

**Project DA: Distribution Automation Deployment
In Missouri, Kansas, Arkansas, and Oklahoma.**

COMMUNITY BENEFITS PLAN

1. Plan Overview

1.1 Project Background

Project DA seeks to sectionalize and automate the switching on up to 179 distribution circuits served by The Empire District Electric Company (“Empire”) that spans state lines of Missouri, Kansas, Arkansas, and Oklahoma and serves approximately 177,000 end-use customers. Empire is a wholly owned affiliate of Liberty Utilities. The proposed DA deployment targets a 33% reduction of Customer Minutes of Interruption (CMI) on the affected circuits, improved weather resilience through the line infrastructure renewal, and additional system flexibility and renewables integration capacity through conductor and station transformer upgrades.

1.2 Progress Overview Since the Last Application Juncture

Since its submission of the Concept Paper in mid-December, Empire worked to transform the Community Benefit Plan’s (CBP) preliminary outline into a more substantive and evidence-driven strategy. In submitting this substantially more mature document, the company hopes to convey its commitment to making sure that Project DA leaves a robust legacy in the communities it will touch, and simultaneously leverages local skills, knowledge, and creativity. As described in more detail below, Empire’s planners, engineers, and community development staff have conducted over 30 in-person engagements in all four states, including with members of the local IBEW union chapter, an Indian Tribe whose primary membership is served by several project sites, the Missouri Office of the Public Counsel (OPC), and multiple municipal governments, chambers of commerce, schools, hospitals, and others.

As illustrated by the number and variety of letters of commitment to explore partnerships and general letters of support, Empire’s community representatives are ready, willing, and capable of collaboration, and see the value in improvements that Project DA entails. Beyond the in-person engagement activities, the company also launched a project website¹ and took meaningful steps to develop the specific steps comprising the benefit realization plan, along with targeted objectives and tools and processes, that would be required to accomplish them. Overall, Empire has a more comprehensive grasp on the task at hand and is ready to move forward should the project funding be awarded. More generally, the planning and engagement work created additional opportunities for the company to learn about their customers’ needs and priorities.

2. Community and Labor Engagement

Aside from formal approvals of the project’s funding sources and requisite site access and modification permits, Empire understands the value of securing support and buy-in from the communities that it serves and the key representatives of the local organized labor movement

¹ [Project DA Grant Survey \(libertyutilities.com\)](https://www.libertyutilities.com) – note that for branding consistency, all affiliates of Liberty Utilities (including Empire) are branded as Liberty on the company’s website.

who will be pivotal in executing the work itself. In most cases, there is overlap between these groups of stakeholders, as unionized line crew employees, and those typically retained by its construction contractors through local union hiring halls often live in the communities that the company serves. A key priority in these engagements are clarity, transparency, and timeliness.

Targeted Community and Labor Engagement Outcomes over the Project Duration:

- Zero project delay days due to preventable stakeholder engagement oversights.
- Execution of Community Agreements with at least three partners, including 2 DACs.
- Wyandotte Tribe’s participation in site preparation activities on at least 2 project sites.
- Gather data on “resilience enablers and vulnerabilities” for communities w. 100+ residents.

2.1 Overall Approach to Engagement

Empire has adopted a three-pronged engagement strategy for this Plan:

- Digital Engagement: Website and Social Media Outreach (Internal and External)
- In-Person Engagement: Key Community Enablers and Beneficiaries
- In-Person Engagement: Potential Delivery Partners

To structure this work Empire has developed and plans to regularly update the following Stakeholder Map, to ensure that it is comprehensive and objective in its engagement efforts.

Table 1: The “SNRD” Stakeholder Map for Project DA (Version 1)

Stakeholder Group	Key Groups or Organizations	Key Engagement Priorities
Supporters	Commerce chambers, municipal governments, large customers sensitive to outage costs, EPC contractors, medical and emergency management organizations.	<i>Capitalize on their enthusiasm</i> – identify meaningful opportunities to reflect the facilitation or resources of these organizations in formal Agreements.
Neutral	Local labor unions, customers in system areas with multiple redundancies (or own backup power), Indian Tribes, local government officials.	<i>Emphasize their points of value</i> – identify what matters to neutral stakeholders who could be pivotal and focus on these issues to convert them into supporters.
Resistors	Vulnerable consumers sensitive to rate increases and organizations advocating on their behalf. Proponents of grid defection (typically solar/storage aggregators).	<i>Listen, learn, incorporate, re-engage</i> – capture concerns in a way that does not assume “knowing the answer.” Incorporate concerns into plans & regularly re-engage.
Detractors	<u>None identified</u> – but could include landowners, or local conservation groups who may have reasons to actively interfere in access / work on specific sites.	<i>Focus on integrative rather than distributive outcomes.</i> Work to proactively identify through site-level project planning work (once DOE funding approval is granted).

In conducting the engagement work, Empire is leaning on a combination of its Operations / Planning, Communications, and Business and Community Development (BCD) teams. While BCD professionals maintain an active line of communications with municipal- and county-level chambers of commerce, economic development organizations and key customers in terms of load size, sensitivity, and criticality to the community, Operations and Planning professionals were tasked with engaging local union leadership and the key regulatory stakeholders. The above SNRD framework’s initial version was developed by the core Project Team members and the suggested approaches have been incorporated into outreach efforts to date.

2.2 Engagement Activities and Outcomes to Date

Prong A: Digital Engagement: Website and Social Media Outreach

A project website went live on March 5th, 2023. The website contains a non-technical project description, along with brief project Q&As and an input form inviting questions and/or proposals to explore collaboration. Empire's Facebook and other social media feeds are promoting the site, which has also been used by BCD members as a visual reference tool and "digital leave behind" materials in their in-person engagements (see prongs B and C).

Empire began to spread awareness about the project internally through its "Good News Fridays" digital newsletter and dedicated posts on Yammer (employee communications hub). In making this a portion of its community outreach strategy, Empire seeks to leverage the high degree of community involvement by its employees. As per its latest Community Region Involvement Database survey, Empire's employees are engaged in over 200 local community organizations across nearly 50 administrative units. Among others, the list includes:

- 10 Municipal Government Organizations and 10 Chambers of Commerce
- 17 Civic Community Betterment Organizations (Rotary Club, Lions Club, Freemasons)
- 12 Educational Organizations and 9 Community Sports and Recreation Organizations.

In disseminating the information about the project through to the members of its staff, Empire seeks to create additional information delivery channels that leverage the customization of the message / advocacy on the part of the employee. The company has already reaped the benefit of this strategy, as an employee who is also a member of the Joplin Rotary Club lobbied for inclusion of the presentation on this project into an already set meeting agenda.

Prong B: In-Person Engagement: Key Community Enablers and Beneficiaries

This prong of the engagement strategy largely focuses on "Supporters" and "Neutral" stakeholders as per the above Stakeholder Map and focuses on creating awareness and "latent advocacy" – to assist the project when required (e.g. local permits facilitation, identification of volunteers and/or local professionals that may be required by the project, etc.). To date, the following stakeholders have been engaged through in-person discussions, many of whom have submitted letters of support and/or intent to form partnerships (See the appropriate Appendix).

Community Enablers & Beneficiaries Engaged and Expressing Support to Date	(1) Neosho Chamber of Commerce, (2) City of Neosho, (3) City of Bolivar, (4) Bolivar Economic Development Cttee., (5) Aurora Chamber of Commerce, (6) Arvest Bank, (7) City of Commerce, (8) McDonald County Chamber of Commerce, (9) City of Joplin, (10) Freeman Hospital, (11) Aurora School, (12) Columbus School, (13) Joplin Rotary Club, (14) Riverton School District Board, (15) Show Me Christian County, (16) Carl Junction School District, (17) City of Sarcoxie, (18) The Economic Development Partnership, (19) Grow Neosho (20) Ozark School District, (21) Taney County Partnership (22) Mercy Hospital, (23) Missouri Office of the Public Counsel.
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Of special note in this category are the company's engagements with representatives of Missouri Office of the Public Counsel (OPC). For the purposes of engagement planning, OPC is deemed to be a "Neutral" stakeholder, as is appropriate based on its mandate. However, Empire is cognizant that some of the stakeholders that OPC represents would have concerns with the project's rate

impact even after the proposed DOE cost share, and thus resist the project. The company believes it is critically important to keep these perspectives in mind as the project and its engaging activities mature and proceed to completion. The Project Team was encouraged to receive OPC's Letter of Support for this project (See Attachment LOC). The team has also asked the OPC to connect them with any stakeholders that may have interest and/or concerns to share.

Prong C: In-Person Engagement: Key Potential Delivery Partners

For this prong of its engagement strategy, the Project Team initially concentrated on two key stakeholders – namely the Local IBEW Chapter 1474, which represents all of Empire's unionized line crew employees, and the Wyandotte Indian Tribe with traditional territory in the vicinity of several of planned project sites. For the purposes of engagement planning, both stakeholders were viewed as "Neutral", as the Project Team had no reason to believe that the underlying work would be opposed by either party, but knew that it would have to identify meaningful value opportunities for both organizations' members to secure their preliminary commitment to explore partnerships in Project DA.

As reflected in the appended Letters of Commitment, both Local 1474 and the Wyandotte Tribe leaders saw sufficient potential for collaboration and benefits to their members and the communities at large to commit to further exploration of partnerships. Local union leadership was encouraged by the opportunities for additional construction job creation as well as training for frontline union members in the areas of Smart Grid technology installation, maintenance, and troubleshooting, along with opportunities for collaborative engagements to revisit (and where necessary, redesign) the operating processes to account for an increasing share of Smart Grid devices on the distribution system. Beyond the letters of support addressed to the DOE, the Local Union leadership also sent a letter to the IBEW International Vice President for the 11th district, also seeking their written commitment of project support. In the case of Wyandotte tribe, there are a variety of collaboration opportunities that the parties will explore, but at a minimum, the company expects the Wyandotte Tribe members to be actively involved in project facilitation (e.g. staging, vegetation clearing, etc.) for the project sites in the vicinity of their territory.

Community Colleges and High Schools as Resilience Planning Enablers

While this represents the latest addition to the Project Team's thinking that will require more follow-up, Empire also plans to explore active partnerships with local schools. Specifically, the company is interested in raising awareness of community college and high school students about various career paths in the utilities industry, and the changes that the industry is undergoing due to increasing focus on cleaner and sustainable sources of energy. Importantly, Empire also sees local educational establishments as an innovative channel for obtaining critical data on community resilience – both natural and human-made features that can help community members in emergencies, but also particular points of vulnerability like critical infrastructure or businesses that are especially reliant on uninterrupted supply of power.

To this end, the company plans to build on its initial engagement with community colleges and schools to explore partnerships in developing an Introduction to Power Systems mini course, which would integrate applied content from disciplines like Physics, Statistics, Economics, and

Physical Geography. As a course deliverable, students would be tasked with gathering information and conducting basic numerical analysis in preparing a “Community Resilience Registry” document, that would list all critical resilience enablers and key points of vulnerability in the communities. Student groups would have some discretion as to the means of analysis and ultimate results presentation. Empire would work with school officials on developing an appropriate remuneration scheme, with a “Work Study” model (where students would be remunerated directly for a set number of hours worked) being a working hypothesis at this time. Depending on the level of interest, Empire will also explore an inter-school competition of resilience planning exercises, where a winning team would receive a prize towards betterment of its school and/or community. From Empire’s perspective, a critical outcome of this engagement will be a detailed database of local resilience resources that it can leverage in emergency planning and capital program planning.

2.3 Future Labor and Community Engagement Activities

Going forward, the project team will proceed with engagement activities grouped under the same three-pronged approach, over two notional periods – post-submission and prior to DOE award decision, and after the decisions have been communicated to Applicants.

Table 2: Future Planned Labor and Community Engagement Activities

Engagement Strategy Prongs	To Do Prior to DOE Award Decision	To Do After DOE Award Decision
Digital: Website & Social Media	<ul style="list-style-type: none"> • Update to confirm submission • 3 social media blitzes before July 	<ul style="list-style-type: none"> • Communicate the DOE Decision • Convey relevant next steps to be taken even if the project is not selected for an award.
In-Person: Enablers & Beneficiaries	<ul style="list-style-type: none"> • Develop “Collaboration Hypotheses Map” for key stakeholders (do not share). • Present to MO Commission on April 21st on the projects applied for. • Engage KS, OK, AR Regulator Staff. 	<ul style="list-style-type: none"> • If awarded, use Collaboration Hypothesis Document content to approach Enablers for partnerships. • If not awarded – identify & convey elements that can still proceed via regular investment program to continue fostering collaboration.
In-Person: Key Delivery Partners	<ul style="list-style-type: none"> • Conduct 1 collaborative engagement with both the Local 1474 and Wyandotte Tribe to jointly identify collaboration avenues. • Engage schools with a short Concept Paper of a course as proposed 	<ul style="list-style-type: none"> • If awarded, commence the Community and/or Labor agreement negotiations with Union and Tribe. • If not awarded – reach out to all to explore incremental opportunities that may be feasible through regular work program.

Should Project DA be selected for DOE funding, the company expects to have annual engagement milestones with key groupings of “Enablers and Beneficiaries” in the form of annual town hall meetings with more granular follow up as necessary. For Key Delivery Partners, formal annual Progress Meetings are expected. However, these would occur in addition to more granular tactical meetings as required to negotiate and advance the objectives of the contemplated collaboration agreements. This will also include the addition of targeted mail campaigns and townhall meetings for the communities where work is scheduled to take place.

3. Investing in American Workforce

Empire is keenly aware of the fact that it is one of the premium employers in its area, and one of relatively few companies working in a high tech-adjacent industry, where new technologies continuously test the robustness and flexibility of its plans and creativity of its staff. Empire is comfortable with this responsibility and has a positive track record to build on, such as retaining and retraining every Asbury coal power generating station employee when it decommissioned the facility ahead of schedule in early 2021 and replaced its capacity with local wind farms. Between 2018 and 2022, the company also created two new jobs to support the transportation electrification program that it successfully proposed to the Missouri PSC. These are just some of the examples of a proven track record in job retention and creation in response to transformational forces in the utilities industry that Empire brings to Project DA.

Targeted Workforce Investment Outcomes over the Project Duration:

- A total of 90,000 construction person-crew hours employed over 5 years
- Construction labor resources from all 4 States employed in the project.
- 100% internal line personnel receiving paid Smart Grid Device Fundamentals training
- Complete a Resourcing Requirements & Gap Analysis Workshop with Local Union Leadership
- Complete a series of Smart Grid Process Redesign Workshops (field + engineering staff).
- All contractor labor resources employed completing an Intro to Smart Grid course.

3.1 Overall Approach to Planning Workforce Growth Maximization

While a significant proportion of Project DA's labor hours would be dedicated to "conventional" utility construction work tasks like pole replacement, conductor stringing, station relay reprogramming or transformer installation (where needed)., the deployment of smart DA devices will result in an increase in recurring demand for knowledge and skillsets that are not commonly required from line staff working on the distribution system today. As such, in estimating the workforce impact of the project and ensuring the maximum local impact, the Project Team must remember to plan for a significant amount of change management, transformation and upskilling requirements in addition to core planning, design and construction tasks. While this complicates planning, it ultimately adds more in-demand skills to the local labor force, ensuring retention and new job creation.

3.2 Activities to Date

The Project Team started from the materials submitted as a part of the Concept Paper in December, and further refined the core skillsets and scope of preparatory activities that would be required beyond the specific project-related logistics. By way of this work, training design and delivery, workforce facilitation, and telecommunications professional services and tasks were added to the scope of required activities, as captured in Table 3.

Table 3: Core Project Skillsets and Sourcing

Project Phase/Major Activity Area	Core Skillsets	Planned Labor Sourcing
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Project Planning and Change Management	Project management, asset procurement, budgeting, training design and delivery, standards redesign.	Internal Empire resources, specialized process design and technical education consultants, in collaboration with Local 1474 members.
Detailed Engineering Studies and Design	Detailed project site prioritization study, cluster load flow and protection studies, project engineering and design work, telecom integration work & testing. Cybersecurity Plan development.	Via RFPs to local / regional Electrical Engineering and Design firms, internal Planning and IT/ OT staff.
Construction and Commissioning	Electrical construction workers for recloser installation and pole line infrastructure upgrade. Cybersecurity protocol deployment.	Specialized contractors sourcing labor via local Union Hiring Hall (electrical work), private EPC contractors for other (e.g. civil, telecom) work.

While it may account for a minor portion of project’s overall labor hours, the approximately 400 person-hours estimated for staff Training and Operating Process Review / Redesign activities, represent an important dimension of the project. Given the significant “big bang” installation of Smart Grid (DA) equipment across the system proposed by this project, Empire employees and contractors will be expected to acquire and refine new skills associated with advanced Smart Grid devices that are not common on the utility’s system today. In addition to practical upskilling in inspection and repair of electrical, mechanical, and telecom components of autoreclosers, Empire would also be required to review and potentially redesign some of the associated operating processes under normal, reactive, and emergency response conditions.

Accordingly, Project Team estimates that workshop facilitation and development of the resulting technical documents and standards updates will create additional opportunities for skilled contractors in the local area, plus paid education and participation in facilitated workshops by the skilled labor. In issuing RFPs for facilitation of these activities, Empire intends to give a considerable weighting to a criterion of local expertise – that is individuals directly familiar with the technical makeup of its distribution system by way of being based inside of its service territory and/or intending to spend considerable time on site while developing the deliverables. Similar requirements will apply to Engineering and Design work. Empire has Master Services Agreements in place with multiple engineering and design firms that it uses periodically for its regular work program and assigns work to through a RFP/RFI process handled through its ProCore system. The company intends to work with its Engineering and Design partners to maximize the direct benefits provided for the local area.

Empire also confirms that there have been no violations to 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 in the last two years.

Workshops and Training Activities:

Type of Activity	Estimated Duration (hrs. per attendee)	Individuals Targeted
Resourcing Requirements and Gap Analysis Workshop.	3	Internal Engineering and Construction Planning staff and Local 1424 leadership.

Process Redesign Workshops – Accounting for the impact of Smart Grid Devices.	10	Internal Construction Planning Staff, T&D Operations Leadership, Control Room and Field Staff.
Smart Grid Operations and Safety Fundamentals Training.	3	Internal outside line crew and other related operations staff members (e.g. meter shop employees). Internal Engineering and Planning employees
Introduction to Smart Grid Operations and Safety Course	2	Offered to all contractor-retained construction crew members.

Before developing the content for the courses, the Project Team will also engage local union leadership and contractor community to explore the types of skill and knowledge gaps that these stakeholders may see in the labor force readiness to accommodate the increasing demand for smart device installation and operation skills. To the extent that these conversations suggest that more formal training partnerships with educational institutions are in order, Empire will include these discussions into the scope of its relevant outreach activities as discussed in Section 2.

Direct Construction Labor Estimate

As a further enhancement upon the previous version of the CBP shared in the Concept Paper, the project team developed an estimate of the total project construction hours that will be required to complete the work in scope.

Table 4: Construction and Installation Crew Hours Estimate

	2024	2025	2026	2027	2028	Total
Construction / Installation Person-Crew Hours	9,049	24,294	20,314	21,909	16,950	92,516

In total, the 5-year labor estimate amounts to about 44 person years of work. Approximately 98% of the hours noted above are associated with electrical construction work that is assigned to either the internal crews or the electrical contractors who are mandated to staff the projects via the local IBEW hiring halls (separate halls for each state in which the work will be taking place). At this juncture, an approximate 50/50 split is assumed at this juncture. About 2% in annual projected work volumes is associated with communications devices installation, which may be eligible for contractors that utilize non-union labor.

Empire does not directly control the wages paid by contractors to unionized workers hired by contractors through hiring halls. However, it can confirm from direct experience that contractors that would be expected to bid on Project DA work, pay its labor force the rates that are approximately 75%-90% higher than the most recent 2023 Minimal Annual Wage Order - Prevailing Hourly Rates as issued by the Missouri Division of Labor Standards. The company confirms that similar order of magnitude Prevailing Wage multipliers apply to its contractor electrical labor force in Oklahoma, Arkansas, and Kansas relative to the Prevailing Hourly Rates. In a similar manner, the company's internal unionized construction labor is also paid rates that exceed the Prevailing Wage orders by approximately the same magnitude. **Note: the project team is not including the specific numbers due to confidentiality requirements but is happy to provide more information in an appropriate setting should this be required.**

When comparing a total forecasted construction labor hours of 92,516 to the typical volume of Empire's work program over the recent years, the estimate amounts to approximately 10% of the total annual volume. To the Project Team, this is an indication of the fact that the project is feasible from the execution perspective and that the incremental increase in labor demand is not unreasonable to expect to be sourced from local or adjacent areas to Empire's service territory and the many DACs that it encompasses.

3.3 Future Workforce Investment Planning Activities

Having developed a comprehensive budgetary estimate appended to this application and having established the scope of change management activities (including training and process redesign) that will create additional in-demand technical skills for the unionized construction crews in the area, the company will proceed with high-level scoping activities in terms of specific Processes, Standards, etc. that a significant expansion of Smart Grid devices would warrant to revisit. It will also explore in more detail the scope and number of *net new permanent internal positions* that will be required to operate the Smart Grid devices should the project be accepted. These may take the form of net-new positions and/or potentially upskilling and retraining opportunities for employees whose positions are not in the same degree of demand as previously, such as remaining meter readers after the implementation of AMI. In any case, the company expects that additional permanent positions will be required as a result of the project's acceptance.

4. Diversity, Equity, Inclusion and Accessibility (DEIA)

4.1 Overall Approach to DEIA Objectives Incorporation and Progress to Date

The company's Radiant Heart logo that it shares with other Liberty Utilities family affiliates, entails a visual representation of its commitment to creating safe, fulfilling, and empowering employment experiences for individuals from all backgrounds, while creating a meaningful cultural exchange and growth experience for all. This commitment is also recognized by the industry, as the company's parent Algonquin Power and Utilities is included in Bloomberg's Gender Equity Index for 2023. Empire is also the title sponsor of Joplin's upcoming 2023 Pride Festival. However, Empire's commitment to diversity and inclusion extends far beyond branding and corporate lists, with multiple policies and concrete practices some of which the Project Team has confirmed will be incorporated in the project execution:

- *AIRS Certified Diversity and Inclusion Recruiter Learning Path* – all of the company's recruitment professionals are completing a comprehensive training process to help build and enhance their diversity and inclusion talent acquisition practices.
- *Diversity Jobs powered by Circa* – Empire is part of a large corporate family (Algonquin Power & Utilities Corp.) which utilizes this online service that ensures that job postings are posted on the widest possible variety of cultural group job boards, to increase reach into the widest talent pool practicable.
- *Unconscious Bias Training* – all company professionals in the supervisory roles or above are offered this training to increase their awareness of inadvertent cognitive shortcuts that may lead to decisions that create discriminating or other types of undesirable outcomes.

- *Supplier Diversity Initiatives* – by way of its corporate affiliate relationships with utilities in other parts of the country (most notably its California water and electric distribution affiliates), Empire is exposed to their progressive policies in encouraging supplier diversity (with over 27% of work program inputs coming from diverse suppliers). Empire is exploring the relevant facets of these activities and intends to adopt them in time of the award decision.

Targeted DEIA Outcomes over the Project Duration:

- All hiring professionals utilize the AIRs and Diversity Jobs Tools in project-related work
- 100% of eligible labor and equipment / materials sourcing processes incorporate selection criteria advancing DEIA candidates or suppliers with a proven and verifiable DEIA policies, practices and outcomes track record, where all other criteria have been met.

4.2 Future DEIA Objectives-Related Activities Planned

Empire is cognizant that advancing the DEIA objectives in its service territory where visible minorities represent less than 10% of the population in the larger more urban areas like Joplin (and a lot fewer in the less populated areas), encouraging diversity and accessibility outcomes is not a trivial task, but for that reason – an additionally important task. As it awaits the results of the DOE funding award, the Project Team intends to tap into its parent entity’s corporatewide Diversity and Inclusion Committee membership (which includes members from Empire) to generate additional ideas, programs and/or establish contacts with local organizations that promote diversity in the workplace. It is the Project Team’s hope that the ongoing initiatives and concrete tools listed above convey the company’s overall commitment to DEIA. Moreover, the company believes that the reliability-related and economic outcomes that this project seeks to facilitate for the DAC communities within its service territory (many of which are served by single-phase, low redundancy assets) are in and of themselves indicative of Empire’s drive to ensure equity and equality of access and economic opportunity for its customers.

5. Justice40 Initiative

5.1 Overall Approach to Justice40 Objectives Realization and Progress to Date

Since Concept Paper submission in mid-December the Project Team has significantly enhanced the level of precision and comprehensiveness of identifying, tracking, and maximizing the potential benefit streams that Project DA can bring to the DAC communities in its service area.

Table 5: Energy Cost and Low-Income Median Score for Empire’s Communities

CEJST Justice40 Metric	MO	KS	OK	AR
Energy Cost Score Median Percentile	81 st	78 th	77 th	80 th
Low Income Score Median Percentile	73 rd	78 th	83 rd	79 th

Table 5 presents the *median* scores of the two key energy-related metrics used in the US Government’s Climate and Economic Justice Screening Tool² (“CEJST”), that provide an initial numerical overview of the extent to which the communities that Empire served are considered disadvantaged based on objective third party benchmarking. Looking beyond these initial higher-order metrics, Empire has confirmed that **its service territory contains a total of 67 census tracts** that fall into the DAC definition. These areas are denoted in light blue on Figure 1, which also showcases the planned DA deployment sites (see Appendix “LOW” for complete lists).

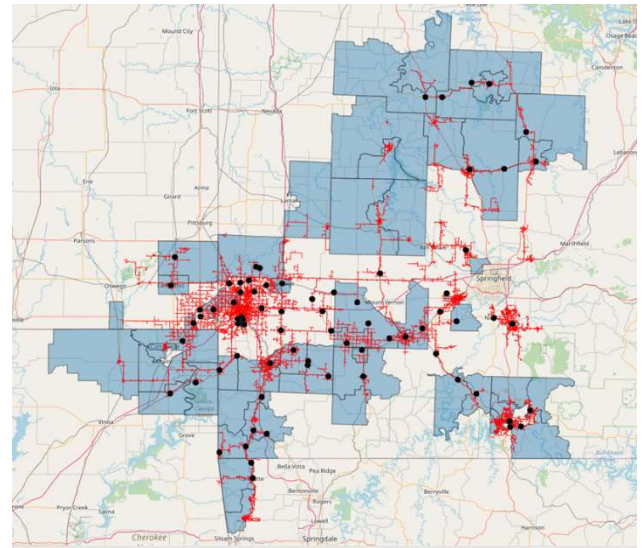


Figure 1: Planned Project Sites and DAC Locations

Using GIS analysis Empire also confirmed that a total of **98,465 of its customers (or 56% of the total) reside within the DAC boundaries**. Switching to an electrical system perspective, **project locations as currently conceived are associated with circuits that serve 77 unique municipalities, 39 (or 51% of which) qualify as DACs** entirely or partially. The disadvantaged communities that stand to benefit from the upgrades of circuits that serve them are located in all **four states** that Empire serves, meaning that the DAC impact provided by this project is of a regional – rather than local – scale and would directly and indirectly benefit the individuals, businesses, and state tax bases in 4 States.

While the bulk of the project sites (and thus spend) is located in Missouri, this is consistent with the fact that over 90% of the company’s system and customers are located in this state as well. Given the fact that the other three states form a much smaller portion of the company’s asset and customer bases, the DOE’s 50% funding contribution impact for these states is even more critical – and likely represents the difference between the projects in these states going ahead in the next five years or being deferred indefinitely due to rate impact considerations.

Specific Justice40 Investment Outcomes over the Project Duration

- Develop in Year 1 and track a separate subset of DAC-specific reliability sub-metrics
- Attain a 33% reduction in Major Event-adjusted CMI for DAC-supplying circuits by Year 5
- Resilience enhancements on 40 DAC-serving circuits via targeted line asset renewal
- Maximize the number of DAC residents retained for project construction work
- 40% of system capacity additions enabled by the project to benefit the DAC communities
- At least 2 project sites employ labor from the Wyandotte Nation Tribe membership
- Community Resilience Registries completed for 39 DACs with local high schools remunerated
- 40% of public EV charging stations built over the 5 years to be w/in a 5-mile radius of a DAC

² Explore the map - Climate & Economic Justice Screening Tool (geoplatform.gov) Accessed Dec 3, 2022

As the above list indicates, Empire is confident that Project DA's impact on local DACs and its residents will be both robust and multifaceted, and span reliability enhancements (and the associated customer interruption cost avoidance), increase of capacity for distributed renewable investments, improved local system weather resilience through targeted asset reinforcement, and direct economic opportunities through employment for DAC residents.

5.2 Looking Ahead: Anticipated Benefit Flows

The timing and processes through which DAC communities are expected to benefit from Project DA will vary by benefit stream. Project construction employment benefits would commence accruing as soon as the first DAC resident is assigned (if internal) or retained (if external) for the job, with their wages and taxes owed generating direct local benefits. Similarly, line infrastructure resilience benefits through renewal would begin accruing as soon as the new devices are constructed. Other benefits, such as those associated with outage avoidance, will be accrued indirectly in the form of avoided outage costs and must account for the fact that reliability is a "lagging indicator." In other words, given a multitude of factors influencing reliability near-term, a certain amount of time must pass for the benefits of newly renewed or reinforced facilities to begin being discernible over the near-term fluctuations in weather and other factors. For this reason, the company has specified that the attainment of the 33% CMI improvement target on the circuits automated through the program is expected by Year 5.

Other benefits, such as participation in projects of the Wyandotte Nation Tribe members will likely depend on the timing of projects that are in the vicinity of the tribe's lands and would benefit specifically from their local knowledge and expertise. Finally, the benefits associated with installation of public EV charging will not begin accruing until a suitable site and a willing host are identified, and the circuits serving the community in question undergo automation and reinforcement to ensure reliable operation. For clarity, the funding for the charging station itself is not included in the project budget. Rather, the benefits account for the likelihood of a public charging station being desired for installation by Empire through its ongoing Transportation Electrification Program once capacity and reliability are enhanced. Empire will continue refining the hypotheses underlying the proposed Justice40 metrics and gathering local research through community and labor engagement ahead of the DOE award announcement.

5.3 Anticipated Negative and Cumulative Environmental Impacts

Having completed the Environmental Assessment appended to its application based on the information known to date, the company confirms that it does not anticipate any negative or cumulative environmental impacts to the Disadvantaged Communities. This is largely because the majority of feeders slated for automation are located on existing roadside shoulders, and the autorecloser assets being installed on the top quarter of the pole, creating no additional ground footprint or causing any visual obstructions given the height of installations.