

Accelerating and Deploying Grid Edge Computing: Community Benefits Plan

Portland General Electric (“PGE”) is pleased to submit the following Community Benefits Plan (“CBP”), as outlined in DE-FOA-0002740, as part of PGE’s proposed “Accelerating and Deploying Grid Edge Computing Project” (“the Project”).

The Project directly supports PGE’s vision of a community-centered electric grid. The Project will deploy technology to increase high-quality job creation, job training for individuals, parity in energy technology access, and regional energy resilience. By enhancing and enabling customer programs through newly available data and grid edge computing, PGE anticipates generating long-term equitable community outcomes.

1. Community and Labor Engagement

1.1 Background: PGE Approach to Community Engagement

While developing the Distribution System, Wildfire Mitigation, and Clean Energy plans, PGE learned the importance of partnering with local community-based organizations (CBO). Entering mutually beneficial partnerships is a key community and labor engagement strategy objective for PGE. PGE is launching the Community Benefits and Impacts Advisory Group (CBIAG) to focus on equity and provide strategic direction that helps shape community-related outcomes. Additionally, PGE believes that those impacted by a decision, program, project, or service must be involved in the decision-making process. This learning shapes PGE’s engagement approach for this project, furthering PGE’s commitment to building the grid of the future in partnership with the community.

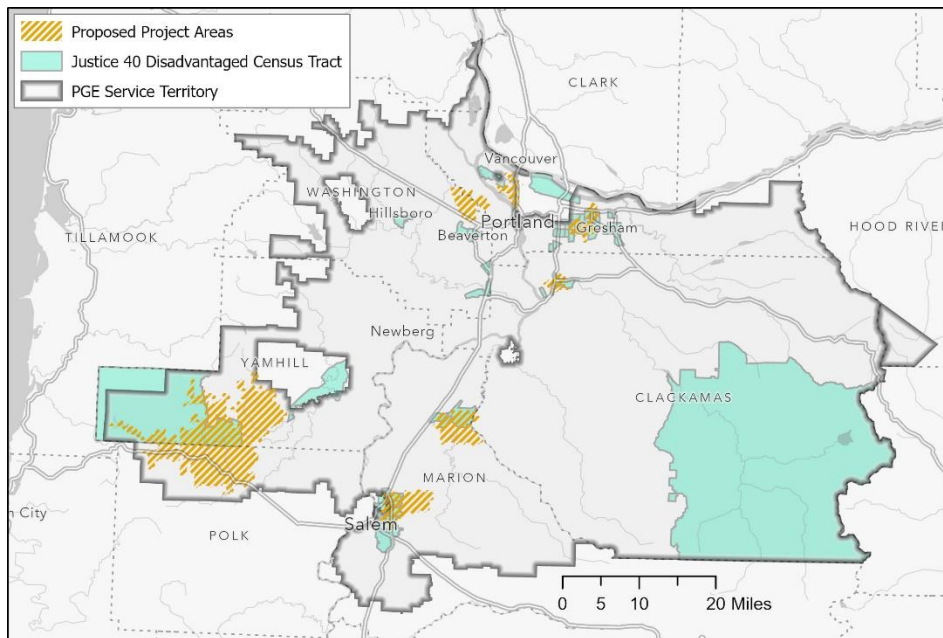
1.2 PGE Community Engagement Plan

1.2.a. Community Engagement Assessment, Methodology and Accountability

In October 2022, PGE executed a scoping and mapping exercise to identify an effective community collaboration and CBO partnership approach. This led PGE to partner with VertueLab, a local non-profit with over a decade of community engagement experience, to conduct in-depth community engagement for this project. In November 2022, PGE also consulted with several CBOs from the Coalition of Communities of Color, the National Association of Minority Contractors-Oregon, We All Rise, the Immigrant and Refugee Community Organization, VertueLab, Energy Trust of Oregon, the Hispanic Chamber, and International Brotherhood of Electrical Workers (IBEW) Local 125 about this Project’s goals. PGE leveraged the Strategic Tribal Engagement Plan and PGE’s ongoing Tribal relationships to gauge Tribal interest. As a result, we identified additional local project partners, including Oregon State University, Saturday Academy, Oregon Tradeswomen Inc., and IBEW Local 125.

PGE is committed to directing engagement and project benefits to Climate and Economic Justice Screen Tool (CEJST) disadvantaged communities (DACs) within our service territory.^{1 2}

Figure 1: CEJST designated disadvantaged communities within PGE's service territory



We will install Smart Grid Chips (SGCs) and use grid edge data to direct benefits to approximately ninety thousand residential customers in DACs, including: Portland, Gresham, Clackamas and Multnomah counties, and the Woodburn, Salem, and Grand Ronde regions. This project

will help deliver more reliable and resilient power, and greater clean energy parity to these communities. These communities are facing a variety of burdens including legacy pollution, workforce development barriers, health, low to moderate income and climate change risks.

To ensure that PGE is accountable for delivering benefits to communities, PGE will use our engagement evaluation approach that combines practices from Results Based Accountability, championed by the Government Alliance on Race and Equity, and Targeted Universalism.³ These methods and tools, including surveys and focus groups, will enable PGE to track, evaluate, and measure engagement performance to continuously refine methods and ensure PGE is tracking meaningful community engagement metrics and benefits.

1.2.b. Community-Based Organization Strategy and Partnership

Our partner VertueLab is a nonprofit organization with over a decade of expertise in facilitating meaningful, effective community engagement and capacity building for CBOs. PGE will work with VertueLab to create awareness, gather feedback, and center the voices and needs of impacted communities in Project development and implementation. In developing the strategy,

¹ PGE's Service Territory : <https://portlandgeneral.com/about/info/service-area>







² CEJST Tool focusing on PGE's Service Territory : <https://screeningtool.geoplatform.gov/en/#7.12/45.655/-123.544>

³ [Results-Based Accountability - Overview and Guide \(clearimpact.com\)](https://clearimpact.com/)

VertueLab will work closely with PGE’s Energy Equity Outreach and Community Outreach and Engagement teams, which were created in 2021 and 2022 and have annual operating budgets of approximately \$1.7 million. This work will include developing a continuous community engagement strategy, including creating a common agenda, defining terms, using operating agreements, creating shared goals and metrics, allowing ongoing feedback and support systems, and partnering with other local CBOs to assist with deepening the engagement strategy. This partnership will empower PGE and VertueLab to compensate CBOs and community members for their time and expertise while helping them build their community engagement capacity.

As indicated in Figure 2, PGE and VertueLab will take a staged engagement approach to incorporate stakeholders’ perspectives in the project plan, allow for transparency, and reduce project risks. Community engagement will be ongoing, through all phases of the project.

Figure 2: PGE’s Community Engagement Phases, Outcomes and Timelines

Continuous Community Engagement					
	 DEFINE	 ENGAGE 	 SET GOALS	 PLAN	 IMPLEMENT
OVERVIEW	Define/Verify PGE’s vision for community benefits. Identify Team (PGE & VertueLab) and finalize vendor contracts. Schedule engagement meetings with stakeholders.	Engage with DACs and confirm understanding of the current state challenges. Discuss with communities the project benefits that are priority for them	Finalize community-oriented goals (Jobs, DEI, J40) giving consideration to stakeholder feedback gathered in the Engage phase	Develop specific actions required to achieve community SMART goals. Review the plan with community stakeholders and discuss extent of their involvement	Execute on the implemental plan to create impact for the community. Track and manage data necessary for community benefits reporting requirements
OUTCOME	<ul style="list-style-type: none">Shared alignment on community benefits vision and valueAddress engagement or participation barriersMobilize team responsible for community engagement	<ul style="list-style-type: none">Solidify understanding of current state burdensAssess burdens rooted in energy, climate and clean energyProvide project overview and expected benefit streams	<ul style="list-style-type: none">Assess stakeholder feedback on community benefits associated with PGE’s projectIdentify new or validate existing SMART goals that benefit DACs and address burden indicators	<ul style="list-style-type: none">Develop activities and action plan that ensure community goals are metAlign community action related timeline with overall project implementation schedule	<ul style="list-style-type: none">Conduct activities as per the action planUpdate data repositories with progress informationEvaluate data and prepare reports
DURATION	4 WEEKS	Initial Engagement : 12 WEEKS (Followed by ongoing engagement)	2 WEEKS	2 WEEKS	55 MONTHS
<div><div>Budget Period 1</div><div>Budget Period’s 2,3,4 & 5</div></div>					

During this phased approach, PGE and VertueLab will educate DACs, CBOs, and other communities on the Project and specifically gather feedback on 1) designing programs that utilize grid edge data to deliver community benefits and 2) how this project can alleviate other community burdens.

1.3 Labor Engagement

PGE’s labor partners are critical to the decarbonization of the electric grid as PGE builds new infrastructure and renewable energy and integrates new technologies, including the SGC. PGE has a long history of working with unions, with the first collective bargaining agreement dating back to 1913. Today, nearly one-quarter of PGE’s employees are covered under Collective Bargaining Agreements (CBA) with the IBEW Local 125.

1.3.a. Labor Partnership, Engagement Methods, and Timeline

The proposed project will be executed by PGE’s IBEW 125 members under an existing, three year Collective Bargaining Agreement, last negotiated in 2022. PGE’s relationship with the union is strong and includes weekly meetings with management and a standing management/labor committee to discuss various issues. PGE will discuss this Project’s roll out plan in both forums during the “Engage” phase of PGE’s community benefits approach. In these discussions, PGE’s operations team will determine which parts of this project will be completed by PGE’s IBEW Local 125 workforce and which will be contracted out to an IBEW 125 signatory contractor or another union contractor if they have a current agreement already established.

1.4. Community and Labor Engagement SMART Goal and Milestones

SMART Goal: PGE will establish a community coalition inclusive of DACs and train union workforce.	
<i>Phase (BP: budget period)</i>	<i>End of Budget Period SMART Milestone(s)</i>
Engage (BP 1)	1) Engage with 2,500 to 5,000 stakeholders and 7 CBOs from the communities where the SGC will be installed 2) Discuss the project rollout plan in weekly meetings with IBEW 125 and with the management/labor committee 3) Make targeted community hires and secure community partnerships with local CBOs that will assist with community member engagement 4) Conduct community assessment needs that inform Project direction
Engage (BP 1-5)	1) Organize at least six community engagement sessions per budget period and incorporate feedback into the project plan
Set Goals (BP 1)	1) Refine the SGC Project’s community goals and associated metrics based on community feedback. 2) Continue engaging with additional stakeholders
Implement (BP 2-5)	1) Update the community coalition at least once every budget period regarding progress and achieve the coalition’s concurrence on PGE’s community benefits progress
Implement (BP 2-5)	1) Track and measure the number of households and communities that have directly benefitted from this technology and make data-informed decisions to shape programs and services to assist disadvantaged customers.

2. Investing in the American Workforce

By catalyzing grid modernization, the Project has the potential to create hundreds of new jobs in coming years. This Project will 1) create new skill development opportunities for unionized workers, 2) bring new talent to PGE through K-12 STEM, university and community college collaborations, 3) create a platform for hundreds of developers to build applications on via the SGC, and 4) create indirect jobs in clean energy by removing barriers related to distributed energy resource (DER) adoption in PGE’s service territory.

2.1 Plan to Attract, Train, and Retain a Skilled and Qualified Workforce

PGE fosters an environment of continuous learning for employees and pays at or above prevailing wage for all applicable trade related job classifications. PGE’s annual Human Resources Department analysis allows PGE to validate that employees on this Project are paid at or above prevailing wage, for the value they bring. The SGC is designed, engineered, and assembled by 100% U.S.-based labor paying above prevailing wages. Additionally, workers on

this project will enjoy benefits including but not limited to healthcare, paid leave, and 401(k) retirement plans.

2.1.a. Workforce Education and Training—Apprenticeship Program:

PGE's pre-apprenticeship and apprenticeship programs are critical to the project's union labor workforce pipeline. PGE will update its pre-apprenticeship and apprenticeship training courses, in partnership with union members, to reflect SGC installation information and how the new technology enables PGE to manage the grid more efficiently. This additional engagement with union workforce helps build understanding and buy-in for the work together.

2.1.b. Workforce Education and Training— Environment, Health and Safety:

Ensuring proper training and safe working conditions is a priority. PGE will use annual and ongoing health and safety trainings, annual OSHA trainings, and other safeguards to ensure the Project's workforce's safety. In the instance of a safety event, PGE will apply its mandatory safety stand down for employees to evaluate the issue and provide all corrective actions needed before work resumes. Project workers will have PGE's anonymous line to report concerns about close calls, safety violations or other potentially harmful workplace activities.

2.1.c. Workforce Education and Training—Workforce Development:

This project will help build qualified workforces through technology development and deployment. Workers skilled in electrical and data engineering, data science and artificial intelligence (AI) will be required to build new customer solutions. PGE's partner, Utilidata, plans to hire additional engineers and staff to support this project. Additionally, the SGC is an open platform with room for hundreds of new software applications and can potentially induce numerous domestic software developer jobs.

The Oregon Clean Energy Workforce Coalition (OCEWC), a group of employers, unions, apprenticeship programs and others convened by PGE in mid-2022, is working to build the clean energy workforce pipeline by increasing equitable access to family-wage clean energy jobs. This Project's lessons will feed into OCEWC's Modern Grid subcommittee, which focuses on the skills and jobs needed to support new and evolving technologies.

To support hiring for this project and create a pipeline of skilled workers, PGE, Utilidata, Saturday Academy, and Oregon State University (OSU) are partnering to develop AI education pathways and internships in K-12 and energy industry AI-specific courses at OSU to expand equitable access to workforce development opportunities. Saturday Academy, a premier local nonprofit organization, brings 40 years of experience dedicated to developing STEM education opportunities for underserved children in K-12 education. NVIDIA will provide resources for faculty to focus on AI for energy research and support use case development. This effort will build off NVIDIA's many academic engagements, including its AI technology center with University of Florida. The NVIDIA CEO's \$50 million gift to support OSU's supercomputer and AI innovation complex will accelerate this work. In 2024, these partners will establish an energy

and AI workforce development advisory group to build a roadmap that expands access for students underrepresented in STEM. We will invite an Oregon community college representative, a representative from an Oregon technical or vocational school, and a leading expert on similar workforce development programs to join the advisory group.

2.2 Worker Rights and Labor Engagement

The SGC installation will be completed under an existing IBEW 125 Collective Bargaining Agreement (CBA). PGE supports workers having a free and fair opportunity to join the labor union of their choosing. We pledge to permit voluntary recognition, and we commit to providing union organizers access to PGE workers.

2.3 Labor Violations

PGE complies with all applicable state and federal labor and employment laws and regulations protecting employee and workers' rights, including but not limited to, the Fair Labor Standards Act (FLSA) and Title VII of the Civil Rights Act of 1964. PGE has not had any violations of OSHA, labor, or employment laws in the last two years including 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 Act.

2.4 Investing in the American Workforce SMART goal and milestones.

SMART Goal: Provide Skills Training for Union Workforce and Recruit New Talent	
PGE will establish a workforce development program with project partners focused on both SGC hardware installation and on data analytics, artificial intelligence, machine learning and energy engineering to build a robust pipeline of qualified workers that can support the SGC project and its operations.	
Phase (BP: budget period)	End of Budget Period SMART Milestone(s)
Engage (BP 1)	1) Establish an energy and AI workforce advisory group and build a roadmap for developing the curriculum and expanding its reach 2) Update all pre-apprenticeship and apprenticeship training courses to reflect SGC installation information and efficient grid management capabilities.
Set Goal (BP 1)	1) Determine pre-apprenticeship and apprenticeship training needs and topics 2) Determine Data Engineering and AI curriculum options in partnership with the energy and AI workforce advisory group
Plan (BP 1)	1) Onboard two OSU graduate students to research and codevelop computational power models 2) Onboard 2 new Saturday Academy faculty positions to develop AI curriculum and expand industry internships in AI. 3) Update pre-apprenticeship and apprenticeship training programs to include lessons on the SGC installation process and efficient grid management capabilities
Plan and Implement (BP 2-5)	1) Provide Saturday Academy -Apprenticeship in Science and Engineering (ASE) internship opportunities to 5 candidates from underrepresented communities every budget period. 2) Conduct STEM classes and summer camps around AI applications using NVIDIA software suite each budget period. 3) Conduct a certain number of pre-apprenticeship and apprenticeship trainings

3. Diversity, Equity, Inclusion and Accessibility

PGE believes the clean energy transition should be equitable and inclusive. The Project team is committed to incorporating DEIA principles on this Project by 1) incorporating DEIA recruitment procedures in project hiring practices and 2) implementing DEIA recruitment procedures in expanding the Project's potential Project partner network.

3.1 DEIA at PGE

Since the formation of the DEI office in 2018, PGE has witnessed a 7.3% increase for women hires overall, and a 21.3% increase for leadership hires, a 4.9% increase in women leaders, and a 6% increase in BIPOC leaders. PGE's pay gap analysis comparing the total average earnings between men and women provided a clear picture of inequities at PGE and how to address them. PGE has established eight employee resource groups for minorities, veterans, and other priority populations. The lessons PGE learned for addressing pay inequities and the policies implemented as a result, such as conducting pay analyses disaggregated by race and gender will directly influence hiring for new employees working on this project.

3.2 DEIA in Project Hiring

PGE's supplier diversity priorities extend to this project. In 2022, PGE set a supplier diversity spending goal of 15%. This led to additional funds going to small businesses and has increased the participation of veteran, minority, and women-owned vendors across our business. In late 2022, PGE also began working with union partners to develop a list of signatory minority, women, and/or veteran owned businesses to support meeting PGE's supplier diversity goals. Under the existing Collective Bargaining Agreement with IBEW 125, for the project work that is contracted out to IBEW signatories, PGE will prioritize minority owned businesses.

3.3 Partnering to Address DEIA

PGE is committed to partnering with entities that prioritize DEIA for this project. Each project partner, including Oregon State University, Saturday Academy, Utilidata/NVIDIA, and VertueLab has respective DEI commitments.⁴

Additionally, PGE will work with the pre-apprenticeship program and other CBOs to promote DEIA amongst future pipeline of workers that will support SGC installation and integration into utility operations and other utility career opportunities. The project will provide learning opportunities to underserved populations including tours of PGE's Sherwood Training Center and job shadowing with our metering personnel, on the apprenticeship and pre-apprenticeship

⁴ 1) VertueLab DEI Roadmap, <https://static1.squarespace.com/static/5a9ee0b3e74940c5cc46249a/t/5f10b52e38b02a5b06561e42/1594930478613/DEI+Roadmap.July2020.pdf> 2) Oregon State University, Diversity Strategic Plan: <https://diversity.oregonstate.edu/diversity-strategic-plan> 3) Saturday Academy, Equity Statement: <https://www.saturdayacademy.org/equity-statement> 4) NVIDIA Diversity, Inclusion and Belonging Policies and Programs: <https://www.nvidia.com/en-us/about-nvidia/careers/diversity-and-inclusion/>

programs. This work builds on partnerships which helped PGE’s 2021 class of 20 pre-apprentices have 35% diversity, and its 2022 class of 24 pre-apprentices have 25% diversity.

3.4 DEIA Strategies, Milestones, and Timelines

SMART Goal: Increase Access to PGE Employment Opportunities for Underrepresented Populations	
Phase (BP: budget period)	End of Budget Period SMART Milestone(s)
Engage and Plan (BP 1)	1) Explore funding agreement and deployment of funds to a minimum of two pre-apprenticeship programs providing services and programs to underrepresented populations in the energy sector including women, people of color, opportunity youth, and formerly incarcerated individuals 2) Review existing corporate hiring trainings to identify additional areas for training to eliminate bias in hiring 3) Update existing trainings to incorporate any new learnings
Plan (BP 1)	1) Research “Safe From Hate” training opportunities for project employees and contractors and incorporate those lessons into existing trainings for them 2) Identify diverse supplier or sub-contracting firms to provide services related to project implementation
Implement (BP 2-5)	1) Provide tour of PGE facilities and information about PGE’s pre-apprenticeship and apprenticeship programs to a minimum of three community-based organizations that provide comprehensive wrap around services to program participants from underserved populations. 2) Continue activities to increase equitable access to pre-apprenticeship and apprenticeship programs. 3) Meet the 15% supplier diversity goal

4. Justice40 Initiatives

The Project supports the delivery of community benefits by increasing job and training opportunities for underserved populations, and by launching grid-edge computing enabled customer programs on energy efficiency, resiliency, and affordability that can be targeted towards disadvantaged customers. Within PGE’s service territory, more than 130,000 residential electric meters fall within Justice40 identified census tracts. Through this project PGE will deploy up to 90,000 SGCS, including more than 40% of the total deployed within Justice40 census tracts (36,000 SGCs deployed in DACs). This aligns with the Justice40 objective to ensure at least 40% of project benefits flow to disadvantaged communities.

PGE will use the community engagement process to identify ways to use enhanced grid edge data to develop programs that deliver and maximize Justice40 benefits to DACs.

Justice40 Outcome	How Project Will Maximize Benefit to DACs
Decreasing Energy Burden	Directly supported by increasing parity in DER access, using the SGC to match customers with income-qualified electrification and energy efficiency programs, and using the SGC to optimize grid operations.
Decreasing Environmental Exposure and Burdens	Indirectly support reductions in air pollution associated with fossil fuels and peaker plants by enabling PGE to utilize distributed renewable energy resources to source a greater percentage of its peak load.
Increasing Access to Low Cost Capital	Indirectly support by unlocking opportunities for new beneficial electrification customer programs. As such there will be a demand for more low-cost capital solutions to be offered and available.

Increasing High Quality Jobs and Job Training	Directly supported through quantifiable, measurable and trackable benefits and SMART goals. Detailed information in section 4.1.
Increasing Clean Energy Enterprise Creation and Contracting	Directly supported by prioritizing minority owned IBEW Local 125 signatories from DACs for project work. Directly supported by distributing funds to Oregon Tradeswomen, which is located in a DAC and serves DACs residents in order to support their pre-apprenticeship program and diversifying job training access.
Increasing Energy Democracy	Directly supported through community involvement in decision-making about this project and through customer access to data captured by the SGC.
Increasing Parity in Clean Energy Technology Access and Adoption	Directly supported with quantifiable, measurable, and trackable benefits and SMART goals. Detailed information in section 4.2.
Increasing Energy Resiliency	Directly supported with quantifiable, measurable, and trackable benefits and SMART goals. Detailed information in section 4.3.

4.1 Increasing high-quality job creation, the clean energy job pipeline, and job training

Through PGE's partnership with OSU and Saturday Academy, PGE plans to make investments in training, recruiting, and removing barriers for DAC residents to participate in job and training opportunities created during and after this project. PGE will specifically ensure these benefits and resources flow to underserved communities and DACs through a series of steps detailed in the table below. PGE will identify the barriers that DAC residents and other underserved communities are facing to accessing skill training and curricula developed by the Modern Grid Subcommittee, OSU partnership, and pre-apprenticeship program. PGE will commit resources to reduce and remove those barriers and will increase recruiting activities specifically targeting underserved communities and DACs.

SMART Goal: PGE has planned for committed spend (indicated in the Budget Justification Workbook) over the whole project on training, recruiting, and removing barriers for residents of DACs and underserved communities in order to increase their access to job opportunities created during and after the project.	
Phase (BP: budget period)	End of Budget Period Milestone(s)
Define (BP 1)	1) Complete an analysis of the barriers DACs and underserved communities experience in accessing job and job training 2) Develop roadmap for committing measurable resources to minimize those barriers.
Implement (BP 2-5)	1) Begin implementing actions to minimize additional barriers for DACs to access quality jobs and workforce training
Plan (BP 1)	1) Identify and invite two community colleges, including data science certificate programs, to have access to the OSU AI curriculum
Implement (BP 2-5)	1) Host a measurable number of recruiting events at community colleges in Oregon that were given access to the AI curriculum.
Implement (BP 2-5)	1) Invest on training, recruiting, and removing barriers for residents of DACs to participate in trainings and recruitment efforts

4.2 Increasing Parity in Clean Energy Technology Access and Adoption

The cost of DER ownership is a barrier to an equitable clean energy transition. The SGC is

designed to lower total cost of DER ownership by 1) lowering upfront interconnection costs (e.g., by minimizing new DER infrastructure requirements and speeding interconnection times), and 2) tapping into DER's grid value using real-time data and better enabling PGE to compensate customers for those grid services. The SGC will increase PGE visibility into DER penetration and enable PGE to develop DER customer offerings specifically targeted to DACs and their needs, thus supporting increases in access and adoption. Specifically, PGE will utilize the data gathered by the SGC in DACs to integrate those households into PGE's Virtual Power Plant (VPP) program and related programs. PGE will then manage DERs for the grid and compensate customers for those grid services. By installing the SGC in DACs and including customers in VPP program opportunities, PGE can accelerate clean energy parity in DACs.

SMART Goal: Increase the count and/or MW's of DER's in substations serving DAC's where SGCs are fully deployed, by the end of the Project.	
Phase (BP: budget period)	End of Budget Period Milestone
Engage (BP 1)	1) Identify opportunities to utilize SGC capabilities and data to expand DER access and the benefits of PGE's VPP program to households in DACs.
Set Goals (BP1)	1) Identify a measurable target to speed solar interconnection times by end of the project (BP 5). 2) Identify a measurable target for count and/or MW's of DER's to increase in substations serving DAC's, where SGCs are fully deployed, by the end of the project (BP5)
Implement (BP 2-3)	1) Increase the count and/or MW's of DER's in substations serving DAC's where SGCs are fully deployed, by end of BP 3.
Implement (BP 4-5)	1) Continue enrolling DERs from households in disadvantaged communities in PGE's VPP related program offerings 2) Increase the count and/or MW's of DER's in substations serving DAC's where SGCs are fully deployed, by the end of the project.

4.3 Increasing Energy Resilience

Deployment of the SGC at customer locations allows PGE to provide resiliency benefits specifically to DACs. The system visibility provided by the SGC will allow PGE to identify and address previously unknown service issues to enhance equitable electric service. As real-time data progresses to AI models, PGE will further improve reliability and resiliency by identifying pre-outage conditions or pending equipment failure before they occur. By installing at least 40% of SGCs in disadvantaged communities, PGE will be able to reduce and minimize the impact of outage events in these communities resulting in improved energy reliability and resilience. Granular SGC data around whole-home energy usage will enable PGE to expand customer access to programs, such as PGE's heat pump program, that help accelerate more resilient, electrified homes. 67% of customers in PGE's pilot income-qualified bill discount program have indicated the program helps them feel more secure in paying their energy bill. The SGC will perform real-time measurement and verification of this program and improve target marketing by identifying energy inefficiencies in homes, thus supporting lasting improvements for this and other resiliency and electrification programs.

SMART Goal: Install at least 40% of the total SGCs in DACs to reduce overall Customer Minutes Interrupted (CMI), a measure of the consequences of disruptive events, by 5% each year.	
Phase (BP: budget period)	End of Budget Period Milestone
Define (BP 1)	1) Establish baseline CMI in each respective DAC.
Engage (BP 1-5)	1) Enroll a planned number of new customers in the income-qualified heat pump discount program.
Implement (BP 2-5)	1) Contribute to PGE's overall goal of CMI reduction by 5% in every disadvantaged community in which the SGC is fully deployed.

4.2 Environmental Impacts

As indicated in the "Environmental Questionnaire" form, there are no foreseeable environmental impacts associated with the SGC project within or outside of the disadvantaged communities. PGE does not plan to carry out project activities that adversely impact biological resources, historical and cultural resources, air quality, water quality and health and safety conditions, or result in waste creation or create a need for environmental restoration.

5. Resource Summary

Title	Scope	Budget	BP
Section 1: Community and Labor Engagement			
VertueLab	Support PGE in operationalizing effective engagement with CBOs and Disadvantaged Community stakeholders	\$1.5M total	1-5
Section 2: Investing in the American Workforce			
Saturday Academy	Develop AI curriculum, classes, camps and Apprentice in Science and Engineering (ASE) positions	\$1.8M total	1-5
Research grads at Oregon State	Graduate researchers exploring the capabilities of AI in energy systems	\$800k total	1-5
Pre-Apprenticeship & Apprenticeship Training Lead	Create training modules and drive Pre-Apprenticeship and Apprenticeship training efforts	\$34k/year.	1-5
Section 3: DEIA			
Human Resources (PGE)	Update hiring practices incorporating DEIA recruitment procedures	\$100k/year	1
Compliance Manager	Overseeing implementation and ongoing management of CBP	\$100k/year	1-4
Oregon Tradeswomen	Career exposure to energy careers	\$125K total	1-5
Section 4: Justice40 Initiative			
PGE Community Benefits Workstream Lead	Track and measure planned Justice40 benefits and ensure meaningful benefits are created in DACs	\$140k/year	1-5

Workforce Resource Investments:

The project plan will be supported through both people resources and dollars allocated to organizations supporting the overall workforce needs now and in the future. Through partnerships with Saturday Academy and Oregon State University, PGE will allocate \$2.6 million for the development of STEM and AI programming to support the next generation of engineers that will leverage the SGC technology as we continue to modernize the grid.

To support building equitable and inclusive representation in the trades, the project will invest \$125,000 with Oregon Tradeswomen. Oregon Tradeswomen supports female/non-binary underserved populations within the construction sector including formerly incarcerated, veterans, and women of color. Participants are offered skills training and education as well as exposure to registered apprenticeship programs at no cost. Their career counselors help graduates with applications to apprenticeship training programs and employers as well as providing individualized support throughout the entire career of a graduate. This model ensures the success of program participants and needs of employers.

PGE's people resources will be dedicated through the work of oversight of engagement and outreach with the project partners noted above as well as the deployment of the new technology. Resources will be allocated from PGE's Government Affairs, DEI, IT, Engineering, HR, and Operations teams.