tab to autopopulate the summary tab.

4. The total budget presented on tabs a. through i. must include both Federal (DOE) and Non-Federal (cost share) portions.

5. All costs incurred by the preparer's sub-recipients, contractors, and Federal Research and Development Centers (FFRDCs), should be entered only in section f. Contractual. All other sections are for the costs of the preparer only.

6. Ensure all entered costs are allowable, allocable, and reasonable in accordance with the administrative requirements prescribed in 2 CFR 200, and the applicable cost principles for each entity type: FAR Part 31 for For-Profit entities; and 2 CFR Part 200 Subpart E - Cost Principles for all o her non-federal en ities.

7. Add rows as needed throughout tabs a. through j. If rows are added, formulas/calcula ions may need to be adjusted by the preparer. Do not add rows to the Instructions and Summary tab. If your project contains more han five budget periods, consult your DOE contact before adding additional budget period rows and columns.

8. ALL budget period cost categories are rounded to the nearest dollar.

BURDEN DISCLOSURE STATEMENT

Public reporting burden for this collection of information is estimated to average 24 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Office of Information Resources Management Policy, Plans, and Oversight, AD-241-2 - GTN, Paperwork Reduction Project (1910-5162), U.S. Department of Energy 1000 Independence Avenue, S.W., Washington, DC 20585; and to the Office of Management and Budget, Paperwork Reduction Project (1910-5162), Washington, DC 20503.

	The	values in this sum		TEGORY COSTS		e cells require data	entry
Section A - Budget Summarv							
		Federal	Cost Share		Total Costs	Cost Share %	Proposed Budget Period Dates
	Budget Period 1	$(1, \lambda, (A))$					
	Budget Period 2	(b) (4)					
	Budget Period 3						
	Budget Period 4						
	Budget Period 5						
	Tot						
Section B - Budget Categories CATEGORY							
a. Personnel	+						
	+						
b. Fringe Benefits	-						
c. Travel	+						
d. Equipment	-						
e. Supplies	1						
f. Contractual							
Sub-recipient	-						
Contractor	-						
FFRDC	-						
Total Contractual	-						
g. Construction	-						
h. Other Direct Costs	-						
Total Direct Costs	L.						
. Indirect Charges	1						
Total Costs							

a. Personnel

INSTRUCTIONS - PLEASE READ!!! 1. List project costs solely for employees of the entity completing this form. All personnel costs for subrecipients and contractors must be included under f. Contractual. 2. All personnel should be identified by position title and not employee name. Enter the amount of time (e.g., hours or % of time) and the base hourly rate and the total direct personnel compensation will automatically calculate. Rate basis (e.g., rate negotiated for each hour worked on the project, labor distr bution report, state civil service rates, etc.) must also be identified. 3. If baded labor rates are utilized, a description of the costs the loaded rate is comprised of must be included in the Additional Explanation section below. DOE must review all components of the loaded labor rate for reasonableness and unallowable costs (e.g. fee or profit). 4. If a position and hours are attributed to multiple employees (e.g. Technician working 4000 hours) the number of employees for that position title must be identified. 5. Each budget period is rounded to the nearest dollar.

			E	Budget P	eriod 1	E	Budget P	eriod 2	Budget	Period 3		Budget Peri	iod 4		Budget Perio	d 5	Project	Project	
SOPO Task #	CREATE Component	Position Title	Time (Hrs)		Total Budget Period 1	Time (Hrs)	Hourly Rate (\$/Hr)	Total Budget Period 2	Time (Hrs) (\$/Hr	Budget	Time (Hrs)	Hourly Rate (\$/Hr)	Total Budget Period 4	Time (Hrs)	Hourly Rate (\$/Hr)	Total Budget Period 5	Total Hours	Total	Rate Basis
					ψυ			ψυ		\$0	_		\$0			\$0		\$0	
					\$0			\$0		\$0			\$0			\$0		\$0	
					\$0			\$0		\$0			\$0			\$0		\$0	
					\$0			\$0		\$0	_		\$0			\$0		\$0	
					\$0			\$0		\$0			\$0			\$0		\$0	
					\$0			\$0		\$0	_		\$0			\$0	0	\$0	
					\$0			\$0		\$C			\$0			\$0	0	\$0	
					\$0			\$0		\$0			\$0			\$0		\$0	
					\$0			\$0		\$0	_		\$0			\$0		\$0	
					\$0			\$0		\$0			\$0			\$0		\$0	
					\$0			\$0		\$0)		\$0			\$0	0	\$0	
					\$0			\$0		\$0)		\$0			\$0	C	\$0	
					\$0			\$0		\$0)		\$0			\$0	0	\$0	
					\$0			\$0		\$0)		\$0			\$0	0	\$0	
					\$0			\$0		\$0)		\$0			\$0	0	\$0	
					\$0			\$0		\$C)		\$0			\$0	0	\$0	
					\$0			\$0		\$0)		\$0			\$0	0	\$0	
					\$0			\$0		\$C)		\$0			\$0	0	\$0	
					\$0			\$0		\$C)		\$0			\$0	0	\$0	
					\$0			\$0		\$C)		\$0			\$0	0	\$0	
					\$0			\$0		\$0)		\$0			\$0	0	\$0	
					\$0			\$0		\$C)		\$0			\$0	0	\$0	
					\$0			\$0		\$C)		\$0			\$0	0	\$0	
					\$0			\$0		\$0)		\$0			\$0	0	\$0	
		Total Personnel Costs	6 0		\$0	0		\$0	0	\$0) 0		\$0	0		\$0	0	\$0	

Additional Explanation (as needed): For Lower South, there are more hours in the final budget period because PECO does not contract out testing. A range was provided for the number of resources given the change in team size per budget period.

b. Fringe Benefits

INSTRUCTIONS - PLEASE READ!!! 1. Fill out the table below by position title. If all employees receive the same fringe benefits, you can show "Total Personnel" in the Labor Type column instead of listing out all position titles. 2. The rates and how they are applied should not be averaged to get one fringe cost percentage. Complex calculations should be described/provided in the Additional Explanation section below. 3. The fringe benefit rates should be applied to all positions, regardless of whether those funds will be supported by Federal Share or Recipient Cost Share. 4. Each budget period is rounded to the nearest dollar.

Labor Type	CREATE Component	Budget	Period 1		Budget F	Period 2		Budget F	Period 3		Budget F	Period 4		Budget F	Period 5		Total Project
		Personnel Costs	Rate	Total													
				\$0			\$0			\$0			\$0			\$0	\$0
				\$0			\$0			\$0			\$0			\$0	\$0
				\$0			\$0			\$0			\$0			\$0	\$0
				\$0			\$0			\$0			\$0			\$0	\$0
				\$0			\$0			\$0			\$0			\$0	\$0
	Total:	\$0		\$0	\$0		\$0	\$0		\$0	\$0		\$0	\$0		\$0	\$0

A federally approved fringe benefit rate agreement, or a proposed rate supported and agreed upon by DOE for estimating purposes is required at the time of award negotiation if reimbursement for fringe benefits is requested. Please check (X) one of the options below and provide the requested information if not previously submitted.

A fringe benefit rate has been negotiated with, or approved by, a federal government agency. A copy of the latest rate agreement is/was included with the project application.*

There is not a current federally approved rate agreement negotiated and available.**

*Unless the organization has submitted an indirect rate proposal which encompasses the fringe pool of costs, please provide the organization's benefit package and/or a list of the components/elements that comprise the fringe pool and the cost or percentage of each component/element allocated to the labor costs identified in the Budget Justification (Form EERE 335.1).

**When this option is checked, the entity preparing this form shall submit an indirect rate proposal in the format provided in the Sample Rate Proposal at https://www.energy.gov/eere/funding/downloads/sample-indirect-rate-proposal-and-profit-compliance-audit, or a format that provides the same level of information and which will support the rates being proposed for use in the performance of the proposed project.

Additional Explanation (as necessary): Please use this box (or an attachment) to list the elements that comprise your fringe benefits and how they are applied to your base (e.g. Personnel) to arrive at your fringe benefit rate.

INSTRUCTIONS - PLEASE READ!!!

1. Identify Foreign and Domestic Travel as separate items. Examples of Purpose of Travel are subrecipient site visits, DOE meetings, project mgmt. meetings, etc. Examples of Basis for Estimating Costs are past trips, travel quotes, GSA rates, etc.

2. All listed travel must be necessary for performance of the Statement of Project Objectives.

3. Only travel hat is directly associated with this award should be included as a direct travel cost to the award.

4. Federal travel regulations are contained within the applicable cost principles for all entity types.

5. Travel costs should remain consistent wi h travel costs incurred by an organization during normal business opera ions as a result of the organizations written travel policy. In absence of a written travel policy, organizations must follow he regulations prescribed by the General Services Administration.

6. Columns E, F, G, H, I, J, and K are per trip.

7. The number of days is inclusive of the day of departure and the day of return.

8. Recipients should enter City and State (or City and Country for International travel) in the Depart from and Destination fields.

9. Each budget period is rounded to the nearest dollar.

Image: Section of the sectio	Domestic Travel International Travel Budget Period 1 Total Domestic Travel			Budget Per	iod 1			\$0 \$0	
Image: Section of the sectio	Budget Period 1 Total							\$0	
	Budget Period 1 Total						 		
	Budget Period 1 Total								
	Budget Period 1 Total						 	\$0	
	Budget Period 1 Total						 	\$0	
								\$0	
								\$0	
			E	Budget Per	iod 2				
								\$0	
								\$0	
								\$0	
								\$0	
	International Travel						 		
	 Dudget Devied 2 Tetal						 	\$0 \$0	
	Budget Period 2 Total Domestic Travel			Budget Pe	riad 2			۵ ۵	
	 Domestic Traver	-	-	buuyei re	nou s	1	 	\$0	
							 	\$0 \$0	
								\$0	
								\$0	
	International Travel								
								\$0	
	Budget Period 3 Total							\$0	
	 Domestic Travel			Budget Pe	riod 4		 		
							 	\$0	
							 	\$0 \$0	
			-				 	\$0 \$0	
	International Travel								
								\$0	
	Budget Period 4 Total							\$0	
	Domestic Travel			Budget Pe	riod 5				
								\$0	
								\$0	
							 	\$0	
	Internetion 177							\$0	
	International Travel							\$0	
	Budget Period 5 Total							\$0 \$0	
	PROJECT TOTAL						 	\$0 \$0	
Additional Expl									

Deta led Budget Jus if cat on

d. Equipment

CEL Compute Exponent in Sequent in Sequent in Bail of Cas Multical fact IDENTIFIE CONTROLLING INTERNATION OF	Image: state		Buder Period 3				30 Budget Period 3 50		
Description Description Image: Section of the sect	A A A A A A A A A A B A B A C A		Buder Period 3			3 9	50 Budget Period 3 90 50		
Description Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description Image: Description	 Interface service service		Budet Period 2		Image: second	9 9	30 Budget Period 3 4 50		
Note Note <t< td=""><td>A A</td><td></td><td>Budet Period 2</td><td></td><td></td><td>9 9 9 9</td><td>50 Budget Period 3 50</td><td></td><td></td></t<>	A A		Budet Period 2			9 9 9 9	50 Budget Period 3 50		
Description Page http:///page/page/page/page/page/page/page/pa	Image: state		Budet Period 2			3 3	50 Bodget Period 3 90 50		
	 Interface Interface		Budet Period 2			9 9 9 9	30 Bodget Period 3 50		
	Image: state		Budet Period 2		Image: state	3 3	30 Budget Period 3 0 50		
Description Description Image: Section of the sect	Image: state		Budet Period 2		Image: state of the s	3 9	80 Budget Period 1 30		
Note Negretical Image: Section of the section of t	Image: state		Budet Period 2			9 9 9 9	50 Budget Period 3 90 50		
Base for i Base for i I			Budet Period 2		Image: second	9 9 9 9	50 Budget Period 3 50		
Description Resp. Proof 1 Image Rest 1 Image Rest 1	Image: state		Budet Period 2		Image: section of the sectio	3 3	30 30		
Base Point Bage Point Image Point Image Point Image Point	A a serie of a serie o		Budet Period 2			9 9 9 9	50 Budget Period 3 0 50		
Description Description Image: Construction Image: Construction Image: Construction	 Interface Interface		Budet Period 2		Image: second	3 3	50 Budget Period 3 50		
Bade Note Bade Note Image Note Image Note Image Note	- - - -		Budet Period 2		Image: second	9 9 9 9	50 Budget Period 1 50		
Logeneric Regeneric Image: State stat	 International sector sec		Budet Period 2			9 9 9 9	50 Budget Period 3 50		
	- - - -		Budet Period 2			S S S S	50 Budget Period 50 <		
	 International sector sec		Budet Period 2			3 3	30 Bodget Period 3 20 30 30 50		
Bage Point 1 Bage Point 2 Image Point 2 Image Point 2	 Antipation of the sector of the		Budet Period 2			9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	50 Budget Period 3 50		
Book Book Privid Image: State St	Image: state					9 9 9 9	50 Budget Pericol 1 50		
Base word i Base word i Base word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i Image word i	- - - -						30 Bodget Period 3 30 30 30 50		
Body Protof Body Protof Image: State	- - - -			2 ota		9 9 9 9	50 Budget Period 3 60 50		
Budge Proid 1 Budge Proid 1 Image: State St	- - - -			2 00		3 3 3 3 3 5	80 Budget Period 3 50		
Budge Period Budge Period Image: Section of the sec	- - - -			2 otal		9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	30 Bodget Period 3 20 30 30 50		
	- - - -			2 ota		3 3 3 3 3 3 3 5	50 Budget Pericol 1 50		
				7 00		9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	30 Budget Period 3 20 30 30 50		
Budget Period Budget Period Image: Section of the section of				2 otal		9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	50 Bodget Period 3 20 30 50		
				2 otal		9 9 8 3 9 3 9 9 8 9 9 9 8 9 9 9	50 Budget Period 3 50		
Budget Period Budget Period Image: Section of the se				2 otal		9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	30 Budget Period 3 20 30 30 50		
				2 otal		9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	50 Budget Period 3 2 50		
				2 otal		9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	30 Budget Period 3 50		
				12 otal		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	50 Budget Period 3 50		
Base of the second				12 otal		9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	30 Budget Period 3 50		
				2 otal		9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	\$0 \$0 Budget Period 3 \$0		
				2 otal		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$0 Budget Period 3 \$0		
				2 otal		\$ \$ \$ \$ \$ \$ Budget Period \$ Budget Period \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$0 \$0 Budget Period 3 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0		
				2 otal		\$ 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	\$0 \$0 Budget Period 3 \$0 \$0 \$0 \$0		
				12 otal		Si Si Si Si Si Budget Period Si Si Si Si Si Si Si Si Si Si Si Si Si	\$0 \$0 Budget Period 3 \$0 \$0 \$0		
Budget Period 1 Budget Period 1 Image: Period 1 Image: Period 1				2 otal		Si Si Si Si Si Si Si Budget Period	\$0 \$0 Budget Period 3 \$0		
				2 otal		5 5 5 5 5 5 5 5 5 5	\$0 \$0		
			Budget Period 1			\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$0 \$0		
Budge Proiot 1 Budge Proiot 2 Image: Provide 1 Image: Provide 1 Image: Provide 1			Budget Period 1			\$ \$ \$ \$			
Budget Period 1 Image: Period 1			Budget Period 1			\$1 \$1 \$1		 1	
Budget Period 1 Image: Period 1			Budget Period 1			\$1 \$1 \$1	\$0	 	
Budget Period 1 Budget Period 1 Image: Period 2 Image: Period 2			Budget Period 1			ŞI	\$0	 	
Build of the second o			Budget Period 1				\$0	 	
Budget Period 1 Budget Period 1 Image: Period 1			Budget Period 1			SI	\$0		
Builder Period 1 Image: Period 1 Image: Period 1 Image: Period 1			Budget Period 1			SI	\$0		
Builder Period 1 Builder Period 1 Image: Period 1			Budget Period 1			SI	\$0	 	
Budge Period Budge Period Image: Period Perio			Budget Period 1			SI	\$0	 	
Budget Period 1			Budaet Period 1			SI	\$0	 	
Budget Period 1			Budget Period 1			S	\$0 \$0	 	
Budget Period 1 Budget Period 1 Budget Period 1 Sol Budget Period 1 Sol Budget Period 1 Sol Budget Period 2 Sol Budget Period 1 Sol Budget Period 2 Sol Budget Period 1 Sol Budget Period 1 Sol Budget Period 1 Sol			Budget Period 1			\$I	-au	 	
Budget Period 1		<u> </u>	Budget Period 1		-	şi			
BudgetPriori BudgetPriori </td <td></td> <td></td> <td></td> <td>1 otal</td> <td></td> <td>51 51 51 51 51 51</td> <td>\$0 \$0</td> <td></td> <td></td>				1 otal		51 51 51 51 51 51	\$0 \$0		
BudgetPriori BudgetPriori </td <td></td> <td></td> <td></td> <td></td> <td></td> <td>SI Budget Period SI SI SI SI SI SI SI SI</td> <td>\$0 Budget Period 2 \$0 \$0</td> <td></td> <td></td>						SI Budget Period SI SI SI SI SI SI SI SI	\$0 Budget Period 2 \$0 \$0		
Budge Proid 1 Budge Proid 1 0 90 0 90 0 90 0 90 0 90 0 90 0 90 0 90 0 90 0 90 0 90 0 90 0 90 0 90 0 90 0 90 0 90						Si Budget Period Si Si Si Si Si Si Si	\$0 \$0 80 Budget Period 2 \$0 \$0		
Budget Prior 1						Si Si Si Budget Period Si Si Si Si Si Si Si Si Si Si Si Si Si	\$0 \$0 \$0 \$0 Budget Period 2 \$0 \$0 \$0		
Budget Period 1 Budget Period 1 Budget Period 1 S0						Si Si Si Budget Period Si Si Si Si Si Si Si Si Si Si Si Si Si	\$0 \$0 \$0 \$0 \$0 \$0 \$0 Budget Period 2 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0		
Budget Period 1 Budget Period 1 0 50 0 50 0 50 0 50 0 50 0 50 0 50 0 50 0 50						Si Si Si Si Si Si Budget Period Si Si Si Si Si Si Si Si Si Si Si Si Si	S0 S0		
Budget Priorit Budget Priorit Budget Priorit Bit Bit Comparison Bit Display Bit Bit Display Bit Bit Bit Display Bit Bit Bit Bit Display Bit Bit Bit Bit <tht< td=""><td></td><td></td><td></td><td></td><td></td><td>Si Si Si Si Si Si Budget Period Si Si Si Si Si Si Si Si Si Si Si Si Si</td><td>S0 S0 S0 S0</td><td></td><td> </td></tht<>						Si Si Si Si Si Si Budget Period Si Si Si Si Si Si Si Si Si Si Si Si Si	S0 S0		
Budget Prior 1 Budget Prior 1 Budget Prior 1 Signature Signature Budget Prior 1						\$1 \$2 \$3 \$3 \$3 \$3 \$3 \$3 \$3 Budget Period \$3 Budget Period \$3 \$3 \$4 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5	30 50 50 50 50 50 50 50 50 80 80 80 80 80 80 80 80 80 80 80 80 80		
Budget Priol 1 0 0 0 30 0 50						\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	30 30 30 30 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 8udget Period 2 50		
Budget Period 1						\$ \$	30 30 50		
						99 99 99 99 99 99 99 99 99 99 99 99 99	30 50 30 30 30 50		
	CREA E Comp ask#					S Budget Period S S S S S S	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0		

INSTRUCTIONS - PLEASE READ

1. Supplies are generally defined as an item with an acquisition cost of \$5,000 or less and a useful life expectancy of less than one year. Supplies are generally consumed during the project performance. Please refer to the applicable Federal regulations in 2 CFR 200 for specific supplies definitions and treatment.

2. List all proposed supplies below, providing a basis of costs (e.g. contractor quotes, catalog prices, prior invoices, etc.). Briefly justify the need for the Supplies as they apply to the Statement of Project Objectives. Note that Supply items must be direct costs to the project at this budget category, and not duplicative of supply costs included in the indirect pool that is the basis of the indirect rate applied for this project.

3. Multiple supply items valued at \$5,000 or less used to assemble an equipment item with a value greater than \$5,000 with a useful life of more than one year should be included on the equipment tab. If supply items and costs are ambiguous in nature, contact your DOE representative for proper categorization.

4. Add rows as needed. If rows are added, formulas/calculations may need to be adjusted by the preparer.

5. Each budget period is rounded to the nearest dollar.

SOPO Task #	CREATE Component	General Category of Supplies	Qty	Unit Cost	Total Cost	Basis of Cost	Justification of need
				Budg	jet Period 1		
					\$0		
					\$0 \$0		
					\$0		
					\$0		
					\$0		
					\$0		
					\$0		
		Budget Period 1 Total			\$0		
				Budg	jet Period 2		
					\$0		
					\$0		
					\$0		
					\$0		
					\$0		
					\$0 \$0		
					\$0 \$0		
		Budget Period 2 Total			\$0		
		Budget Feriou z Total		Puda	jet Period 3		
	<u> </u>			Βυυξ	s0		
					\$0 \$0		
					\$0 \$0		
					\$0		
					\$0 \$0		
					\$0		
					\$0		
					\$0		
		Budget Period 3 Total			\$0		
				Budg	jet Period 4		
					\$0		
					\$0		
					\$0		
					\$0		
					\$0		
					\$0		
					\$0		
					\$0		
		Budget Period 4 Total			\$0		
				Budg	et Period 5		
					\$0		
	<u> </u>				\$0		
					\$0		
					\$0 \$0		
					\$0 \$0		
					\$0 \$0		
					\$0		
		Budget Period 5 Total			\$0		
		TOTAL SUPPLIES			\$0 \$0		
		TOTAL SUFFLIES			3 0		

f. Contractual

INSTRUCTIONS - PLEASE READ

1. The entity completing this form must provide all costs related to sub-recipients, contractors, and FFRDC partners in the applicable boxes below.

2. Sub-recipients (partners sub-awardees): Subrecipients shall submit a Budget Justification describing all project costs and calculations when their total proposed budget exceeds either (1) \$100 000 or (2) 25% of total award costs. These sub-recipient forms may be completed by either the sub-recipients themselves or by the preparer of this form. The budget totals on the sub-recipient's forms must match the sub-recipient entries below. A subrecipient is a legal entity to which a subaward is made, who has performance measured against whether the objectives of the Federal program are met, is responsible for programmatic decision making, must adhere to applicable Federal program compliance requirements, and uses the Federal funds to carry out a program of the organization. All characteristics may not be present and judgment must be used to determine sub-recipient vs. contractor status.

3. Contractors: List all contractors supplying commercial supplies or services used to support the project. For each Contractor cost with total project costs of \$100,000 or more, a Contractor quote must be provided. A contractor is a legal entity contracted to provide goods and services within normal business operations, provides similar goods or services to many different purchasers, operates in a competitive environment, provides goods or services that are ancillary to the operation of the Federal program, and is not subject to compliance requirements of the Federal program. All characteristics may not be present and judgment must be used to determine subrecipient vs.contractor status.

4. Eederal Funded Research and Development Centers (FFRDCs): FFRDCs must submit a signed Field Work Proposal during award application. The award recipient may allow the FFRDC to provide this information directly to DOE, however project costs must also be provided below.

5. Each budget period is rounded to the nearest dollar.

SOPO Task #	CREATE Component	Sub-Recipient Name/Organization	Sub-Recipient Unique Entity Identifier (UEI)	Purpose and Basis of Cost	Budget Period 1	Budget Period 2	Budget Period 3	Budget Period 4	Budget Period 5	Project Total
					1. N				1 (\$0
										\$0
										\$0
									8	\$0
	1				10 10		3			\$0
									1	\$0
				Sub-total	\$0	\$0	\$0	\$0	\$0	\$0
SOPO Task #	CREATE Component		actor Janization	Purpose and Basis of Cost	Budget Period 1	Budget Period 2	Budget Period 3	Budget Period 4	Budget Period 5	Project Total

(b) (4)

			Sub-tota	1 \$0			\$0		\$0 \$0 \$0	
SOPO Task #	CREATE Component	FFRDC Name/Organization	Purpose and Basis of Cost	Budget Period 1	Budget Period 2	Budget Period 3	Budget Period 4	Budget Period 5	Project Total	
			(b) (•	4)						
									\$0	
									\$0 \$0	
	5								\$0 \$0	
-									\$0	
									\$0 \$0	
	2								\$0 \$0	
									\$0 \$0	
									\$0	
<u> </u>	1 2 2			-					\$0 \$0	
									\$0	
									\$0 \$0	
	2 2								\$0	
									\$0 \$0	
1									\$0	

g. Construction

PLEASE READ!!!

1. Construction, for the purpose of budgeting, is defined as all types of work done on a particular building, including erecting, altering, or remodeling. Construction conducted by the award recipient is entered on this page. Any construction work that is performed by a contractor or subrecipient should be entered under f. Contractual.

2. List all proposed construction below, providing a basis of cost such as engineering estimates, prior construction, etc., and briefly justify its need as it applies to the Statement of Project Objectives. 3. Each budget period is rounded to the nearest dollar.

SOPO CREATE **General Description** Cost **Basis of Cost** Justification of need Task # Component **Budget Period 1** \$0 **Budget Period 1 Total Budget Period 2 Budget Period 2 Total** \$0 **Budget Period 3** Budget Period 3 Total \$0 **Budget Period 4 Budget Period 4 Total** \$0 **Budget Period 5** Budget Period 5 Total \$0 TOTAL CONSTRUCTION \$0
h. Other Direct Costs

INSTRUCTIONS - PLEASE READ!!!

1. Other direct costs are direct cost items required for the project which do not fit clearly into other categories. These direct costs must not be included in the indirect costs (for which he indirect rate is being applied for this project). Examples are: tuition, printing costs, etc. which can be directly charged to he project and are not duplicated in indirect costs (overhead costs).

Basis of cost are items such as vendor quotes, prior purchases of similar or like items, published price list, etc.

3. Each budget period is rounded to the nearest dollar.

SOPO Task #	CREATE Component	General Description and SOPO Task #	Cost	Basis of Cost	Justification of need
			Budg	et Period 1	
		Budget Period 1 Total	\$0		
		Budget Period 1 Total	φυ	Budget Period 2	
				Budget Feriou 2	
		Budget Period 2 Total	\$0		
				Budget Period 3	
		Budget Period 3 Total	\$0		
		Budget i chou o rotar	ψu	Budget Period 4	
				Budget i chou 4	
		Budget Period 4 Total	\$0		
				Budget Period 5	
		Budget Period 5 Total	\$0		
		TOTAL OTHER DIRECT COSTS	\$0		

Additional Explanation (as needed): Reflects PennDOT standard project contingency. Unneeded budget will be returned to PECO for reallocation for GRIP-eligible purposes

i. Indirect Costs

INSTRUCTIONS - PLEASE READ

1. Fill out the table below to indicate how your indirect costs are calculated. Use the box below to provide additional explanation regarding your indirect rate calculation.

2. The rates and how they are applied should not be averaged to get one indirect cost percentage. Complex calculations or rates that do not do not correspond to the below categories should be described/provided in the Additional Explanation section below. If questions exist, consult with your DOE contact before filling out this section.

3. The indirect rate should be applied to both the Federal Share and Recipient Cost Share.

4. NOTE A Recipient who elects to employ the 10% de minimis Indirect Cost rate cannot claim resulting cost as a Cost Share contribution, nor can the Recipient claim "unrecovered indirect costs" as a Cost Share contribution. Neither of these costs can be reflected as actual indirect cost rates realized by the orgnaization, and therefore are not verifiable in the Recipient records as required by Federal Regulation (200.306(b)(1))

5.. Each budget period is rounded to the nearest dollar.

	Budget Period 1	Budget Period 2	Budget Period 3	Budget Period 4	Budget Period 5	Total	Explanation of BASE
Provide ONLY Applicable Rates:							
Overhead Rate	0.00%	0.00%	0 00%	0.00%	0.00%		Example: Labor + Fringe
General & Administrative (G&A)	0.00%	0.00%	0 00%	0.00%	0.00%		
FCCM Rate, if applicable	0.00%	0.00%	0 00%	0.00%	0.00%		
OTHER Indirect Rate	0.00%	0.00%	0 00%	0.00%	0.00%		
Indirect Costs (As Applicable):							
Overhead Costs						\$0	
G&A Costs						\$0	
FCCM Costs, if applicable						\$0	
OTHER Indirect Costs						\$0	
Total indirect costs requested:	\$0	\$0	\$0	\$0	\$0	\$0	

A federally approved indirect rate agreement, or rate proposed (supported and agreed upon by DOE for estimating purposes) is required if reimbursement of indirect costs is requested. Please check (X) one of the options below and provide the requested information if it has not already been provided as requested, or has changed.

An indirect rate has been approved or negotiated with a federal government agency. A copy of the latest rate agreement is included with this application and will be provided electronically to the Contracting Officer for this project. The organization does not have a current, federally approved indirect cost rate agreement and has provided an indirect rate proposal in support of the proposed costs. This organization has elected to apply a 10% de minimis rate in accordance with 2 CFR 200.414(f).

You must provide an explanation (below or in a separate attachment) and show how your indirect cost rate was applied to this budget in order to come up with the indirect costs shown.

Additional Explanation (as needed): *IMPORTANT: Please use this box (or an attachment) to further explain how your total indirect costs were calculated. If the total indirect costs are a cumulative amount of more than one calculation or rate application, the explanation and calculations should identify all rates used, along with the base they were applied to (and how the base was derived), and a total for each (along with grand total).

PLEASE READ!!!

A detailed presentation of the cash or cash value of all cost share proposed must be provided in the table below. All items in the chart below must be identified within the applicable cost category tabs a. through i. in addition to the detailed presentation of the cash or cash value of all cost share proposed provided in the table below. Identify the source organization & amount of each cost share item proposed in the award.
 Cash Cost Share - encompasses all contributions to the project made by the recipient, subrecipient, or third party (an entity that does not have a role in performing the scope of work) for costs incurred and paid for during the project. This includes when an organization pays for personnel, supplies, equipment, etc. for their own company with organizational resources. If the item or service is reimbursed for, it is cash cost share. All cost share items must be necessary to the performance of the project. Contractors may not provide cost share. Any partial donation of goods or services is considered a discount and is not allowable.
 In Kind Cost Share - encompasses all contributions to the project made by the recipient, or third party (an entity that does not have a role in performing the scope of work) where a value of the contribution can be readily determined, verified and justified but where no actual cash is transacted in securing the good or service comprising the cost share items include volunteer personnel hours, the donation of space or use of equipment, etc. The cash value and calculations thereof for all In Kind cost share items must be justified and explained in the Cost Share items section below. All cost share items must be necessary to the performing the scope of work) on actual cash is transacted in securing the good or service comprising the contribution. In Kind cost share items include volunteer personnel hours, the donation of space or use of the project. If questions exist, consult your DOE contact before filling out In Kind cost sha

4. Funds from other Federal sources MAY NOT be counted as cost share. This prohibition includes FFRDC sub-recipients. Non-Federal sources include any source not originally derived from Federal funds. Cost sharing commitment letters from subrecipients and third parties must be provided with the original application.

5. Fee or profit, including foregone fee or profit, are not allowable as project costs (including cost share) under any resulting award. The project may only incur those costs that are allowable and allocable to the project (including cost share) as determined in accordance with the applicable cost principles prescribed in FAR Part 31 for For-Profit entities and 2 CFR Part 200 Subpart E - Cost Principles for all other non-federal entities.

6. NOTE: A Recipient who elects to employ the 10% de minimis Indirect Cost rate cannot claim the resulting indirect costs as a Cost Share contribution.

7. NOTE: A Recipient cannot claim "unrecovered indirect costs" as a Cost Share contribution, without prior approval.

8. Each budget period is rounded to the nearest dollar.

Organization/Source	Type (Cash or In Kind)	Cost Share Item	Budget Period 1	Budget Period 2	Budget Period 3	Budget Period 4	Budget Period 5	Total Project Cost Share
(b) (4)								
								\$0
								\$0
								\$0
								\$0
								\$0
								\$0
		TOTAL COST SHARE	(b) (4)					
Tota	al Project Cost:							
Additional Explanation (as	needed):							

Applicant Name:			Award Number: Award Number:	DE-FOA-00027		-		
Section A - Budget Summary							OMB Approval No. 0348-0044	1
Occilon A - Budget Gunnary	Catalog of Federal	Estimated Und	obligated Funds		New or R	evised Budget		I
Grant Program Function or Activity	Domestic Assistance Number	Federal	Non-Federal	Federal	Non-Federal		Total	
(a) 1. Budget Period 1	(b) (4)							
2. Budget Period 2 3. Budget Period 3								
 Budget Period 4 Budget Period 5 								
6. Totals Section B - Budget Categories								
		Grant Program, Function or Activity					T (1 (5)	
6. Object Class Categories		Budaet Period 1	Budget Period 2	Budaet Period 3	Budaet Period 4	Budget Period 5	Total (5)	
a. Personnel								
 b. Fringe Benefits 		(b) (4)						
c. Travel								
d. Equipment								
e. Supplies								
f. Contractual								
g. Construction								
h. Other								
i. Total Direct Charges (sum of 6a-6h	ו)							
j. Indirect Charges								
k. Totals (sum of 6i-6j)								
7. Program Income								

Previous Edition Usable

SF-424A (Rev. 4-92)

Authorized for Local Reproduction

Prescribed by OMB Circular A-102

ENVIRONMENTAL QUESTIONNAIRE

I. INSTRUCTIONS

The proposer shall prepare this Environmental Questionnaire (EQ) as accurately and completely as possible. Supporting information can be provided as attachments. The proposer must identify the location of the project and specifically describe the activities that would occur at that location. The proposer must provide specific information and quantities, regarding air emissions, wastewater discharges, solid wastes, etc., to facilitate the necessary review. In addition, the proposer must submit with this EQ a FINAL copy of the project's statement of work (SOW) or statement of project objective (SOPO) that will be used in the contract/agreement between the proposer and the U.S Department of Energy (DOE).

II. QUESTIONNAIRE

A. PROJECT SUMMARY

- 1. Solicitation/Project Number: DE-FOA-0002740 Proposer: PECO Energy Company
- 2. <u>This Environmental Questionnaire pertains to a:</u> <u>Recipient or Prime Contractor</u> Sub-recipient or Subcontractor
- 3. Principal Investigator: (b) (6) Telephone Numbe (b) (6)
- 4. Project Title: CREATE Plan: Clean and Resilient Community Schools Sub-recipient Project
- 5. Expected Project Duration: 5 years
- Location of Activities covered by <u>this</u> Environmental Questionnaire: (City/Township, County, State): Philadelphia, Philadelphia, Pennsylvania
- 7. List the full scope of activities planned (only for the location that is the subject of this Environmental Questionnaire). Perform energy efficiency audits, follow-on engineering assessments and deploy building climate technology at public Title 1 schools in Greater Philadelphia. Environmental Questionnaires will be completed for projects with significant impacts as sites are selected and detailed specifications are finalized.
- 8. List all other locations where work would be performed by the primary contractor of the project and subcontractor(s). Each of the following must have an individual Environmental Questionnaire.

Subcontractor or sub-recipient	Location of activities for this project		
The Fund for the School District of Phila	Select regional Title 1 schools		

9. Identify and select the checkbox with the predominant project work activities under Group A, B, or C

Group A

Routine administrative, procurement, training, and personnel actions. Contract activities/awards for management support, financial assistance, and technical services in support of agency business, programs, projects, and goals. Literature searches and information gathering, material inventories, property surveys; data analysis, computer modeling, analytical reviews, technical summary, conceptual design, feasibility studies, document preparation, data dissemination, and paper studies. Technical assistance including financial planning, assistance, classroom training, public meetings, management training, survey participation, academic contribution, technical consultation, and stakeholders surveys. Workshop and conference planning, preparation, and implementation which may involve promoting energy efficiency, renewable energy, and energy conservation.

STOP! If all work activities related to this project can be classified and described within categories under Group A, proceed directly to Section III CERTIFICATION BY PROPOSER. No additional information is required. If project work activities are described in either Group(s) B or C; then continue filling out questionnaire.

NETL F 451.1-1/3 Revised: 12/3/2014 Reviewed: 12/3/2014 (Page 2)

U.S. DEPARTMENT OF ENERGY

ENVIRONMENTAL QUESTIONNAIRE

Group B

Laboratory Scale Research, Bench Scale Research, Pilot Scale Research, Proof-of-Concept Scale Research, or Field Test Research. Work <u>DOES NOT</u> involve new building/facilities construction and site excavation/groundbreaking activities. This work typically involves routine operation of <u>existing</u> laboratories, commercial buildings/properties, offices and homes, project test facilities, factories/power plants, vehicles test stands and components, refueling facilities, utility systems, or other existing structures/facilities. Work will NOT involve major change in facilities missions and operations, land use planning, new/modified regulatory/operating permit requirements. Includes work specific to routine DOE Site operations and Lab research work activities, but NOT building construction and site preparation. DOE work typically involves laboratory facilities and lab equipment operations, buildings and grounds management activities; and buildings and facilities maintenance, repairs, reconfiguration, remodeling, equipment use and replacement.

Group C

Pilot Test Facilities Construction, Pilot Scale Research, Field Scale Demonstration, or Commercial Scale Application. Work typically involves facility construction, site preparation/excavation/groundbreaking, and/or demolition. This work would include construction, retrofit, replacement, and/or major modifications of laboratories, test facilities, energy system prototypes, and power generation infrastructure. Work may also involve construction and maintenance of utilities system right-of-ways, roads, vehicle test facilities, commercial buildings/properties, fuel refinery/mixing facilities. This work may require new or modified regulatory permits, environmental sampling and monitoring requirements, master planning, public involvement, and environmental impact review. Includes work specific to DOE Site Operations and Lab operation activities involving building and facilities construction, replacement, decommissioning/demolition, site preparation, land use changes, or change in research facilities mission or operations.

B. PROPOSED PROJECT ALTERNATIVES

If applicable, list any project alternatives considered to achieve the project objectives.
 N/A

C. PROJECT LOCATION

1. Provide a brief description of the project location (physical location, surrounding area, adjacent structures).

Project locations (schools) will be identified throughout the course of the 5 year CREATE program execution period.

<u>Attach</u> a project site location map of the project work area.
 N/A

D. ENVIRONMENTAL IMPACTS

NEPA procedures require evaluations of possible effects (including land use, energy resource use, natural, historic and cultural resources, and pollutants) from proposed projects on the environment.

1. Land Use

a.	Characterize prese	ent land use where the proposed proj	ect would be located.	
	✓ Urban	Industrial	Commercial	Agricultural
	Suburban	Rural	Residential	Research Facilities
	Forest	University Campus	Other:	

Identify the total size of the facility, structure, or system and what portion would be used for the proposed project.
 TBD

NETL F 451.1-1/3
Revised: 12/3/2014
Reviewed: 12/3/2014
(Page 3)

c.	Describe planned construction, installation, and/or demolition activities, i.e., roads, utilities system right-of-ways, parking lots, buildings, laboratories, storage tanks, fueling facilities, underground wells, pipelines, or other structures.
	TBD
d.	Describe how land use would be affected by operational activities associated with the proposed project. Image: Provide the image of the image o
e.	Describe any plans to reclaim areas that would be affected by the proposed project. ✓ No land areas would be affected.
f.	Would the proposed project affect any unique or unusual landforms (e.g., cliffs, waterfalls, etc.)? No Yes (describe)
g.	Would the proposed project be located in or near local, state, or federal parks; forests; monuments; scenic waterways; wilderness; recreation facilities; or tribal lands?
2.	Construction Activities and/or Operation
a.	Identify project structure(s), power line(s), pipeline(s), utilities system(s), right-of-way(s) or road(s) that will be constructed and clearly mark them on a project site map or topographic map as appropriate.
b.	Would the proposed project require the construction of waste pits or settling ponds? No Yes (describe and identify location, and estimate surface area disturbed)
c.	Would the proposed project affect any existing body of water? 🔽 No 🔲 Yes (describe)
d.	Would the proposed project impact a floodplain or wetland? I No Yes (describe)
u.	
e.	Would the proposed project potentially cause runoff/sedimentation/erosion? 🔽 No 🔲 Yes (describe)
f.	Would the proposed project include activities located on perma-frost, near fault zones, or involve fracturing, well drilling, geologic stimulation, sequestration, active seismic data collection, and/or deepwater operations? Image: Provide the proposed project include activities located on perma-frost, near fault zones, or involve fracturing, well drilling, geologic stimulation, sequestration, active seismic data collection, and/or deepwater operations? Image: Provide the proposed project include activities located on perma-frost, near fault zones, or involve fracturing, well drilling, geologic stimulation, sequestration, active seismic data collection, and/or deepwater operations? Image: Provide the proposed project include activities located on perma-frost, near fault zones, or involve fracturing, well drilling, geologic stimulation, sequestration, active seismic data collection, and/or deepwater operations? Image: Provide the proposed project include activities located on perma-frost, near fault zones, or involve fracturing, well drilling, geologic stimulation, sequestration, active seismic data collection, and/or deepwater operations?

NETL F 451.1-1/3
Revised: 12/3/2014
Reviewed: 12/3/2014
(Page 4)

g.	Would the proposed project involve any of the following: nanotechnology; recombinant DNA or genetic engineering; facility decommissioning or disposition of equipment/materials; or management of radioactive wastes/materials? No Yes (describe)
3.	Biological Resources
a.	Identify any State or Federally listed endangered or threatened plant or animal species potentially affected by the proposed project.
b.	Would any designated critical habitat be affected by the proposed project? IN Ves (describe)
c.	Describe any impacts that construction would have on any other types of sensitive or unique habitats. No planned construction No habitats Impact (describe)
d.	Would any foreign substances/materials be introduced into ground or surface waters, soil, or other earth/geologic resource because of project activities? How would these foreign substances/materials affect the water, soil, biota, and geologic resources? INO Yes (describe)
e.	Would any migratory animal corridors be impacted or disrupted by the proposed project? 🔽 No 🔲 Yes (describe)
4.	Socioeconomic and Infrastructure Conditions
a.	Would local socio-economic changes result from the proposed project? Vo Ves (describe)
b.	Would the proposed project generate increased traffic use of roads through local neighborhoods, urban or rural areas? Image: No Image: Yes (describe)
c.	Would the proposed project require new transportation access (roads, rail, etc.)? Describe location, impacts, costs.
	V No Yes (describe)
d.	Would the proposed project create a significant increase in local energy usage? INO Ves (describe)
	Potential for incremental increases in energy consumption to power building climate technology to be mitigated by energy efficiency reviews and upgrades.

ENVIRONMENTAL QUESTIONNAIRE

5. Historical/Cultural Resources

a.	Describe any historical, archaeological, or cultural sites in the vicinity of the proposed project; note any sites included on the National Register of Historic Places.
b.	Would construction or operational activities planned under the proposed project disturb any historical, archaeological, or cultural sites?
c.	Has the State Historic Preservation Office been contacted with regard to this project? 🚺 No 🔲 Yes (describe)
d.	Would the proposed project interfere with visual resources (e.g., eliminate scenic views) or alter the present landscape? No Yes (describe)
e.	Would the proposed project be located on or adjacent to tribal lands, lands considered to be sacred, or lands used for traditional purposes? Describe any known tribal sensitivities for the proposed project area.
	No known tribal sensitivities.

6. Atmospheric Conditions/Air Quality

 Identify air quality conditions in the immediate vicinity of the proposed project with regard to attainment of National Ambient Air Quality Standards (NAAQS). This information is available under the Green Book Non-Attainment Areas for Criteria Pollutants located at <u>http://www.epa.gov/air/oaqps/greenbk/astate.html</u>

	Attainment	Non-Attainment
O ₃ - 1 Hour		
O ₃ - 8 Hour		
SO _x		
PM - 2.5	\checkmark	
PM - 10	<	
СО	I	
NO ₂		
Lead	<	

- b. Would proposed project require issuance of new or modified local, state, or federal air permits to perform project related work and activities? 🔽 No 🔲 Yes (describe)
- c. Would the proposed project be in compliance with local and state air quality requirements? **V**es If not, please explain.

ENVIRONMENTAL QUESTIONNAIRE

d. Would the proposed project be classified as either a New Source or a major modification to an existing source?

To be determined based on any new installations of building climate control technology.

e. What types of air emissions, including fugitive emissions, would be anticipated from the proposed project, and what would be the maximum annual rate of emissions for the project?

	Maximum per Year	Total for Project					
SO _x							
NO _x							
PM - 2.5							
PM - 10							
Со							
CO ₂							
Lead							
H ₂ S							
Organic solvent vapors or other volatile organic compoundsList:							
Hazardous air pollutants List:							
Other List:							
✓ None							

- f. Would any types of emission control or particulate collection devices be used?
 ✓ No
 ✓ Yes (describe, including collection efficiencies)
- g. How would emissions be vented?
- 7. Hydrologic Conditions/Water Quality
- a. What nearby water bodies may be affected by the proposed project? Provide distance(s) from the project site.
 N/A
- What sources would supply potable and process water for the proposed project?
 N/A

NETL F 451.1-1/3 Revised: 12/3/2014 Reviewed: 12/3/2014 (Page 7)

U.S. DEPARTMENT OF ENERGY

ENVIRONMENTAL QUESTIONNAIRE

c. Quantify the wastewater that would be generated by the proposed project.

		Gallons/day	Gallons/year	
	Non-contact cooling water			
	Process water			
	Sanitary Sanitary			
	Other describe:			
	✓ None			
d.	What would be the major components of <u>each</u> type of wastewater (e.g., c	oal fines)? 🗸	No wastewate	r produced
e.	Identify the local treatment facility that would receive wastewater from t	he proposed pro	ject.	
	✓ No discharges to local treatment facility			
f.	Describe how wastewater would be collected and treated.	\checkmark	No wastewate	r produced
g.	Would any run-off or leachates be produced from storage piles or waste	disposal sites?	🗸 No 🗌 Yes (describe source)
h.	Would project require issuance of new or modified water permits to perfe	orm project wor	k or site develop	ment activities?
i.	Where would wastewater effluents from the proposed project be discharg	ged? 🔽 No	wastewater prod	luced
j.	Would the proposed project be permitted to discharge effluents into an ex-	xisting body of v	water?	
	✓ No			
	Would a new or modified National Pollutant Discharge Elimination Syst	em (NPDES) pe	ermit be required	?
1.	Would the proposed project adversely affect the quality or movement of	groundwater?	🗹 No 🔲	Yes (describe)

ENVIRONMENTAL QUESTIONNAIRE

m.	Would the proposed project require issuance of an <u>Underground Injection Control (UIC)</u> permit? No Yes (describe)
n.	Would the proposed project be located in or near a wellhead protection area, drinking water protection area, or above a sole source aquifer or underground source of drinking water (USDW)? No Yes (describe)

8. Solid and Hazardous Wastes

a. Identify and estimate wastes that would be generated from the project. Solid wastes are defined as any solid, liquid, semisolid, or contained gaseous material that is discarded, has served its intended purpose, or is a manufacturing or mining byproduct (See <u>EPA Municipal Solid Waste</u> and <u>Municipal Solid Waste by State</u>).

19.	Annual Quantity
Municipal solid waste (e.g., paper, plastic, etc.)	
Coal or coal by-products	
Other Identify:	
Hazardous waste – Identify:	
None None	

- b. Would project require issuance of new or modified solid waste and/or hazardous waste related permits to perform project work activities?
 Ves (explain)
- c. How and where would solid waste disposal be accomplished?
 - None generated
 - On-site (identify and describe location)
 - Off-site (identify location and describe facility and treatment)
- d. How would wastes for disposal be transported?
- e. Describe hazardous wastes that would be generated, treated, handled, or stored under this project. Hazardous waste information can be found at <u>EPA Hazardous Waste</u> website.

f. How would hazardous or toxic waste be collected and stored? 🖌 None used or produced

NETL F 451.1-1/3
Revised: 12/3/2014
Reviewed: 12/3/2014
(Page 9)

g.	If hazardous wastes would require off-site disposal, have arrangements been made with a certified TSD (Treatment, Storage, and Disposal) facility?					
	✓ Not required					
9.	Health/Safety Factors					
a.	Identify hazardous or toxic materials that would be used in the proposed project. None Hazardous or toxic materials that would be used (identify):					
b.	Describe the potential impacts of this project's hazardous materials on human health and the environment. Image: None					
c.	Would there be any special physical hazards or health risks associated with the project? 🔽 No 🔲 Yes (describe)					
d.	Does a worker safety program exist at the location of the proposed project? IN Ves (describe)					
e.	Would additional safety training be necessary for any new laboratory, equipment, or processes involved with the project?					
f.	Describe any increases in ambient noise levels to the public from construction and operational activities. Image: Second secon					
	TBD					
g.	Would project construction result in the removal of natural or other barriers that act as noise screens?					
	TBD					
h.	Would hearing protection be required for workers? 🔽 No 🔲 Yes (describe)					
	TBD					
10.	Environmental Restoration and/or Waste Management					
a.	Would the proposed project include CERCLA removals or similar actions under RCRA or other authorities?					

NETL F 451.1-1/3
Revised: 12/3/2014
Reviewed: 12/3/2014
(Page 10)

b.	Would the proposed project include siting, construction treatment facilities or pilot-scale waste stabilization and					ale wa	
c.	Would the proposed project involve operations of env No Yes (describe)	rironm	ental moni	itorin	g and control sys	tems?	
d.	Would the proposed project involve siting, construction hazardous waste for 90 days or less?				mmissioning of a cribe)	facili	ty for storing packaged
E.	REGULATORY COMPLIANCE						
1.	For the following laws, describe any existing permits, agencies, contacts, etc., that would be required for the				nits, manifests, re	espon	sible authorities or
a.	Resource Conservation and Recovery Act (<u>RCRA</u>): Describe:		None		New Required		Modification Required
b.	Comprehensive Environmental Response, Compensat None New Required Mod Describe:		nd Liability ion Require		(CERCLA):		
c.	Toxic Substance Control Act (TSCA): Describe:		None		New Required		Modification Required
d.	Clean Water Act (CWA): Describe:		None		New Required		Modification Required
e.	Underground Storage Tank Control Program (UST): Describe:		None		New Required		Modification Required
f.	Underground Injection Control Program (UIC): Describe:	7 1	None		New Required		Modification Required
g.	Clean Air Act (CAA): Describe:		None		New Required		Modification Required

h.	Endangered Species Act (ESA): Describe:	🖌 None	New Required	Modification Required
i.	<u>Floodplains and Wetlands Regulations</u> : Describe:	7 None	New Required	Modification Required
j.	Fish and Wildlife Coordination Act (FWCA): Describe:	✓ None	New Required	Modification Required
	Describe:			
k.	National Historic Preservation Act (NHPA): Describe:	🖌 None	New Required	Modification Required
1.	Coastal Zone Management Act (CZMA): Describe:	✓ None	New Required	Modification Required
2.	Identify any other environmental laws and regulation for this project, and describe the permits, manifests, a			ompliance would be necessary
	N/A		nould of required.	
F.	DESCRIBE ANY ISSUES THAT WOULD GENI PROPOSED PROJECT. None	ERATE PUBLI	C CONTROVERSY 1	REGARDING THE
G.	WOULD THE PROPOSED PROJECT PRODUC	F ADDITION	AL DEVELOPMENT	OP ARE OTHER MAJOR
0.	DEVELOPMENTS PLANNED OR UNDERWAY Image: No Yes (describe)			, OK AKE OTHER MAJOR
H.	SUMMARIZE THE SIGNIFICANT IMPACTS T None (provide supporting detail) Signif	THAT WOULD ficant impacts (c		E PROPOSED PROJECT.
	Proposed project work would include rou climate control technology.	tine upgrade	s to building ene	rgy efficiency and

ENVIRONMENTAL QUESTIONNAIRE

I. PROVIDE A DESCRIPTION OF HOW THE PROJECT WOULD BE DECOMMISSIONED, INCLUDING THE DISPOSITION OF EQUIPMENT AND MATERIALS.

TBD

III. CERTIFICATION BY PROPOSER

I hereby certify that the information provided herein is current, accurate, and complete as of the date shown immediately below.

Signature (b) (6)	Date (mm/dd/yyyy):	03/27/2023
Typed Name: (b) (6)		
Title: Vice President of Developmenet		
Organization: The Fund for the School District of Phila		

IV. <u>REVIEW AND APPROVAL BY DOE</u>

I hereby certify that I have reviewed the information provided in this questionnaire, have determined that all questions have been appropriately answered, and judge the responses to be consistent with the efforts proposed.

DOE Project Manager

DISCLOSURE OF LOBBYING ACTIVITIES

Complete this form to disclose lobbying activities pursuant to 31 U.S.C.1352

OMB Number: 4040-0013 Expiration Date: 02/28/2025

1. * Type of Federal Action:	2. * Status of Federal Action:	3. * Report Type:				
a. contract	a. bid/offer/application	a. initial filing				
b. grant	b. initial award	b. material change				
c. cooperative agreement	c. post-award	For Material Change Only:				
d. loan		year quarter				
e. loan guarantee		date of last report				
f. loan insurance						
4. Name and Address of Reporting	Entity:					
Prime SubAwardee Tier if known:						
*Name The Fund for the School Dis	strict of Philadelphia					
* Street 1 c/o Duane Morris, LLP	Street 2 30 S. 17th	St. FI 11				
* ^{city} Philadelphia	State PA	^{Zip} 19103				
Congressional District, if known:						
5. If Reporting Entity in No.4 is Suba	wardee, Enter Name and Address of Pr	ime:				
6. * Federal Department/Agency:	7 * Federal Pro	gram Name/Description:				
c. rederar Department/Agency.		Jan Hane Beschpton.				
	CFDA Number, if application	ble:				
8. Federal Action Number, if known:	9. Award Amou	nt, if known:				
\$						
10. a. Name and Address of Lobbying	g Registrant:					
Prefix * First Name n/a	Middle Name n/a					
* Last Name	Suffix					
* Street 1 Street 2						
Street	Street 2					
* City	State	Zip				
b. Individual Performing Services (inclu	uding address if different from No. 10a)					
Prefix * First Name	Middle Name					
* Last Name	Suffix					
	Sunx					
* Street 1	Street 2					
* City	State	Zip				
	by title 31 U.S.C. section 1352. This disclosure of lobbying a					
reliance was placed by the tier above when the transa	action was made or entered into. This disclosure is required pu public inspection. Any person who fails to file the required disc					
\$10 000 and not more than \$100 000 for each such fa						
(b) (6)						
*Name: Prefix Ms. * First Nam	e (b) (6) iddle N	ame				
t / and Name						
(0) (0)						
Title: Vice President of Developme	Telephone No.: (b) (6)	Date: 03/27/2023				
Federal Use Only:		Authorized for Local Reproduction Standard Form - LLL (Rev. 7-97)				



Creating a Resilient, Equitable & Accessible Transformation in Energy (CREATE)

for Greater Philadelphia



Philadelphia

pennsylvania DEPARTMENT OF ENVIRONMENTAL

PIDC

Energy Programs Office

THE CHAMBER

PARTNERS

City of

CREATE Plan

Proposed Project Goals: CREATE delivers a strategic portfolio of resilience investment throughout southeastern Pennsylvania and is centered around energizing South Philadelphia's economic and innovation hub. It incorporates targeted improvements that will enhance service resilience and reliability, with a concentrated focus on disadvantaged communities (DACs) across the PECO service territory – (b) (4) of localized, distribution grid benefits and climate resilience improvements will go towards Justice 40 DAC customers. All of PECO's 1.7 million customers, (b) (4) of whom reside in DACs will benefit from additional upgrades along (b) (4) of transmission Right of Way (ROW). CREATE will support more than (b) (4) employment opportunities across the region and align with PECO's (b) (4) certified diverse supplier spend target. DOE grant funding will comprehensively address future grid vulnerabilities, reduce carbon emissions through the retirement of legacy diesel generators and the reduction of backup diesel generator usage in Center City Philadelphia, and add (b) (4) of increased distribution capacity for future electrification growth, such as new electric vehicle (EV) charging stations. Pencoyd Flooding



Pencoyd Flooding during Hurricane Ida





Lower South Philadelphia



Urban Affairs Coalition

KEY PERSONNEL

(b) (b) Vice President, Projects & Contracts PECO.IIJA@exeloncorp.com

Principal Project Manager PECO.IIJA@exeloncorp.com



Requested DOE Funds & Proposed Applicant Cost Share

Expected Grid and Community Benefit Outcome:

- Lower South Philadelphia: Construct a new substation to reduce forecasted load from (b) (4)
 of capacity on adjacent circuits. Complete a resilient electric supply business case for the Navy Yard economic innovation center.
- PURMI: Rejuvenate (b) (4)

, and reduce outages and high-impact manhole events.

- Substation Flood Mitigation: Relocate substation to eliminate outages from water intrusion to substation switchgear building, control house and critical spare power transformers during a 100-year or 500-year flood event. Reconstruct rail spur to support timely shipping of spare substation transformers during equipment failure events.
- Amtrak: Rebuild (b) (4) of aging PECO transmission infrastructure and extend the life of existing PECO transmission circuits by 50+ years to reduce outage events. Rebuild (b) (4)
- Conowingo: Rebuild [(b) (4)

while extending the life of the transmission infrastructure by 50+ years.

- **Campus Microgrid**: Deploy (b) (4) and integrate into existing microgrid controller to ensure continued operations at PECO's Berwyn storm response campus during extreme weather events by enabling islanding mode and transition to backup power within 1 second.
- PennDOT (subrecipient): Deploy (b) (4) critical transportation hubs to support operation of traffic monitoring equipment during extreme weather events.
- Clean & Resilient Community Schools (subrecipient): Perform energy efficiency audits, followon engineering assessments and deploy building climate technology at public Title 1 schools in Greater Philadelphia.
- Workforce Development: Establish a regional workforce training collaborative that convenes training programs, workforce development boards and local employers

CREATE Component	Total Project Costs	Applicant Cost Share _a	Requested DOE Funds _b
Lower South Philadelphia Resilience (b) (4)	(b) (4)		
Philadelphia Underground Risk Mitigation Initiative (PURMI)			
Substation Flood Mitigation			
Amtrak Transmission Upgrades			
Conowingo Transmission Upgrades			
Campus Microgrid			
Grant Administration/Compliance			
PECO Investment Sub-Total			
Partnership: PennDOT Battery Storage Pilot			
Partnership: Clean & Resilient Community Schools			
Partnership: PIDC Life Sciences Resiliency Campus Business Case			
Total Package			

(b) (4

peco[™] AN EXELON COMPANY

	EXELON COMPANY	TECHNOLOGY SUMMARY	DESCRIPTION OF TECHNOLOGY IMPACTS	FOA ELIGIBLE USE
	Lower South Philadelphia	 Build a new substation in South Philadelphia; located above the 500-year floodplain Retire 20 miles of aging underground cable Complete a resilient electric supply business case for the Navy Yard economic innovation center 	 Increase capacity and resilience Relieve capacity constraints at adjacent substations Reduce consequences of extreme weather events 	A • B • C • K
T S	PURMI	 Upgrade underground monitoring and control technologies in Center City Philadelphia Redesign system configuration and add access points 	 Mitigate future underground fire events Minimize the time required to troubleshoot disruptions 	B ∘ C ∘ K ∘ L
O M P O N E N	Substation Flood Mitigation	 Demolish and rebuild of Pencoyd Substation with higher transmission voltage and above the 500-year floodplain Relocate a critical spare autotransformer above the 500-year floodplain at Grays Ferry Substation 	 Improve reliability and allow for future load growth Weatherize, harden and fireproof equipment Reduce flood risk for critical backup equipment 	B ∘ C ∘ K
ECO CO	Amtrak	 Replace or rebuild (b) (4) Utilize new (b) (4) 	 Harden power lines against extreme weather events Enable future system reconfiguration at higher capacity 	A • F • K • L • M
	Conowingo	 Replace (b) (4) Improve (b) (4) Utilize new (b) (4) Install (b) (4) 	 Increase transmission capacity and reduce system losses Mitigate equipment failure risks and limit service disruption Deliver emission free hydroelectric power from Conowingo Dam Position PECO for further future expansion within this ROW 	A • F • K • L • M
	Campus Microgrid	network Install (b) (4) microgrid controller 	 Enable storm response center islanding during an outage Retirement of 3 diesel backup generators 	Н∘К
HIPS	PennDOT	 Deploy battery storage devices on existing equipment such as traffic monitoring and management devices 	 Uninterrupted operation during disruptive weather events Support critical public safety functions 	н
PARTNERS	Clean and Resilient Community Schools	 Perform energy efficiency audits and follow-on engineering assessments Deploy climate resilience and clean energy investments at Title 1 public schools 	 Bill reduction Building heating/cooling quality improvements Community heating/cooling center Education and workforce training 	с

United States Senate

WASHINGTON, DC 20510

March 10, 2023

The Honorable Jennifer Granholm Secretary U.S. Department of Energy 1000 Independence Ave., SW Washington, DC 20585

Dear Secretary Granholm:

We write in support of PECO Energy Company's (PECO) "Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia" ("CREATE Plan") application for the U.S. Department of Energy's (DOE) Grid Infrastructure Resilience and Innovation Partnership (GRIP) program. We urge you to give this application full and fair consideration.

It is our understanding that through the CREATE Plan, PECO plans to execute a package of strategic investments in its electric infrastructure to make the grid more resilient, reliable, and better able to support the efforts of its customers to apply advanced and clean energy technologies. Over the last 15 years, Pennsylvania has experienced some of the most catastrophic storms in the Commonwealth's history. PECO informed us that their proposal would relieve system constraints and deploy new technologies to enhance energy resiliency, which is consistent with the goals of the IIJA and the GRIP program.

PECO tells us that the investments as proposed in the CREATE Plan would not only reduce costs and support affordability for customers in the Philadelphia region, but also have the potential to support Pennsylvania's broader economic development efforts. The Lower South Philadelphia economic development hub is a major center for job growth, innovation, and international trade. Further, the investments proposed in the plan would enable future private sector growth and opportunity.

Thank you in advance for your thoughtful consideration. Please include this letter in the official record of the application. Consistent with all applicable laws, rules and regulations, we also respectfully request that you keep us informed of the status of this grant application. If you have other questions for us or our staff, please reach out to Senator Casey's office at (202) 224-6851 or Senator Fetterman's office at (202) 224-4254.

ey, g.

Robert P. Casey, Jr. United States Senator

John Fetterman United States Senator

MADELEINE DEAN 4TH DISTRICT, PENNSYLVANIA

COMMITTEES JUDICIARY COMMITTEE FOREIGN AFFAIRS COMMITTEE

Congress of the United States

House of Representatives Washington, DC 20313-3804 WASHINTON OFFICE 150 CANNON HOUSE OFFICE BUILDING WASHINGTON, DC 20515 202-225-4731

DISTRICT OFFICE 115 EAST GLENSIDE AVENUE, SUITE 1 GLENSIDE, PA 19038 215-884-4300

1200 EAST HIGH STREET, SUITE 105 POTTSTOWN, PA 19464 610-382-1250

10 March 2023

The Honorable Jennifer Granholm Secretary U.S. Department of Energy 1000 Independence Avenue, S.W. Washington, D.C. 20585

Dear Secretary Granholm:

I write in support of PECO Energy Company's (PECO) "Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia" ("CREATE Plan") application for the U.S. Department of Energy's (DOE) Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the Infrastructure Investment and Jobs Act of 2021 (IIJA).

Through the CREATE Plan, PECO would invest in its electric infrastructure to make the grid more resilient, reliable, and better able to support advanced and clean energy technologies.

Over the last 15 years, Pennsylvania has experienced historically catastrophic storms. PECO's proposal to accelerate critical investments in reliability—while relieving system constraints and using new technologies to enhance resiliency—is consistent with the goals of the IIJA and the GRIP program. Requested funding would allow these investments, while reducing customer costs and supporting affordability.

The investments will not only benefit the Philadelphia region, but also support Pennsylvania's overall economic development efforts and enable future private sector growth and opportunity. Additionally, the CREATE Plan's investments in grid resiliency, emergency response, battery storage deployment, and community-based energy resiliency will provide valuable information for stakeholders throughout Pennsylvania.

I respectfully request your full and fair consideration of PECO's application. If I can be of further assistance, please do not hesitate to call upon me.

Sincerely, Madelune Sean

Madeleine Dean Fourth Congressional District, Pennsylvania United States House of Representatives

PRINTED ON RECYCLED PAPER

DWIGHT EVANS 3RD DISTRICT, PENNSYLVANIA

WASHINGTON OFFICE 1105 LONGWORTH HOUSE OFFICE BUILDING WASHINGTON, DC 20515–3803 (202) 225–4001

> DISTRICT OFFICE 7174 OGONTZ AVENUL PHILADELPHIA, PA 19138 (215) 276-0340

DISTRICT OFFICE 1310 POINT BREEZE AVENUE PHILADELPHIA, PA 19146 (215) 254-3400

March 6. 2023

The Honorable Jennifer Granholm Secretary - U.S. Department of Energy 1000 Independence Avenue, S.W. Washington, D.C. 20585

Dear Secretary Granholm:

Congress of the United States House of Representatives Washington, DC 20515

COMMITTEE ON WAYS AND MEANS

CONGRESSIONAL BLACK CAUCUS CONGRESSIONAL PROGRESSIVE CAUCUS GUN VIOLENCE PREVENTION TASK FORCE TASK FORCE ON POVERTY, INCOME INFQUALITY, AND OPPORTUNITY LGBTQH EQUALITY CAUCUS CONGRESSIONAL BLACK MATERNAL HEALTH CAUCUS CONGRESSIONAL PRO-CHOICE CAUCUS

I am pleased to express support for PECO Energy Company's (PECO) "Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia" ("CREATE Plan") application for the U.S. Department of Energy's (DOE) Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the Infrastructure Investment and Jobs Act of 2021 (IIJA).

Through the CREATE Plan, PECO proposes to execute a package of strategic investments in its electric infrastructure to make the grid more resilient, reliable, and better able to support the efforts of its customers to apply advanced and clean energy technologies. Over the last 15 years, Pennsylvania has experienced some of the most catastrophic storms in the Commonwealth's history. PECO's proposal to accelerate critical investments in reliability, while relieving system constraints and deploying new technologies to enhance resiliency as proposed by the CREATE Plan, is consistent with the goals of the IIJA and the GRIP program. Through the funding sought in this application, PECO will be able to make these critical investments while reducing customer costs and supporting affordability.

The investments proposed in the CREATE Plan will not only benefit the Philadelphia region, but it will also support Pennsylvania's overall economic development efforts. The Lower South Philadelphia economic development hub is a major center for job growth, innovation and international trade. Further, the investments proposed in the plan would enable future private sector growth and opportunity. In addition, the CREATE Plan's investments in grid resiliency, emergency response, battery storage deployment, and community-based energy resiliency will provide valuable learnings for stakeholders throughout Pennsylvania.

I support PECO's CREATE Grid Infrastructure Resilience and Innovation Partnership grant application, an effort which would continue the development of a more reliable, resilient and flexible grid in Pennsylvania. I hope you will give this project fair consideration in the implementation of this new program.

Thank you for your consideration of this request.

Dwight Evans Member of Congress

Congress of the United States Washington, DC 20515

March 10, 2023

The Honorable Jennifer Granholm Secretary U.S. Department of Energy 1000 Independence Avenue, S.W. Washington, D.C. 20585

Dear Secretary Granholm,

I write to convey my support for PECO Energy Company's (PECO) "Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia" ("CREATE Plan") application for the U.S. Department of Energy's (DOE) Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the *Infrastructure Investment and Jobs Act* (IIJA).

Through the CREATE Plan, PECO proposes to execute a package of strategic investments in its electric infrastructure to make the grid more resilient, reliable, and better able to support the efforts of its customers to apply advanced and clean energy technologies. Over the last 15 years, Pennsylvania has experienced some of the most catastrophic storms in the Commonwealth's history.

PECO's proposal to accelerate critical investments in reliability, while relieving system constraints and deploying new technologies to enhance resiliency as proposed by the CREATE Plan, is consistent with the goals of the IIJA and the GRIP program. Through the funding sought in this application, PECO will be able to make these critical investments while reducing customer costs and supporting affordability.

The investments proposed in the CREATE Plan will not only benefit the Philadelphia region, but it will also support Pennsylvania's overall economic development efforts. The Lower South Philadelphia economic development hub is a major center for job growth, innovation and international trade. This proposal would further enable future private sector growth and opportunity and the investments the grid resiliency, emergency response, battery storage deployment, and community-based energy resiliency would provide valuable learnings for stakeholders throughout Pennsylvania.

Thank you for your full and fair consideration PECO's CREATE Plan application. I look forward to continuing to work with the Department of Energy in the smooth and seamless implementation of the *Infrastructure Investment and Jobs Act*. Please do not hesitate to contact Matthew Clarkin (matthew.clarkin@mail.house.gov) on my staff if you have any questions or need additional information.

Brien Fitzatrick

Brian Fitzpatrick Member of Congress

Congress of the United States House of Representatives Washington, DC 20515

March 9, 2023

The Honorable Jennifer Granholm Secretary U.S. Department of Energy 1000 Independence Avenue, S.W. Washington, D.C. 20585

Dear Secretary Granholm:

I am pleased to express support for PECO Energy Company's (PECO) "Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia" ("CREATE Plan") application for the U.S. Department of Energy's (DOE) Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the Infrastructure Investment and Jobs Act of 2021 (IIJA). I urge DOE to consider and allocate funding to support the CREATE Plan for Greater Philadelphia.

Through the CREATE Plan, PECO proposes to execute a package of strategic investments in its electric infrastructure to make the grid more resilient, reliable, and better able to support the efforts of its customers to apply advanced and clean energy technologies. Over the last 15 years, Pennsylvania has experienced some of the most catastrophic storms in the Commonwealth's history. PECO's proposal to accelerate critical investments in reliability, while relieving system constraints and deploying new technologies to enhance resiliency as proposed by the CREATE Plan, is consistent with the goals of the IIJA and the GRIP program. Through the funding sought in this application, PECO will be able to make these critical investments while reducing customer costs and supporting affordability.

The investments proposed in the CREATE Plan will not only benefit the Philadelphia region, but it will also support Pennsylvania's overall economic development efforts. The Lower South Philadelphia economic development hub is a major center for job growth, innovation and international trade. Further, the investments proposed in the plan would enable future private sector growth and opportunity. In addition, the CREATE Plan's investments in grid resiliency, emergency response, battery storage deployment, and community-based energy resiliency will provide valuable learnings for stakeholders throughout Pennsylvania.

5675 N. Front Street, Ste 180 Philadelphia, PA 19120 Phone: (267) 335-5643 Fax: (267) 437-3886 8572 Bustleton Ave Philadelphia, PA 19152 Phone: (215) 335-3355 Fax: (215) 856-3734 1318 W. Girard Ave Philadelphia, PA 19123 Phone: (215) 982-1156 Fax: (267) 639-9944 1502 Longworth House Office Building Washington, DC 20515 Phone: (202) 225-6111 Fax: (202) 226- 0611 I support PECO's CREATE Grid Infrastructure Resilience and Innovation Partnership grant application, an effort which would continue the development of a more reliable, resilient and flexible grid in Pennsylvania. I hope you will give this project strong consideration in the implementation of this new program.

Thank you for your consideration of this request.

Brenden F. Bagh

Brendan F. Boyle Member of Congress

CHRISSY HOULAHAN 6TH DISTRICT OF PENNSYLVANIA

1727 LONGWORTH BUILDING WASHINGTON, DC 20515

815 WASHINGTON STREET SUITE 2-48 READING, PA 19601

709 E. GAY STREET SUITE 4 WEST CHESTER, PA 19380



COMMITTEE ON ARMED SERVICES

PERMANENT SELECT COMMITTEE ON INTELLIGENCE

Congress of the United States House of Representatives Washington, DC 20515

March 9, 2023 The Honorable Jennifer Granholm Secretary U.S. Department of Energy 1000 Independence Avenue, S.W. Washington, D.C. 20585

Dear Secretary Granholm:

I am pleased to express support for PECO Energy Company's (PECO) "Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia" ("CREATE Plan") application for the U.S. Department of Energy's (DOE) Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the Infrastructure Investment and Jobs Act of 2021 (IIJA). I respectfully request your full and fair consideration from the DOE to allocate funding to support the CREATE Plan for Greater Philadelphia.

Through the CREATE Plan, it's my understanding that PECO proposes to execute a package of strategic investments in its electric infrastructure to make the grid more resilient, reliable, and better able to support the efforts of its customers to apply advanced and clean energy technologies. Over the last 15 years, Pennsylvania has experienced some of the most catastrophic storms in the Commonwealth's history. In particular, rainfall from Hurricane Ida and an accompanying tornado, devastated portions of Chester County in my district of PA-06. PECO's proposal to accelerate critical investments in reliability, while relieving system constraints and deploying new technologies to enhance resiliency as proposed by the CREATE Plan, is consistent with the goals of the IIJA and the GRIP program. As it has been explained to me, through the funding sought in this application, PECO will be able to make these critical investments while reducing customer costs and supporting affordability.

It's my understanding the investments proposed in the CREATE Plan will not only benefit the Philadelphia region, but it will also support Pennsylvania's overall economic development efforts. The Lower South Philadelphia economic development hub is a major center for job growth, innovation and international trade. Further, the investments proposed in the plan would enable future private sector growth and opportunity. In addition, the CREATE Plan's investments in grid resiliency, emergency response, battery storage deployment, and community-based energy resiliency will provide valuable learnings for stakeholders throughout Pennsylvania.

I support PECO's CREATE Grid Infrastructure Resilience and Innovation Partnership grant application, an effort which would continue the development of a more reliable, resilient and flexible grid in Pennsylvania. I hope you will give this project strong consideration in the implementation of this new program. Thank you in advance for the consideration of my views. Please include this letter in the official record of the application. Consistent with all applicable laws, rules and regulations, I also respectfully request that you keep me informed of the status of this grant application. Finally, if you have any questions, comments, or concerns, please feel free to contact me or my staff at 202-225-4315.

Mising Moulahan

Chrissy Houlahan United States Representative

JOANNA E. McCLINTON, MEMBER SPEAKER 191ST LEGISLATIVE DISTRICT

139 MAIN CAPITOL BUILDING P.O. BOX 202191 HARRISBURG, PENNSYLVANIA 17120-2191 PHONE: (717) 772-9850 FAX: (717) 783-1516



52 SOUTH 60TH STREET PHILADELPHIA, PENNSYLVANIA 19139 PHONE: (215) 748-6712 FAX: (215) 748-1687 WWW.REPMCCLINTON.COM

House of Representatives commonwealth of pennsylvania harrisburg

March 28, 2023

The Honorable Jennifer Granholm, Secretary U.S. Department of Energy (DOE) 1000 Independence Avenue, S.W. Washington, DC 20585

Dear Secretary Granholm,

I am writing to express support for PECO's "Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia" ("CREATE Plan") application for the U.S. DOE's Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the Infrastructure Investment and Jobs Act (IIJA) of 2021.

Through the CREATE Plan, PECO proposes a strategic investment in its electric infrastructure to make the grid more resilient, reliable, and better able to support the efforts of its customers to apply advanced and clean energy technologies. As a result of severe weather throughout the years, Southeastern Pennsylvania has experienced some of the most severe power interruptions in the region's history. These critical investments in reliability and deploying new technologies to enhance resiliency make the infrastructure systems more resilient and capable of supporting accelerated deployment of clean distributed energy technologies.

Moreover, these investments are consistent with the Biden Administration's Justice40 Initiative, to ensure opportunity and inclusion for the diverse communities in Philadelphia. The CREATE Plan will enhance PECO's support for education and workforce training programs for youth and establish the new Clean and Resilient Community Schools program to bring the benefits of clean energy education to all communities in the region. Additionally, PECO is establishing a regionwide Environmental Justice Advisory Committee of community leaders who will meet with Company leaders regularly to share perspectives and opportunities.

I am in full support of PECO's application for these important community investments. If you have any further questions, please don't hesitate to contact me.

tonna & marter

Joanna E. McClinton Speaker of the House Pennsylvania House of Representatives



March 14, 2023

HOUSE OF REPRESENTATIVES

HARRISBURG

The Honorable Jennifer Granholm Secretary, U.S. Department of Energy (DOE) 1000 Independence Avenue, S.W. Washington, DC 20585

Dear Secretary Granholm:

As the bipartisan leaders of the Pennsylvania House of Representatives Consumer Protection, Technology and Utilities Committee, we are pleased to express support for PECO's "Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia" ("CREATE Plan") application for the U.S. DOE's Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the Infrastructure Investment and Jobs Act of 2021.

Through the CREATE Plan, PECO proposes to execute a package of strategic investments in its electric infrastructure to make the grid more resilient, reliable, and better able to support the efforts of its customers to utilize advanced and clean energy technologies. Over the last 15 years, as a result of severe weather events, PECO has experienced some of the most catastrophic storms in the company's more than 100-year history. Accelerating critical investments in system reliability while relieving system constraints and deploying new technologies to enhance resiliency as proposed by the CREATE Plan is consistent with a series of bipartisan initiatives passed by the General Assembly in recent years, including mandating AMI technology for large electric utilities, authorizing the establishment of Distribution System Investment Charges (DSIC), and allowing utilities to propose innovative rate mechanisms that support long-term system investment strategies. Through the funding sought in this application, PECO will be able to make these critical investments while reducing customer costs and supporting affordability.

The investments proposed in the CREATE Plan will not only benefit the Philadelphia region but will also support Pennsylvania's overall economic development efforts. The Lower South Philadelphia economic development hub is a major center for job growth, innovation, and international trade, and the investments proposed in the plan will enable future private sector growth and opportunity. In addition, the CREATE Plan's investments in grid resiliency, emergency response, battery storage deployment, and community-based energy resiliency will provide valuable learnings for stakeholders throughout Pennsylvania.

We are pleased to strongly support PECO's CREATE Grid Infrastructure Resilience and Innovation Partnership grant application which will continue the development of a more reliable, resilient, and flexible grid in Pennsylvania. Thank you for your consideration.

fim markels

Representative Jim Marshall 14th Legislative District

16th Legislative District



March 15, 2023

The Honorable Jennifer Granholm Secretary, U.S. Department of Energy (DOE) 1000 Independence Avenue, S.W. Washington, DC 20585

Dear Secretary Granholm:

As the Majority and Minority Chairs of the Pennsylvania State Senate's Committee on Consumer Protection and Professional Licensure, we express our support for PECO's "Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia" ("CREATE Plan") application for the U.S. DOE's Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the Infrastructure Investment and Jobs Act of 2021.

Recently, the committee held a joint hearing on the ever-growing concerns over grid reliability. This issue not only impacts PJM and other RTOs, but also Pennsylvania's public utilities keeping the lights on in our neighborhoods. We are pleased to support PECO's ongoing efforts to address grid resilience and reliability locally through its CREATE Plan. Over the years, our General Assembly has required smart meters, authorized the establishment of Distribution System Investment Charges (DSIC), and allowed utilities to propose innovative rate mechanisms that support long-term system investment strategies. We have put these systems in place to enhance grid reliability in the Commonwealth. Through the funding sought in this application, PECO will be able to enhance this work by accelerating critical investments in system reliability and deployment of new technology while reducing customer costs and supporting affordability.

We request your support of PECO's CREATE Grid Infrastructure Resilience and Innovation Partnership grant application which will continue the development of a more reliable, resilient and flexible grid in Pennsylvania. Thank you for your consideration.

Sincerely.

Senator Pat Stefano (R-32) Majority Chair

Senator Lisa M. Boscola (D-18) Minority Chair



COMMONWEALTH OF PENNSYLVANIA PENNSYLVANIA PUBLIC UTILITY COMMISSION COMMONWEALTH KEYSTONE BUILDING 400 NORTH STREET HARRISBURG, PENNSYLVANIA 17120

April 3, 2023

The Honorable Jennifer Granholm Secretary, U.S. Department of Energy 1000 Independence Ave SW Washington, DC 20585

Re: PECO IIJA CREATE Plan Application

Dear Secretary Granholm:

On behalf of the Pennsylvania Public Utility Commission ("Commission"), I am writing regarding PECO Energy Company's (PECO) "Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia" ("CREATE Plan") Application for the U.S. DOE's Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the Infrastructure Investment and Jobs Act (IIJA) of 2021. PECO is a regulated utility under the Commission's jurisdiction.

PECO met with Commission staff in March 2023 to discuss its CREATE Plan Application for the U.S. DOE's Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the IIJA.

In general, the Public Utility Commission is supportive of Pennsylvania utilities pursuing funding towards innovative projects that have the potential to improve service and affordability for Pennsylvania customers.

Sincerely,

/s/ Elizabeth H. Barnes

Elizabeth H. Barnes, Deputy Chief Counsel David E. Screven, Acting Executive Deputy Chief Counsel Pennsylvania Public Utility Commission Commonwealth Keystone Building 400 North Street Harrisburg, PA 17120Tel: (717) 787-5000 Fax: (717) 783-3458 ebarnes@pa.gov dscreven@pa.gov

Counsel for the Pennsylvania Public Utility Commission





COMMISSIONERS Marian D. Moskowitz OFFICE OF THE COMMISSIONERS 313 W. Market Street P.O. Box 2748 West Chester, PA 19380-0991 (610) 344-6100



March 7, 2023

The Honorable Jennifer Granholm Secretary, U.S. Department of Energy (DOE) 1000 Independence Avenue, S.W. Washington, DC 20585

Dear Secretary Granholm:

On behalf of Chester County, Pennsylvania, I am pleased to express support for PECO's "Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia" ("CREATE Plan") application for the U.S. DOE's Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the Infrastructure Investment and Jobs Act of 2021.

Through the CREATE Plan, PECO proposes to execute strategic investments in its electric infrastructure to make the grid more resilient, reliable, and better able to support customer adoption of advanced and clean energy technologies. The CREATE Plan represents a transformational investment in the region's core energy infrastructure, as well as a foundation for clean energy job growth and community-based resilience. Through the funding sought in this application, PECO will be able to accelerate and enhance these critical investments while reducing customer costs and preserving affordability for Philadelphia's diverse low and moderate-income communities.

The CREATE Plan will install microgrid and battery storage technologies to create an enhanced resilience emergency response operations center to serve Chester County, along with Delaware and York counties. This investment in Berwyn, Chester County will ensure that PECO can maintain emergency response operations through extreme weather situations that have occurred with increasing frequency over the last 15 years as a result of climate change.

We are also pleased that the CREATE Plan incorporates a robust Community Benefits Plan that establishes job creation, education and workforce development, vendor diversity, and community engagement as core elements. Through this letter of support, Chester County pledges its commitment to coordinate with PECO on the execution of infrastructure improvement project at the Berwyn Operations Center, as well as on the CREATE Plan's community-based energy resilience investments.

Thank you for your consideration.

Marian Montocontz

Marian Moskowitz Chair, Board of Commissioners

COUNCIL DR. MONICA TAYLOR Craw ELAINE PAUL SCHAEFER

Vice Chair KEVIN M. MADDEN

CHRISTINE A. REUTHER RICHARD R. WOMACK



201 West Front Street Media, Pennsylvania 19063

> 610.891.4270 www.delcopa.gov

COUNTY OF DELAWARE GOVERNMENT CENTER BUILDING

March 17, 2023

The Honorable Jennifer Granholm Secretary, U.S. Department of Energy (DOE) 1000 Independence Avenue, S.W. Washington, DC 20585

Dear Secretary Granholm:

On behalf of Delaware County, Pennsylvania, I am pleased to express support for PECO's "Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia" ("CREATE Plan") application for the U.S. DOE's Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the Infrastructure Investment and Jobs Act of 2021.

Through the CREATE Plan, PECO proposes to execute strategic investments in its electric infrastructure to make the grid more resilient, reliable, and better able to support customer adoption of advanced and clean energy technologies. Over the last 15 years, the Philadelphia area has experienced some of the most catastrophic storms in its history as a result of climate change, and the CREATE Plan represents a transformational investment in the region's core energy infrastructure, as well as a foundation for clean energy job growth and community-based resilience. Through the funding sought in this application, PECO will be able to accelerate and enhance these critical investments while reducing customer costs and preserving affordability for Philadelphia's diverse low and moderate-income communities.

The CREATE Plan will modernize a critical segment of aging infrastructure in Delaware County, improving reliability and resiliency for the diverse communities, including the City of Chester, which share electric grid facilities with Amtrak. We are also pleased to note that the CREATE Plan will install microgrid and battery storage technologies to create an enhanced resilience emergency response operations center to serve Delaware County, along with Chester and York counties. Additionally, the investments in the "Lower South Philadelphia" area that is adjacent to Delaware County will support continued job growth in this economic development center that employs thousands of Delaware County residents.

We are also pleased that the CREATE Plan incorporates a robust Community Benefits Plan that establishes job creation, education and workforce development, vendor diversity, and community engagement as core elements. Through this letter of support, Delaware County pledges its commitment to coordinate with PECO on the execution of infrastructure improvement project in the County, as well as community-based energy resilience investments.

Thank you for your consideration.

18

Dr. Monica Taylor Delaware County Council, Chair



March 15, 2023

The Honorable Jennifer Granholm Secretary, U.S. Department of Energy (DOE) 1000 Independence Avenue, S.W. Washington, DC 20585

Dear Secretary Granholm:

I am pleased to express support for PECO's "Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia" ("CREATE Plan") application for the U.S. DOE's Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the Infrastructure Investment and Jobs Act of 2021.

Through the CREATE Plan, PECO proposes to execute strategic investments in its electric infrastructure to make the grid more resilient, reliable, and better able to support customer adoption of advanced and clean energy technologies. The CREATE Plan represents a transformational investment in the region's core energy infrastructure, as well as a foundation for clean energy job growth and community-based resilience. Through the funding sought in this application, PECO will be able to accelerate and enhance these critical investments while reducing customer costs and preserving affordability for Philadelphia's diverse low and moderate-income communities.

The CREATE Plan will modernize a critical segment of aging infrastructure that delivers emission-free electricity from the Conowingo hydroelectric generating plant into Plymouth Township and surrounding areas in Montgomery County. These facilities also provide potential pathways to bring off-shore wind to the southeastern Pennsylvania market, expanding the region's access to emission-free energy.

I am also pleased that the CREATE Plan incorporates a robust Community Benefits Plan that establishes job creation, education and workforce development, vendor diversity, and community engagement as core elements that will benefit municipalities in Montgomery County which include disadvantaged neighborhoods. Through this letter of support, Montgomery County pledges its commitment to coordinate with PECO on the execution of the Conowingo line infrastructure improvement project, as well as on the CREATE Plan's community-based energy resilience investments.

Thank you for your consideration.

Remeth E. Lawrence, ge.

Kenneth E. Lawrence, Jr. Montgomery County Commissioners, Chair

March 7, 2023

The Honorable Jennifer Granholm Secretary, U.S. Department of Energy (DOE) 1000 Independence Avenue, S.W. Washington, DC 20585

RE: Letter of Support for PECO IIJA CREATE Program Application on Behalf of Asplundh Engineering

Dear Secretary Granholm:

On behalf of Asplundh Engineering Services, I'm pleased to express support for PECO's CREATE Greater Philadelphia Plan application for the U.S. DOE's Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the Infrastructure Investment and Jobs Act of 2021.

PECO's CREATE Plan proposes to have an estimated employment impact of 2,600 jobs through its proposed \$260 million investment that will make our region's backbone infrastructure more reliable, resilient, compatible with the growing clean energy economy, and inclusive for all our diverse communities. As a key vendor partner that has worked with PECO for decades, we place the highest priority on ensuring that electric infrastructure projects in the region are completed in a manner that provides good pay, benefits, opportunities for training and skill development, and is respectful of the right to organize.

Asplundh Engineering Services and PECO share a common commitment to promoting workplaces that are safe, healthy, inclusive, and respectful of all our communities. If we are selected as a contractor to perform work on the CREATE projects, we also intend to actively work with PECO in support of execution of its community-based workforce training and diverse vendor strategies. In addition to opportunities that will be created through implementation of this program, our company also looks forward to future opportunities related to clean and resilient energy projects that will be enabled by the CREATE Plan throughout southeastern Pennsylvania.

Thank you for your consideration. David MCALY David McGinley

President Asplundh Engineering Services, LLC




March 27, 2023

The Honorable Jennifer Granholm Secretary, U.S. Department of Energy (DOE) 1000 Independence Avenue, S.W. Washington, DC 20585

Dear Secretary Granholm:

On behalf of Carr & Duff, LLC, I'm pleased to express support for PECO's CREATE Greater Philadelphia Plan application for the U.S. DOE's Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the Infrastructure Investment and Jobs Act of 2021.

PECO's CREATE Plan proposes to have an estimated employment impact of 2,600 jobs through its proposed \$260 million investment that will make our region's backbone infrastructure more reliable, resilient, compatible with the growing clean energy economy, and inclusive for all our diverse communities. As a key vendor partner that has worked with PECO for decades, we place the highest priority on ensuring that electric infrastructure projects in the region are completed in a manner that provides good pay, benefits, opportunities for training and skill development, and is respectful of the right to organize.

Carr & Duff a member of IBEW locals 98, 126, 269, 375, and 351, as well as Operating Engineers local 542, and PECO share a common commitment to promoting workplaces that are safe, healthy, inclusive, and respectful of all our communities. If we are selected as a contractor to perform work on the CREATE projects, we also intend to actively work with PECO in support of execution of its community-based workforce training and diverse vendor strategies. In addition to opportunities that will be created through implementation of this program, our company also looks forward to future opportunities related to clean and resilient energy projects that will be enabled by the CREATE Plan throughout southeastern Pennsylvania.

Thank you for your consideration.

Sincerely,

Valarie J. Cofield Executive Vice President

/VJC

cc: File

Carr and Duff, LLC 2100 Byberry Road Huntingdon Valley, PA 19006-3598 Phone: (215) 672-4200

Ceiba 🏆

A Latino coalition building organization serving Philadelphia

174 Diamond St Philadelphia PA 19122 215-634-7245 info@ceibaphiladelphia.org

March 28, 2023

The Honorable Jennifer Granholm Secretary, U.S. Department of Energy (DOE) 1000 Independence Avenue, S.W. Washington, DC 20585

Dear Secretary Granholm:

Ceiba is excited to support the "Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia" ("CREATE Plan") application for the U.S. DOE's Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the Infrastructure Investment and Jobs Act of 2021.

Ceiba's support for the CREATE Plan is rooted in our mission to promote the economic development and financial inclusion of Philadelphia's Latino community through collaborations and advocacy aimed at ensuring their access to quality housing. Ceiba is the backbone of the Ceiba - Latino Equitable Development Collective, a collective impact initiative that brings together the top 10 Latino nonprofits in Philadelphia to encourage collaboration between organizations. Many of them have excellent track records and are leaders in their field.

Ceiba has a track record of working with PECO on workforce development programs. For example, this past weekend, PECO provided lunch to the over 100 people who attended Ceiba's Record Clearing clinic. At this clinic, Ceiba and the Defender Associations was able to help 47 people secure the assistance of an attorney to help them with their record cleaning needs.

PECO's CREATE Plan will expand financial equity and inclusion for people of color, women, and immigrants in the poorest neighborhoods in Philadelphia. Latinos have the highest poverty rate in Philadelphia: 37%. The poverty rate for Latino children is higher, 48.6 %. Philadelphia's Latino poverty rate is the highest among the nation's most populous cities and its poorest large cities. Poverty is a complex issue, however, as the challenges of climate change are barreling down on our community, especially in their homes, we believe that bringing the benefits of clean energy and climate resilience at the community level through education, workforce development, supplier diversity, and school-based community energy centers are critical to the economic development of the Latino community and the advancement of a more resilient, sustainable and equitable future for our neighborhoods.

Ceiba looks forward to being part of the proposed Environmental Justice Advisory Committee with the hope of partnering with other leading regional non-profits to bring climate resiliency, energy efficiency and clean energy investments into our communities.

Please do not hesitate to contact us if you need additional information about Ceiba's support of PECO's CREATE Plan.

Respectfully,

Will Gonzalez, Esq Executive Director



March 23, 2023

The Honorable Jennifer Granholm Secretary, U.S. Department of Energy (DOE) 1000 Independence Avenue, S.W. Washington, DC 20585

Dear Secretary Granholm:

On behalf of Danella Companies, I'm pleased to express support for PECO's CREATE Greater Philadelphia Plan application for the U.S. DOE's Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the Infrastructure Investment and Jobs Act of 2021.

PECO's CREATE Plan proposes to have an estimated employment impact of 2,600 jobs through its proposed \$260 million investment that will make our region's backbone infrastructure more reliable, resilient, compatible with the growing clean energy economy, and inclusive for all our diverse communities. As a key vendor partner that has worked with PECO for decades, we place the highest priority on ensuring that electric infrastructure projects in the region are completed in a manner that provides good pay, benefits, opportunities for training and skill development, and is respectful of the right to organize.

Danella Companies, the Operating Engineers (Local 542), Laborers District Council, Outside Electricians (Local 126), Steamfitters and Welders (Local 420), Teamsters (Local 342), and PECO share a common commitment to promoting workplaces that are safe, healthy, inclusive, and respectful of all our communities. If we are selected as a contractor to perform work on the CREATE projects, we also intend to actively work with PECO in support of execution of its community-based workforce training and diverse vendor strategies. In addition to opportunities that will be created through implementation of this program, our company also looks forward to future opportunities related to clean and resilient energy projects that will be enabled by the CREATE Plan throughout southeastern Pennsylvania.

Thank you for your consideration.

Sincerely,

aseph Spause Joseph Spause

President JSpausc@Danella.com 610-397-1145

> Danella Companies, Inc. 2290 Butler Pike, Plymouth Meeting PA 19462 Office 610-828-6200 Fax 610-828-2260 www.danella.com

> > Pride in everything we do."





March 13, 2023

The Honorable Jennifer Granholm Secretary, U.S. Department of Energy (DOE) 1000 Independence Avenue, S.W. Washington, DC 20585

Dear Secretary Granholm:

On behalf of the Diverse Chambers Coalition of Philadelphia (DCCPHL) and the Women's Business Enterprise, we are pleased to express support for PECO's "Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia" ("CREATE Plan") application for the U.S. DOE's Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the Infrastructure Investment and Jobs Act of 2021. Representing the City's African American, Asian American, Hispanic and LGBTQ+ business communities, the DCCPHL works to ensure that diverse businesses have a seat at the table and equal opportunities.

We are pleased that, through the CREATE Plan, PECO proposes to execute a package of strategic investments in its electric infrastructure to make the grid more resilient, reliable, and better able to support the efforts of its customers to apply advanced and clean energy technologies. In support of these investments, PECO's industry-leading supplier diversity programs, and those of its corporate parent Exelon, are deeply aligned with DCCPHL and the Women's Business Enterprises' core mission of local business empowerment in every community. Along with Exelon, PECO has made a long-term commitment to supplier diversity, and has achieved supplier diversity levels exceeding 40 percent on a consistent basis in recent years. As part of the CREATE Community Benefits Plan, PECO has committed to maintaining and expanding these levels and working with contractors and sub-contractors to guarantee that diversity initiatives are built into every level of the company's supply strategy.

CREATE also incorporates an array of workforce, education, and community-based energy resilience initiatives as foundational elements of an integrated, comprehensive strategy to expand opportunity to residents and small businesses in all communities. Individuals who

benefit from these programs will not only serve as the utility employees of the future, but they will also bring their skills to suppliers and diverse business enterprises in adjacent sectors.

The DCCPHL and the Women's business Enterprises Center are pleased to commit to working with PECO to continue to identify opportunities to expand and improve the Company's diverse vendor empowerment programs. Thank you for your consideration.

Sincerely,

Regina Hairston Regina Hairston (Mar 13, 2023 20:41 EDT)

Regina Hairston President & CEO African-American Chamber of Commerce

2023 20:38 EOT

Khine Zaw, President & CEO Asian American Chamber of Commerce

e Hodriguez (Mar 13, 2023 20 10 EDT)

Jennifer Rodriguez President & CEO Greater Philadelphia Hispanic Chamber of Commerce

3, 2023 20 32 EDT)

Zach Wilcha President & CEO Independence Business Alliance

Elizabeth Walsh President Women's Business Enterprise Center



190 N INDEPENDENCE MALL WEST 8TH FLOOR PHILADELPHIA, PA 19106-1520 Phone: 215-592-1800 www.dvrpc.org

March 28, 2023

The Honorable Jennifer Granholm Secretary, U.S. Department of Energy (DOE) 1000 Independence Avenue, S.W. Washington, DC 20585

Dear Secretary Granholm:

On behalf of the Delaware Valley Regional Planning Commission (DVRPC), I am pleased to express support for PECO's "Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia" ("CREATE Plan") application for the U.S. DOE's Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the Infrastructure Investment and Jobs Act of 2021. As the Metropolitan Planning Organization (MPO) for the bi-state, nine-county Greater Philadelphia Region, DVRPC works with stakeholders to approve and advance infrastructure investments and initiatives that support our collective vision for an equitable, resilient, and sustainable region. Implementation of PECO's CREATE Plan will bring us closer to realizing that vision.

Through the CREATE Plan, PECO proposes to execute a package of strategic investments in its electric infrastructure to make the grid more resilient, reliable, and better able to support the efforts of its customers to apply advanced and clean energy technologies. Over the last 15 years, the Philadelphia region has experienced some of the most catastrophic storms in its history, and the CREATE Plan represents a transformational investment in the city's core energy infrastructure, as well as a foundation for clean energy job growth and community-based resilience.

The investments proposed in the CREATE Plan will create an integrated platform to advance the Philadelphia region's energy transition. Specifically, the investments proposed for the Lower South area of Philadelphia, currently an economic development hub and center for job growth, innovation, and international trade, will enable future private sector growth, opportunity, and clean energy deployment. Additionally, the CREATE Plan's Community Benefits Plan offers a comprehensive approach to bringing the benefits of climate resiliency and clean energy access to the community level.

I am pleased to strongly support PECO's CREATE Grid Infrastructure Resilience and Innovation Partnership grant application to continue the development of a more reliable, resilient, and flexible grid, while promoting opportunity and energy equity. Thank you for your consideration.

Sincerely,

Swella Maron

Ariella Maron, Executive Director Delaware Valley Regional Planning Commission



EMPOWER CONSTRUCTION LLC | 235 NEW YORK DRIVE, FORT WASHINGTON, PA 19034 | 215-298-0170

Letter of Support for PECO IIJA CREATE Program Application on Behalf of Empower Construction

March 24, 2023

The Honorable Jennifer Granholm Secretary, U.S. Department of Energy (DOE) 1000 Independence Avenue, S.W. Washington, DC 20585

Dear Secretary Granholm:

On behalf of Empower Construction, I'm pleased to express support for PECO's CREATE Greater Philadelphia Plan application for the U.S. DOE's Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the Infrastructure Investment and Jobs Act of 2021.

PECO's CREATE Plan proposes to have an estimated employment impact of 2,600 jobs through its proposed \$260 million investment that will make our region's backbone infrastructure more reliable, resilient, compatible with the growing clean energy economy, and inclusive for all our diverse communities. As a key minority owned vendor partner that has worked with PECO for decades, we place the highest priority on ensuring that electric infrastructure projects in the region are completed in a manner that provides good pay, benefits, opportunities for training and skill development, and is respectful of the right to organize.

Empower Construction and PECO share a common commitment to promoting workplaces that are safe, healthy, inclusive, and respectful of all our communities. If we are selected as a contractor to perform work on the CREATE projects, we also intend to actively work with PECO in support of execution of its community-based workforce training and diverse vendor strategies. As a Minority Owned Contractor, diversity inclusion and workforce development is at the core of our values and mission. This aligns with our mission of "Empowering utilities and people...". In addition to opportunities that will be created through implementation of this program, our company also looks forward to future opportunities related to clean and resilient energy projects that will be enabled by the CREATE Plan throughout southeastern Pennsylvania.

Thank you for your consideration.

William S. Bowie, President & CEO Empower Construction



Haye Construction Letter of Support for PECO IIJA CREATE Program Application on Behalf of PECO Contractor/Vendor

March 7, 2023

The Honorable Jennifer Granholm Secretary, U.S. Department of Energy (DOE) 1000 Independence Avenue, S.W. Washington, DC 20585

Dear Secretary Granholm:

On behalf of Hay Construction Services, I'm pleased to express support for PECO's CREATE Greater Philadelphia Plan application for the U.S. DOE's Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the Infrastructure Investment and Jobs Act of 2021.

PECO's CREATE Plan proposes to have an estimated employment impact of 2,600 jobs through its proposed \$260 million investment that will make our region's backbone infrastructure more reliable, resilient, compatible with the growing clean energy economy, and inclusive for all our diverse communities. As a key vendor partner that has worked with PECO for decades, we place the highest priority on ensuring that electric infrastructure projects in the region are completed in a manner that provides good pay, benefits, opportunities for training and skill development, and is respectful of the right to organize.

Haye Construction Services and PECO share a common commitment to promoting workplaces that are safe, healthy, inclusive, and respectful of all our communities. If we are selected as a contractor to perform work on the CREATE projects, we also intend to actively work with PECO in support of execution of its community-based workforce training and diverse vendor strategies. In addition to opportunities that will be created through implementation of this program, our company also looks forward to future opportunities related to clean and resilient energy projects that will be enabled by the CREATE Plan throughout southeastern Pennsylvania.

Thank you for your consideration.

John Haye

Haye Construction Services.



March 23, 2023

The Honorable Jennifer Granholm Secretary, U.S. Department of Energy (DOE) 1000 Independence Avenue, S.W. Washington, DC 20585

Dear Secretary Granholm:

On behalf of Henkels & McCoy, Inc., I'm pleased to express support for PECO's CREATE Greater Philadelphia Plan application for the U.S. DOE's Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the Infrastructure Investment and Jobs Act of 2021.

PECO's CREATE Plan proposes to have an estimated employment impact of 2,600 jobs through its proposed \$260 million investment that will make our region's backbone infrastructure more reliable, resilient, compatible with the growing clean energy economy, and inclusive for all our diverse communities. As a key vendor partner that has worked with PECO for decades, we place the highest priority on ensuring that electric infrastructure projects in the region are completed in a manner that provides good pay, benefits, opportunities for training and skill development, and is respectful of the right to organize.

Henkels & McCoy, Inc., IBEW Local 98, IBEW Local 126, Laborers Local 57, Operating Engineers Local 542, Carpenters Local 167 and PECO share a common commitment to promoting workplaces that are safe, healthy, inclusive, and respectful of all our communities. If we are selected as a contractor to perform work on the CREATE projects, we also intend to actively work with PECO in support of execution of its community-based workforce training and diverse vendor strategies. In addition to opportunities that will be created through implementation of this program, our company also looks forward to future opportunities related to clean and resilient energy projects that will be enabled by the CREATE Plan throughout southeastern Pennsylvania.

Thank you for your consideration.

Sincerely

VE

Bryan W. Ellis Regional Vice President

111 South Wacker Drive, Suite 3000 Chicago, IL 60606 (312) 796-6564



March 31, 2023

The Honorable Jennifer Granholm Secretary, U.S. Department of Energy (DOE) 1000 Independence Avenue, S.W. Washington, DC 20585

Dear Secretary Granholm:

On behalf of Hilco Redevelopment Partners (HRP), I am pleased to express our support for PECO's "Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia" ("CREATE Plan") application for the U.S. DOE's Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the Infrastructure Investment and Jobs Act of 2021.

HRP is a vertically integrated real estate development company that reimagines and redevelops obsolete industrial sites in major urban centers around the country. All HRP projects are executed around our three pillars of community, economic and environmental sustainability. HRP is currently executing one of the largest and most transformational redevelopment projects in the Philadelphia region's history – transforming the century-old Philadelphia Energy Solutions refinery property into The Bellwether District, a 1,300 acre e-commerce, life sciences, and logistics hub in the Lower South Philadelphia region.

The CREATE Plan's investments to modernize and harden the electric infrastructure serving this riverfront district, strategically located near multi-modal transportation assets, will provide a platform to support decades of job growth, innovation, and international commerce. As The Bellwether District pursues an array of opportunities to implement critical resiliency measures, sustainable construction and zero and low-emissions energy options, the CREATE Plan's grid modernization will play an important role in its growth. We are also pleased that the CREATE Plan incorporates a robust Community Benefits Plan that establishes job creation, education and workforce development and vendor diversity as core elements, supporting all employers that will need workers trained for the clean energy jobs of the future.

HRP is pleased to strongly support PECO's CREATE Plan Grid Infrastructure Resilience and Innovation Partnership grant application which will continue the development of a more reliable, resilient, and flexible grid while promoting opportunity and energy equity across the region. Thank you for your consideration.

Sincerely,

Alleres

Roberto E. Perez, CEO



March 23, 2023

The Honorable Jennifer Granholm Secretary, U.S. Department of Energy (DOE) 1000 Independence Avenue, S.W. Washington, DC 20585

Dear Secretary Granholm:

On behalf of INTREN, LLC, I'm pleased to express support for PECO's CREATE Greater Philadelphia Plan application for the U.S. DOE's Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the Infrastructure Investment and Jobs Act of 2021.

PECO's CREATE Plan proposes to have an estimated employment impact of 2,600 jobs through its proposed \$260 million investment that will make our region's backbone infrastructure more reliable, resilient, compatible with the growing clean energy economy, and inclusive for all our diverse communities. As a key vendor partner that has worked with PECO for over 8 years, we place the highest priority on ensuring that electric infrastructure projects in the region are completed in a manner that provides good pay, benefits, opportunities for training and skill development, and is respectful of the right to organize.

INTREN, LLC and PECO share a common commitment to promoting workplaces that are safe, healthy, inclusive, and respectful of all our communities. If we are selected as a contractor to perform work on the CREATE projects, we also intend to actively work with PECO in support of the execution of its community-based workforce training and diverse vendor strategies. As INTREN is an MBE certified contractor, we value inclusion and diversity in the workplace. INTREN has a long history of workforce development within the local communities and will bring that commitment to PECO. In addition to opportunities that will be created through implementation of this program, our company also looks forward to future opportunities related to clean and resilient energy projects that will be enabled by the CREATE Plan throughout southeastern Pennsylvania.

Thank you for your consideration.

Matthew Turk



OutPerforming. Everyday.

Chief Operating Officer INTREN | 18202 W. Union Road | Union, IL 60180 Tel: 815-923-2300 ,, 113, Fax: 815-923-7803, Mobile: 815-378-0930 www.lntren.com

815.923.2300 | 18202 W. Union Rd. Union, IL 60180 | www.intren.com

March 7, 2023

The Honorable Jennifer Granholm Secretary, U.S. Department of Energy (DOE) 1000 Independence Avenue, S.W. Washington, DC 20585

Dear Secretary Granholm:

On behalf of Judge Electrical, Inc., I'm pleased to express support for PECO's CREATE Greater Philadelphia Plan application for the U.S. DOE's Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the Infrastructure Investment and Jobs Act of 2021.

PECO's CREATE Plan proposes to have an estimated employment impact of 2,600 jobs through its proposed \$260 million investment that will make our region's backbone infrastructure more reliable, resilient, compatible with the growing clean energy economy, and inclusive for all our diverse communities. As a key vendor partner that has worked with PECO for decades, we place the highest priority on ensuring that electric infrastructure projects in the region are completed in a manner that provides good pay, benefits, opportunities for training and skill development, and is respectful of the right to organize.

Judge Electrical Inc., our IBEW employees and PECO share a common commitment to promoting workplaces that are safe, healthy, inclusive, and respectful of all our communities. If we are selected as a contractor to perform work on the CREATE projects, we also intend to actively work with PECO in support of execution of its community-based workforce training and diverse vendor strategies. In addition to opportunities that will be created through implementation of this program, our company also looks forward to future opportunities related to clean and resilient energy projects that will be enabled by the CREATE Plan throughout southeastern Pennsylvania.

Thank you for your consideration.



Frances Mary Judge President at Judge Electrical Inc. Phone: 215-723-7861 Mobile: 610-999-9722 Email: <u>Fran@judgeelectricalinc.com</u> 179 Ridge Road Telford. Pa 18969





March 16, 2023

The Honorable Jennifer Granholm Secretary, U.S. Department of Energy (DOE) 1000 Independence Avenue, S.W. Washington, DC 20585

Dear Secretary Granholm:

On behalf of the Kleinman Center for Energy Policy at the University of Pennsylvania, I am pleased to express support for PECO's "Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia" ("CREATE Plan") application for the U.S. DOE's Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the Infrastructure Investment and Jobs Act of 2021.

The Kleinman Center was established in 2014 with the goal of creating the conditions for policy innovation that support a just and efficient transition to sustainable energy. Our approach is based on three foundational elements: 1) creating impactful research, 2) cultivating tomorrow's leaders, and 3) convening today's experts. We view the implementation of the Infrastructure Investment and Jobs Act (IIJA) and the Inflation Reduction Act (IRA) as transformational opportunities to accelerate this transition nationally and in the Philadelphia region.

In addition to the strategic investments proposed for the Philadelphia region's electric grid incorporated into the CREATE Plan, we are particularly pleased that the proposal includes a robust Community Benefits Plan that takes a comprehensive approach to bringing energy resiliency and clean energy opportunities to diverse and disadvantaged communities. The CREATE Plan incorporates education and workforce development, vendor diversity, community engagement, and community-based energy resiliency programs that align with the Kleinman Center's vision. We look forward to collaborating with PECO on developing research that supports the goals of CREATE's Community Benefits Plan and serving as a resource to support PECO's Environmental Justice Advisory Committee.

I am pleased to strongly support PECO's CREATE Grid Infrastructure Resilience and Innovation Partnership grant application which will continue the development of a more reliable, resilient, and flexible grid while promoting opportunity and energy equity. Thank you for your consideration.

Sincerely,

MAR

Mark Alan Hughes Professor of Practice, Weitzman School of Design Faculty Director, Kleinman Center for Energy Policy University of Pennsylvania <u>mahughes@upenn.edu</u>

University of Pennsylvania Stuart Weitzman School of Design Fisher Fine Arts Building, Suite 401 220 S. 34th St. Philadelphia, PA 19104 W kleinmanenergy.upenn.edu P 215.898.8502 F 215.573.1650 Manayunk Development Corporation

March 7, 2023

The Honorable Jennifer Granholm Secretary, U.S. Department of Energy (DOE) 1000 Independence Avenue, S.W. Washington, DC 20585

Dear Secretary Granholm:

On behalf of the Manayunk Development Corporation and Manayunk Special Services District, we are pleased to express support for PECO's "Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia" ("CREATE Plan") application for the U.S. DOE's Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the Infrastructure Investment and Jobs Act of 2021.

Through the CREATE Plan, PECO proposes to execute a package of strategic investments in its electric infrastructure to make the grid more resilient, reliable, and better able to support the efforts of its customers to apply advanced and clean energy technologies. Over the last 15 years, the Philadelphia region has experienced some of the most catastrophic storms in its history as a result of climate change, and the CREATE Plan represents a transformational investment in the City's core energy infrastructure, as well as a foundation for clean energy job growth and community-based resilience. Through the funding sought in this application, PECO will be able to accelerate and enhance these critical investments while reducing customer costs and preserving affordability for Philadelphia's diverse low and moderate-income communities.

We are particularly pleased with the CREATE Plan's proposal to relocate the Pencoyd electric substation as part of the project. Hurricane Ida of 2021 exposed the increasing vulnerability of our critical infrastructure, like this substation, to climate-driven extreme weather events. By relocating the facility, our communities will be protecting against the substantial disruptions that resulted from flooding during that event. We are also pleased that the CREATE Plan incorporates a robust Community Benefits Plan that establishes job creation, education and workforce development, vendor diversity, and community engagement as core elements. We look forward to working with PECO on the execution of this important project in our neighborhoods, as well as engaging with the company on community-based energy resilience initiatives.

We are pleased to support PECO's CREATE Grid Infrastructure Resilience and Innovation Partnership grant application which will continue the development of a more reliable, resilient, and flexible grid while promoting opportunity and energy equity across the City. Thank you for your consideration.

Sincerely,

nu Mclaules

www.manayunk.com gmccauley@manayunk.org 267.270.3078

Manayunk Development Corporation 4312 Main Street Philadelphia, PA.19127





Support for PECO IIJA CREATE Program Application on Behalf of PECO Contractor/Vendor

March 7, 2023

The Honorable Jennifer Granholm Secretary, U.S. Department of Energy (DOE) 1000 Independence Avenue, S.W. Washington, DC 20585

Dear Secretary Granholm:

On behalf of Miller Bros., I am pleased to express support for PECO Energy's (PECO) CREATE Greater Philadelphia Plan application for the U.S. DOE's Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the Infrastructure Investment and Jobs Act of 2021.

PECO's CREATE Plan proposes to have an estimated employment impact of 2,600 jobs through its proposed \$260 million investment that will make our region's backbone infrastructure more reliable, resilient, compatible with the growing clean energy economy, and inclusive for all our diverse communities. As a key vendor partner that has worked with PECO for decades, we place the highest priority on ensuring that electric infrastructure projects in the region are completed in a manner that provides good pay, benefits, opportunities for training and skill development, and is respectful of the right to organize.

Miller Bros and PECO share a common commitment to promoting workplaces that are safe, healthy, inclusive, and respectful of all our communities. If we are selected as a contractor to perform work on the CREATE projects, we also intend to actively work with PECO in support of execution of its community-based workforce training and diverse vendor strategies. In addition to opportunities that will be created through implementation of this program, our company also looks forward to future opportunities related to clean and resilient energy projects that will be enabled by the CREATE Plan throughout southeastern Pennsylvania.

Thank you for your consideration

Jany B. Mullert

Harry B. Miller III, President Miller Bros.

Packer Park Civic Association

A501 C)3 CORPORATION – All Donations are Tax Deductible www.packerparkcivic.com "WORKING TOGETHER TO SERVE & UNITE OUR COMMUNITY" 3310 South 20th Street – Philadelphia, Pa. 19145



March 20, 2023

The Honorable Jennifer Granholm Secretary, U.S. Department of Energy (DOE) 1000 Independence Avenue, S.W. Washington, DC 20585

Dear Secretary Granholm:

On behalf of the Packer Park Civic Association, I am pleased to express support for PECO's "Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia" ("CREATE Plan") application for the U.S. DOE's Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the Infrastructure Investment and Jobs Act of 2021.

Through the CREATE Plan, PECO proposes to execute a package of strategic investments in its electric infrastructure to make the grid more resilient, reliable, and better able to support the efforts of its customers to apply advanced and clean energy technologies. Over the last 15 years, the Philadelphia region has experienced some of the most catastrophic storms in its history as a result of climate change, and the CREATE Plan represents a transformational investment in the City's core energy infrastructure, as well as a foundation for clean energy job growth and community-based resilience. Through the funding sought in this application, PECO will be able to accelerate and enhance these critical investments while reducing customer costs and preserving affordability for Philadelphia's diverse low and moderate-income communities.

We are particularly pleased with the CREATE Plan's proposal to make strategic investments in <u>Lower</u> <u>South Philadelphia</u> that will not only bolster the area as a clean economic development and job creation hub but also relieve capacity constraints on the circuits serving our communities. The CREATE Plan incorporates a robust Community Benefits Plan that establishes job creation, education and workforce development, vendor diversity, and community engagement as core elements. We look forward to working with PECO on the execution of this important project, as well as engaging with the company on community-based energy resilience initiatives. We do want to be part of this important process.

PPCA is pleased to support PECO's CREATE Grid Infrastructure Resilience and Innovation Partnership grant application which will continue the development of a more reliable, resilient, and flexible grid while promoting opportunity and energy equity across the City. Thank you for your consideration.

Respectfully, 6 Barbara A. Capozzi, Esg.

President - Packer Park Civic Association



A STATE OF A

THE FORE A COMPRESSION OF ALL A RECENT THE FORE ADELSHIN A REPORT

March 29, 2022

The Honor size frammer frammers Secretary, U.S. Deployment of framework (NOE) 1000 Independence Avanue Sty Washington, DC 20581

Dear Secretary Granholm:

On behalf of the Philadelphia International Airport (Phil), Lam pleased to express support for PECO's "Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia" ("CREATE Plan") application for the U.S. DOE's Grid Infrastructure Resilience and Innovation Partnership (GRIP) program.

Through the CREATE Plan, PECO proposes a package of strategic investments in its electric infrastructure to make the grid more resilient, reliable, and better able to support the efforts of its customers to apply advanced and clean energy technologies. Over the last 15 years, the Philadelphia region has experienced some of the most catastrophic storms in its history as a result of climate change, and the CREATE Plan represents a transformational investment in the City's core energy infrastructure, as well as a foundation for clean energy job growth and community-based resilience.

The airport is working to reduce its carbon footprint through equipment electrification, solar energy generation and other initiatives, and CREATE's grid modernization will benefit those efforts. The CREATE Plan's investments to modernize and harden the electric infrastructure serving the Lower South Philadelphia will also spur job growth, innovation, and international trade in the region, which supports the airport's economic development goals.

I am pleased to strongly support PECO's CREATE Grid Infrastructure Resilience and Innovation Partnership grant application which will continue the development of a more reliable, resilient, and flexible grid while promoting opportunity and energy equity across the City.

Sincerely,

may april

Api Appulingam / Deputy Director of Aviation, Capital Development City of Philadelphia Department of Aviation



1500 Market Street Suite 3500 West Philadelphia, PA 19102 p 215.496.8020 f 215.977.9618 PIDCphila.com

March 22, 2023

The Honorable Jennifer Granholm Secretary, U.S. Department of Energy (DOE) 1000 Independence Avenue, S.W. Washington, DC 20585

Dear Secretary Granholm:

On behalf of the Philadelphia Industrial Development Corporation (PIDC), I am pleased to express support for PECO's "Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia" ("CREATE Plan") application for the U.S. DOE's Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the Infrastructure Investment and Jobs Act of 2021.

PIDC is Philadelphia's public-private economic development corporation, working for more than sixty years with manufacturing, industrial, commercial, real estate development and diverse businesses and the non-profit sector to bring growth to every area of the City. The PIDC-operated Navy Yard is considered the most successful redevelopment of a former military facility in the country and is currently an expanding community of 15,000 employees and 150 employers. The Navy Yard will support an additional 10 million square feet of commercial and residential development at full buildout. Since 2000, PIDC has overseen the investment of more than \$1 billion into this dynamic business community.

The investments proposed in the CREATE Plan align with the PIDC's Energy Master Plan and will facilitate the future growth of this vital economic engine for the region. PECO's plan to build a new substation at the Navy Yard will not only support this growth, but also provide additional capacity across the "Lower South Philadelphia" region. This economic development hub is a major center for job growth, innovation, and international trade, and the investments proposed in the plan will enable future private sector growth, opportunity, and clean energy deployment. PECO and PIDC also plan to incorporate an innovative sub-recipient project into the CREATE program to enable PIDC to develop a business case for a Life Sciences Resiliency Campus that would leverage the investment in reliable and resilient electric supply across multiple life sciences companies. PIDC will provide a separate Letter of Commitment for that sub-recipient initiative.

I am pleased to strongly support PECO's CREATE Grid Infrastructure Resilience and Innovation Partnership grant application which will continue the development of a more reliable, resilient, and flexible grid while promoting opportunity and energy equity. Thank you for your consideration.

Sincerely,

Am Rhead

Sam Rhoads



Riggs Distler & Company, Inc. 4 Esterbrook Lane Cherry Hill, NJ 08003 Phone: 856.433.6000 Fax: 856.433.6035 www.RiggsDistler.com

March 27, 2023

The Honorable Jennifer Granholm Secretary, U.S. Department of Energy (DOE) 1000 Independence Avenue, S.W. Washington, DC 20585

Dear Secretary Granholm:

On behalf of Riggs Distler & Company, Inc. (Riggs Distler) I'm proud to express our support for PECO's CREATE Greater Philadelphia Plan application for the U.S. DOE's Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the Infrastructure Investment and Jobs Act of 2021.

Since 1909, Riggs Distler has remained the first choice for power and utility providers throughout the Northeast and Mid-Atlantic regions. A core commitment to safety, careful adherence to schedules and budgets, and a broad range of turnkey construction services sets us apart as the preferred sole-source partner of the region's most important clients like PECO.

PECO's CREATE Plan proposes to have an estimated employment impact of 2,600 jobs through its proposed \$260 million investment that will make our region's backbone infrastructure more reliable, resilient, compatible with the growing clean energy economy, and inclusive for all our diverse communities. As a key construction partner that has worked with PECO for decades, we place the highest priority on ensuring that electric infrastructure projects in the region are completed in a manner that provides good pay, benefits, opportunities for training and skill development, and is respectful of the right to organize.

Riggs Distler and PECO share a common commitment to promoting workplaces that are safe, healthy, inclusive, and respectful of all our communities. If we are selected as a contractor to perform work on the CREATE projects, we also intend to actively work with PECO in support of execution of its community-based workforce training and diverse vendor strategies. In addition, it is our best practice to integrate into a community by becoming part of the ecosystem. We empower our employees to support the communities we serve through patronage of local establishments, building relationships with community members and identifying opportunities to improve the community through volunteer services. We look forward to future opportunities related to clean and resilient energy projects that will be enabled by the CREATE Plan throughout southeastern Pennsylvania.

Stephen M. Zemaitatis Jr. President & CEO of Riggs Distler



Letter of Support for PECO IIJA CREATE Program Application from EMSDC

March 13, 2023

The Honorable Jennifer Granholm Secretary, U.S. Department of Energy (DOE) 1000 Independence Avenue, S.W. Washington, DC 20585

Dear Secretary Granholm:

On behalf of the Sustainable Business Network of Greater Philadelphia (SBN), I am pleased to support the "Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia" ("CREATE Plan") application for the U.S. DOE's Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the Infrastructure Investment and Jobs Act of 2021. SBN is a network of local independent businesses in the Philadelphia region that is dedicated to building profitable enterprises while serving community needs, sharing wealth and protecting the environment.

The Philadelphia region has suffered an unprecedented series of extreme weather events driven by climate change over the last fifteen years, and we are pleased that PECO has developed the CREATE Plan in order to accelerate and enhance investments in the electric grid that will make it more climate resilient and able to integrate more clean energy onto the grid. We are also encouraged that CREATE's Community Benefits Plan incorporates an array of public engagement, workforce, education, and community-based energy resilience initiatives as foundational elements of a comprehensive strategy to expand opportunity to residents and small businesses in all communities. PECO's commitment to maintain and expand its commitment to sourcing through MWBE and local businesses is particularly aligned with SBN's mission.

The Sustainable Business Network is pleased to support PECO's application for funding under the GRIP program and thanks you for your consideration.

Sincerely,





March 16, 2023

The Honorable Jennifer Granholm Secretary, U.S. Department of Energy (DOE) 1000 Independence Avenue, S.W. Washington, DC 20585

Dear Secretary Granholm:

On behalf of Sysco, the world's global foodservice leader, I am pleased to express support for PECO's "Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia" ("CREATE Plan") application for the U.S. DOE's Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the Infrastructure Investment and Jobs Act of 2021.

Sustainability is an integral element of Sysco's corporate strategy, and electric vehicles represent a critical component of our approach. Sysco has committed to electrifying 35 percent of our U.S. fleet by 2030, and major distribution facilities such as Sysco Philadelphia represent an important opportunity to reduce our carbon footprint and improve the environment in our neighboring communities.

Through the CREATE Plan, PECO will advance strategic electric infrastructure investments aimed at making the Lower South Philadelphia grid more resilient, enabling customers like Sysco to develop clean technology solutions. Further, CREATE incorporates a robust Community Benefits Plan that establishes job creation, education and workforce development, and vendor diversity as core elements, supporting all employers that will need workers trained for the clean energy jobs of the future.

I am pleased to strongly support PECO's CREATE Grid Infrastructure Resilience and Innovation Partnership grant application, which will continue the development of a more resilient electric grid while promoting opportunity and energy equity.

Thank you for your consideration.

Sincerely,

Bupatto

Brad Christie Senior Director of Government Relations Sysco Corporation Bradley.christie@sysco.com 832.906.1812



JOIN FORCES. SUCCEED TOGETHER.

The Honorable Jennifer Granholm Secretary, U.S. Department of Energy (DOE) 1000 Independence Avenue, S.W. Washington, DC 20585

Dear Secretary Granholm:

On behalf of the Diverse Chambers Coalition of Philadelphia, I am pleased to express support for PECO's "Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia" ("CREATE Plan") application for the U.S. DOE's Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the Infrastructure Investment and Jobs Act of 2021. Representing the City's African American, Asian American, Hispanic and LGBTQ+ business communities, the DCCPHL works to ensure that diverse businesses have a seat at the table and equal opportunities.

We are pleased that, through the CREATE Plan, PECO proposes to execute a package of strategic investments in its electric infrastructure to make the grid more resilient, reliable, and better able to support the efforts of its customers to apply advanced and clean energy technologies. In support of these investments, PECO's industry-leading supplier diversity programs, and those of its corporate parent Exelon, are deeply aligned with DCCPHL's core mission of local business empowerment in every community. Along with Exelon, PECO has made a long-term commitment to supplier diversity, and has achieved supplier diversity levels exceeding 40 percent on a consistent basis in recent years. As part of the CREATE Community Benefits Plan, PECO has committed to maintaining and expanding these levels and working with contractors and sub-contractors to guarantee that diversity initiatives are built into every level of the company's supply strategy.

CREATE also incorporates an array of workforce, education, and community-based energy resilience initiatives as foundational elements of an integrated, comprehensive strategy to expand opportunity to residents and small businesses in all communities. Individuals who benefit from these programs will not only serve as the utility employees of the future, but they will also bring their skills to suppliers and diverse business enterprises in adjacent sectors.

The DCCPHL is pleased to commit to working with PECO to continue to identify opportunities to expand and improve the Company's diverse vendor empowerment programs. Thank you for your consideration.

Sincerely

Elizabeth M. Walsh President

STATEMENT OF PROJECT OBJECTIVES (SOPO) CREATE Plan

Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia

A. OBJECTIVES

The objective of CREATE is to catalyze a generational transformation of southeastern Pennsylvania's energy landscape through a combination of targeted infrastructure investments and comprehensive community-based collaborations to reduce the likelihood and consequence of impacts to the electric grid due to extreme weather and rising sea levels.

Grid Outcomes

- Lower South: Reduce forecasted load from [(b) (4)
 Produce a resilient electric supply business case to inform future resilience upgrades for multiple buildings and life sciences companies within the Navy Yard.
- **PURMI**: Rejuvenate [(b) (4)] infrastructure in Center City Philadelphia and retire 100-year-old cable to reduce outages and high-impact manhole events.
- **Substation Flood Mitigation**: Eliminate water intrusion to switchgear building and control house, preventing outages during a 500-year flood event. Reconstruct rail spur to support shipping of 3 spare power transformers for emergent transformer failures.
- Amtrak: Extend the life of existing transmission circuits by 50+ years and [(
- Conowingo: Rebuild [(b) (4)
- **Campus Microgrid**: Ensure continued operations at PECO's Berwyn operations and storm response campus during extreme weather events by enabling islanding mode and transition to backup power within 1 second
- **PennDOT**: Maintain power and communications to ensure visibility into transportation infrastructure during extreme weather events in at least **brd** critical transportation hubs

Community Outcomes

- **Clean and Resilient Community Schools:** Deploy \$[(b) (4)] in funding for community based climate resilience and clean energy investments at Title 1 public schools.
- Establish Environmental Justice Advisory Committee: Create as standing forum for discussion of energy impacts and opportunities with grassroots representatives of DACs.
- Workforce Development Programs: Link CREATE employment opportunities to training programs and convene annual meetings to connect workforce development boards, training programs and employers.
- **Vendor Diversity Initiative:** Align with PECO's commitment to work to ensure (b) (4)] of vendor contracts will be executed with MWBE qualifying businesses.

B. SCOPE OF WORK

1.

To meet the Plan's objective, CREATE must address 2 critical grid challenges that can impede the transition to a clean, resilient, and equitable energy future: 1) limits on large-scale electrification capacity and 2) climate-vulnerable and aging infrastructure.

- Lower South: Constructing a new substation in Lower South Philadelphia and developing a business case that includes feedback from stakeholders, recommended engineering solutions and cost, and proposed funding mechanisms for a Life Sciences Resiliency Campus at the Navy Yard.
- **PURMI**: Upgrading underground monitoring and control technologies in Center City Philadelphia.
- **Substation Flood Mitigation**: Demolishing and rebuilding the Pencoyd Substation with higher transmission voltage and above the 500-year floodplain. Relocating a critical spare autotransformer above the 500-year floodplain at Grays Ferry Substation.
- **Amtrak**: Replacing or rebuilding aging foundations, overhead conductors, and transmission structures. Utilize new HTLS conductor to increase ratings.



• **PennDOT**: Deploying [(b) (4) critical transportation hubs

(See CBP for community benefits scope, including Clean and Resilient Community Schools)

Each component, while on separate timelines, will follow the same 4-step approach: 1. Program Management and Planning; 2. Preliminary Design and Permitting; 3. Detailed Design; and 4. Final Construction. These tasks are further defined in Section C.

C. TASKS TO BE PERFORMED

Task 1 – Project Management and Planning

PECO will perform project management activities to include project planning and control, subcontractor control, financial management, data management, management of supplies and/or equipment, risk management, environmental compliance (NEPA), and reporting as required to successfully achieve the overall objectives of the project.

Subtask 1.1 – Project Management Plan (PMP):

Within 30 days of the award, PECO shall submit a Project Management Plan (PMP) to the designated Federal Project Officer (FPO). PECO shall not proceed beyond Task 1.0 until the PMP has been accepted by the FPO.

The PMP shall be revised and resubmitted as often as necessary, during the course of the project, to capture any major/significant changes to the planned approach, budget, key personnel, major resources, etc.

PECO shall manage and direct the project in accordance with the accepted PMP to meet all technical, schedule and budget objectives and requirements. PECO shall coordinate activities to effectively accomplish the work. PECO shall ensure that project plans, results, and decisions are appropriately documented, and that project reporting and briefing requirements are satisfied.

Subtask 1.2: National Environmental Policy Act (NEPA) Compliance:

As required, PECO shall provide the documentation necessary for NEPA Compliance.

Subtask 1.4: Annual Pre-Continuation Briefing(s):

PECO will brief DOE on an annual basis to explain the plans, progress and results of the technical effort. The briefing shall also describe performance relative to project success criteria, milestones, and the Go/No-Go Decision point that are documented in the PMP.

Subtask 1.5: Periodic Progress Review with Community Stakeholders:

PECO will conduct periodic review sessions with relevant community and external stakeholders on the progress and address issues and concerns as needed.

Task 2 – Preliminary Design and Permitting

PECO will perform preliminary design, acquire required property(s) and easement(s) and engage an engineering company to review and finalize the conceptual design.

Subtask 2.1 - Perform Preliminary Project Diagram and Acquire Property

This subtask only applies to Lower South and Substation Flood Mitigation components.

- PECO shall create preliminary planning documents and diagrams that would depict the scope of work for the project.
- PECO shall purchase the property and easements required to build the substation.

Subtask 2.2 Complete Conceptual Design and Obtain Required Permit

This subtask applies to all grid components except for PURMI. PURMI adopts an iterative annual planning process where PECO identifies an annual scoped block at the beginning of each calendar year and completes a conceptual design of the identified block for the particular year.

- PECO shall submit an explanation of the need, solution, and alternative solutions for each component to the Regional Transmission Office, PJM. PJM will perform a no-harm analysis to ensure the project does not cause any issues, after which PJM will include the component as part of the local plan. Presenting the need and the solution is expected to take approximately 60 days. PJM's no harm analysis and inclusion of the project in the local plan may take anywhere between 30 days to a few months.
- Utilizing the competitive bidding process, PECO will engage a design engineering company to study and finalize the conceptual design, and to conduct a technical challenge session with local and state agencies (e.g., township or city) and community partners (e.g., neighborhood associations) to obtain approval of the conceptual layout as required.

• Using the conceptual layout provided by the engineering company, PECO will forward a list of large and long lead materials items to Exelon Supply Operations. Exelon Supply Operations uses preferred electric distributor, Choctaw-Kaul, to source the materials required per scope of work.

<u> Task 3 – Detailed Design</u>

PECO shall engage an engineering company and coordinate with the Lead Responsible Engineer (LRE) to perform a detailed design of each component. PECO shall submit the necessary permits to proceed with construction.

Subtask 3.1 – Perform Detailed Design and Obtain Approvals

- Utilizing a competitive bidding process, PECO will engage a design engineer company to create a detailed design based on the approved conceptual design identified in Task 2.0.
- PECO will review the engineering drawings with the internal LRE and collaborate with vendors and the design engineering company to obtain drawings and necessary submittals imperative to complete detailed design.
- PECO will work with the design engineering company to complete detailed design drawings and issue drawings for construction along with the required scoping packages. PECO will then conduct a competitive bidding event for contractors to execute scoped work package.
- PECO will submit an application to the Pennsylvania Public Utility Commission (PUC) to review the Letter of Notification related to the Transmission Right of Way and obtain approval for the project.

Subtask 3.2 – Complete Procurement and Award Contracts

- Exelon Supply Operations will source the remaining equipment and materials required to commence construction.
- PECO will apply for state and local construction permits as deemed necessary by its Legal and External Affairs Department.
- PECO will secure funding and obtain approvals from various local (city, township, municipality, etc.), state/federal authorities (Department of Environmental Protection, PJM, PUC, etc.) and community partners (neighborhood associations, etc.).
- PECO will receive and evaluate bids from construction contractors to execute project. Award contract to the winning bidder and secure construction personnel required to support construction activities.
- PECO will inventory materials that have been procured and confirm materials are onsite.
- PECO will start underground excavations and civil construction

Task 4.0 – Final Construction

PECO will perform the required construction based on the detailed design, electrify the equipment, and close out the projects once successfully completed.

Subtask 4.1 – Complete Construction, Equipment Installation and Testing

- PECO will schedule outages utilizing its Distribution System Operations organization and mitigate any high-risk evolution situations as required from the Exelon Management Model.
- PECO will start and complete wiring of equipment and devices before the electrical outage to get them ready for the outage.

Subtask 4.2– Energize Equipment, Place In-Service, and Complete Post Construction Documentation

- PECO will confirm electrical outage, apply Exelon's Lock Out Tag Out procedure, and start working safely on the necessary circuits or equipment during the outage.
- PECO will field-test the newly installed equipment and all ties to the pre-existing equipment for any faulty connections.
- PECO will electrify equipment in the system and place equipment in-service
- PECO will obtain construction as-builts drawings, update system records, close open work order tasks, and pay final invoices required to close out the project accounting.
- PECO will send notification to the necessary local, state, and federal regulatory agencies stating that project has been completed successfully.

D. DELIVERABLES

PECO shall submit the following list of deliverables during the project.

- Subtask 1.1: Project Management Plan
- Subtask 1.4: Pre-Continuation Briefing Document(s)

PECO shall submit periodic, topical, final, and other reports in accordance with the Federal Assistance Reporting Checklist and accompanying instructions.

E. BRIEFINGS/TECHNICAL PRESENTATIONS

PECO shall prepare and present periodic briefings, technical presentations and demonstrations as requested by the Federal Project Officer, which may be held at a DOE or PECO's facility, other mutually agreeable location, or via webinar. Such meetings may include all or a combination of the following:

- **Kickoff Briefing** Not more than 30 days after submission of the Project Management Plan, PECO shall prepare and present a project summary briefing as part of a Project Kickoff Meeting.
- **Pre-Continuation Briefing** Not less than 90 days prior to the planned start of a budget period, PECO shall brief the DOE on the results to date, and their plans for the subsequent periods of work. The DOE will consider the information from this briefing, as well as the content of deliverables submitted to date, prior to authorizing continuation of the project.
- Final Project Briefing Not less than 30 days prior to the end of the project, PECO shall prepare and present a Final Project Briefing on the results and accomplishments of the entire project.
- Other Briefings PECO shall prepare and present technical, financial, and/or administrative briefings as requested by the DOE. Additionally, PECO could make technical presentations at national and/or industry conferences as required.

All tabs except for the Instructions and Summary tab of this document may contain business sensitive, trade secrets, proprietary, or otherwise confidential information that is exempt from public disclosure. Such information shall be used or disclosed only for evaluation purposes or in accordance with a financial assistance agreement between the submitter and the Government. The Government may use or disclose any information that is not appropriately marked or otherwise restricted, regardless of source.

Instructions and Summary

 Award Number:
 DE-FOA-0002740
 Date of Submission:
 4/4/2023

 Award Recipient:
 PECO Energy Company
 Form submitted by:
 PECO Energy Company

Please read the instructions on each worksheet tab before starting. If you have any questions, please ask your DOE contact! Do not modify this template or any cells for formulas!

1. If using this form for award application, negotiation, or budget revision, fill out the blank white cells in workbook tabs a. through j. with total project costs.

2. Blue colored cells contain instructions, headers, or summary calculations and should not be modified. Only blank white cells should be populated.

3. Enter detailed support for the project costs identified for each Category line item within each worksheet tab to autopopulate the summary tab.

4. The total budget presented on tabs a. through i. must include both Federal (DOE) and Non-Federal (cost share) portions.

5. All costs incurred by the preparer's sub-recipients, contractors, and Federal Research and Development Centers (FFRDCs), should be entered only in section f. Contractual. All other sections are for the costs of the preparer only.

6. Ensure all entered costs are allowable, allocable, and reasonable in accordance with the administrative requirements prescribed in 2 CFR 200, and the applicable cost principles for each entity type: FAR Part 31 for For-Profit entities; and 2 CFR Part 200 Subpart E - Cost Principles for all o her non-federal en ities.

7. Add rows as needed throughout tabs a. through j. If rows are added, formulas/calcula ions may need to be adjusted by the preparer. Do not add rows to the Instructions and Summary tab. If your project contains more han five budget periods, consult your DOE contact before adding additional budget period rows and columns.

8. ALL budget period cost categories are rounded to the nearest dollar.

BURDEN DISCLOSURE STATEMENT

Public reporting burden for this collection of information is estimated to average 24 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Office of Information Resources Management Policy, Plans, and Oversight, AD-241-2 - GTN, Paperwork Reduction Project (1910-5162), U.S. Department of Energy 1000 Independence Avenue, S.W., Washington, DC 20585; and to the Office of Management and Budget, Paperwork Reduction Project (1910-5162), Washington, DC 20503.

Section A - Budget Summary	(b) (4)
Section B - Budget Categories	
CATEGORY	
a. Personnel	
b. Fringe Benefits	
c. Travel	
d. Equipment	
e. Supplies	
f. Contractual	
Sub-recipient	
Contractor	
FFRDC	
Total Contractua	
g. Construction	
h. Other Direct Costs	
Total Direct Costs	
i. Indirect Charges	
Total Cost	

Additional Explanation (as needed): Subrecipients (PIDC, The Fund, PennDOT) are included in the Cost Share. Total costs for the 3 Subrecipients are listed on the Contractual tab. Both the Fund and PennDOT have their own separate Budget Jus ification Workbooks

a. Personnel

NSTRUCTIONS - PLEASE READ!!!

1. List project costs solely for employees of the entity completing this form. All personnel costs for subrecipients and contractors must be included under f. Contractual. 2. All personnel should be identified by position title and not employee name. Enter the amount of time (e.g., hours or % of time) and the base hourly rate and the total direct personnel compensation will automatically calculate. Rate basis (e.g., rate negotiated for each hour worked on the project, labor distr bution report, state civil service An personnel should be identified.
 If loaded labor rates are ut lized, a description of the costs the loaded rate is comprised of must be included in the Additional Explanation section below. DOE must review all components of the loaded labor rate for reasonableness and unallowable costs (e.g., fee or profit).
 If loaded labor rates are ut lized, a description of the costs the loaded rate is comprised of must be included in the Additional Explanation section below. DOE must review all components of the loaded labor rate for reasonableness and unallowable costs (e.g. fee or profit).
 If a position and hours are attributed to multiple employees (e.g. Technician working 4000 hours) the number of employees for that position title must be identified.
 Each budget period is rounded to the nearest dollar.

			E	Budget Pe	riod 1	B	ludget Pe	riod 2	E	Budget P	Period 3	Budget Per	iod 4		Budget Perio	d 5	Project	Project		1
SOPO Task #	CREATE Component	Position Title	Time (Hrs)			Time (Hrs)			Time (Hrs)	Hourly Rate	Total Budget	Time Hourly Rate (Hrs) (\$/Hr)	Total Budget	Time (Hrs)	Hourly Rate (\$/Hr)	Total Budget	Total Hours	Total Dollars	Rate Basis	
4	Lower South Substation																			
2	Campus MicroGrid	(b) (4)																		
3	Campus MicroGrid																			
4	Campus MicroGrid																			
2	Campus MicroGrid																			
3	Campus MicroGrid																			
4	Campus MicroGrid																			
4	Substation Flood Mitigation																			
4	Substation Flood Mitigation																			
4	Substation Flood Mitigation																			
4	Substation Flood Mitigation																			
2-4	PURMI																			
2-4	PURMI																			
					\$0			\$0			\$0		\$0		1	\$0	0 0	\$0		-
					\$0			\$0			S		so			\$0		\$0		1
					\$0			\$0			SC)	\$0			\$0		\$0		1
					\$0			\$0			SC)	\$0			\$0	0 0	\$0		1
					\$0			\$0			\$0		\$0		1	\$0	0 0	\$0		1
					\$0			\$0			\$0		\$0		1	\$0	0 0	\$0		1
															i					1
		(b)(4)																		
		(b) (4)																		
-																				

Additional Explanation (as needed): For Lower South, there are more hours in the final budget period because PECO does not contract out testing. A range was provided for the number of resources given the change in team size per budget period. Fringe and loaded costs are not included and PECO will not seek grant reimbursement for any labor cost adders.

ecrets, Proprietary, or Otherwise Confidential Information Exempt from Public Disclosure

Contains Business Sensitive, Trade Secrets, Proprietary, or Otherwise Confidential Information Exempt from Public Disclosure

b. Fringe Benefits

INSTRUCTIONS - PLEASE READ!!!

1. Fill out the table below by position title. If all employees receive the same fringe benefits, you can show *Total Personnel* in the Labor Type column instead of listing out all position titles.

The rates and how they are applied should not be averaged to get one fringe cost percentage. Complex calculations should be described/provided in the Additional Explanation section below.
 The fringe benefit rates should be applied to all positions, regardless of whether those funds will be supported by Federal Share or Recipient Cost Share.

Each budget period is rounded to the pearest dollar.

Labor Type	CREATE Component	Budget I	Period 1		Budget P	Budget Period 2		Budget Period 3			Budget Period 4			Budget Period 5			Total Project
		Personnel Costs	Rate	Total	Personnel Costs	Rate	Total	Personnel Costs	Rate	Total	Personnel Costs	Rate	Total	Personnel Costs	Rate	Total	
				\$0			\$0			\$0			\$0			\$0	\$0
				\$0			\$0			\$0			\$0			\$0	\$0
				\$0			\$0			\$0			\$0			\$0	\$0
				\$0			\$0			\$0			\$0			\$0	\$0
				\$0			\$0			\$0			\$0			\$0	\$0
	Total:	\$0		\$0	\$0		\$0	\$0		\$0	\$0		\$0	\$0		\$0	\$0

A federally approved fringe benefit rate agreement, or a proposed rate supported and agreed upon by DOE for estimating purposes is required at the time of award negotiation if reimbursement for fringe benefits is requested. Please check (X) one of the options below and provide the requested information if not previously submitted.

A fringe benefit rate has been negotiated with, or approved by, a federal government agency. A copy of the latest rate agreement is/was included with the project application.*

There is not a current federally approved rate agreement negotiated and available.**

*Unless the organization has submitted an indirect rate proposal which encompasses the fringe pool of costs, please provide the organization's benefit package and/or a list of the components/elements that comprise the fringe pool and the cost or percentage of each component/element allocated to the labor costs identified in the Budget Justification (Form EERE 335.1).

**When this option is checked, the entity preparing this form shall submit an indirect rate proposal in the format provided in the Sample Rate Proposal at https://www.energy.gov/eere/funding/downloads/sample-indirect-rate-proposal-and-profit-compliance-audit, or a format that provides the same level of information and which will support the rates being proposed for use in the performance of the proposed project.

Additional Explanation (as necessary): Please use this box (or an attachment) to list the elements that comprise your fringe benefits and how they are applied to your base (e.g. Personnel) to arrive at your fringe benefit rate.

c. Travel

INSTRUCTIONS - PLEASE READ

1. Identify Foreign and Domestic Travel as separate items. Examples of Purpose of Travel are subrecipient site visits, DOE meetings, project mgmt. meetings, etc. Examples of Basis for Estimating Costs are past trips, travel quotes, GSA rates, etc. 2. All listed travel must be necessary for performance of the Statement of Project Objectives.

3. Only travel that is directly associated with this award should be included as a direct travel cost to the award.

4. Federal travel regulations are contained within the applicable cost principles for all entity types.

5. Travel costs should remain consistent with travel costs incurred by an organization during normal business operations as a result of the organizations written travel policy. In absence of a written travel policy, organizations must follow the

regulations prescribed by the General Services Administration.

6. Columns E, F, G, H, I, J, and K are per trip.

7. The number of days is inclusive of the day of departure and the day of return.

8. Recipients should enter City and State (or City and Country for International travel) in the Depart from and Destination fields.

9. Each budget period is rounded to the nearest dollar.

SOPO Task #	CREATE Component	Purpose of Travel	Depart From	Destination		No. of Travelers	Lodging per Traveler	Flight per Traveler	Vehicle per Traveler	Per Diem Per Traveler	Cost per Trip	Basis for Estimating Costs		
		Domestic Travel			E	Budget Per	iod 1							
											\$0			
											\$0			
											\$0			
											\$0			
		International Travel												
											\$0			
		Budget Period 1 Total									\$0			
		Domestic Travel	Budget Period 2											
											\$0			
											\$0			
											\$0 \$0			
		later of the set The set									\$0			
		International Travel									\$0			
		Budget Deried 2 Tetal									\$0 \$0			
		Budget Period 2 Total Domestic Travel								l l	\$ U			
		Domestic Travel			- 1	Budget Per	riod 3			I	0.0			
					-						\$0			
											\$0 \$0			
											\$0 \$0			
		International Travel									Ф О			
											\$0			
		Budget Period 3 Total									\$0 \$0			
		Domestic Travel	Budget Period 4											
		Domestic Traver				Suugei rei	100 4		1		¢0.			
											\$0 \$0			
											\$0 \$0			
											\$0 \$0			
		International Travel									ψŪ			
											\$0			
		Budget Period 4 Total									\$0			
		Domestic Travel			I	Budget Per	riod 5				**			
											\$0			
											\$0 \$0			
											\$0			
											\$0			
		International Travel												
											\$0			
		Budget Period 5 Total									\$0			
		PROJECT TOTAL									\$0			
		needed): PECO does not anticipate travel costs as part of the CREA												

Contains Business Sensitive, Trade Secrets, Proprietary, or Otherwise Confidential Information Exempt from Public Disclosure
d. Equipmen

				di Equ	ipinon						
 List all equipment below, providing a During awa d negot at ons, prov de a 	a basis of cost (e.g. contrac or quotes, catalog prices, priv a contractor quote for all equipment items over \$50,000 in It, irst of ts kind, or otherw se not avai able off the shelf,	or invoices, n pr ce. If the	etc.). Brie ly justify e contrac or quote	items as this not an ex	ney apply to the Statement of Project Objec wes cact price match, prov de an explanation in the a	ulations in 2 CFR 200 for specific equipment de ini ions and treatment. Il I is exis ing equipment, provide ogical support for the estimated value shown. ddt onal explanation section below. Il a contractor quo e is not practical, such as or a					
SOPO REA E Component Equipment Item Qty Un t Cost otal Cost Basis of Cost ustification of need											
				Budget	Period 1						

(b) (4)

Contains Business Sensitive, Trade Secrets, Proprietary, or Otherwise Confidential Information Exempt from Public Disclosure

e. Supplies

INSTRUCTIONS - PLEASE READ

1. Supplies are generally defined as an item with an acquisition cost of \$5,000 or less and a useful life expectancy of less than one year. Supplies are generally consumed during the project performance. Please refer to the applicable Federal regulations in 2 CFR 200 for specific supplies definitions and treatment.

2. List all proposed supplies below, providing a basis of costs (e.g. contractor quotes, catalog prices, prior invoices, etc.). Briefly justify the need for the Supplies as they apply to the Statement of Project Objectives. Note that Supply items must be direct costs to the project at this budget category, and not duplicative of supply costs included in the indirect pool that is the basis of the indirect rate applied for this project.

3. Multiple supply items valued at \$5,000 or less used to assemble an equipment item with a value greater than \$5,000 with a useful life of more than one year should be included on the equipment tab. If supply items and costs are ambiguous in nature, contact your DOE representative for proper categorization.

4. Add rows as needed. If rows are added, formulas/calculations may need to be adjusted by the preparer.

5. Each budget period is rounded to the nearest dollar.

SOPO Task #	CREATE Component	General Category of Supplies	Qty	Unit Cost	Total Cost	Basis of Cost	Justification of need
			•	Budg	get Period 1		
					\$0		
					\$0		
					\$0		
					\$0		
					\$0		
					\$0 \$0		
		Budget Period 1 Total			\$0 \$0		
	1	Budget Period 1 Total		Bude	get Period 2		
	1		<u>г</u>	Budg	\$0		Γ
					\$0		
					\$0		
					\$0		
					\$0		
					\$0		
					\$0		
					\$0		
		Budget Period 2 Total			\$0		
	-		r	Budg	get Period 3		
					\$0		
					\$0 \$0		
					\$0 \$0		
					\$0		
					\$0		
					\$0		
					\$0		
		Budget Period 3 Total			\$0		
				Budg	get Period 4		
					\$0		
					\$0		
					\$0		
					\$0		
					\$0		
					\$0 \$0		
			-		\$0 \$0		
		Budget Period 4 Total			\$0		
		Budget i enou 4 rotai		Bude	get Period 5		
			1	Jud	\$0		
					\$0		
			1		\$0		
					\$0		
					\$0		
					\$0		
					\$0		
					\$0		
		Budget Period 5 Total TOTAL SUPPLIES			\$0		
		TOTAL SUPPLIES			\$0		

Additional Explanation (as needed): No supplies with a useful life of less than 5 years was identified. See Equipment tab for all materials.

f. Contractual

NSTRUCTIONS - PLEASE READ!!!

1. The entity completing this form must provide all costs related to sub-recipients, contractors, and FFRDC partners in the applicable boxes below.

Sub-recipients (partners, sub-awardees): Subrecipients shall submit a Budget Justification describing all project costs and calculations when their total proposed budget exceeds either (1) \$100,000 or (2) 25% of total award costs. These sub-recipient forms may be completed by either the sub-recipients themselves or by the preparer of this form. The budget totals on the sub-recipient intrines below. A subrecipient is a legal entity to which a subaward is made, who has performance measured against whether the objectives of the Federal program are met, is responsible for decision making, must adher to applicable Federal program compliance requirements, and uses the Federal India to carry out a program of the organization. All characteristics may not be present and judgment must be used to determine subrecipient to subrecipient vs. Contractor supplying commercial supplies or services used to support the project. For each Contractor cost with total project costs of \$100,000 or more, a Contractor quote must be used to determine subrecipient vs. contracted to provide goods and services within normal business operations, provides similar goods or services subrecipient vs. contractor subject to compliance requirements of the Federal program. All characteristics may not be present and judgment must be used to determine subrecipient vs. contractor subjects or sub-exceed setting and program are ancillary to the operation of the Federal program. All characteristics may not be present and judgment must be used to determine subrecipient vs.

4. <u>Acederal Funded Research and Development Centers (FFRDCs)</u>: FFRDCs must submit a signed Field Work Proposal during award application. The award recipient may allow the FFRDC to provide this information directly to DOE, however project costs must also be provided below. 5. Each budget period is rounded to the nearest dollar.

SO Tas	CREATE Component	Sub-Recipient Name/Organization	Sub-Recipient Unique Entity Identifier (UEI)	Purpose and Basis of Cost	Budget Period 1	Budget Period 2	Budget Period 3	Budget Period 4	Budget Period 5	Project Total

(b) (4)

Contains Business Sensitive, Trade Secrets, Proprietary, or Otherwise Confidential Information Exempt from Public Disclosure

g. Construction

PLEASE READ!!!

1. Construction, for the purpose of budgeting, is defined as all types of work done on a particular building, including erecting, altering, or remodeling. Construction conducted by the award recipient is entered on

 Construction, on the purpose of budgeing, is defined as an types of work one on a particular bulking, including rectang, and ing, or removing construction conducted by the award recipient of this page. Any construction work that is performed by a contractor or subrecipient should be entered under 1. Contractual.
 List all proposed construction below, providing a basis of cost such as engineering estimates, prior construction, etc., and briefly justify its need as it applies to the Statement of Project Objectives. 3. Each budget period is rounded to the nearest dollar.

Overall description of construction activities Example Only - Build wind turbine platform

SOPO	CREATE	General Description	Cost	Basis of Cost	Justification of need								
Task #	Component		Budget Perio										
	1		Budget Perio		Γ								
		Budget Period 1 Total	\$0										
-	Budget Period 2												
		Budget Period 2 Total	\$0										
	Budget Period 3												
		Budget Period 3 Total	\$0										
I													
			Budget Perio	d 4									
				<u> </u>									
		Duda (D. 117)	<u>^</u>										
		Budget Period 4 Total											
			Budget Perio	d 5									
————													
		Budget Period 5 Total	\$0										
		TOTAL CONSTRUCTION	\$0										

Additional Explanation (as needed): All construction performed by a contractor and represented on the Contractual tab
(Contains Business Sensitive, Trade Secrets, Proprietary, or Otherwise Confidential Information Exempt from Public Disclosure h. Other Direct Costs										
1 E	INSTRUCTIONS - PLEASE READ!!! 1. Other direct costs are direct cost items required for the project which do not fit clearly into other categories. These direct costs must not be included in the indirect costs (for which the indirect rate is being applied for this project). Examples are: tuition, printing costs, etc. which can be directly charged to the project and are not duplicated in indirect costs (overhead costs). 2. Basis of cost are items such as vendor quotes, prior purchases of similar or like items, published price list, etc. 3. Each budget period is rounded to the nearest dollar.										
	SOPO CREATE Compo Task #	nent General Des	cription and SOPO Task #	Cost	Basis of Cost		Justification of	of need			
				Budaet F	Period 1						
(b) (4)										

Contains Business Sensitive, Trade Secrets, Proprietary, or Otherwise Confidential Information Exempt from Public Disclosure

Contains Business Sensitive, Trade Secrets, Proprietary, or Otherwise Confidential Information Exempt from Public Disclosure

i. Indirect Costs

INSTRUCTIONS - PLEASE READ

1. Fill out the table below to indicate how your indirect costs are calculated. Use the box below to provide additional explanation regarding your indirect rate calculation.

2. The rates and how they are applied should not be averaged to get one indirect cost percentage. Complex calculations or rates that do not do not correspond to the below categories should be described/provided in the Additional Explanation section below. If questions exist, consult with your DOE contact before filling out this section.

3. The indirect rate should be applied to both the Federal Share and Recipient Cost Share.

4. NOTE A Recipient who elects to employ the 10% de minimis Indirect Cost rate cannot claim resulting cost as a Cost Share contribution, nor can the Recipient claim "unrecovered indirect costs" as a Cost Share contribution. Neither of these costs can be reflected as actual indirect cost rates realized by the orgnaization, and therefore are not verifiable in the Recipient records as required by Federal Regulation (200.306(b)(1))

5.. Each budget period is rounded to the nearest dollar.

	Budget Period 1	Budget Period 2	Budget Period 3	Budget Period 4	Budget Period 5	Total	Explanation of BASE
Provide ONLY Applicable Rates							
Overhead Rate	0.00%	0.00%	0.00%	0 00%	0.00%		Example: Labor + Fringe
General & Administrative (G&A)	0.00%	0.00%	0.00%	0 00%	0.00%		
FCCM Rate, if applicable	0.00%	0.00%	0.00%	0 00%	0.00%		
OTHER Indirect Rate	0.00%	0.00%	0.00%	0 00%	0.00%		
Indirect Costs (As Applicable)							
Overhead Costs						\$0	
G&A Costs						\$0	
FCCM Costs, if applicable						\$0	
OTHER Indirect Costs						\$0	
Total indirect costs requested	\$0	\$0	\$0	\$0	\$0	\$0	

A federally approved indirect rate agreement, or rate proposed (supported and agreed upon by DOE for estimating purposes) is required if reimbursement of indirect costs is requested. Please check (X) one of the options below and provide the requested information if it has not already been provided as requested, or has changed.

An indirect rate has been approved or negotiated with a federal government agency. A copy of the latest rate agreement is included with this application and will be provided electronically to the Contracting Officer for this project. The organization does not have a current, federally approved indirect cost rate agreement and has provided an indirect rate proposal in support of the proposed costs. This organization has elected to apply a 10% de minimis rate in accordance with 2 CFR 200.414(f).

You must provide an explanation (below or in a separate attachment) and show how your indirect cost rate was applied to this budget in order to come up with the indirect costs shown.

Additional Explanation (as needed): * MPORTANT: Please use this box (or an attachment) to further explain how your total indirect costs were calculated. If the total indirect costs are a cumulative amount of more than one calculation or rate application, the explanation and calculations should identify all rates used, along with the base they were applied to (and how the base was derived), and a total for each (along with grand total).

PECO will cover indirect costs separately/internally and will not submit for reimbursement.

Contains Business Sensitive, Trade Secrets, Proprietary, or Otherwise Confidential Information Exempt from Public Disclosure

Contains Business Sensitive, Trade Secrets, Proprietary, or Otherwise Confidential Information Exempt from Public Disclosure

Cost Share

PLEASE READ!!!

1. A detailed presentation of the cash or cash value of all cost share proposed must be provided in the table below. All items in the chart below must be identified within the applicable cost category tabs a. through i. in addition to the detailed presentation of the cash or cash value of all cost share proposed provided in the table below. Identify the source organization & amount of each cost share item proposed in the award.

2. Cash Cost Share - encompasses all contributions to the project made by the recipient, subrecipient, or third party (an entity that does not have a role in performing the scope of work) for costs incurred and paid for during the project. This includes when an organization pays for personnel, supplies, equipment, etc. for their own company with organizational resources. If the item or service is reimbursed for, it is cash cost share. All cost share items must be necessary to the performance of the project. Contractors may not provide cost share. Apartial donation of goods or services is considered a discount and is not allowable.

3. In Kind Cost Share - encompasses all contributions to the project made by the recipient, subrecipient, or third party (an entity that does not have a role in performing the scope of work) where a value of the contribution can be readily determined, verified and justified but where no actual cash is transacted in securing the good or service comprising the contribution. In Kind cost share items include volunteer personnel hours, the donation of space or use of equipment, etc. The cash value and calculations thereof for all in Kind cost share items must be explained in the Cost Share items must be necessary to the performance of the project. If questions exist,

consult your DOE contact before filling out In Kind cost share in this section. Contractors may not provide cost share. Any partial donation of goods or services is considered a discount and is not allowable.

4. Funds from other Federal sources MAY NOT be counted as cost share. This prohibition includes FFRDC sub-recipients. Non-Federal sources include any source not originally derived from Federal funds. Cost sharing commitment letters from subrecipients and third parties must be provided with the original application.

5. Fee or profit, including foregone fee or profit, are not allowable as project costs (including cost share) under any resulting award. The project may only incur those costs that are allowable and allocable to the project (including cost share) as determined in accordance with the applicable cost principles prescribed in FAR Part 31 for For-Profit entities and 2 CFR Part 200 Subpart E - Cost Principles for all other non-federal entities.

6. NOTE: A Recipient who elects to employ the 10% de minimis Indirect Cost rate cannot claim the resulting indirect costs as a Cost Share contribution.

Recipient cannot claim "unrecovered indirect costs" as a Cost Share contribution, without prior approval.

8. Each budget period is rounded to the nearest dollar.

 Organization/Source
 Type (Cash or |
 Cost Share Item
 Budget
 Budget
 Budget
 Budget
 Budget
 Budget
 Budget
 Budget
 Total Project

 PECO
 PECO

7. NOTE: A

Additional Explanation (as needed): Subrecipients (PIDC, The Fund, PennDOT) are included in the Cost Share. Total costs for the 3 Subrecipients are listed on the Contractual tab. Boin the Fund and PennDOT have their own separate Budget Justification Workbooks.

Contains Business Sensitive, Trade Secrets, Proprietary, or Otherwise Confidential Information Exempt from Public Disclosure

Applicant Name: PECO Energy Company

Company Award Number: DE-FOA-0002740 Budget Information - Non Construction Programs

OMB Approval No. 0348-0044

Section A - Budget Summary									
	Catalog of Federal	Estimated Unot	oligated Funds	New or Revised Budget					
Grant Program Function or Activity	Domestic						T ()		
	Assistance Number	Federal	Non-Federal	Federal	Non-Federal		Total		
(a) 1. Budget Period 1	(b)								
2. Budget Period 2		(b) (4)							
3. Budget Period 3									
4. Budget Period 4									
5. Budget Period 5									
6. Totals									
Section B - Budget Categories									
6. Object Class Categories									
a. Personnel									
b. Fringe Benefits									
c. Travel									
d. Equipment									
e. Supplies									
f. Contractual									
g. Construction									
h. Other									
i. Total Direct Charges (sum of 6a-6h	n)								
j. Indirect Charges									
k. Totals (sum of 6i-6j)									
7. Program Income									

Previous Edition Usable

SF-424A (Rev. 4-92) Prescribed by OMB Circular A-102

Authorized for Local Reproduction

Instructions and Summary

Award Number: DE-FOA-0002740

Award Recipient: PECO Energy Company

Date of Submission: 4/4/2023

Form submitted by: PECO Energy Company

(May be award recipient or sub-recipient) Please read the instructions on each worksheet tab before starting. If you have any questions, please ask your DOE contact! Do not modify this template or any cells for formulas! 1. If using this form for award application, negotiation, or budget revision, fill out the blank white cells in workbook tabs a. through j. with total project costs.

2. Blue colored cells contain instructions, headers, or summary calculations and should not be modified. Only blank white cells should be populated.

3. Enter detailed support for the project costs identified for each Category line item wi hin each worksheet tab to autopopulate the summary tab.

4. The total budget presented on tabs a. through i. must include both Federal (DOE) and Non-Federal (cost share) portions.

5, All costs incurred by the preparer's sub-recipients, contractors, and Federal Research and Development Centers (FFRDCs), should be entered only in section f. Contractual, All o her sections are for the costs of he preparer only.

6. Ensure all entered costs are allowable, allocable, and reasonable in accordance with the administrative requirements prescribed in 2 CFR 200, and the applicable cost principles for each entity type; FAR Part 31 for For-Profit entities; and 2 CFR Part 200 Subpart E - Cost Principles for all other non-federal entities.

7. Add rows as needed throughout tabs a. through j. If rows are added, formulas/calculations may need to be adjusted by the preparer. Do not add rows to the Instructions and Summary tab. If your project contains more than five budget periods, consult your DOE contact before adding additional budget period rows and columns.

8. ALL budget period cost categories are rounded to the nearest dollar.

BURDEN DISCLOSURE STATEMENT

Public reporting burden for this collection of information is estimated to average 24 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Office of Information Resources Management Policy, Plans, and Oversight, AD-241-2 - GTN, Paperwork Reduction Project (1910-5162), U.S. Department of Energy 1000 Independence Avenue, S.W., Washington, DC 20585; and to the Office of Management and Budget, Paperwork Reduction Project (1910-5162), Washington, DC 20503.

SUMMARY OF BUDGET CATEGORY COSTS PROPOSED										
The values in this summary table are from entries made in subsequent tabs, only blank white cells require data entry Section A - Budget Summary										
Section A - Budget Summary		Federal	Cost Share			Total Costs	Cost Share %	Proposed Budget Period Dates		
	Budget Period 1	reactar	oostonare			10101 00515	oost onlare //	rioposca Badgerrenoa Bates		
	Budget Period 2	(b) (4)								
	Budget Period 3									
	Budget Period 4									
	Budget Period 5									
	Total									
Section B - Budget Categories	Budget Basis d 4	Budget Bariad A	Budget Bariad A	Budget Basis d (Budget Basis d 5	Total Ocota	N/ of Project			
CATEGORY	Budget Period 1	Budget Period 2	Budget Period 3	Budget Period 4	Budget Period 5	Total Costs	% of Project	Comments (as needed)		
a. Personnel	— (b) (4)									
b. Fringe Benefits										
c. Travel										
d. Equipment										
e. Supplies										
f. Contractual										
Sub-recipient										
Contractor	(b) (4)									
FFRDC										
Total Contractual	I									
g. Construction										
h. Other Direct Costs										
Total Direct Costs										
i. Indirect Charges										
Total Costs	5									

Additional Explanation (as needed): Subrecipients (PIDC, The Fund, PennDOT) are included in the Cost Share. Total costs for the 3 Subrecipients are listed on the Contractual tab. Bo h the Fund and PennDOT have their own separate Budget Justification Workbooks



CREATE Plan

Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia

Applicant Name: PECO Energy Company (PECO)¹

Funding Announcement Number: DE-FOA-0002740

Concept Paper Identification No: TA1-168-E

 Topic Area 1: Grid Resilience Grants (Bipartisan Infrastructure Law (BIL) Section 40101(c))
 Teaming Partners: City of Philadelphia, Pennsylvania Department of Environmental Protection Energy Programs Office, Pennsylvania Department of Transportation, Fund for the School District of Philadelphia, Philadelphia Industrial Development Corporation, Urban Affairs Coalition, and Greater Philadelphia Chamber of Commerce

Business/Administrative Point of Contact	Technical Point of Contact						
(b) (6)	(b) (6)						
Director, PECO Strategy	VP, PECO Projects & Contracts						
<u>PECO.IIJA@exeloncorp.com</u>	<u>PECO.IIJA@exeloncorp.com</u>						

CREATE incorporates targeted improvements and partnerships across PECO's service territory, which includes Bucks, Chester, Delaware, Montgomery, Philadelphia, and York counties.



¹ Exelon, PECO's parent company, has signed onto Outage Data Initiative Nationwide (ODIN), a voluntary program to promote increasing standardization of outage data.

Project Overview

Background

PECO Energy Company (PECO or the Company), a subsidiary of Exelon Corporation, is headquartered in Philadelphia and is Pennsylvania's largest electric and natural gas utility, employing over 2,800 people and delivering power to nearly 1.7 million electric customers in southeastern Pennsylvania. With a history of more than 140 years of service to the Greater Philadelphia region, PECO has a long-standing commitment to deliver safe, reliable, and resilient energy to the customers and communities it serves.

PECO hopes to further this commitment through an investment in additional critical energy infrastructure and community-based initiatives to Create a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia, hereafter referred to as "CREATE" or the "Plan."

The objective of CREATE is to catalyze a generational transformation of southeastern Pennsylvania's energy landscape, centered around Lower South Philadelphia, through a combination of targeted, resilience-focused infrastructure investments and comprehensive community-based collaborations. The Plan will advance the objectives of the Department of Energy's (DOE) Grid Resilience and Innovation Partnership Program (GRIP) (Topic Area 1 – 40101(c)) by reducing the likelihood and consequence of impacts to the electric grid due to extreme weather and rising sea levels.

Lower South Philadelphia is an innovation and economic development hub key to the region's continued inclusive growth. The area is located at the confluence of the Delaware and Schuylkill rivers, forming one of the oldest industrial, trade, and transportation centers in the United States. With an international airport, deep water port, interstate highways, passenger and freight rail connections, nearby research universities, national security assets, and 2 of the largest economic redevelopment centers in the country, the area is uniquely positioned to serve as a life sciences, intermodal trade, logistics, and innovation hub for the Northeast Corridor. This low-lying area sits at less than 10 feet of elevation and is vulnerable to climate-driven flooding and other extreme weather events, creating the need for infrastructure modernization that ensures the resilience of this area. Adjacent to this center of economic activity are densely populated, diverse, urban neighborhoods with high concentrations of poverty that require access to a clean environment, education, transportation, and job training to participate in the future growth and vitality of this area.

Project Goal

The End of Project Goal is to enhance service resilience and reliability, with a concentrated focus on disadvantaged communities (DACs) across the PECO service territory – 43% of localized, distribution grid benefits and climate resilience improvements will go towards Justice40 DAC customers. All of PECO's 1.7 million customers, 30% of whom reside in DACs, will

benefit from additional upgrades along (b) (4) . CREATE will support more than (b) (4) opportunities across the region and align with PECO's (b) (4) diverse supplier spend target. DOE grant funding will comprehensively address future grid vulnerabilities, reduce carbon emissions through the retirement of legacy diesel generators and the reduction of backup diesel generator usage in Center City Philadelphia, and add (b) (4) distribution capacity for future electrification growth, such as new electric vehicle (EV) charging stations.

PECO has identified 3 critical success factors to achieve the goals outlined above:

- 1. **People**: Community support for its infrastructure projects, availability of a skilled labor workforce, and PECO's technical expertise to deliver innovative solutions. (*See Qualifications and Experience and the Community Benefits Plan for more detail*)
- 2. **Technology**: Innovative technology that supports PECO's Climate Resilience Strategy, achieves deployment at-scale, and leads to additional private sector investment. (*See Innovation Impacts and Innovation Risk Mitigation for more details*)
- 3. **Process**: Robust project management practices built upon PECO's 140-year experience of designing, building, and commissioning electric infrastructure (*See Project Management for more details*)

DOE Funding Impact

PECO invested over \$6.5 billion in electric infrastructure upgrades between 2013 and 2022. However, PECO recognizes the upward pressure on customer bills created by large-scale investments, requiring the Company to balance the pace of investments with affordability impacts. DOE grant funding will allow PECO to pursue incremental resilience upgrades while limiting the associated customer bill impact.

PECO currently has (b) (4) million budgeted (as shown in the Report on Resilience Investments) for targeted component upgrades of the Conowingo and Amtrak ROWs and underground infrastructure in Center City Philadelphia. DOE grant funding will allow PECO to build upon these foundational investment plans, include innovative technologies mentioned in the "Innovation and Impacts" section below, and embark on new scopes of resiliency work, including the Lower South Philadelphia Substation, Substation Flood Mitigation, Campus Microgrid, and partnerships including Clean and Resilient Community Schools, and Pennsylvania Department of Transportation (PennDOT), all of which are components of CREATE. (*See Relevance, Outcomes, and Grid Benefits for individual component details*)

In concert with CREATE, PECO will make fully self-funded investments to connect new transmission lines to the Lower South Philadelphia Substation and will seek to improve structures and foundations along sections of the Conowingo ROW to support the proposed conductor replacement.

Community Benefits (Job Quality, Equity, and DACs)

Economic models forecast that the roughly \$250 million in capital investment associated with CREATE will have a total employment impact of (b) (4). Through the CREATE Plan, PECO pledges to work with a broad range of leading community partners, including the Greater Philadelphia Chamber of Commerce, the Philadelphia Urban Affairs Coalition (UAC), the Energy Coordinating Agency (ECA), Opportunities Industrialization Coalition (OIC), the Philadelphia Energy Authority (PEA) and the Greater Philadelphia Chamber of Commerce to establish or support programs that focus on providing training and development opportunities to individuals from DACs. The Company will give priority consideration to entities that consider graduates of these programs and the workforce development programs of other community-based organizations that serve DACs.

PECO intends to use both Company and contractor labor for the implementation of CREATE. PECO's approximately 1,300 non-management field craft personnel and call center employees are represented by the International Brotherhood of Electrical Workers Local 614 (IBEW 614). In addition to craft employees, a majority of PECO's Contractors of Choice are represented by trade unions as well. In April 2021, PECO and IBEW 614 ratified a labor agreement that continues to provide PECO's represented workforce with a competitive wage and benefits package.

Approximately (b) (4) the customers directly benefitting from the localized, distribution grid resilience components of the CREATE Plan live in DACs. In addition, all of PECO's 1.7 million electric customers will broadly benefit from proposed upgrades at our Storm Response Center and along (b) (4) (b) (4) of those customers live in DAC's.

CREATE also incorporates extensive labor and community engagement provisions, including the establishment of a new Environmental Justice Advisory Committee and the Clean and Resilient Community Schools initiative, as well as leveraging PECO's extensive education, workforce development and diverse vendor programs in support of the Plan. (*See Community Benefits Plan for more details*)

Potential Long-term Constraints on Natural Resources

PECO has determined that the CREATE Plan is not expected to have a significant impact on the communities' access to natural resources.

To identify and prevent adverse environmental impacts and avoid potential long-term constraints on natural resources, PECO has and will continue to leverage its Environmental Management System (EMS), which received ISO 14001 Certification in 2008. ISO 14001 Certification is the globally recognized "gold" standard for promoting effective, systematic management of environmental risks and opportunities. Built on the "Plan, Do, Check, Act" model, EMS enables PECO to systematically manage environmental risks and opportunities; improve environmental performance by clarifying environmental accountabilities, roles, and responsibilities; integrate environmental concerns and performance improvement into business decision-making and planning; improve business performance as environmental costs are better managed, planned for, and reduced over time; and increase credibility and strengthen relationships with external stakeholders.

Climate Resilience Strategy

The CREATE Plan will advance PECO's "Path to Clean" by implementing clean energy technology, enabling additional electrification capacity, and retiring diesel gas generators. Path to Clean outlines the Company's commitments to reduce operations-driven emissions by 50% by 2030, partner with customers and communities to help them meet their climate goals, and achieve net-zero operations-driven emissions by 2050. In addition, PECO has committed to (1) make significant investments to modernize its energy infrastructure to increase resilience in the face of intensifying weather patterns, (2) develop more efficient ways to manage and modernize the grid through innovation, and (3) advocate for energy efficiency, solar, and transportation electrification policies that advance clean and affordable energy access for all.

PECO also continues to leverage its industry leading emergency response facilities to respond to impacts from extreme weather events and provide mutual assistance support to other utilities throughout the country. Further, the proposed Campus Microgrid battery will both harden PECO's Berwyn Storm Response Center facility and provide valuable insights for future microgrid resilience implementations at the Company and across the region.

Technical Description, Innovation, and Impact

Relevance, Outcomes and Grid Benefits

PECO reviewed the objective and goals of CREATE, outlined in the Project Overview, to ensure alignment with the eligible uses and technical approaches authorized and prioritized under Topic Area 1 in the FOA. CREATE will address 2 critical grid challenges that can impede the transition to a clean, resilient, and equitable energy future: (1) limits on large-scale electrification capacity, and (2) climate-vulnerable and aging infrastructure. Addressing these challenges will require a multi-component approach to provide additional capacity on some of PECO's constrained distribution circuits and reduce outage frequency and duration in areas vulnerable to extreme weather events. This, in turn, will enable continued customer-driven electrification and deployment of distributed energy resources (DER) technologies such as solar, battery storage, and EVs.

CREATE Components

The CREATE Plan is seeking to drive resiliency, reliability, and capacity improvements across southeastern Pennsylvania to improve the lives of citizens and businesses. The Plan is comprised of 7 grid components that will allow PECO to address time-sensitive climate resilience needs in light of recent weather events and maximize the impact of federal funding in

this economic center, which serves the 4-state Delaware Valley metropolitan region of the U.S. CREATE components will address vulnerable areas of PECO's service territory that are susceptible to the types of severe weather events that impact families, communities, and businesses, and meet Section 40101(c) eligible uses (A), (B), (C), (F), (H), (K), and (L). (See Innovation and Impacts for more details on alignment with eligible uses)

Lower South: (b) (4)

The Lower South component of CREATE will add a

new substation to be located at the Navy Yard that will reduce the forecasted peak load **fore** on the Packer and Southwark Substations and improve the reliability of electricity supply to the Navy Yard due to its proximity. The additional capacity will also enable the continued expansion and electrification of key drivers of economic growth in this area, including the Navy Yard, Bellwether District, PhilaPort, Philadelphia International Airport (PHL), and Lower Schuylkill Master Plan.

(See letters of support from the City of Philadelphia, PHL, PIDC, and Sysco Corporation. The Innovation Risk Mitigation section also contains more details on economic growth areas)

Philadelphia Underground Risk Mitigation Initiative (PURMI): (b) (4)

component of CREATE will rejuvenate (b) (4) infrastructure in Center City Philadelphia by retiring 100-year-old cable and replacing communications platforms with underground real-time monitoring equipment. These upgrades will minimize the time required to troubleshoot disruptions and reduce the frequency and duration of outages.

Substation Flooding Mitigation: PECO's Grays Ferry and Pencoyd Substations experienced a 100-year flood event caused by Hurricane Ida in 2021. (b) (4)

component of CREATE will relocate the entire Pencoyd Substation to a more climate-resilient location, eliminating equipment damage from a 500-year flood event. The new substation will have an increased voltage and improve the resilience and reliability of adjacent circuits. Additionally, this component will relocate an existing spare autotransformer from the Grays Ferry Substation, eliminating the risk of equipment damage from a 500-year flood event. This relocation includes the design and construction of a new foundation to support 3 spare transformers, the restoration of a rail spur for transformer deliveries, and the inclusion of a physical perimeter to meet PECO security requirements.

. The PURMI

. This

Amtrak: PECO has an agreement to utilize an Amtrak ROW along the Northeast corridor spanning from the Pennsylvania-Delaware state line to central Philadelphia. As part of CREATE, PECO is proposing to upgrade aging Amtrak ROW foundations, overhead conductors, and transmission structures. The Amtrak component will extend the life of existing transmission circuits by over 50 years and (b) (4) while maintaining existing ground line clearance.



Conowingo and Amtrak ROW are interconnected with the PJM grid, thus providing interregional resilience benefits.

The Campus Microgrid: This component will implement innovative smart energy technology at PECO's Berwyn, Pennsylvania Storm Response Center to support resilient storm response activities during a distribution system outage. The advanced microgrid controller functionality and **(b)** (4) will allow for the retirement of 3 legacy diesel backup generators and underground fuel tanks and support a seamless transition to the microgrid's backup power within 1 second in the event of a grid power loss. This deployment of advanced grid technologies to support critical emergency response infrastructure will provide a template for future application of these technologies at the corporate, regional, and industry levels.

PennDOT: In partnership with PECO, PennDOT will execute a pilot program to deploy (b) (4) systems that will provide enhanced resiliency for its critical traffic monitoring equipment and communications control system, preventing highly disruptive outages during extreme weather events. PECO recognizes that outages from extreme weather events can impact other essential infrastructure networks and have multiple disruptive effects on the larger community. Successful demonstration of this pilot will provide visibility to critical points in the region's transportation network and deliver insights on the scaling potential of this technology, including identifying optimal battery sizes, duration capacities, equipment protection, and system integration requirements.

(See CBP for details on community benefits, including Clean and Resilient Community Schools)

Feasibility

PECO has conducted extensive planning and a comprehensive review of the execution, technology, stakeholder, and financial risks for all components of CREATE. At the beginning of the planning phase, PECO identified 3 critical success factors, outlined in the Project Goals section of the Project Overview, to ensure the successful implementation of the CREATE Plan: People, Technology, and Process. (*See Project Management and Qualifications and Experience sections for more details on the critical success factors*)

Between 2013 and 2022, PECO invested over \$6.5 billion in non-storm, electric capital, including reliability and resilience infrastructure investments. Approximately \$275 million of this investment was executed under PECO's Long-Term Infrastructure Improvement Plan (LTIIP) and focused on the replacement of aging infrastructure and storm hardening through reconstructing facilities to make them less susceptible to the impact of extreme weather conditions.

Additionally, PECO has experience working with the DOE on execution, compliance, and oversight of large infrastructure projects, particularly the DOE's \$200 million grant to support PECO's \$406 million Smart Grid/Smart Meter (SGSM) project that deployed more than 600,000 advanced meter infrastructure (AMI) meters, a comprehensive bidirectional communications infrastructure, advanced supervisory control and data acquisition, grid-connected network devices, IT system enhancements, and customer-side technology demonstrations. Since then, PECO has continuously scaled-up its investment in the innovative use of its AMI infrastructure, completing AMI meter installation for all 1.7 million of its electric customers and 500,000 gas customers.

Innovation and Impacts

To transform the southeast Pennsylvania region, guide it towards a resilient, clean, and equitable energy future, and advance the objectives of Topic Area 1, CREATE must implement state-of-the-art technology that exceeds industry standards and current-state grid technology.

Lower South²: The new Lower South Philadelphia Substation will be equipped with fire monitoring and fire-resistant technology, which will reduce the impact of a substation fire. The consequences of extreme weather events will be addressed by weatherizing critical substation equipment and elevating it above the 500-year floodplain. The substation will provide greater capacity and resilience to critical national security infrastructure and relieve capacity constraints at adjacent substations that serve vital infrastructure customers and neighborhoods with a high percentage of DACs. The new substation's location within the Navy Yard will eliminate approximately 20 miles of old underground cables serving this area. The Lower South component will also include a partnership project with Philadelphia Industrial Development Corporation (PIDC) to develop a business case for a resilient electric supply solution serving multiple life sciences companies that will include multiple back-up sources and ride-through

² Investments consistent with IIJA Section 40101(c) eligible uses (A), (B), (C), and (K)

capability to ensure smooth transition to alternate sources and enable future private sector investment.

PURMI³: PECO plans to rejuvenate underground assets in Center City Philadelphia through the following innovative engineering solutions: upgrading monitoring and control technologies, redesigning system configuration, and adding infrastructure access points, all of which would minimize the time required to troubleshoot disruptions. In addition, PECO will repackage and install additional duct banks to prepare for future load growth within Center City Philadelphia to support EV charging stations and other sources of electrification. This component will accelerate and inform PECO's evaluation of potential strategies for upgrading the aging underground distribution infrastructure in PECO's service territory. PURMI also incorporates additional breakdowns, switching points, and hand holes at the secondary taps, avoiding community-disruptive street digs to locate faults. These upgrades will significantly increase grid resilience by reducing the frequency and duration of outages.

Substation Flood Mitigation⁴: Advanced technologies and hardening measures used to reduce the consequence of disruptive events will include the following: traveling wave fault locators to improve restoration efforts and reduce outage durations, a 13kV switchgear housed indoors for climate resilience and hardening of the 13kV distribution system, 13kV circuit breakers with remote racking capabilities to enhance operational safety, fire-resistant walls between the power transformers, new microprocessor relays with monitoring and control technologies on both the 13kV distribution and 230kV transmission systems, and 5 miles of new overhead optical ground wire (OPGW) to increase communication capacity through a critical fiber path.

Amtrak⁵: The transmission facilities serving numerous DACs, including the City of Chester, where more than 30% of residents live in poverty, will be completely rebuilt with HTLS conductors, to enable additional capacity, harden power lines against extreme weather events, and reduce the risk of power outages. PECO will coordinate this work with Amtrak's own planned upgrades along the ROW. DOE funding will support PECO's effort to execute work on a compressed timeline to align with Amtrak's engineering and construction schedule.

Conowingo⁶: With a maximum output of 572MW, the Conowingo Hydroelectric Station in Darlington, Maryland supplies emissions-free electricity to PECO's service territory. PECO has identified upgrading the Conowingo Transmission ROW facilities as a priority component of CREATE, including (b) (4)



⁴ Investment consistent with IIJA Section 40101(c), eligible uses (B), (C), and (K)

⁵ Investment consistent with IIJA Section 40101(c), eligible uses (A), (F), (K), (L), and (M)

⁶ Investment consistent with IIJA Section 40101(c), eligible uses (A), (F), (K), (L), (M)

Campus Microgrid⁷: The proposed Campus Microgrid component will add a (b) (4) at PECO's Storm Response Center in Berwyn, Pennsylvania, one of PECO's most critical operations and storm response centers. Integrating this battery storage system with the existing microgrid controller will allow for the hardening of critical systems, improve restoration response during extreme weather events, and enable the retirement of 3 diesel backup generators. The Campus Microgrid will also provide valuable insight through developing, testing, and evaluating these advanced energy technologies and serve as a model blueprint for the hardening of other critical operation and emergency response centers in PECO's territory. DOE funding would support PECO's mission to deploy innovative technology, supporting similar resilience upgrades in the future.

PennDOT⁸: This component includes the deployment of battery storage devices to harden existing equipment such as traffic monitoring and communication devices at critical locations on State highways. The battery storage facilities will enable these PennDOT devices to continue uninterrupted operation after disruptive weather events, supporting critical public safety functions and providing a potential model for similar deployments across the State.

Support of State, Local, Tribal, Regional and National Resilience

CREATE is designed to advance the environmental, energy resilience, and economic goals established by State and local policy leaders while achieving the objectives of the IIJA and GRIP.

State Level: In 2012 Pennsylvania enacted legislation permitting utilities, including electric distribution companies, to seek approval of Distribution System Improvement Charges (DSIC) to allow recovery of eligible costs under utility LTIIP⁹. Since then, PECO has received approval for a DSIC and 2 electric LTIIP plans: (1) LTIIP I (2016-2020), which included an additional \$274.3 million invested to deploy advanced equipment and reinforce the electric system; and (2) LTIIP II (2021-2025), which includes a planned investment of \$1.36 billion to reduce the frequency and duration of outages, support grid modernization, and improve reliability. CREATE's planned investments and improvements are both separate from and incremental to the Company's planned LTIIP II investments. (*See Report on Resilience Investments for more information on the investment breakdown*)

More recently, Pennsylvania established its Climate Action Plan 2021 which outlines a pathway to reaching Pennsylvania's GHG reduction goals: 26% from 2025 levels and 80% by 2050.¹⁰ CREATE will assist Pennsylvania's efforts to achieve its ambitious greenhouse gas reduction

⁷ Investment consistent with IJA Section 40101(c), eligible use (H), and (K)

⁸ Investment consistent with IIJA Section 40101(c), eligible use (H), and (K)

⁹ Act 11 of 2012. 66 Pa.C.S. § 1353 (a). The General Assembly of the Commonwealth of Pennsylvania, 14 Feb. 2012, https://www.legis.state.pa.us/WU01/LI/LI/US/HTM/2012/0/0011..HTM

¹⁰ 2021 Pennsylvania Climate Action Plan. Pennsylvania Department of Environmental Protection, Sep. 2021, http://www.depgreenport.state.pa.us/elibrary/GetDocument?docId=3925177&DocName=2021%20PENNSYLVANI A%20CLIMATE%20ACTION%20PLAN.PDF%20%20%3cspan%20style%3D%22color:green%3b%22%3e%3c/span%3e %20%3cspan%20style%3D%22color:blue%3b%22%3e%28NEW%29%3c/span%3e%209/21/2023

goals by providing additional hosting capacity for charging in South Philadelphia and for electrification projects in both Center City Philadelphia and the Lower South Philadelphia economic development region. The CREATE Plan is supported by Governor Shapiro, Pennsylvania's U.S. senators, and the region's House delegation, and the bipartisan leaders of the General Assembly's utility oversight committees. (See Community Partnership Documentation)

City Level: Philadelphia has committed to achieving carbon neutrality by 2050 and released its Climate Action Playbook establishing the City's first Environmental Justice Commission.¹¹ The Climate Action Playbook outlines three sustainability actions that the City will prioritize: (1) reducing Philadelphia's contribution to climate change; (2) utilizing nature as a solution to climate pollution, and (3) adapting to a changing climate to prepare Philadelphia for more severe weather events in the future. These initiatives are being implemented simultaneously with the City's efforts to establish an integrated transportation infrastructure vision for the Lower South Philadelphia region, which is complementary to CREATE, supporting decarbonization efforts and fostering economic development. The CREATE Plan enjoys the support of the City of Philadelphia, the suburban counties where work will be executed, labor, community, and local business organizations. (See Community Partnership Documentation)

Local Level: 42 suburban municipalities and counties within PECO's service territory have passed "Ready for 100" resolutions supporting the transition to 100% renewable energy. In addition to their support for enhanced access to clean energy solutions, these suburban municipalities are vulnerable to climate-driven extreme weather, which has led to 8 of the 10 most destructive storms in PECO's more than 100-year history occurring in the last 12 years. Hurricanes Irene (2011), Hurricane Sandy (2012), Ice Storm Nika (2014), Derecho (2020), Tropical Storm Isaias (2020), and Hurricane Ida (2021) all resulted in hundreds of thousands of customer outages, requiring massive resource deployments. CREATE will support climate resilience in PECO's service territory by relocating or replacing vulnerable infrastructure and supporting community-level clean energy investments through additional hosting capacity.

Innovation Risk Mitigation

CREATE reduces innovative technology risk and enables significant private sector investment by renewing aging infrastructure and adding load capacity across PECO's territory, thus providing opportunities for deploying sustainable energy solutions, economic expansion, and additional private sector investment. PECO has established partnerships with local stakeholders who will leverage CREATE's solutions to deploy EV charging solutions and DERs that will contribute to a more resilient grid throughout South Philadelphia and targeted areas in PECO's service territory.

Specific regional growth projects that the Lower South component will enable include:

¹¹ *Philadelphia Climate Action Playbook*. The City of Philadelphia Office of Sustainability, Jan. 2021, https://www.phila.gov/media/20210113125627/Philadelphia-Climate-Action-Playbook.pdf

- The Navy Yard: PIDC has led the remarkable redevelopment of the former military facility into a community of 15,000 employees and 150 employers. Future plans call for \$6 billion of new investment over the next 20 years, resulting in an estimated 12,000 new jobs. The Navy Yard development team has pledged over \$1 billion to diversity, equity, inclusion, and accessibility hiring initiatives while planning and building out the 109-acre project¹².
- The Bellwether District: Hilco Redevelopment Partners (Hilco), a nationally recognized leader in brownfield transformation, is reinventing the former Philadelphia Energy Solution refinery into a 1300-acre, state-of-the-art campus. Hilco will remediate and redesign the site into a green, sustainable development and economic engine for Philadelphia. As an employment hub, it will generate an estimated 19,000 new jobs over 15 years¹³.
- *PhilaPort:* PhilaPort is an essential economic driver, not only in Philadelphia, but also across the region, providing employment opportunities and enabling trade. Because electrification will be a critical element supporting the port's continued growth, \$3.5 billion in future anticipated capital investment is planned.
- *Philadelphia International Airport:* Philadelphia International Airport is embarking on an ambitious cargo expansion plan that will nearly triple capacity and stimulate the region's economic development. This expansion is expected to have an estimated employment impact of 28,000 new jobs¹⁴.
- Lower Schuylkill Master Plan: The Lower Schuylkill Master Plan envisions a 21st-century industrial district for the 3,700-acre area that integrates exciting opportunities for new and growing businesses with sustainable features. This project is projected to attract over \$860 million in private investment and an estimated 6,500 new jobs while establishing an integrated green network with 5 miles of new trails and 46 acres of new green space in an underserved area of Philadelphia. The development capacity is more than 6 million square feet of space, and the estimated economic impact is \$63 billion¹⁵.

The CREATE plan will also provide numerous benefits to reduce technology risk, achieve further deployment at scale, and increase private sector investments.

 Renewed infrastructure, installed as part of the Substation Flood Mitigation, PURMI, Conowingo, and Amtrak components, will support load growth, allowing for EV charging stations and DER integration. PURMI will also add new underground access points, supporting future implementations of automated equipment, and providing opportunities to coordinate with other infrastructure systems in Philadelphia's underground network.

 ¹² The Navy Yard | Philadelphia, PA. Retrieved March 27, 2023, from https://navyyard.org/who-we-are
 ¹³ Hilco Redevelopment Partners. The Bellwether District | Next Starts Here. Retrieved March 27, 2023, from https://www.thebellwetherdistrict.com/

¹⁴ Brown, F. (2021, June 14). *PHL Announces Significant Air Cargo Expansion Strategy*. PHL.org. Retrieved March 27, 2023, from https://www.phl.org/newsroom/cargo-expansion

¹⁵ The Lower Schuylkill Master Plan. PIDC Philadelphia. Retrieved March 27, 2023, from

https://www.pidcphila.com/images/uploads/resource_library/LSMP_ExecSummary.pdf

- The Amtrak upgrades will support future operations at a higher voltage, creating
 opportunities for follow-on investments by PECO after the GRIP's 5-year execution
 window. These potential follow-on investments could include substation upgrades and
 system configuration updates necessary to increase the Amtrak line's transmission
 capacity, enabling increased transmission of reliable electricity into nearby DACs.
- Berwyn's Campus Microgrid will provide a demonstration of DER and automated equipment, further bolstering PECO's emergency response facilities and offering a template for first responder organizations throughout the region. A strong storm response center will take a proactive approach to reduce storm-related damages and lower overall investment risk for new grid technology. The Campus Microgrid will serve as a model, providing valuable insights for future implementations at the corporate, regional, and industry levels.

Workplan

Project Objectives

The objective of CREATE is to catalyze a generational transformation of southeastern Pennsylvania's energy landscape through a combination of targeted infrastructure investments and comprehensive community-based collaborations to reduce the likelihood and consequence of impacts to the electric grid due to extreme weather and rising sea levels. The expected outcomes are two-fold:

Grid Outcomes

- Lower South: Reduce forecasted peak load from (b) (4) on adjacent circuits. Produce a resilient electric supply business case for the Navy Yard economic innovation center.
- **PURMI**: Rejuvenate (b) (4) infrastructure in Center City Philadelphia and retire 100-year-old cable to reduce outages and high-impact manhole events.
- Substation Flood Mitigation: Eliminate outages from water intrusion to substation switchgear building, control house and critical spare power transformers during a 100-year or 500-year flood event. Reconstruct rail spur to support timely shipping of 3 spare substation transformers for emergent transformer failures.
- Amtrak: Rebuild (b) (4) and extend the life of existing PECO transmission circuits by 50+ years to reduce outage events. Rebuild two 230kV circuits with high temperature low sag (HTLS) conductor to increase existing line ratings by over 50% while maintaining existing ground line clearance.
- Conowingo: (b) (4)

- **Campus Microgrid**: Ensure continued operations at PECO's Berwyn Storm Response Center during extreme weather events by enabling islanding mode and transition to backup power within 1 second.
- **PennDOT**: Maintain power and communications to ensure visibility into transportation infrastructure during extreme weather events at 2 critical transportation hubs.

Community Outcomes

- Clean and Resilient Community Schools: Deploy (b) (4) in funding for communitybased climate resilience and clean energy investments at Title 1 public schools.
- Establish Environmental Justice Advisory Committee: Create a standing forum for discussion of energy impacts and opportunities with grassroots representatives of DACs.
- Workforce Development Programs: Link CREATE employment opportunities to training programs and convene annual meetings to connect workforce development boards, training programs, and employers.
- Vendor Diversity Initiative: Align with PECO's commitment to work to ensure (b) (4) vendor contracts will be executed with MWBE qualifying businesses.

(See CBP for more details on community outcomes)

Technical Scope Summary

To meet the Plan's objective, CREATE must address 2 critical grid challenges that can impede the transition to a clean, resilient, and equitable energy future: (1) limits on large-scale electrification capacity and (2) climate-vulnerable and aging infrastructure. This will be achieved by:

- Lower South: Constructing a new substation in Lower South Philadelphia elevated above a 500-year floodplain and developing a business case that includes feedback from stakeholders, recommended engineering solutions and cost, and proposed funding mechanisms for a Life Sciences Resiliency Campus at the Navy Yard.
- **PURMI**: Upgrading underground monitoring and control technologies in Center City Philadelphia.
- **Substation Flood Mitigation**: Demolishing and rebuilding the Pencoyd Substation with higher transmission voltage and above the 500-year floodplain. Relocating a critical spare autotransformer above the 500-year floodplain at Grays Ferry Substation.
- **Amtrak**: Replacing or rebuilding aging foundations, overhead conductors, and transmission structures. Utilize new HTLS conductor to increase ratings.
- Conowingo: (b) (4)
- **Campus Microgrid**: Installing (b) (4) system and integrating it into the existing microgrid controller.
- **PennDOT**: Deploying backup batteries at 2 critical transportation hubs.

(See CBP for community benefits scope, including Clean and Resilient Community Schools) (See Project Schedule and Milestone Summary for performance periods and decision points)

Work Breakdown Summary (WBS) and Task Description

The 4-step WBS below is consistent with PECO standard project and program management practices. Please refer to the Statement of Project Objectives (SOPO) for a detailed description of each task and subtask. All components, except for PURMI and the Clean and Resilient Community Schools partnership, will follow Tasks 2, 3, and 4 sequentially as execution progresses over time. Because the construction of PURMI lies in the center of the City of Philadelphia, PECO will determine a specific scope of 2 to 3 city blocks at the beginning of each budget period to be completed within the same budget period. (*See Community Benefits Plan (CBP) for the Clean and Resilient Community Schools work plan timeline*).

Task 1.0 – Project Management and Compliance Oversight (All Budget Periods)

PECO will perform project management activities to include project planning and control, subcontractor control, financial management, data management, management of supplies and/or equipment, risk management, environmental compliance (NEPA), and reporting as required to successfully achieve the overall objectives of the Plan and strict compliance of federal grant requirements. The following 4 subtasks will be performed routinely throughout the 5-year execution period and cover all budget periods.

Subtask 1.1 – Project Management Plan (PMP) Subtask 1.2 – National Environmental Policy Act (NEPA) Compliance Subtask 1.3 – Cybersecurity Plan (CSP) not applicable to 40101(c) Subtask 1.4 – Annual Pre-Continuation Briefing(s) Subtask 1.5 – Periodic Progress Review with Community Stakeholders

Task 2.0 – Preliminary Design and Permitting

PECO will develop a preliminary project diagram, review the conceptual design with stakeholders, acquire property, obtain necessary permits, and identify and order long lead material and equipment. To ensure the completion of the Conowingo transmission upgrade component within the DOE's 5-year grant performance period, PECO has started Subtask 2.1 and plans to complete the entirety of Task 2 by end of 2023.

Subtask 2.1 – Perform Preliminary Project Diagram and Acquire Property Subtask 2.2 – Complete Conceptual Design and Obtain Required Permit

Task 3.0 – Detailed Design

PECO will perform a detailed component design, procure vendor drawings and submittals, obtain approvals, and permits from regulatory agencies and state/local governments, award contracts, and order all equipment and material required for construction. Community stakeholders will also be engaged to review PECO's detailed design. To align the Company's

schedule with Amtrak's planned construction timing, PECO completed Task 2 in 2022 and plans to start Subtask 3.1 prior to the DOE's 5-year grant performance period.

Subtask 3.1 – Perform Detailed Design and Obtain Approvals Subtask 3.2 – Complete Procurement and Award Contracts

Task 4.0 – Final Construction

PECO will perform the required construction based on its detailed design, electrify the equipment, and close out the components once successfully completed. This also includes the Clean and Resilient Community Schools Partnership execution.

Subtask 4.1 – Complete Construction, Equipment Installation and Testing Subtask 4.2– Energize Equipment, Place In-Service, and Complete Post Construction Documentation

Milestone Summary and Go/No-Go Decision Points

Milestones

PECO will demonstrate the Plan's progress and accomplishments through quarterly milestones that will be reviewed and evaluated at the end of each quarter. These milestones will serve as guidelines to ensure that the Plan is on-track and progressing toward its End of Project Goals. PECO will obtain specific documentation, such as progress reports, contract sign-off, and regulatory approvals listed in the Milestone Summary and Go/No-Go Decision Points table below, to verify the success of each SMART milestone. PECO will share this documentation upon the DOE's request and during annual pre-continuation reports.

Go/No-Go Decision Points

As part of annual pre-continuation briefing with the DOE, PECO leadership will perform annual, Plan-wide Go/No-Go decision meetings to determine if the CREATE Plan should proceed. These meetings will consist of a thorough review of the schedule, scope, and budget. This review process will include an evaluation of component and community benefits milestones and End of Project Goals to ensure that the Plan continues to advance the objectives of the DOE's GRIP Program and deliver benefits and economic opportunities to workers, local communities, and DACs. The agenda, details, and reporting methods of the Go/No-Go decision meetings will be finalized in the Project Management Plan and shared with the DOE within 30 days of an award.

Below is the comprehensive list of all Milestones and Go/No-Go decision in the CREATE Plan.

Mile	stone	Summary and Go/No-Go Decision Points	Component(s)	#
	Q1	Complete Project Management Plan*	All	1
	Q2	Acquire property and receive property purchase agreement	SFM, Lower S.	2
		Go/No-Go: Submit annual Pre-Continuation Briefing for budget period 1	All	3
H	Q3	Receive approval from Pennsylvania Public Utility Commission*	Conow., Amtrak	4
Year 1		Award contract to battery supplier	Campus Microgrid	5
Ye	isk is	Year 1 scope energized*	PURMI	6
	Q4	Complete Opportunity Youth, MWBE Vendor, and Workforce Plan. Host EJAC Steering Committee kick-off. *	СВР	7
	2	Finalize Clean & Resilient Community Schools Sub-Recipient Contract*	Clean Schools/CBP	8
	Q1	Conceptual design for Year 2 scope completed	PURMI	9
	00	Award contract for detailed design/engineering services	SFM	10
	Q2	Deploy battery storage devices on existing equipment*	PennDOT	11
	Q3	Collaborate with customers/stakeholders on detailed design on substation	Lower S.	12
Year 2		Go/No-Go: Submit annual Pre-Continuation Briefing for budget period 2	All	13
Yea		Complete construction on Amtrak Line 1 and Conowingo Circuit 1*	Conow., Amtrak	14
2		Year 2 scope energized*	PURMI	15
		Complete civil and electrical design	Campus Microgrid	16
	Q4	Complete detailed substation design*	Lower S.	17
		Complete PIDC Subrecipient business case	Lower S.	18
		First Clean & Resilient Community Schools grants awarded	Clean Schools/CBP	19
	Q1	Conceptual design for Year 3 scope completed	PURMI	20
	Q2	Complete receipt of all approvals and permits*	SFM, Lower S.	21
	Q3 Q4	Go/No-Go: Submit annual Pre-Continuation Briefing for budget period 3	All	22
m		Review with customers/stakeholders and commence construction	Lower S.	23
Year 3		Battery equipment ready for electrical, communications, and control work	Campus Microgrid	24
		Complete construction on Amtrak Line 2 and Conowingo Circuit 2*	Conow., Amtrak	25
		Year 3 scope energized*	PURMI	26
		Host Regional Environmental Justice Forum	СВР	27
	Q1	Conceptual design for Year 4 scope completed	PURMI	28
	Q2	Review with customers/stakeholders on progress	Lower S.	29
4	02	Go/No-Go: Submit annual Pre-Continuation Briefing for budget period 4	All	30
Year 4	Q3	Complete testing of battery energy storage system and place in service*	Campus Microgrid	31
×		Complete and energize Circuit 3*	Conowingo	32
	Q4	Year 4 scope energized*	PURMI	33
		Complete full funding of Clean & Resilient Community Schools budget*	Clean Schools/CBP	34
	Q1	Conceptual design for Year 5 scope completed	PURMI	35
5	Q2	Complete installation of substation devices*	SFM	36
Year	Q3	Issue final progress report on customer/stakeholder engagement	Lower S.	37
Y	Q4	Complete Lower South, SFM, CBP, and PURMI Year 5 scope*	Lower S., PURMI, SFM, CBP	38
*	India	cates a SMART Milestone		
		mn maps Milestones Summary to the Project Schedule		

End of Project Goal

PECO's End of Project Goal is to enhance service resilience and reliability for its customers, with a concentrated focus on DACs across PECO's service territory – (b) (4) ocalized distribution grid benefits and climate resilience improvements will go towards Justice40 Disadvantaged Community (DAC) customers. All of PECO's 1.7 million customers – (b) (4) which are in DACs – will benefit from upgrades to PECO's Berwyn Campus Storm Response Center and (b) (4) extending the usable life by more than 50 years. CREATE will support more than (b) (4) opportunities across the region and align with PECO's (b) (4) certified diverse supplier spend target. DOE grant funding will comprehensively address future grid vulnerabilities, reduce carbon emissions through the retirement of legacy diesel generators and the reduction of backup diesel generator usage in Center City, and add (b) (4) of increased distribution capacity for future EV charging capabilities.

3	Y	'ear	1 (0	(TR)		Year	2 (QT	R)	Y	'ear 3	(QTF	R)	Y	'ear 4	(QTF	R)	Y	'ear 5	i (QTI	R)
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Project Mgmt	1		3				13				22				30					
Component	s																			
Lower S.*		2					12	17/ 18		21	23			29					37	38
PURMI				6	9			15	20			26	28			33	35			38
SFM		2				10				21								36		38
Campus MG			5					16			24				31					
Conow.			4					14				25				32				
Amtrak			4					14				25								
PennDOT*						11														
Community	Ber	nefit	s Pla	an (Se	e CBI	for i	nore	detail	s)	,		2							-	W
Clean Schools /CBP*				7/8				19				27				34				38
Tasl Tasl Tasl * Invo	rend Task 1: Project Management Task 2: Project Planning, Preliminary Design, and Permitting Task 3: Details Design Task 4: Final Construction * Involves Subrecipients																			

Project Schedule

Buy American Requirements

Based on M-22-11, the Buy America requirements of the BIL do not apply to DOE projects in which the prime recipient is a for-profit entity. Because PECO is a for-profit entity, the Buy America requirements do not apply. However, PECO is committed to supporting the procurement of domestic equipment and supplies in support of the CREATE program.

Project Management

Management Approach

PECO will leverage its proven model for effective project management, timely execution, and budget performance for all infrastructure investment projects. PECO's Chief Operating Officer is responsible for the governance, oversight, support, and performance of all projects, ensuring performance and financial management. PECO's Vice Presidents (VPs) of Technical Services, Transmission and Substation Operations, Project Management, and Regulatory Policy and Strategy (collectively, the Executive Sponsors), will be responsible for executing all components of CREATE, bringing decades of leadership experience in a broad range of senior operational roles throughout the organization. These Executive Sponsors will identify a full-time lead project manager who will be responsible for coordinating all workstreams incorporated in the Plan. PECO's project managers are required to meet strict qualifications imposed by its parent company Exelon. The lead project manager, which is subject to those qualifications, will convene weekly meetings of all project principles to track progress toward goals and deliverables, monitor budgets, identify risks, and ensure program integration.

PECO will also establish a dedicated compliance office under the leadership of its VP of Project Management, which will be responsible for DOE grant funding budget performance, updating the DOE on scheduled conference calls and meetings, and submitting annual pre-continuation briefing documents.

For the CREATE Plan's subrecipient projects (PennDOT, PIDC and Clean and Resilient Community Schools), PECO's community impact leads will provide updates on milestone progress and budget performance from subrecipients and work with PECO's DOE funding compliance office to include in overall CREATE plan update to the DOE.

PECO will complete all oversight in accordance with the PMP, consistent with the applicable Federal Assistance Reporting Checklist and Instructions. PECO and its subrecipients will complete all financial management practices and associated tracking in accordance with the PMP.

Management Structure

To ensure achievement of overall objectives, PECO, along with its subrecipients, will leverage the management structure in the following diagram during the execution of the Plan.

Over the 5-year project window, the PECO CREATE Compliance PMO will facilitate annual, program-wide Go/No-Go reviews with DOE. (*See Milestone Summary and Go/No-Go Decision Points*)

Technical and Management Aspects of Management Plan

PECO will adhere to all elements of the PMP and ensure that all project management practices, systems, and communication procedures align with DOE requirements. The lead project manager will coordinate weekly internal core team meetings and monthly internal team meetings with the Plan's participants, as needed. The CREATE Team will be encouraged to raise any concerns or issues with their Plan components during these meetings. In the event of a project change, consistent with PECO standards and expectations, the lead project manager will identify project variances from targeted performance early in the evaluation process to allow time for



course correction. All subrecipients, subcontractors and other participants actively performing work will be required to prepare weekly status/financial reviews for all scope elements, with the goal of identifying deviations from the planned schedule and budget as early as possible so they can be corrected.

Reducing Perceived Risk and Enabling Private Sector Investment

PECO recognizes that significant infrastructure and community projects contain inherent risks such as supply chain, labor, permitting, land and ROW, among others. PECO has established a Project Risk Register containing a comprehensive risk inventory that is updated regularly and reviewed to evaluate risks and mitigation strategies.

The following are examples of mitigation plans for some common risks:

- Supply Chain Risk: Leads for each CREATE component will identify long lead time equipment once a detailed design is complete and will work closely with the supply procurement team to place a timely order of key equipment.
- *Permitting, Land and ROW*: PECO has engaged landowners such as the PIDC who has indicated its support for CREATE. PECO has obtained letters of support from the City of

Philadelphia and all county governments where permitting, land and ROW acquisition will be required. (*See Community Partnership Documentation*)

• Labor: PECO's Project Management Office (PMO) uses a competitive sourcing process to attract and retain diverse contractors and suppliers, while leveraging long-term strategic contracts to obtain optimal pricing for resources. The PMO also meets with PECO's contractor community monthly to maintain strategic partnerships and ensure alignment on safety, diversity, and customer priorities supporting PECO's immediate and long-range capital work plans. The PMO routinely shares long-range work plans with internal stakeholders to ensure roles are adequately staffed for work plan expansion.

Quality Assurance/Quality Control (QA/QC)

PECO will deploy its standard QA/QC process, including but not limited to: (1) adherence to all scope and process elements; (2) review of all deliverables by relevant personnel (e.g., technical experts, executive sponsors, compliance office) prior to deliverable completion; (3) review of all data by the compliance office, prior to finalization, and for data sets collected over time, at least a monthly review by the compliance office; and (4) identification and review of QA/QC issues or concerns in the monthly meeting lead by the compliance office.

Technical Qualifications and Resources

Qualifications and Experience

PECO's project managers have working knowledge of PMO methodology and possess a diverse knowledge base in areas such as organization, planning, communication, problem-solving, leadership, budgeting, conflict management, negotiating, and team building. Consistent with Exelon policy, the lead project manager is required to hold a Project Management Institute (PMI®) certification, which serves as a globally recognized endorsement of project management knowledge and experience. Senior project managers, who will be utilized for CREATE, are required to have the Certified Associate Project Management (CAPM®) credential, which validates knowledge of the principles and terminology of PMI® standards and best practices in project management.

Additionally, PECO's President and Chief Executive Officer, Mike Innocenzo, served as the SGSM VP throughout the majority of PECO's 2009 Smart Future Greater Philadelphia, bringing direct experience with the execution and compliance responsibilities associated with federally supported infrastructure projects.

CREATE's Executive Sponsors have the following experience:

- (b) (6) (c) VP of Technical Services, oversees the overall management of PECO's Central Engineering, Vegetation Management, and Investment Strategy departments.
- (b) (6), VP of Transmission and Substation Operations, oversees the safe and reliable operation of PECO's electric transmission system, including transmission and

- substation construction, operation and maintenance, and NERC Reliability Standards Compliance.
- (b) (6) , VP of Projects and Contract Controls, oversees project management, construction, and capital spend.
- (b) (6) , VP of Regulatory Policy and Strategy, oversees the Company's regulatory strategy, policy and regulatory affairs, acting as PECO's interface with the Pennsylvania Public Utility Commission.

Experience with Teaming Partners

CREATE has the support of all critical teaming partners identified on the cover page of this Technical Volume. As the electric utility serving the City of Philadelphia and its surrounding counties for more than a century, PECO has extensive experience dealing with all these organizations, as well as with the broader communities served by the Company.

For example, PECO has extensive experience with the City of Philadelphia, including key departments such as Streets, Licenses and Inspections, Labor, Planning and Development, Emergency Management, and Sustainability. PECO places a priority on collaboration with the City and all municipalities in its service territory. PECO is working with the City to align strategies for the Lower South Philadelphia electric infrastructure enhancements with broader infrastructure planning being led by the City and key governmental and private sector organizations operating in this area. Similarly, the PURMI component requires extensive coordination with City agencies and operators of other forms of infrastructure located within the Center City underground network, including the City-owned natural gas and water companies.

PIDC is a public-private industrial development corporation that owns and operates the Navy Yard redevelopment and other City-owned properties. In addition to other functions, PIDC operates the electric infrastructure within the Navy Yard's footprint, distributing power delivered through PECO substations. PECO has partnered with the PIDC and Navy Yard management team for decades, helping meet the energy capacity and reliability needs of this area, even before its rapid growth and geographic challenges have made collaboration essential. PECO has assisted PIDC in the development of its Energy Master Plan to transform the property into a state-of-the-art microgrid, incorporating DERs and enhanced resilience.

PECO will work directly with Amtrak to coordinate infrastructure upgrades, as part of the Amtrak component of CREATE, with the railway's existing plan to upgrade service infrastructure along the East Coast. PECO also has decades of experience coordinating with PennDOT on project execution and collaborated closely with the Department on developing the battery storage pilot.

In addition, PECO works with several Exelon-approved vendors and technology partners on a regular basis and anticipates utilizing such vendors as a part of the CREATE implementation. While PECO is still in the detailed design phase of the Plan, it has engaged in conversations with critical path vendors such as (b) (4) for power transformer equipment.

Equipment and Facilities

PECO leveraged its 3 critical success factors - People, Technology, and Process - described in the Project Overview to perform a comprehensive risk analysis of access to equipment and facilities. As a result, the Company is confident in the execution of CREATE within the GRIP Program execution period. Through established vendor relationships, including industry-leading diverse vendor programs, PECO's Supply and Investment Strategy organizations have already begun planning for the acquisition of equipment and facilities needed to implement the project components incorporated into CREATE.

Most CREATE components are located on PECO-owned property. As such, PECO will be able to leverage its existing equipment and facilities for those portions of the Plan. For components on property owned by third parties, such as the Lower South and PURMI, PECO will leverage its External Affairs, Transmission, and Substation, Project Management, Real Estate, and other departments to engage the appropriate community stakeholders to secure landowner consent. PECO and the PIDC have initiated discussions on the location and characteristics of the Lower South component, building on long-standing discussions between the organizations of future capacity needs for the property. Regarding access to the Center City underground to complete the PURMI, PECO will coordinate with relevant City departments, other entities that may own underground infrastructure in proximity, and customers to develop minimally disruptive work strategies and schedules.

Key Personnel Qualifications and Time Commitment

PECO has leveraged lessons learned from previous project experience to carefully estimate and plan the resources required to deliver CREATE on time and on budget. Planned resources include support across project management, technical design and engineering, construction and contractors, workforce development, and community engagement. PECO's PMO will provide the leadership and time needed to drive tracking and accountability across commitments outlined in this application including the program schedule, budget, SMART milestones and goals, and community and grid benefits.

A Corporate Community Impacts Team, comprised of Governmental and Community Impact leads, will include dedicated resources to evolve and implement an impactful CBP over the duration of the Plan's performance period and beyond. This team will drive broad and frequent feedback from local stakeholders that will be fastidiously communicated and incorporated to improve local project impacts.

Key individuals from PECO's centralized planning and management team are identified below. More details about personnel can be found in the Budget Justification Workbook in this application, which outlines direct project labor estimates of approximately 45,500 hours over the course of the Plan execution period. In addition, specific roles and labor hours are not listed for any planned contracted design, construction, and staff augmentation for GRIP compliance activities, which total over \$196 million. *(see section 6.0 of CBP for additional resource time commitments)*

Name	CREATE Plan Role	Title					
(b) (6)	Governmental Lead	Senior Manager, State Government Affairs					
(b) (6)	Financial Control	Director, Finance					
	Lower South Stakeholder Engagement	Senior Manager, Economic Development					
	Project Manager	Principal Project Manager					
	Technical Expert	Principle Engineer					
	Environmental Compliance	Senior Manager, Environment					
	Supply	Director, Diverse Business Empowerment					
	Technical Expert	Manager, Transmission Substation Engineering					
	Community Impact Lead	Director, Corporate Community Impact					
	PennDOT Lead	Acting Senior Manager, Traffic Operations Division					
	Clean and Resilient Community Schools Lead	Vice President of Development					
, ,	PIDC Lead	Director Smart Grid & Sustainability					

DOE Services

If grant funding is awarded, PECO and all its identified partners have the additional planning, policy, financing, data management, and technology resources required to complete the scope of work on time and on budget. PECO will keep in close communication with the DOE to provide progress reporting and follow the DOE's feedback. However, PECO does not anticipate needing technical services from the DOE, NNSA, or FFRDCs.

COMMUNITY BENEFITS PLAN (CBP)

Through the CREATE Plan (CREATE or the Plan), PECO aims to catalyze a generational transformation of southeastern Pennsylvania's energy landscape through a combination of targeted infrastructure investments and comprehensive community-based collaborations. Each component of CREATE seeks to leverage private sector and governmental initiatives, enhance established collaborative partnerships with organized labor and non-governmental and community organizations, and develop innovative platforms for extending the benefits of climate resiliency and clean energy to all communities in the region consistent with the Justice40 initiative.

In addition to providing more than (b) (4)]the Plan's operational benefits to disadvantaged communities (DACs) within PECO's utility service territory, CREATE is designed to support a broad range of education, workforce, supplier diversity, public engagement, and partnership initiatives. These efforts will provide a scalable model for local climate resilience and long-term participation in the sustainable energy economy.

CREATE establishes clear objectives, targets, and timelines for implementation across the integrated elements of the CBP. These efforts build on existing industry-leading programs and commitments and incorporate multiple components into a "value stack" approach to community energy transition.

Through CREATE's CBP, PECO will:

- Deliver operational improvements including reliability, climate resiliency, and clean energy hosting capacity to DACs throughout the region.
- Provide resources to enable Title 1 public schools in DACs to reduce their exposure to climate-driven disruptions and energy burdens through deployment of resilient infrastructure and clean energy technology access to better serve their communities.
- Leverage education and workforce partnerships to provide greater opportunities for access to clean energy jobs of the future by enhancing connections between these programs, local energy-related employers, and workforce development boards.
- Build on PECO's industry-leading vendor diversity and DAC-based small business job creation programs by requiring that bidders for projects under the CREATE Plan describe their plans for identifying opportunities to utilize local and diverse small businesses.
- Advance energy democracy in the region and the objectives described above through the establishment of an Environmental Justice Advisory Committee (EJAC) of community-based leaders to provide a forum for continuous feedback and dialogue on project execution and PECO's overall engagement with its DACs.

Community and Labor Engagement

Community Engagement

PECO prioritizes engaging with all the diverse communities the Company serves in the City of Philadelphia and more than 200 suburban municipalities. The Company maintains regular communications through external affairs managers who serve as lead points of contact for elected and government officials in their jurisdictions. Led by its Corporate Community Impact organization, (b) (4)

Location In 2021, PECO expanded its community engagement activities to encompass a broader range of social equity and engagement activities that impact the communities the Company serves, including addressing the gun violence epidemic. PECO has engaged with a broad and diverse group of governmental, labor, community, and local economic development organizations to develop the CREATE Plan. A summary of letters of commitment, partnership and support are provided at the end of the CBP.

In addition to the Company's commitment to reduce its operations-driven greenhouse gas emissions by [916] by 2030 and achieve net zero emissions by 2050, PECO's "Path to Clean" climate and clean energy strategy aims to support customers in reducing their environmental footprints by facilitating enhanced access to clean, affordable energy solutions. The Company hosts regularly scheduled collaboratives on solar energy and transportation electrification and has received multiple awards from the United States Environmental Protection Agency for its implementation of energy efficiency programs, a key component of the Company's efforts to help customers save energy and money. The Company provides technical support to customers implementing clean energy projects through its internal energy efficiency experts and vendor partners, its Green Power Connect distributed energy resources team, and Large Customer Services transportation electrification subject matter experts.

As the Plan incorporates investment components throughout the Company's service territory, PECO will host a standing forum through which the newly established EJAC can discuss energy and environmental issues that impact DACs, which will inform PECO policies and community engagement practices. This EJAC will include representatives from environmental justice (EJ) communities identified through recommendations from a Steering Committee of elected officials and leading local non-governmental community representatives.

The EJAC will be chaired by PECO's Vice President of Governmental and External Affairs with the EJ Steering Committee providing strategic guidance. Representation on the Advisory Committee will be proportional to the percentage of DACs in each jurisdiction and cover the full PECO service territory.

(See Resource Plan for time commitments across the 4 CBP sections)

Topics to be discussed through the EJAC will include but not be limited to:

• Updates on key PECO diversity initiatives and investments

- Updates on energy and environmental policies impacting EJ communities and Path to Clean implementation
- Updates on PECO projects in EJ communities
- Presentations from national and local experts on EJ issues

PECO leadership will receive regular briefings on the deliberations of the EJAC through PECO's Strategy Council which meets monthly, and PECO plans to host two regional Environmental Justice Forums during the Plan's execution period.

To assist customers from DACs with reducing their energy burdens, PECO provides Low-to-Middle-Income (LMI) customers with a comprehensive, complementary suite of resources to reduce their energy usage and lower their monthly bills, including the Customer Assistance Program, which is the largest in Pennsylvania, the Low-Income Usage Reduction Program which served 10,000 LMI customers last season, the Matching Energy Assistance Fund, Low-Income Home Energy Assistance Program (LIHEAP) promotion and enrollment assistance, the Customer Awareness Referral and Evaluation Services, Community Engagement Outreach, budget billing programs and more. The Company also established a coordinated program to facilitate implementation of COVID relief programs, clearing more than (b) (4)

The overarching goal of all these programs is providing affordable energy service for LMI customers and increasing energy security for vulnerable communities.

Through the EJAC and Clean and Resilient Community Schools initiatives, PECO will engage with leaders at the neighborhood level to increase LMI customer program awareness and identify opportunities to explore innovative approaches to reducing customers' energy burdens.

Labor Engagement

PECO intends to utilize both Company and contractor labor for the implementation of CREATE components. PECO's (b) (4) on-management field craft personnel and call center employees are represented by the International Brotherhood of Electrical Workers Local 614 (IBEW 614), In April 2021, PECO and IBEW 614 ratified a labor agreement that continues to provide PECO's represented workforce with a highly competitive wage and benefits package to support family-sustaining careers.

CREATE enjoys the support of the Philadelphia Building Trades Council, which represents over 50 unions in the Philadelphia region. The Building Trades Council has worked collaboratively with PECO and its contractors for decades to ensure that electric infrastructure projects in the region are completed in a manner that provides good pay, benefits, opportunities for training and skill development, and is respectful of the right to organize.

The Company is also pleased that its key contractor partners such as (b) (4) nd minority and women-owned vendor partners (b) (4)

that are expected to

compete for project opportunities through the CREATE Plan employ union labor (see attached letters of support) and have expressed their support for the project.

PECO prioritizes safety and diversity for its workforce and strives to ensure that every employee brings their whole self to work every morning and returns home safely every night, including offering paid leave, equal pay, and mental health and tuition assistance benefits.

Consistent with these values, PECO affirms that no violations were found within the past two years under the National Labor Relations Act, Fair Labor Standards Act, Occupational Safety and Health Act, Service Contract Act, Davis-Bacon Act, or Title VII of the Civil Rights.

Investing in the American Workforce

Economic models forecast that the roughly (b) (4) [capital investment associated with CREATE will have a total employment impact of approximately (b) (4) [capital Recognizing the criticality of identifying and training the next generation of the energy workforce, PECO works with a range of community partners establishing or supporting programs that focus on introducing individuals from diverse communities to career-establishing positions in the industry.

CREATE will leverage the extensive energy education and workforce training infrastructure that PECO has established with community-based partners to further facilitate pipeline strategies that connect both opportunity youth (in collaboration with the Urban Affairs Coalition (UAC)) and skill-enhanced young adults (in coordination with "Workforce Partners" -- the Energy Coordinating Agency (ECA), Opportunities Industrialization Center (OIC) and Philadelphia Energy Authority (PEA)) with clean energy careers. In addition to sponsoring career fairs with these organizations, PECO will convene annual meetings with its agency partners, local workforce development boards, and energy-related employers from throughout the region.

The following existing programs focus on providing training and development opportunities to individuals from DACs and those facing other barriers to employment and will be leveraged to support the CREATE Plan and its CBP:

Philadelphia Energy Authority/Frankford High School Bright Solar Futures is the first Career and Technical Education 3-year high school program in the country that trains students for careers in the solar industry.

PECO's Infrastructure Academy is a 3-evening seminar that prepares job seekers with the skills that they need to secure a family-sustaining career in the energy industry.

¹ IMPLAN Economic Impact Analysis for Planning. Pennsylvania Impact Estimate for \$1M of Utility Capital Investments - 3 Year Average. IMPLAN. 20 Feb. 2023. https://implan.com/.

Helper Pre-apprentice Program is designed to remove barriers to workforce entry by providing resources and hands-on training to be successful within the energy sector – often leading to family-sustaining jobs. The program had 20 graduates in 2022.

Philadelphia Opportunities Industrialization Council's Smart Energy Technical Training Program offers training for those interested in pursuing energy-oriented careers, including solar energy.

Energy Coordinating Agency Gas Technician Training Program will provide training to help prepare jobseekers for gas careers in the utility industry.

As PECO works with contractors, vendors, and project partners to implement the CREATE Plan, the Company will give priority consideration to entities that consider graduates of these programs and the workforce development programs of other community-based organizations.

Advancing Diversity, Equity, Inclusion and Accessibility

PECO recognizes the role that clean energy resources and energy resilience can play in supporting the advancement of diversity, equity, inclusion, and accessibility in DACs. CREATE will serve as a catalyst for community-based business development and wealth creation and apply its industry-leading supplier diversity strategy to all procurements incorporated into the Plan. Under the CREATE Plan, PECO will continue its commitment to diverse suppliers, who accounted for (b) (4) but the plan before the supplier spend in 2022 and strive to increase its use of diverse suppliers throughout the implementation.

PECO will require potential CREATE vendors to include plans in their project proposals for integrating diverse and small businesses into their supply strategies. PECO anticipates that such strategies may incorporate local procurement, community engagement, hiring processes, and mentoring programs. Vendors will be required to submit to PECO annual reports describing the diversity and community-based initiatives to PECO. The Company will align these efforts with the Philadelphia Chamber of Commerce's Diverse Procurement Collaborative.

PECO will provide the DOE with diverse supplier spending reports as part of its progress reports, along with periodic updates on programmatic initiatives performed by the Company and vendors selected to work on CREATE. Additionally, PECO has established anti-harassment and diverse hiring policies, and it provides mandatory training for employees designed to prevent harassment and discrimination, including unconscious bias.

Clean and Resilient Community Schools

The cornerstone of CREATE's community-based energy resiliency and clean energy access strategy is the establishment of the Clean and Resilient Community Schools partnership. This partnership will drive the equitable, inclusive, and accessible deployment of clean and resilient energy technologies in DACs through public schools in these communities. PECO will partner with The Fund for The School District of Philadelphia ("The Fund") which will serve as a CREATE Plan sub-recipient, to launch this dedicated initiative and establish a funding pool enabling schools in DACs to make energy burden reducing investments, enhance their energy resilience, and participate in clean energy initiatives. The School District of Philadelphia has identified and shared with PECO and the Fund a range of potential investments consistent with this mission.

PECO will provide an initial commitment of (b) (4)

additional non-federal contributions dedicated solely to energy resiliency and clean energy initiatives.

Schools in the City of Philadelphia and Title I School Districts in the suburban counties served by PECO will be eligible to submit applications seeking capital to apply toward energy burdenreducing investments in climate resiliency, energy efficiency, clean energy infrastructure and school-based, hands-on education and workforce training. PECO, The Fund, and the School District of Philadelphia have agreed to provide neighborhood schools with the maximum level of flexibility possible to identify the investments and programs that best meet the needs of the students and their local communities based on resiliency, energy affordability, clean energy access, and community benefits.

The Clean and Resilient Community Schools partnership will assist EJ communities in the region with managing the increasingly disruptive impact of extreme weather events. For example, to support community-based climate resilience, the partnership will seek to identify at least 1 qualifying school that lacks air conditioning and provide funding to assist in the installation of a high-efficiency HVAC system to avoid heat-related closures while also potentially providing vulnerable individuals in surrounding neighborhoods climate-controlled shelter during dangerous heat events. This is a particular challenge for low-income residents in urban heat islands who are uniquely vulnerable to the impacts of climate change. A high percentage of residents in these communities, including the elderly, children, and the disabled, do not have access to air conditioning while living in neighborhoods where peak summer temperatures can exceed official local reported highs as much as 22 degrees Fahrenheit.²

The long-term goal of the Clean and Resilient Community Schools Partnership is to establish a sustainable fund that will outlast the initial 5-year period covered under CREATE. PECO is working with its lead project partners to create a durable structure to enable residents of DACs to mitigate the increasing impacts of climate change and make clean energy solutions accessible in all communities.

in

² Heat Vulnerability Index Highlights City Hot Spots. Department of Public Health. City of Philadelphia, 16 July 2019, www.phila.gov/2019-07-16-heat-vulnerability-index-highlights-city-hot-spots.

Contributing to Justice40

PECO strongly supports the Justice40 initiative and seeks to implement CREATE in a manner that meets and exceeds these goals. Every aspect of the Plan has been developed with the goal of maximizing benefits to PECO's customers and communities and mitigating risks related to public and stakeholder support for the project.

The components incorporated into CREATE will deliver more than (b) (4) both the Plan's reliability, resiliency, and clean energy hosting capacity benefits to DACs in the City of Philadelphia and Delaware and Montgomery counties.

The work necessary to deliver benefits to these communities is anticipated to have minimal negative impact on these neighborhoods. For example, construction of the new Lower South Substation will occur on property owned by the Philadelphia Industrial Development Corporation in an area that is exclusively commercial and industrial, but it will provide resilience and clean energy hosting capacity to existing circuits in nearby DACs with many residents living below the federal poverty level. Additionally, clean energy technology deployments by businesses within the Lower South Philadelphia footprint will enable the replacement of commercial and industrial vehicles and equipment with zero and low-emissions electrification technologies, reducing ground-level emissions and contributing to healthier neighborhoods.

Similarly, the Philadelphia Underground Risk Mitigation (PURMI) component in Center City Philadelphia will reduce and mitigate highly disruptive events that occur in the underground infrastructure networks in the City's downtown area. While Center City is a vibrant urban area, more than 15% percent of the residents in its neighborhoods are LMI individuals, including residents of Chinatown who often not only live in the area but also rely on its businesses and employers. By proactively replacing aging and climate-vulnerable equipment in these underground networks, PECO will be able to schedule work to minimize community disruption rather than reactively respond to unplanned impacts on multiple infrastructure systems. State and local permits requirements to execute these projects will be obtained, and PECO anticipates long-term benefits in terms of air quality impacts from reduced outages and associated diesel generator emissions and water run-off.

PECO has engaged with the communities directly impacted by CREATE and obtained letters of support from the Packer Park Civic Association (Lower South) and Manayunk Business District (Pencoyd), as well as letters from the Philadelphia Association of Community Development Corporations, the Diverse Chambers of Commerce, the Chinatown Development Corporation (PURMI), and Congreso, the City's leading service organization for the Hispanic community, expressing support for the comprehensive approach to the CREATE Plan and its CBP.

Direct benefits of reliability, resilience, clean energy hosting capability, and economic development capacity investments: Based on a detailed analysis of distribution circuit identifiers, (b) (4) dustomers benefitting from localized, distribution level upgrades live in
DAC's, according to the DOE's Energy Justice Dashboard³. CREATE components delivering direct benefits include the Lower South Substation (Lower South Philadelphia and adjacent neighborhoods), PURMI (DAC neighborhoods in Center City), and the Substation Flood Mitigation components at Grays Ferry and Pencoyd.

CREATE also includes operational components that provide general, systemwide benefits to all PECO's 1.7 million customers. Of these customers, approximately (b) (4) live in designated DACs.

Minority and Women Business Enterprises (MWBE): PECO is proud of its industry leading MWBE vendor programs and believes these initiatives provide some of the most important tools for supporting wealth creation and community development in our region. As part of the CREATE application, PECO pledges to maintain its commitment to work to ensure that (b) (4) the Company's vendor contracts will be executed with MWBE qualifying businesses and all project vendors will also be required to submit plans to PECO describing their support for the execution of CREATE's CBP goals.

Education and Workforce: In collaboration with lead opportunity youth partner, UAC, and workforce partners, the ECA, Philadelphia OIC, and the PEA, PECO will leverage its workforce development program network to train individuals from DACs for positions supporting the execution of CREATE, as well as future clean energy opportunities with employers throughout the region. The purpose of these programs is to ensure that individuals from all communities in the Philadelphia region have access to generationally transformational career opportunities in the energy industry.

Clean and Resilient Community Schools: Schools in DACs operate on the front lines of Environmental Justice. These schools often lack access to capital to invest in energy efficiency and clean energy resources, leaving them to operate with outmoded systems that are prone to costly and expensive breakdowns that are disruptive to the learning environment. Many older schools in Philadelphia lack air conditioning and operate older, unreliable heating systems, leaving them vulnerable to extreme weather events that are increasingly reducing the number of days that students are able to receive instruction. In partnership with The Fund, the School District of Philadelphia and Title 1 schools throughout the Company's service territory, CREATE will bring energy resilience to the community level through investments in energy efficiency and sustainable energy technologies that can support educational operations and curriculum, and serve as a community resource for workforce development, climate resilience, and renewable energy access.

³ Energy Justice Mapping Tool – Disadvantaged Communities Reporter. Department of Energy. 2022. Energy Justice Dashboard (anl.gov). Accessed 20 Feb. 2022.

Summary of Operational Benefits

(See Project Schedule in the Technical Volume for Benefits Timeline)

Geographically Specific Project Component	DAC Customers	Total	% DAC
		Customers	Customers
Lower South Philadelphia			
PURMI	(b) (4)		
Substation Floor Mitigation (Grays Ferry)			
Substation Floor Mitigation (Pencoyd)			
Estimated Total Program Benefit			

Summary of Non-Operational Benefits

Program	Estimated Percentage of DAC Beneficiaries
Education & Workforce Development	
Non-Managerial Represented Labor	(b) (4)
MWBE Vendors	
Clean and Resilient Schools Partnership	

CBP Work Plan Timeline and SMART Milestones

Workforce & Education		FY	- 1		1	FY - 2			FY	- 3		F	Y - 4	6	-	FY	- 5	
Opportunity Youth Plan		#	8	а. — а	2.4	57.53 5	68	8 - 8		8	8	8			a	-	5 5	3
Workforce Training Plan		#																
Inclusion of Consideration of Workforce Program Candidates for CREATE Contract RFPs	#		12-			A 74 A	174											
Annual Workforce Steering Committee Meeting		2	*	2 2	ž	*	-	12 - 2		*			*	-12	0 ž		*	
Annual Job Fair	8	2	8	*	1	1942 - 1	*	5 - 8		¥	*	×.	2	*	11 - S		¥ — 8	*
Final Program Summary				<			39			5	s						6 - 6	#

EJAC		FY	- 1			FY	- 2			FY	- 3			FY	- 4			FY	- 5	
EJAC Nominations Review Meeting	*					3	i i i			2		2		8	8	12	8	84 	14 H	32 - S
EJAC Kick-Off Meeting		#																		
Quarterly Meetings			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Regional EJ Forum									#								#			
Annual EJAC Report			*				*				*				*		Ĵ		#	

Vendor Diversity		FY	- 1		FY	- 2		FY	- 3			FY	- 4		FY	- 5	
Vendor Diversity Plan	#	Ĩ	2.		2					3		а	а 				
Annual MWBE Vendor Spend				*	Î		*			*				*			
Report	cs ie				50 A						2	a	a.		0	5 3	
Final Program Summary	a 2																#

Clean and Resilient Community Schools		FY	- 1		FY - 3	2		FY -	3		FY	- 4			FY - 5	;	
Finalize Sub-Recipient Contract	#					Ĵ	4 - F							ĵ.	Ĵ	- 55, 53	
PECO Annual Seed Funding Contribution	*		19	*			*			*				*	30		
First School Project Funding Submissions		*			1.000											5.5.5	
Annual Funder Collaborative			*			k			*			*			*	*	
Annual Program Contribution/ Grant Awards Report	5.8 8.	535	*		1	‡	<i>.</i>	ð. 3	*		80	#	6		1	k	
Final Program Summary	20 - 60 20 - 10					Ĩ	8										#

- Smart Milestone

Community Benefits Plan (CBP) Milestones

Program Year	SMART Milestones
FY - 1	#Completion of CREATE Opportunity Youth Plan
	#Inclusion of Workforce Program Candidate Consideration in Vendor RFPs
	#Completion of CREATE Workforce Development Plan
	#Completion of CREATE MWBE Vendor Plan
	#EJAC Steering Committee Kick-Off Meeting
	#Finalization of Clean and Resilient Community Schools Sub-Recipient Contract
FY - 2	#First Full-Year Clean and Resilient Community Schools Grants Awarded
FY - 3	#Host First Regional Environmental Justice Forum
FY - 4	#Complete Full Funding of Clean and Resilient Community Schools Budget
FY - 5	#Host Second Regional Environmental Justice Forum
	#Submit Final Program Reports

(See Technical Volume for a comprehensive list of SMART milstones and verification methods)

Resource Plan

CBP Resources Summary	Resource Commitment (Annual FTE Time Allocation)
Labo	or & Community
Environmental Justice Advisory Council	(b) (4)
Work	force & Education
Opportunity Youth Coordination	(b) (4)
Workforce Partnerships Coordination	
Advancing Diversity,	Equity, Inclusion & Accessibility
Diverse Vendor Initiatives	(b) (4)
Clean & Resilient Community Schools	PECO internal collaboration resource)
Contril	buting to Justice40
Community Benefits Plan Management and	(b) (4) ncorporated within CREATE Plan Compliance
Compliance	structure ensuring oversight and coordination of CBP
	value stack)

Summary of Community Support

PECO is pleased to provide Letters of Commitment, Partnership and Support from a broad range of government officials and non-governmental organizations, including: Pennsylvania Governor Josh Shapiro, Speaker of the Pennsylvania House of Representatives Joanna McClinton, United State Senators Robert Casey and John Fetterman, Philadelphia-area members of the U.S. House of Representatives Brendan Boyle, Madeleine Dean, Dwight Evans, Brian Fitzpatrick, Chrissy Houlahan, and Mary Gay Scanlon, Philadelphia Mayor Jim Kenney, the Chester County Commission, the Delaware County Commission, the Montgomery County Commission, the Pennsylvania Department of Transportation, Philadelphia Industrial Development Corporation (PIDC), Philadelphia International Airport (PHL), The Fund for the School District of Philadelphia, Philadelphia Building Trades Council -- AFL-CIO, PECO Environmental Justice Steering Committee, Diverse Supplier Business Council, Urban Affairs Coalition (UAC), Energy Coordinating Agency (ECA), Philadelphia OIC, Philadelphia Energy Authority, the School District of Philadelphia, Greater Philadelphia Chamber of Commerce, Philadelphia Sustainable Business Council, Kleinman Center for Energy Policy at the University of Pennsylvania, Delaware Valley Regional Planning Commission, Diverse Chambers Coalition of Philadelphia, Manayunk Development Corporation, Ceiba, Hilco Redevelopment Partners, Sysco Corporation,

1



March 7, 2023

The Honorable Jennifer Granholm Secretary, U.S. Department of Energy 1000 Independence Avenue, S.W. Washington, DC 20585

Dear Secretary Granholm:

On behalf of the Commonwealth of Pennsylvania, I am pleased to express support for PECO's "Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia" ("CREATE Plan") application for the U.S. DOE's Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the Infrastructure Investment and Jobs Act (IIJA) of 2021.

Through the CREATE Plan, PECO proposes to execute a package of strategic investments in its electric infrastructure to make the grid more resilient, reliable, and better able to support the efforts of its customers to apply advanced and clean energy technologies. Over the last 15 years, as a result of severe weather events, Pennsylvania has experienced some of the most severe power interruptions in the Commonwealth's history. Accelerating critical investments in system reliability while relieving system constraints and deploying new technologies to enhance resiliency as proposed by the CREATE Plan is consistent with initiatives undertaken by the Commonwealth to make critical infrastructure systems more resilient and capable of supporting accelerated deployment of clean distributed energy technologies.

In addition to the reliability, resiliency, and clean energy benefits of the CREATE Plan, the investments proposed in the project will catalyze economic development in the Lower South Philadelphia economic development hub. This area is a major regional center for job growth, innovation, and international trade, and the investments proposed in the plan will enable future private sector growth and opportunity. In addition, the CREATE Plan's investments in grid resiliency, emergency response, battery storage deployment, and community-based energy resiliency will provide a valuable blueprint for stakeholders throughout Pennsylvania as we work to implement the IIJA and the Inflation Reduction Act (IRA)

I am pleased to strongly support PECO's CREATE Grid Infrastructure Resilience and Innovation Partnership grant application which will continue the development of a more reliable, resilient, and flexible grid in Pennsylvania. Thank you for your consideration.

Governor Josh Shapiro



CITY OF PHILADELPHIA

Office of the Mayor 215 City Hall Philadelphia, PA 19107 (215) 686-2181 FAX (215) 686-2180 JAMES F. KENNEY Mayor

March 7, 2023

The Honorable Jennifer Granholm Secretary, U.S. Department of Energy (DOE) 1000 Independence Avenue, S.W. Washington, DC 20585

Dear Secretary Granholm:

On behalf of the City of Philadelphia, I am pleased to express support for PECO's "Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia" ("CREATE Plan") application for the U.S. DOE's Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the Infrastructure Investment and Jobs Act of 2021.

Through the CREATE Plan, PECO proposes to execute a package of strategic investments in its electric infrastructure to make the grid more resilient, reliable, and better able to support the efforts of its customers to apply advanced and clean energy technologies. Over the last 15 years, the Philadelphia region has experienced some of the most catastrophic storms in its history as a result of climate change, and the CREATE Plan represents a transformational investment in the city's core energy infrastructure, as well as a foundation for clean energy job growth and community-based resilience. Through the funding sought in this application, PECO will be able to accelerate and enhance these critical investments while reducing customer costs and preserving affordability for Philadelphia's diverse low and moderate-income communities.

We are particularly pleased with the CREATE Plan's proposal to make strategic investments in Lower South Philadelphia that will not only bolster the area as a clean economic development and job creation hub but also relieve capacity constraints on the circuits serving our communities. The CREATE Plan incorporates a robust Community Benefits Plan that establishes job creation, education and workforce development, vendor diversity, and community engagement as core elements. We look forward to working with PECO on the execution of this important project, as well as engaging with the company on community-based energy resilience initiatives.

I am pleased to support PECO's CREATE Grid Infrastructure Resilience and Innovation Partnership grant application which will continue the development of a more reliable, resilient, and flexible grid while promoting opportunity and energy equity across the city. Thank you for your consideration.

Sincerely, James F. Kenney Mayor



Philadelphia Building and Construction Trades Council — AFL-CIO

4170 WOODHAVEN ROAD • PHILADELPHIA, PA19154 • (215) 677-8500 • FAX (215) 677-7918

RYAN N. BOYER Business Manager

PATRICK J. EIDING Secretary-Treasurer

WAYNE MILLER President

March 7, 2023

The Honorable Jennifer Granholm Secretary, U.S. Department of Energy (DOE) 1000 Independence Avenue, S.W. Washington, DC 20585

Dear Secretary Granholm:

On behalf of the Philadelphia Building Trades Council, an umbrella organization of more than 50 local unions in the construction industry in the Greater Philadelphia region, I'm pleased to express support for PECO's CREATE Greater Philadelphia Plan application for the U.S. DOE's Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the Infrastructure Investment and Jobs Act of 2021.

PECO's CREATE Plan proposes to have an estimated employment impact of 2,300 jobs through its proposed \$260 million investment that will make our region's backbone infrastructure more reliable, resilient, compatible with the growing clean energy economy, and inclusive for all our diverse communities. The Building Trades Council has worked collaboratively with PECO and its contractors for decades to ensure that electric infrastructure projects in the region are completed in a manner that provides good pay, benefits, opportunities for training and skill development, and is respectful of the right to organize.

The Building Trades Council and PECO share a common commitment to promoting workplaces that are safe, healthy, inclusive, and respectful of all our communities. The company demonstrates through its core values of safety and diversity that every worker should be able to bring his or her whole self to work every day and return home safe and healthy every evening. The company's employee resource groups offer the opportunity for all employees to share the diversity of their backgrounds and interests in a manner that reflects the diversity of the Philadelphia region.

As PECO implements the CREATE program, the company has committed to the Building Trades Council that it will work to expand its innovative workforce development programs with a focus on training individuals from disadvantaged communities and provide favorable consideration to contractors who commit to considering graduates of these programs for positions on these project teams. The program also will spur opportunities for members of the Council's represented workforce in a broad range of construction projects which will be enabled by CREATE project investments, particularly in the "Lower South Philadelphia" region.

Thank you for your consideration.

Ryan N. Boyer Business Manager



MARK LYNCH JR. GARY MASINO SHAWN MCCULLOUGH Vice Presidents FRANCIS MCLAUGHLIN DENNIS PAGLIOTTI STEPHEN PETTIT

JAMES REILLEY JIM SNELL SAMUEL STATEN, JR. MARK WILDSMITH JOSEPH WILLIAMS



OFFICE OF THE SUPERINTENDENT 440 North Broad Street, Suite 301 Philadelphia, PA 19130

Tony B. Watlington, Sr., Ed.D. Superintendent

March 28, 2023

The Honorable Jennifer Granholm Secretary, U.S. Department of Energy (DOE) 1000 Independence Avenue, S.W. Washington, DC 20585

Dear Secretary Granholm:

On behalf of the School District of Philadelphia (the "District"), I am writing to express support for PECO's "Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia" ("CREATE Plan") application for the U.S. DOE's Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the Infrastructure Investment and Jobs Act of 2021. The eighth largest school district in the US, the District serves nearly 200,000 students, 87% of who identify as minority members, 100% of whom are considered economically disadvantaged, who speak 173 different languages at home.

In addition to the CREATE Plan's investments in the region's electric infrastructure, we are pleased that the Plan incorporates an array of workforce, education, public engagement, and community-based energy resilience initiatives as foundational elements. Most specifically, the CREATE Plan's Clean and Resilient Community Schools program will deliver the benefits of climate resiliency and clean energy to disadvantaged communities throughout the Philadelphia region. The flexible fund established through CREATE will enable schools to identify opportunities that are targeted to the needs of their students and the neighborhoods they serve, offering the tools to mitigate the impact of extreme weather events, reduce energy costs, and incorporate clean energy technologies.

The District is pleased to support the PECO Create Plan as an important element in the region's energy future. Thank you for your consideration.

Sincerely,

Jony & Wathington, Sr

Tony B. Watlington, Sr., Ed.D.

TBW/dpw



1650 Arch Street, Suite 2701 Philadelphia, PA 19103 *Phone* 215-851-0110 *Fax* 215-851-0514

March 7, 2023

The Honorable Jennifer Granholm Secretary, U.S. Department of Energy (DOE) 1000 Independence Avenue, S.W. Washington, DC 20585

Dear Secretary Granholm:

On behalf of the Urban Affairs Coalition (UAC), I am pleased to express support for PECO's "Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia" ("CREATE Plan") application for the U.S. DOE's Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the Infrastructure Investment and Jobs Act of 2021.

With the CREATE Plan, PECO proposes to execute a package of strategic investments in its electric infrastructure to make the grid more resilient, reliable, and better able to support the efforts of its customers to apply advanced and clean energy technologies. Consistent with the Biden Administration's Justice40 Initiative, the CREATE Plan incorporates an integrated, comprehensive package of initiatives to ensure opportunity and inclusion for all the Philadelphia region's diverse communities. Through this letter, the UAC commits to leveraging its organizational resources to support PECO on the execution of its Community Benefits Plan, serving as the company's lead collaborator in linking enhanced education and workforce training programs for opportunity youth with the CREATE Plan. We also support PECO's initiatives to engage with disadvantaged communities through the establishment of a new Environmental Justice Advisory Council and the Clean and Resilient Community Schools program to bring the benefits of energy resiliency and clean energy education and access to all communities in the region.

We are pleased to strongly support PECO's CREATE Grid Infrastructure Resilience and Innovation Partnership grant application for all Philadelphia area communities. Thank you for your consideration.

Arun Prabhakaran President Urban Affairs Coalition



March 29, 2023

PECO Environmental Justice Steering Committee

The Honorable Art Haywood PA St. Senate

The Honorable Donna Bullock PA House of Representatives

The Honorable Danilo Burgos PA House of Representatives

The Honorable Katherine Gilmore-Richardson Philadelphia City Council

Laura Goodrich Cairns Delaware County Commerce Ctr.

The Honorable Ken Lawrence Montgomery County Commission

Emily Schapira Philadelphia Energy Authority

Steve Buxton Philadelphia OIC

Sheila Ireland Energy Coordinating Agency

Rich Sauer Phila. Assn. of Community Development Corporations Secretary, U.S. Department of Energy (DOE) 1000 Independence Avenue, S.W. Washington, DC 20585 Dear Secretary Granholm:

As members of the Steering Committee for PECO's Environmental Justice Advisory Committee (EJAC), we are pleased to express support for the "Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia" ("CREATE Plan") application for the U.S. DOE's Grid Infrastructure Resilience and Investment and Jobs Act of 2021.

In conjunction with the development of the CREATE Plan, PECO is launching the EJAC to ensure that disadvantaged communities throughout the Philadelphia region have a voice in the implementation of the Plan and their broader energy future. The company has invited governmental and community leaders throughout the region to submit recommendations to serve on the EJAC which will meet on a quarterly basis to receive updates on project execution, education, workforce, and clean energy initiatives, and hold collaborative discussions on emerging issues.

In addition to the investments in reliability, resiliency, and clean energy hosting capacity, consistent with the Biden Administration's Justice40 Initiative, the CREATE Plan incorporates an integrated, comprehensive Community Benefits Plan to ensure opportunity and inclusion for all the Philadelphia region's diverse communities. The CREATE Plan will enhance PECO's support for enhanced education and workforce training programs for opportunity youth and establish the new Clean and Resilient Community Schools program to bring the benefits of energy resiliency and clean energy education and access to all communities in the region.

We are pleased to strongly support PECO's CREATE Grid Infrastructure Resilience and Innovation Partnership grant application for all Philadelphia area communities. Thank you for your consideration.



Board of Directors

CHAIR Vernice Lewis PECO, an Exelon Company

VICE CHAIR Shelly Brown Aon

TREASURER Tasha Y. Brown Ernst & Young

SECRETARY LJay Burks Comcast

Interim President Brian K. Oglesby EMSDC

Philadelphia Office

Rodin Place 2000 Hamilton Street Suite 308 Philadelphia, PA 19130

P: 215-569-1005 F: 215-569-2667

Pittsburgh Office

322 North Shore Drive Building 18, Suite 200 Pittsburgh, PA 15212

P: 412-710-2060

www.emsdc.org

Letter of Support for PECO IIJA CREATE Program Application from EMSDC

March 29, 2023

The Honorable Jennifer Granholm Secretary, U.S. Department of Energy (DOE) 1000 Independence Avenue, S.W. Washington, DC 20585

Dear Secretary Granholm:

On behalf of the Eastern Minority Supplier Development Council (EMSDC), I am pleased to support PECO's "CREATE Plan" application for the U.S. DOE's Grid Infrastructure Resilience and Innovation Partnership program under Section 40101(c) of the Infrastructure Investment and Jobs Act. The EMSDC certifies and connects minority-owned businesses (Asian, Black, Hispanic, and Native American) throughout Pennsylvania, Southern New Jersey, and Delaware with member corporations who are committed to support diverse business empowerment and community development.

PECO's supplier diversity programs, and those of its corporate parent Exelon, are deeply aligned with the EMSDC's core mission to engage, connect, grow, and impact diverse businesses and the communities in which they are based. PECO has made a long-term commitment to supplier diversity and has achieved supplier diversity levels exceeding 40 percent on a consistent basis in recent years. As part of the CREATE Community Benefits Plan, PECO has committed to maintaining and expanding these levels and working with contractors and sub-contractors to guarantee that diversity initiatives are built into every level of the company's supply strategy.

CREATE incorporates an array of workforce, education, and communitybased energy resilience initiatives as part of an integrated, comprehensive strategy to expand opportunity to residents and small businesses in all communities. Individuals who benefit from these programs will not only serve as the utility employees of the future, but they will also bring their skills to suppliers and diverse business enterprises in adjacent sectors.

The EMSDC is pleased to commit to working with PECO to continue to identify opportunities to expand and improve the Company's diverse vendor empowerment programs. Thank you for your consideration.

3- K G-

[March 10, 2023]

The Honorable Jennifer Granholm Secretary, U.S. Department of Energy (DOE) 1000 Independence Avenue, S.W. Washington, DC 20585

Dear Secretary Granholm:

On behalf of the Philadelphia Energy Authority (PEA), the Energy Coordinating Agency (ECA) and the Philadelphia Opportunities Industrialization Center, Inc. (OIC), we are pleased to express support for PECO's "Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia" ("CREATE Plan") application for the U.S. DOE's Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the Infrastructure Investment and Jobs Act of 2021. Over the last decade, our organizations have served as partners with PECO on industry-leading workforce development programs to prepare individuals from disadvantaged communities in the Philadelphia region with training to enter the energy industry workforce with a focus on clean energy jobs.

With the CREATE Plan, PECO proposes to execute a package of strategic investments in its electric infrastructure to make the grid more resilient, reliable, and better able to support the efforts of its customers to adopt advanced and clean energy technologies. Consistent with the Biden Administration's Justice40 Initiative, the CREATE Plan incorporates an integrated, comprehensive package of initiatives to ensure opportunity and inclusion for all the Philadelphia region's diverse communities. Through this letter, our organizations pledge to work individually and collaboratively with PECO to expand the workforce training for underserved youths and young adult populations in disadvantaged communities identify channel strategies to connect our clients with jobs created directly and indirectly through the CREATE program. We also support PECO's initiatives to engage with disadvantaged communities through the establishment of a new Environmental Justice Advisory Council and the Clean and Resilient Community Schools program to bring the benefits of energy resiliency and clean energy education and access to all communities in the region.

We are pleased to strongly support PECO's CREATE Grid Infrastructure Resilience and Innovation Partnership grant application. Thank you for your consideration.

Shallo Indand

Sheila Ireland President and CEO Opportunities Industrialization Center Philadelphia Energy Authority

Emily Schapira President and CEO

Stephen J. Luxton Executive Director and CEO Energy Coordinating Agency



March 7, 2023

The Honorable Jennifer Granholm Secretary, U.S. Department of Energy (DOE) 1000 Independence Avenue, S.W. Washington, DC 20585

Dear Secretary Granholm:

On behalf of the Greater Philadelphia Chamber of Commerce, I am pleased to express support for PECO's "Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia" ("CREATE Plan") application for the U.S. DOE's Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the Infrastructure Investment and Jobs Act of 2021.

Through the CREATE Plan, PECO proposes to execute a package of strategic investments in its electric infrastructure to make the grid more resilient, reliable, and better able to support the efforts of its customers to apply advanced and clean energy technologies. Over the last 15 years, the Philadelphia region has experienced some of the most catastrophic storms in its history, and the CREATE Plan represents a transformational investment in the City's core energy infrastructure, as well as a foundation for clean energy job growth and community-based resilience. Through the funding sought in this application, PECO will be able to accelerate and enhance these critical investments while reducing customer costs and preserving affordability for Philadelphia's residents and businesses.

The investments proposed in the CREATE Plan will create an integrated platform to advance the Philadelphia region's energy transition. The Lower South Philadelphia economic development hub is a major center for job growth, innovation, and international trade, and the investments proposed in the plan will enable future private sector growth, opportunity, and clean energy deployment. PECO is a regional leader in implementing education and workforce development, the Chamber's Diverse Procurement Collaborative vendor diversity initiative, and community engagement programs that align with the Chamber's inclusive growth strategy of bringing economic opportunity to every neighborhood in the City. Through this letter, the Chamber commits to working with PECO to develop innovative strategies to help advance pathways for participants in these education and workforce development partnerships with family-sustaining energy jobs in the region.

I am pleased to strongly support PECO's CREATE Grid Infrastructure Resilience and Innovation Partnership grant application which will continue the development of a more reliable, resilient, and flexible grid while promoting opportunity and energy equity. Thank you for your consideration.

Sincerely,

Kenneth Anderson Vice President, Civic Affairs



March 29, 2023

The Honorable Jennifer Granholm Secretary, U.S. Department of Energy (DOE) 1000 Independence Avenue, S.W. Washington, DC 20585

Dear Secretary Granholm:

On behalf of the 150 members of the Philadelphia Association of Community Development Corporations (PACDC), we are pleased to express support for PECO's "Creating a Resilient, Equitable and Accessible Transformation in Energy for Greater Philadelphia" ("CREATE Plan") application for the U.S. DOE's Grid Infrastructure Resilience and Innovation Partnership (GRIP) program under Section 40101(c) of the Infrastructure Investment and Jobs Act of 2021. The Plan is aligned with our efforts to build a more equitable Philadelphia in which all residents, including people of color and others who have been poorly served in the past, have access to the essential ingredients they need to thrive.

PECO's CREATE Plan offers opportunities for growth and community empowerment across the City of Philadelphia through its direct investment in energy infrastructure that is more reliable, resilient, and able to support clean energy solutions. CREATE also incorporates a broad array of workforce, education, supplier diversity, and community-based energy resilience incorporated into this program. By expanding capacity in the "Lower South Philadelphia" innovation and economic development region and relieving congestion in adjacent diverse and dynamic communities, the CREATE Plan will not only generate approximately 2,600 jobs, but also support long-term growth and economic opportunity.

The CREATE Plan will enhance PECO's support for education and workforce training programs for opportunity youth and establish the new Clean and Resilient Community Schools program to bring the benefits of energy resiliency and clean energy access to all communities in the region. In conjunction with the development of the CREATE Plan, PECO is also launching a new Environmental Justice Advisory Committee to ensure that disadvantaged communities throughout the region have a voice in the implementation of the Plan and their broader energy future.

PACDC is pleased to work with PECO and our member organizations to collaborate on the Company's engagement efforts with communities that will host project work and the diverse communities that will benefit from the education, workforce, vendor diversity, and community-based resiliency components incorporated into the Plan. Thank you for your consideration.

Rick Sauer Executive Director



Project Environmental Checklist Procedure

PECO Administrative Procedure

EN-PE-08012

Revision No.: 7

Effective: Supersedes: Level: Review Type: Core Function: 11/11/2021 N/A 2 3 Year Environmental Strategy & Compliance

(b) (4)

	Locations of Work (DE-FOA	-0002740)		
Prime or Sub	Name	City	State	Zip Code + 4
Prime	Project Management & Compliance	Philadelphia	PA	19103-1338
Prime	Navy Yard Substation	Philadelphia	PA	19112*
Prime	Hilco Redevelopment	Philadelphia	PA	19145*
Prime	Amtrak Transmission Right of Way	Eddystone	PA	19022^
Prime	Amtrak Transmission Right of Way	Linwood	PA	19061^
Prime	Amtrak Transmission Right of Way	Marcus Hook	PA	19061- <mark>(b) (4)</mark>
Prime	Amtrak Transmission Right of Way	Linwood	PA	19061^
Prime	Campus Microgrid	Berwyn	PA	19312- <mark>(b) (4)</mark>
Prime	Conowingo Transmission Right of Way	King of Prussia	PA	19406^
Prime	Conowingo Transmission Right of Way	King of Prussia	PA	19406^
Prime	Conowingo Transmission Right of Way	Exton	PA	19341^
Prime	Conowingo Transmission Right of Way	West Chester	PA	19380^
Prime	Conowingo Transmission Right of Way	Plymouth Meeting	PA	19462- <mark>(b) (4)</mark>
Prime	Philadelphia Underground Risk Mitigation Initiative (PURMI)	Philadelphia	PA	19102*
Prime	Philadelphia Underground Risk Mitigation Initiative (PURMI)	Philadelphia	PA	19103*
Prime	Philadelphia Underground Risk Mitigation Initiative (PURMI)	Philadelphia	PA	19104*
Prime	Philadelphia Underground Risk Mitigation Initiative (PURMI)	Philadelphia	PA	19106- <mark>(b) (4)</mark>
Prime	Philadelphia Underground Risk Mitigation Initiative (PURMI)	Philadelphia	PA	19107*
Prime	Philadelphia Underground Risk Mitigation Initiative (PURMI)	Philadelphia	PA	19146^
Prime	Philadelphia Underground Risk Mitigation Initiative (PURMI)	Philadelphia	PA	19147*
Prime	Substation Flood Mitigation: Grays Ferry	Philadelphia	PA	19146^
Prime	Substation Flood Mitigation: Pencoyd	Philadelphia	PA	19129*
Sub	PennDOT: Critical Transportation Infrastructure Resilience	Philadelphia	PA	19131^
Sub	PennDOT: Critical Transportation Infrastructure Resilience	Conshohocken	PA	19428- (b) (4)
Sub	Clean and Resilient Community Schools	Philadelphia	PA	19103-4001
Sub	PIDC: Life Sciences Resiliency Campus Business Case	Philadelphia	PA	19112-1327

*Exact site to be determined

^No Zip + 4 available

Redacted precise Zip+4 operations locations