

1. Community and Labor Engagement

Overview:

With the support of the U.S. Department of Energy, Central Maine Power Company (CMP) will implement smart grid technologies that will increase capacity, reduce clean energy curtailment, unlock clean energy generation, and enable grid resiliency for a population of 1.3 million in the State of Maine. Established in 1899, CMP has long been a leading utility provider and strong union employer in central, southern, and western Maine, serving over 650,000 customers, including service to 14 counties, and 346 cities, towns, townships, and plantations delivering 9,297 GWh of electricity during the past year. The proposed project prioritizes investments in disadvantaged communities (DACs), specifically focusing such investments in the company's Augusta, Lewiston, Bridgton, Dover, Fairfield, and Skowhegan districts, all of which include areas designated by the DOE as disadvantaged communities (DACs). Specifically, 83% of all Maine DACs are within CMP's service territory. This territory includes 28 DACs in 12 counties and serves the following critical community anchor institutions in those DACs:

Airports	Emergency Shelters	Hospitals	Manufacturing Sites	Public Safety Infrastructure	Public Schools
9	75	11	148	32	103

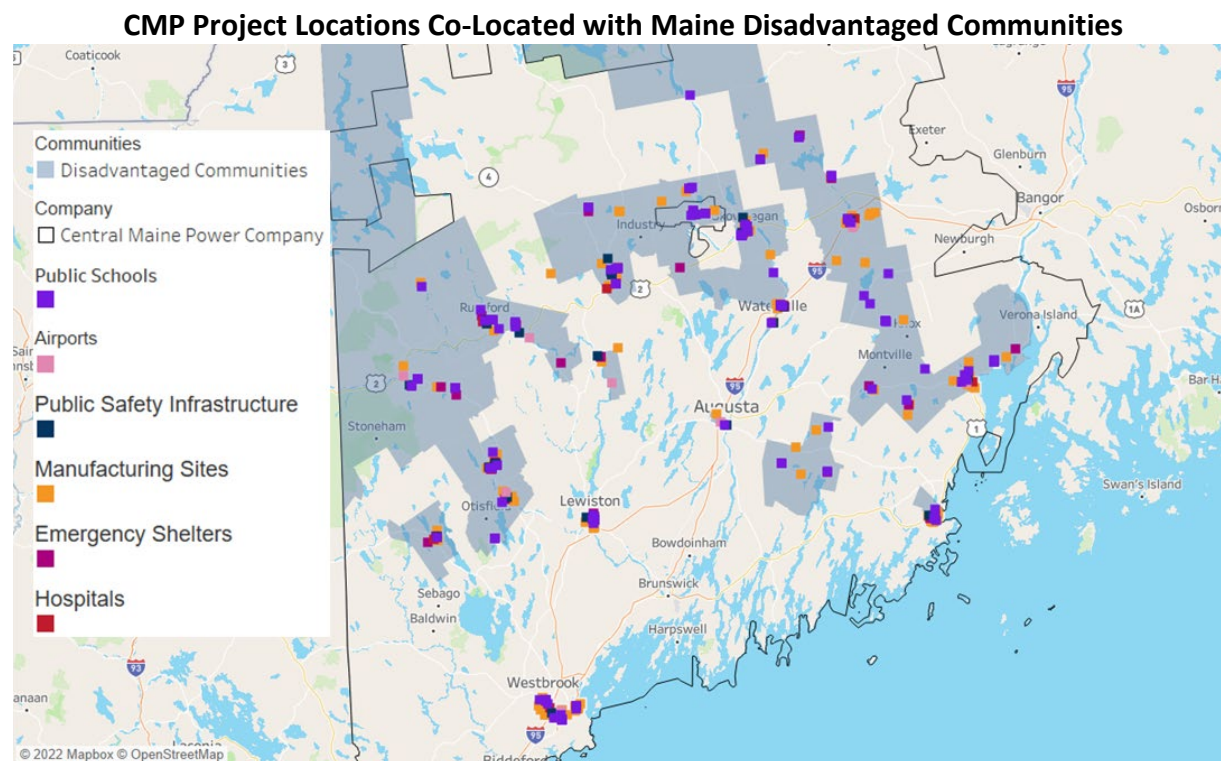


Figure 1 There are approximately 189,645 people in the disadvantaged population served by CMP.

CMP anticipates that the proposed project will create approximately 100 total good paying jobs.

Community and Labor Engagement History: CMP actively and frequently engages with the community in the proposed service area. CMP Government and Community Relations Program Managers, in collaboration with other CMP professionals, conduct substantial proactive outreach with numerous organizations and government agencies throughout the year. Outreach includes opportunities for training in topics such as safety, smart meters, bill reading, and Blue Sky/Emergency Preparedness seminars. CMP collaborates with local economic development agencies to attract new business to all of CMP's divisions. Furthermore, as a prominent utility supplier in central, southern, and western Maine, CMP has a long history of collaborating with community and labor stakeholders throughout the region, including unions, local governments, and community benefit groups such as, but not limited to:

- **Local Governments – Communities of Augusta, Lewiston, Bridgton, Dover, Fairfield, and Skowhegan** - CMP Government and Community Relations Program Managers regularly meet with government officials in CMP's operating divisions. Local and county government leaders have indicated their overall support for CMP's application, and they are especially encouraged by the targeted advantages incorporated in the application specific to DACs in CMP's divisions. Local government leaders additionally appreciate the activities that CMP will be able to undertake to enhance the system and limit the number and length of outages that occur as weather extremes continue to evolve. In 2023 and beyond, CMP will continue to hold annual municipal leader meetings in its operating divisions that include these communities, covering topics such as system overviews, project updates, vegetation management schedules, capital improvement plans, routine maintenance programs, resiliency projects, and workforce development as it relates to increasing diversity in local hiring as well as updates on DACs that will benefit from CMP's community-driven GRIP grant program, discussed below.
- **Community Benefit Organizations – Maine Community Foundation (MCF) and Maine Development Foundation (MDF)** - As a follow-on to its many years of community support activities, CMP has received a letter of commitment from these two key foundations, one of which will serve as a sub-grantee in this application. The foundations will convene a community-driven task force to plan and oversee the distribution of grant funds to organizations focused on workforce development, diversity, equity, and inclusion, and addressing the needs of DACs, with the goal of ensuring equitable distribution of allocated funds. CMP's Linda Ball serves on the MDF's board of directors and is active in supporting many of its initiatives including Main Street Maine, Rural Entrepreneurship, Adult Learners Program, Maine Spark (workforce development), Leadership Development and its work to help 230 dislocated mill workers at Pixelle, in Jay, Maine, a factory that plans to close its doors by May, 2023.
- **Labor engagement** – Half of CMP's 1,034 employees are unionized. As members of the International Brotherhood of Electrical Workers (IBEW), they are part of one of the leading U.S. workforce development-focused unions. IBEW provides electrical apprentices with industry-leading training and opportunities to gain more skills and experiences in the four years of the apprenticeship program than other career paths. IBEW District 2 includes nine local unions in Maine and several thousand workers in the CMP service territory.

- AVANGRID Inc. (AVANGRID), CMP's parent company, maintains a supplier diversity program, which is notable for its commitment to creating opportunities for suppliers from diverse backgrounds. AVANGRID has set a goal to increase spending with diverse suppliers to \$300 million in 2025.

Engagement Plan/Methods:

CMP is committed to ensuring that the benefits of the proposed smart grid enhancements will be realized by all residents of the proposed service area, including the 28 disadvantaged communities in CMP's divisions. As a long-time utility leader in the community, CMP will facilitate a community-driven process that builds upon past successful community engagement efforts in the region.

The community-driven process will be advanced with best practices recommended by the International Association of Public Participation (IAP2), allowing CMP to develop an objectives-driven approach that customizes engagement activities to support different levels of participation, as follows, to ensure engagement methods support a broad and inclusive process.

To leverage existing relationships and also to build new relationships with community organizations, CMP will continue to engage regularly with local collaborators such as Maine Community Foundation and Maine Development Foundation. In addition to its developing plan to grant \$300,000 in GRIP community benefit funds to groups identified by the above-referenced two foundations, CMP also collaborates with community colleges, county workforce development boards, and area non-profits. CMP will encourage meaningful two-way communication on project progress, concerns, and opportunities by bringing multiple perspectives to the table and identifying critical issues early by organizing outreach through respected, grassroots community foundations, establishing a project website for inquiries, and distributing a quarterly email update targeted toward the DACs. CMP will begin this process with a project kick-off meeting focusing on DAC participation, with an agenda developed in collaboration with local governments and DACs to reflect community opinions. Other activities will include:

- CMP's outreach team will disseminate information through a continually updated, customer-focused project web page e-blasts, social media, bill inserts, and other techniques to keep a large and diverse audience informed.
- CMP will increase awareness and understanding of project advantages, relevance, and participation opportunities through an education and outreach campaign leveraging local MWBE community engagement partners to make information available and accessible to all stakeholders in the project region.
- CMP will participate in job training programs offered by workforce development boards, unions and community colleges by joining other employers to offer curriculum input to ensure students gain the knowledge needed to succeed. This in turn will help CMP gain insight into how it can strengthen economic development and job opportunities for the planned project.

Additionally, CMP will conduct a stakeholder analysis of area organizations engaged in workforce development, diversity, equity, and inclusion, and addressing the needs of DACs. The analysis will use primary and secondary research methods to determine the key sectors, labor unions, communities, and non-profit organizations, for project engagement and the best methods to use (e.g., advisory committee, focus groups, working group members, active public participants). CMP maintains many strong relationships with community-based organizations, and they have been asked to support this critical DOE initiative.

2. Investing in the American Workforce

Skilled Workforce

CMP recognizes that the DOE encourages employers to create good jobs, not just any jobs. CMP agrees with DOE's seven principles for good job creation, and notes that these principles essentially describe the types of jobs found at CMP, where half the workers are union members. All work for this project will be conducted in the United States. CMP is committed to providing high-quality jobs and also has a demonstrated track record of supporting programs that encourage and train the next generation to join the energy workforce. According to the Bureau of Labor Statistics, only 8% of the national energy sector workforce is African American¹. CMP is committed to working with its community partners to improve equity in the sector. CMP is committed to working with its community partners to improve equity in this sector and is committed to ensuring that all jobs created through any funding received as a result of this application receive Davis-Bacon compliant wages at a minimum. CMP offers its employees AVANGRID-backed benefits, including but not limited to up to \$10,000 of tuition assistance, student loan repayment assistance, caregiver insurance, medical/dental/vision, life insurance, and comprehensive 401k benefits. CMP has provided an overview of the anticipated subcontractor jobs (including union positions) that will be created as a direct result of the proposed project below:

Milestone	Activity	Metric
Budget Period 1	Engineering	10 Jobs are Created and hired
Budget Period 2	Engineering, Procurement of Materials, and Construction	20 jobs are created and hired
Budget Period 3	Manufacturing of Materials and Construction	50 jobs are created and hired
Budget Period 4	Construction and Close out	20 jobs are created and hired

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<https://www.naseo.org/data/sites/1/documents/publications/Workforce%20Diversity%20Data%20Findings%20MASTER%20Final42.pdf>

Workforce and Community Agreements: Through its outreach team's participation in local boards, chambers, and community groups, CMP has built strong relationships with unions, trade groups, universities/colleges, and many supply chain providers. One of the unions representing CMP workers is the International Brotherhood of Electrical Workers (IBEW) District 2, which encompasses nine local unions. These important organizations will be engaged to assist in addressing job quality and workforce continuity. Building on existing relationships with unions, CMP will strive to maximize the use of union labor and project labor agreements where appropriate. In addition, CMP will assign an estimated 15% of one staff member's time to oversee and coordinate the GRIP Community Benefits Plan. This staffer will convene public meetings to engage and negotiate agreements with stakeholders and will coordinate inbound and outbound communications channels.

Developing the Workforce Pipeline: CMP has taken internal steps to identify areas within the Company that have greater vacancies and where demand for qualified candidates is higher. CMP's has several tracks for its' workforce development programs through support for apprenticeship through its longstanding IBEW partnership and through workforce organizations and Electrical Lineworker programs offered by the Maine Community College system.

CMP sponsors a local Electrical Lineworker Technology apprenticeship program through Kennebec Valley Community College. This one-year certificate program provides students with the technical background and the manual skills necessary for careers in the installation and maintenance of electrical power, telephone, and cable television systems. Safety, pole climbing, and teamwork are emphasized throughout the program while the student learns and performs overhead and underground construction. Students are exposed to such curriculum topics as AC/DC electrical theory, field training, occupational safety, line construction theory, tree trimming and line clearance, rigging, transformers, basic telecommunications, and utility metering. Approximately two-thirds of the program is devoted to strenuous hands-on skills, allowing students to develop a high degree of proficiency in the use of electrical line working equipment and procedures. For the past four years, CMP has drawn from the graduate student pool to hire into full time job roles in the utility. The program is highly successful with more than 570 students completing the program since its inception in 1990. Following graduation, 91.3% of students are employed within six months, earning an average salary of \$60,908. CMP is in the process of expanding this course offering through the community college system. CMP is working with universities and community colleges in the state to identify opportunities to train electrical design and commissioning professionals who will be essential to complete tasks designing and commissioning automation devices.

Jobs for Maine Graduates (JMG) is another organization CMP draws upon and has supported financially for the past eight years with grants totaling \$200,000 to date. JMG partners with public education and private businesses to offer results driven solutions to ensure all Maine students graduate, attain post-secondary credentials, and pursue meaningful careers. Scholarships are provided to University of Maine Engineering System students, partially funded

by the Avangrid Foundation, a 501(c)(3) organization, which invests in communities where AVANGRID and its subsidiaries, such as CMP, operate and serve.

CMP supports education in the K-12 grades with utility related programs and resources. The company has a “Safety City” demonstration that provides STEM education to elementary school students in the state of Maine demonstrating how the power distribution system works.

CMP will leverage its strong relationship with the Maine State Chamber of Commerce. Local chapters of the Chamber of Commerce will be asked to assist in communicating opportunities for economic development associated with the program and to highlight resiliency needs of underserved communities.

Violations

During the past three years, CMP had no employment-related violations under the National Labor Relations Act, Fair Labor Standards Act, Davis Bacon Act or Title VII of the Civil Rights Act.

3. Diversity, Equity, Inclusion and Accessibility

CMP prioritizes selection of subcontractor firms that adopt DEIA principles, sound worker compensation standards that align with or exceed Davis-Bacon requirements and hiring employees from local communities. The supplier survey issued in preparation for this project received responses that highlighted notable contributions by CMP suppliers to local communities for DEIA and workforce initiatives.

Resource Summary: CMP has structured its team to include a specific and dedicated leadership role for its outreach liaisons. Additionally, it will supplement its capacity with members selected from employees and subject matter expert consultants to ensure a robust collective that will develop tactical approaches to define an inclusive process that engages underserved populations. The CBP process prioritizes inclusive engagements with host communities, ensures equitable distribution of project benefits, and specifically addresses the needs of environmental justice communities that have previously been underserved and under-engaged in large scale infrastructure projects that affect residents of the region.

Communication Channels: CMP’s divisions have robust communication plans in place, including monthly bill inserts, quarterly emails, social media messaging, information on cmpco.com, radio, TV, and newsprint ads to communicate with our customers. In addition, CMP’s Government Affairs and Community Relations departments attend in person, local emergency management meetings, chamber meetings and events, attend community organization meetings and events. CMP employees are members of multiple economic development partnerships, Chambers of Commerce, education foundations, and various other boards throughout CMP’s service area. Public involvement materials for this project will be made available in multiple languages as appropriate and in formats that can be accessed by people with disabilities, including websites

and PDFs. Meetings venues will be near transit services and accessible to people with physical limitations.

DEIA SMART Goals

Budget Period 1: Conceptual and detailed design ensues

SMART Milestone: CMP will finalize its DEIA procurement policy for the project and will fund the Maine Community Foundation to issue an RFP for workforce development, DEIA, and Justice40/DAC advancement initiatives.

Budget Period 2: Procurement begins

SMART Milestone: CMP, through the Maine Community Foundation, will award RFP grants.

Budget Period 3: Procurement continues, Construction begins

SMART Milestone: CMP will work to ensure smart grid curriculum is part of curriculum development efforts offered through the Maine Community College System.²

Budget Period 4: Construction complete, Projects are commissioned and closed out.

SMART Milestone: Through quarterly reporting to DOE, CMP will document its metrics with workforce development, DEIA and DAC support and share with community partners.

4. Justice40 Initiative

Disadvantaged Communities

Across the counties with DACs, the current risk and exposure to environmental hazards appears to increase with the respective demographic concentrations of people of color and low-income individuals as well as unemployment and education levels. (Source: <https://ejscreen.epa.gov/mapper/>) As shown below, CMP serves the Augusta, Lewiston, Bridgton, Dover, Fairfield, and Skowhegan districts, which face a range of environmental justice challenges. Two census tracts in these districts are highlighted below.

Fairfield

Of the approximately 6,484 individuals living in Fairfield, Somerset County, Maine, 17.3% are low income and a majority have less than high school education. The unemployment rate is 7%, with job growth lagging the rest of the nation by 10 points. The Environmental Justice Indexes established using the EPA's EJScreen Tool, for the selected census tract in Fairfield largely stand above the 50th percentile in the State of Maine. Notably, the census tract is in the 87th percentile for Particulate Matter 2.5 levels, 87th percentile for Ozone concentrations, 86th percentile for exposure to Lead Paint, and 86th percentile for the number of Underwater Storage Tanks. Within Somerset County, 43% of the residents are low income, with 19% of the population having less than a high school education.

Fairfield is identified as a DAC according to Justice40 Initiative criteria; the selected census tract has three categories that meet the criteria: climate change, health, and energy.

Lewiston

² <https://www.mccs.me.edu/workforce-training/>

Eight DACs, according to Justice40 Initiative criteria, are in the Lewiston area (population 36,617, which includes approximately 10,000 resettled Somalis, who came to the U.S. to flee civil war). Lewiston has a poverty rate of 16.3% and a median household income of \$48,069. In 16 indices measured by the EJ Screen, the selected census tract in Lewiston was in the 96th percentile or higher, meaning that Lewiston residents fare worse than almost all other Maine residents in terms of air quality, exposure to health hazards and toxins, poverty level, and educational attainment.

Of the approximately 111,034 individuals living in surrounding Androscoggin County, 9% are people of color, 36% are low income, and the majority have less than high school education.

	Fairfield	Lewiston
Environmental Justice Indexes	Percentile in Maine	
Particulate Matter 2.5	87	97
Ozone	87	88
Diesel Particulate Matter	82	99
Air Toxics Cancer Risk	76	99
Air Toxics Respiratory Hazard Index	72	99
Traffic Proximity	84	99
Lead Paint	86	99
Superfund Proximity	42	98
Risk Management Program Facility Proximity	71	99
Hazardous Waste Proximity	78	99
Underground Storage Tanks	86	99
Wastewater Discharge	90	99
Socioeconomic Indicators	Percentile in Maine	
Demographic Index	74	99
People of Color	16	96
Low Income	84	99
Unemployment Rate	78	68
Limited English Speaking	0	97
Less than High School Education	76	98
Under Age 5	51	88

Over Age 64	28	62
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Benefits to DACs

It is anticipated that air quality and CO₂ benefits will be associated with reductions in outages and future projects can estimate the benefits associated with preparing the grid for the integration of a significant amount of new distributed generation that can serve to further decrease energy burden and emissions. We also anticipated that the proposed project also will facilitate the following benefits to disadvantaged communities:

- An increase in access to low-cost capital by the injection of \$300,000 to the communities served by the Maine Community Foundation, which will re-grant the funds to community-vetted organizations advancing job creation, DEIA, and assistance to DACs through a community-driven process.
- An increase in job creation (with acknowledgement of “good jobs” principles per the DOE), the clean energy job pipeline, and job training for individuals.
 - CMP anticipates that the proposed smart grid implementation will increase job creation, the clean energy job pipeline, and job training in the following areas:
 - Installation and maintenance: Smart grid infrastructure requires skilled workers such as electricians, engineers, and technicians. These workers will be needed to install smart meters, sensors, and other devices, as well as maintain and upgrade the system as needed. As the demand for smart grid technology increases, so will the need for workers to install and maintain it.
 - Manufacturing: Smart grids rely on a variety of components such as sensors, communication devices, and software and will create jobs in the manufacturing sector. CMP supports the Manufacturing Alliance of Central Maine, which is leading advanced manufacturing workforce development efforts.
 - Data management and analysis: Smart grids generate a vast amount of data that needs to be managed and analyzed. Data analysts and data scientists will be needed to process and analyze this data, identify trends and patterns, and use it to optimize the performance of the grid.
 - Energy efficiency and conservation: Smart grids promote energy efficiency and conservation by allowing consumers to monitor their energy use and adjust it accordingly. This creates opportunities for energy auditors, building shell specialists, energy efficiency consultants, and other professionals to help consumers reduce their energy consumption.
 - Research and development: As smart grid technology continues to evolve, there will be a need for researchers and developers to work on new technologies and innovations. CMP’s work with community colleges will serve as the foundation of these efforts.
- Increases in clean energy enterprise creation and contracting (e.g., minority-owned, or disadvantaged business enterprises).

- Increased parity in clean energy technology access and adoption will be achieved by the prioritization of DAC communities under this program, which will allow CMP to perform critical infrastructure improvements six to ten years earlier than it otherwise would have.
- An increase in energy resilience will be achieved by this initiative's emphasis on modernizing the grid to not only reduce the number of power outages but also their duration.

Anticipated Negative and Cumulative Environmental Impacts to DACs

CMP does not anticipate any lasting negative environmental impacts to DACs as part of the proposed project. During the active construction phase of the project, there will be some temporary disturbances, e.g., noise, increased vehicle traffic, potential for short outages for cutovers and ground disturbance. All reasonable efforts will be made to be respectful of the communities within which the work will take place to closely monitor and mitigate impacts through CMPs established project management process and two-way outreach and communication feedback loop with area community groups, as well as through the outreach efforts of the two foundations. Further, CMP has a robust mitigation strategy that includes but is not limited to:

- Supply Chain Lead Times - Transformers (1-2 Years) and wire (1-2 Years) are key items. Alternatives such as the use of potential transformers (PTs) as a replacement for service transformers are being implemented as PTs have shorter lead times. Long lead time materials are ordered during the design engineering task, often one year in advance of anticipated construction to reduce overall schedule. Transformer Recycling and refurbishment is also being actively undertaken as CMP procurement has engaged partners in transformer refurbishment programs to reuse transformers salvageable from the existing system for use on future projects.
- Real Estate - New real estate may be required to complete projects. CMP has a centralized real estate group responsible for efficient easement acquisitions. Staging yards will be needed for storage of materials leading up to construction and will be secured during planning.
- Weather Events – Storm events have historically created delays in project execution. This risk can be mitigated by maximizing resources during non-storm events. CMP program management plans for storm delays by building into the schedule historical average of storm days.
- Battery Failures - Recloser technologies require maintenance programs to ensure that batteries are replaced on time in deployed devices. If batteries fail, communications can be lost, and functionality can be diminished. CMP is developing a maintenance program to address the deployment of devices in the system. Inventory of safety stock ensures availability of key parts on hand to address emergency needs.
- Operational Wireless - Advanced Grid Restoration (AGR) is dependent on operational available wireless communications. If communications are not available when an incident occurs AGR can fail to operate. Additionally, AGR relies on programming to effectively

operate. Sequential Reclosing was a mode of operation developed specifically to operate with AGR absent operational communications, even if wireless communications are not available at the time the disruption occurs, sequential reclosing can still operate.

How and When Anticipated Benefits Are Expected to Flow to DACs

CMP anticipates that the proposed project can bring the following benefits to DACs during the project period and beyond:

1. **Energy affordability:** DAC members often have limited resources to pay for their energy bills. Over the longer term, smart grids can potentially help reduce energy costs by preparing the grid for distributed generation technologies that have the potential to lower energy bills for consumers. Smart grids thus hold the promise to decrease energy burden and emissions.
2. **Improved reliability:** DACs often experience power outages due to aging infrastructure and equipment. Smart grids can help improve reliability by detecting faults in the grid and responding quickly to restore power. This is particularly important for communities that rely on electricity for critical services, such as healthcare.
3. **Increased access to renewable energy:** Smart grids can help DACs access renewable energy sources, such as solar. Through their participation in Maine's robust energy programs, many CMP municipalities are well advanced in their development of community solar, even in low-income communities, and in moving toward community choice aggregation that is focused on procuring renewable resources.
4. **Job creation:** The deployment of smart grids can create new jobs, particularly in the installation and maintenance of advanced metering and monitoring systems. This can benefit DACs by providing new employment opportunities and boosting local economic development, as long as the necessary tandem activities to recruit, train and support trainees from underserved communities are undertaken.

It is anticipated that benefits associated with this project will exceed the Justice40 targets. A planned analysis of anticipated benefits will examine how this project can increase energy resiliency, decrease environmental exposures, increase parity in energy technology, increase clean energy enterprise creation and contracting, and increase the pipeline of energy jobs for communities within the project area. The projects in this proposal prioritize investments in DACs, specifically focusing on the company's Augusta, Lewiston, Bridgton, Dover, Fairfield, and Skowhegan districts designated by the White House, DOE and/or State as DACs. As a result of this project. It is also anticipated that air quality improvements and CO₂ reduction benefits will be associated with reductions in outages and future projections can estimate the benefits associated with preparing the grid for the integration of a significant amount of new distributed generation which can serve to further decrease energy burden and emissions.

Justice 40 SMART Goals

Budget Period 1: Conceptual and detailed design ensues

SMART Milestone: Identify potential environmental risks of project and develop a mitigation plan for review by community partners.

Budget Period 2: Procurement begins

SMART Milestone: Create an updated plan based on community feedback.

Budget Period 3: Procurement continues, Construction begins

SMART Milestone: Implement the risk mitigation plan during construction and update approach as needed.

Budget Period 4: Construction complete, Projects are commissioned and closed out

SMART Milestone: Report out success of plan and identify any modifications required for future projects.