Grid Modernization Advisory Council: Equity Working Group

ESMP Equity Assessment Table

Category	Problem Statement	How ESMPs Propose to Address This	Outcomes	Metrics of Success
1. Accessibility and community engagement	a. Siting and grid modernization decisions have historically been made without significant stakeholder input b. Not all relevant information is shared with the public c. Information is overly technical and in many cases is not translated	d. Written informational materials are produced in multiple languages e. Utility-led Community Engagement Stakeholder Advisory Group (CESAG) f. DPU-required joint stakeholder meetings in Fall 2023 g. Eversource states the urgency of near-term projects (2025–2029) may afford less engagement than later (2030 and after) h. For projects, the utilities have stated they will engage impacted communities before submitting filings to the Energy Facilities Siting Board (however, it is unclear which specific projects this would apply to) i. Utilities have discussed negotiating community benefit agreements for communities impacted by projects, but form of agreements unclear. j. National Grid plans for public engagement on multiple channels, including translation where needed and an initiative to engage Federally Recognized Tribes in New England k. Eversource's pending Grid Resiliency and Innovation Partnership (GRIP) program application included a community engagement plan designed to lead to a community benefit agreement	l. Plain language is used / layman's terms and translation of materials m. Utilities provide easy-to-interpret visualizations n. There are clear avenues for input early in planning processes o. Stakeholder input is used to inform data-driven decisions p. Stakeholder engagement exists beyond infrastructure siting and is integrated more broadly with grid modernization investments	q. Fewer customer complaints r. Fewer infrastructure siting delays s. Stakeholders demonstrate a feeling of agency in their relationship to EDCs t. Documented responses to community comments presented in engagement and via CESAG u. Inventory of documents available in multiple languages v. Number of executed community benefits agreements w. Increase in community participation in utility surveys, events or other engagement venues from environmental justice communities x. Documentation of stakeholder partnerships and community leadership on working groups and committees **Proposed metrics: EDCs** y. The number of outreach and involvement meetings **about the respective EDCs ESMP filing** with stakeholders, including EJCs, municipal leaders, community-based organizations and customers (i.e., residential, commercial and industrial, and DER customers) z. The number of outreach and involvement meetings **about specific ESMP infrastructure projects** with stakeholders, including EJCs, municipal leaders, community-based organizations, and customers (i.e., residential, commercial and industrial, and DER customers) aa. The number and category of **requests made as part of stakeholder feedback on specific ESMP infrastructure projects, classified into visual mitigation, access accommodations, work hours, right-of-way maintenance, informational accommodations, engineering accommodations,**

					and damage prevention, as well as the EDCs' response to these requests classified as under consideration, implemented, not accepted with reason, and other. * * **Additional descriptions** • **Visual mitigation:** shrubs/tree planting or relocating objects out of a specific line of sight. • **Access accommodations:** adjusting work zones to allow for continuity of access for school bus, elderly services, or regional transit. • **Work hours:** adjusting work hours to accommodate traffic/pedestrian management or construction noise. • **Right-of-way maintenance:** backfilling and repaving based on feedback from stakeholders, usually public way managers such as DPW or DOT. • **Informational accommodations:** using local feedback to tailor outreach methods such as timing of meetings, translation of content into appropriate languages, and ADA access. • **Engineering accommodations:** adjusting engineering design, to the extent practicable, to address stakeholder concerns. • **Damage prevention:** identifying conditions prior to construction to ensure the integrity of adjacent utilities, businesses, residents, and structures.
2. Workforce and economic benefits	a. There is a lack of economic opportunities for historically underserved populations. The energy sector has a lack of diversity, particularly in leadership or higher-wage roles[1]	c. Community Solar Resilience Program (Eversource) prioritizes workforce development for MWEs d. National Grid identified temporary and permanent, union, non-union, and management roles needed, and using a "strategic workforce development" program to hire underrepresented people in their workforce e. Eversource has workforce development programs, Electric Power Utility Technology Program and Clean Energy Pathways, which aims to expand the energy efficiency workforce and increase access to individuals who are historically underrepresented	g. Well-paid permanent jobs h. Full-time positions i. Jobs located within or near EJCs j. Jobs accommodating of different languages k. Workforce training for entry-level employees l. Opportunities for learning, development, and advancement m. Increased job safety	n. Hours of work per employee at minimum wage o. Number of additional jobs with livable wages p. Reduced hazardous occupational exposures resulting in injuries, deaths, and chronic disease q. An additional ~38,000 workers to support grid modernization and to reach the Commonwealth's clean energy goals r. Job placement rates for utility-proposed programs s. Post-training position retention rates for new employees

[1] MassCEC Landscape Study, pg. 63: https://www.masscec.com/sites/default/files/documents/Powering%20the%20Future_A%20Massachusetts%20Clean%20Energy%20Workforce%20Needs%20Assessment_Final.pdf

	b. Immigrants, workers of color, and women are disproportionately impacted by wage and hour violations[2]	f. Eversource applied to the U.S. Department of Energy Grid Resiliency and Innovation Partnership (GRIP) program which would create a pipeline for clean energy jobs with local partnerships		t. Increases in local hire requirements or supplier diversity requirements u. All ESMPs need to be provide clarity on the incremental job impacts of the plan. Categories of anticipated job growth should be shared with public and educational partners. v. Job training programs by geographic service territories to address "training deserts"
3. Health benefits	a. Emissions from burning natural gas b. Emissions from burning heating oil c. Emissions from grid electricity source mix d. While air emissions impact the entire state, recent studies have indicated impacts are higher in EJ communities[3]	e. Eversource acknowledges inequities in health impacts from pollution/high GHG emissions plans to electrify transportation to mitigate impacts do not factor in equity f. National Grid generally highlights that EE programs and electrification measures will improve health overall and that EJ/LMI customers are currently impacted the most g. Plans offer no quantification of health benefits	h. Less air pollution i. Better indoor air quality j. Improved cardiovascular, respiratory, kidney, and cerebrovascular health outcomes k. Reduced excess mortality l. Improved quality of life m. Increased stakeholder education on climate-related health impacts	n. Reduced statewide incidences of heart disease, bronchitis, and lung cancer from inhalable particulate matter (PM) o. Reduced statewide incidences of asthma, respiratory and lung diseases from nitrous oxide (NO_x) from fuel combustion p. Reduced statewide incidences of respiratory infections and lung disease from sulfur dioxide (SO_2) released from fuel combustion q. Calculations in the ESMPs of the incremental impact of the grid modernization plan on health indicators
4. Financial benefits and incentives	a. Renters, low-income, and non-English-speaking households are less likely to have used Mass Save energy efficiency incentives[4] b. Low to moderate income housing is more likely to have pre-weatherization barriers creating challenges for both energy efficiency and electrification	c. National Grid has incentives covering up to 100% of costs of EV charging equipment, energy efficiency upgrades, and weatherization for EJCs[5] d. Eversource offers a plethora of EV charging equipment incentives for EJCs[6] e. Unitil currently offers low-income residential customers 100% of the cost of improvements for energy efficiency and up to 100% of EVSE installation costs for multi-unit dwellings (MUDs) of up to four units and $1,700 of capital costs[7] f. Three programs—Eversource Community Solar Access Program (ECSAP), Community Solar Resilience Program, and Affordable Solar Access Program—are geared toward EJCs	j. Access to innovative financing or tech k. Installation of energy-efficiency upgrades l. Widespread updated weatherization to ready residential units for energy-efficiency upgrades m. Widespread adoption of electric vehicles	n. Increases in: o. Community solar enrollment in EJCs p. Residential solar enrollment in EJCs q. EVSE enrollment in EJCs r. Energy-efficiency upgrade enrollment in EJCs s. Comparison of EV/Solar electrification adoption by zip code to identify communities underserved by programs t. Pre-weatherization and electrical upgrade support u. Net economic, GHG and health benefits resulting from ESMPs (in aggregate and per capita)

[2] Secretary Marty Walsh, U.S. Department of Labor, "How we're addressing equity for underserved workers," April 22, 2022. From https://blog.dol.gov/2022/04/14/how-were-advancing-equity-for-underserved-workers, accessed October 3, 2023.

3 https://www.bc.edu/bc-web/centers/schiller-institute/sites/masscleanair.html

[4] Massachusetts Clean Energy Center. EmPower program. From https://www.masscec.com/program/empower-massachusetts, accessed October 3, 2023.

[5] National Grid. Future Grid Plan. "Exhibit 6.3: Summary of EJC Incentives and Offerings." September 2023: page 238.

[6] Eversource. Electric Sector Modernization Plan. "Table 42: Overview of EJC and low-income offerings." September 2023: page 282.

[7] Unitil. ESMP 2025–2050. September 2023: page 66.

		g. At present, additional net benefits such as health, economics, and greenhouse gas emissions are largely described qualitatively h. Public park atop Kendall Square underground substation is proposed (Eversource) i. EDCs identified customer benefits associated with investments and alternatives including safety, grid reliability and resilience, electrification of buildings and transportation, reduced GHG emissions and air pollutants, mitigation of impacts to the ratepayer, and more; to be filed with the DPU in January 2024		
5. Affordability	a. Low-income Massachusetts households spend a disproportionately high percentage of their income on energy[8] b. As electrification increases energy usage, current rate structures may increase affordability challenges. c. Gas introduces significant volatility into the region's energy prices[9]	d. Advanced metering infrastructure (AMI) e. Demand response f. Improved customer communications g. Distributed energy resources (DER) h. Eversource proposes an Affordable Solar Access Program and plans to tackle on-bill financing	i. Access to utility incentives j. Rates are designed fairly k. Utility service charges are on an income-based sliding scale l. Consumer choice	m. Percent reduction (or increase) in rates / residential energy rate (cents) per kWh n. Percent reduction (or increase) in bills o. Percent reduction in energy burden p. Reduction in number of customers with excess energy burden q. Anticipated net cost per customer of ESMPs r. Rate reform recommendations and impacts of alternative rate structures for electrification customers, particularly in winter s. Percent and count of residential customers disconnected for non-payment t. Percent and count of residential customers with accounts past due more than 60 days
6. Resilience and reliability	a. EJCs are receiving differing power quality and reliability than other customers [10] b. Urban heat island impacts denser, less forested communities across Massachusetts,	c. Resilient Neighborhoods Program (National Grid) is designed to address climate-related power outages, prioritizing EJCs d. Investments in vegetation management, hardening and undergrounding infrastructure across all plans e. There are proposed new design and construction standards based on results of climate vulnerability study f. Joint-EDC Equitable Transactional Energy Study offering "a more dynamic locational value	i. Increased resilience against outages from infrastructure failures, storms, accidents, other j. Reduced methane leaks k. Cleaner water for human consumption, recreation, and natural ecosystems l. Increased access to land for recreation, agriculture, and	o. Fewer incidences and shorter durations of power outages p. Fewer incidences and shorter durations of power outages q. Increased deployment of distributed energy resources in EJ communities during outages r. Shorter outage periods, particularly in EJC communities

[8] MassCEC Empower

[10] https://www.clf.org/blog/not-all-electrical-outages-are-experienced-equally/

	which tend to be EJ communities[11]	compensation framework" to offer options for consumers to participate in virtual power plants (VPPs) that offer a better representation of distributed energy resources in EJCs g. Eversource plans to use their equity framework for construction of proposed new substations h. Plan lacks specific mention of EJCs and resiliency measures	infrastructure; decreased erosion and ecosystem destruction m. Increased reliability against outages and/or brownouts n. Increased publication and access data to climate-related impacts on EJCs	s. Targeted infrastructure investments based on climate vulnerability to flooding, heat and other anticipated impacts. t. Decrease or elimination of disconnection during heat waves

[11] Walkey, John, and Paula Garcia. *Commonwealth Magazine*. "For environmental justice communities, tackling climate change can't wait." September 22, 2023. From https://commonwealthmagazine.org/environment/for-environmental-justice-communities-tackling-climate-change-cant-wait/, accessed October 3, 2023.