

Infrastructure Rebuilding and Resilience Commission

Commission Meeting #5

September 18, 2024



GOVERNOR'S OFFICE OF
POLICY INNOVATION AND THE FUTURE

MAINE
EMERGENCY MANAGEMENT AGENCY



Commission Meeting Schedule (through Nov.)

May 21	11am-12:30	Executive Order signing, Stonington visit (optional)
May 31	9am-12pm	York County visit (optional)
June 26	1-4pm	Commission meeting #1 – zoom
June 28	9am-12pm	Western Maine visit (optional)
July 17	11am-2pm	Downeast visit (optional)
July 24	1-4pm	Commission meeting #2 – zoom
August 5	1-4pm	Midcoast visit & Commission meeting #3 – hybrid
September 4	1-4pm	Commission meeting #4 – zoom
September 6	9:30-11am	Northern Maine visit (optional, Zoom or in-person)
September 18	1-4pm	Commission meeting #5 – zoom
October 2	1-4pm	Commission meeting #6 – in person, Augusta
October 30	1-4pm	Commission meeting #7 – zoom
November 12	1-4pm	Commission meeting #8 – in person 109 Capitol Street, Augusta, DHHS conference room



Agenda – September 18th

- 1:00 **Opening Remarks**, Commission co-chairs
- 1:10 **Maine’s Energy Landscape**, Governor’s Energy Office, Maine Public Utilities Commission
- 1:40 **Innovation examples from Colorado**, Colorado Energy Office, Colorado Resilience Office
- 2:05 **Electric Utility Resilience**, Central Maine Power, Versant Power
- 2:35 **Break**
- 2:45 **Water-related Systems & Infrastructure**, Maine CDC, Maine DEP, GEI Consultants
- 3:15 **Group Discussion**, Commission Members
- 3:55 **Closing Remarks**, Commission co-chairs
- 4:00 **Adjourn**



Speakers

Dan Burgess, Governor's Energy Office

Infrastructure Rebuilding and Resilience Commission | September 18, 2024 |

GOVERNOR'S OFFICE OF
Policy Innovation
and the Future



MAINE
Emergency
Management Agency





MAINE GOVERNOR'S
Energy Office

Maine Energy Overview

Infrastructure Rebuilding and Resilience Commission
September 18, 2024

Dan Burgess, Director

ISO New England – Power Grid Profile

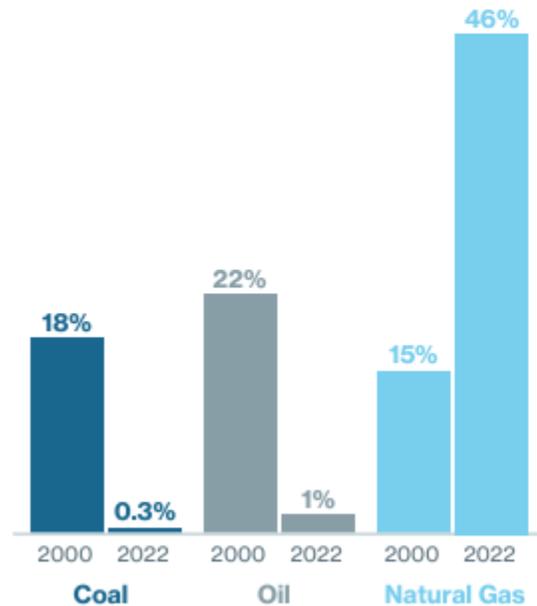
A Major Energy Transformation Is Underway

New England has shifted away from older coal- and oil-fired generation to cleaner burning natural gas.

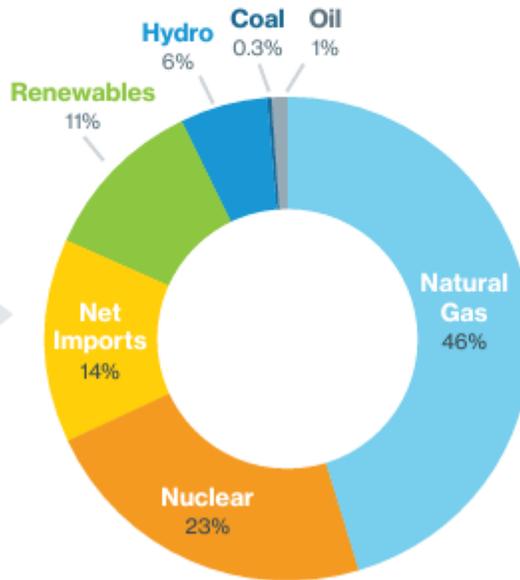
Most of today's electricity comes from lower-emitting energy resources.

The region is transitioning to large-scale clean and renewable energy.

YESTERDAY VS. TODAY



2022 ENERGY RESOURCES



LOOKING TO THE FUTURE



Wind power dominates new resource proposals: nearly 16,000 MW



Solar power is growing rapidly: ISO-NE forecasts nearly 12,000 MW within a decade



Battery storage technologies are emerging at the customer and grid level: more than 11,000 MW proposed



New transmission proposals would provide access to additional clean or renewable energy in New England or Eastern Canada

The amount of electricity produced by generators in New England and imported from other regions to satisfy all residential, commercial, and industrial customer demand in New England. This is called Net Energy for Load (NEL).



ISO New England – Forecasting and Adequacy

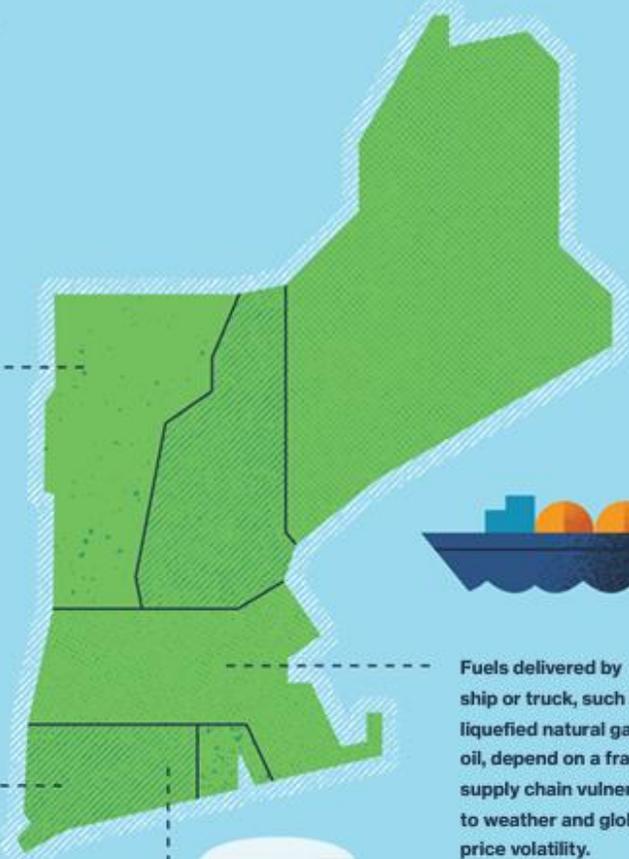
Our System Currently Has Built-in Vulnerabilities



When New England is facing adverse weather, our neighbors typically are as well, limiting our ability to count on increased electricity imports.



New England has limited pipeline capacity for natural gas. Pipeline constraints are magnified in the winter, as heating customers are served before power plants.

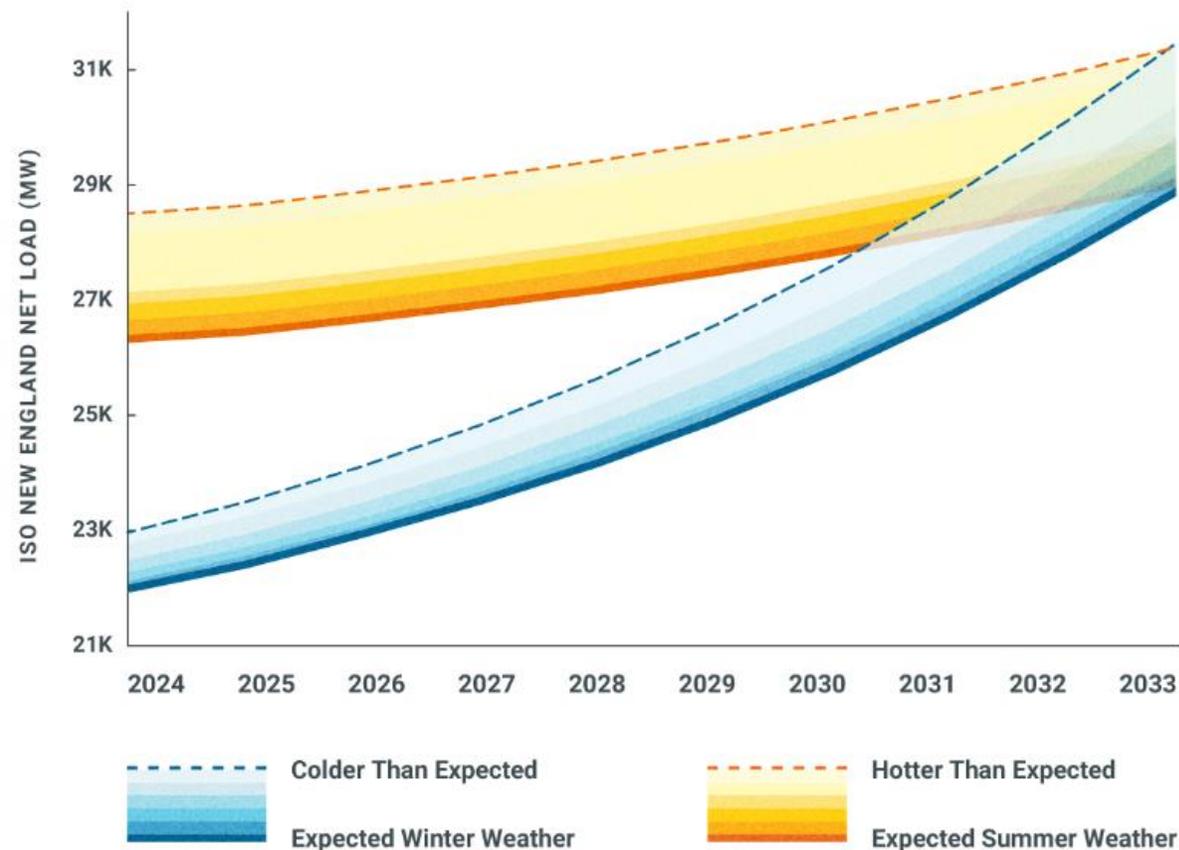


Fuels delivered by ship or truck, such as liquefied natural gas and oil, depend on a fragile supply chain vulnerable to weather and global price volatility.



Peak Demand Forecast

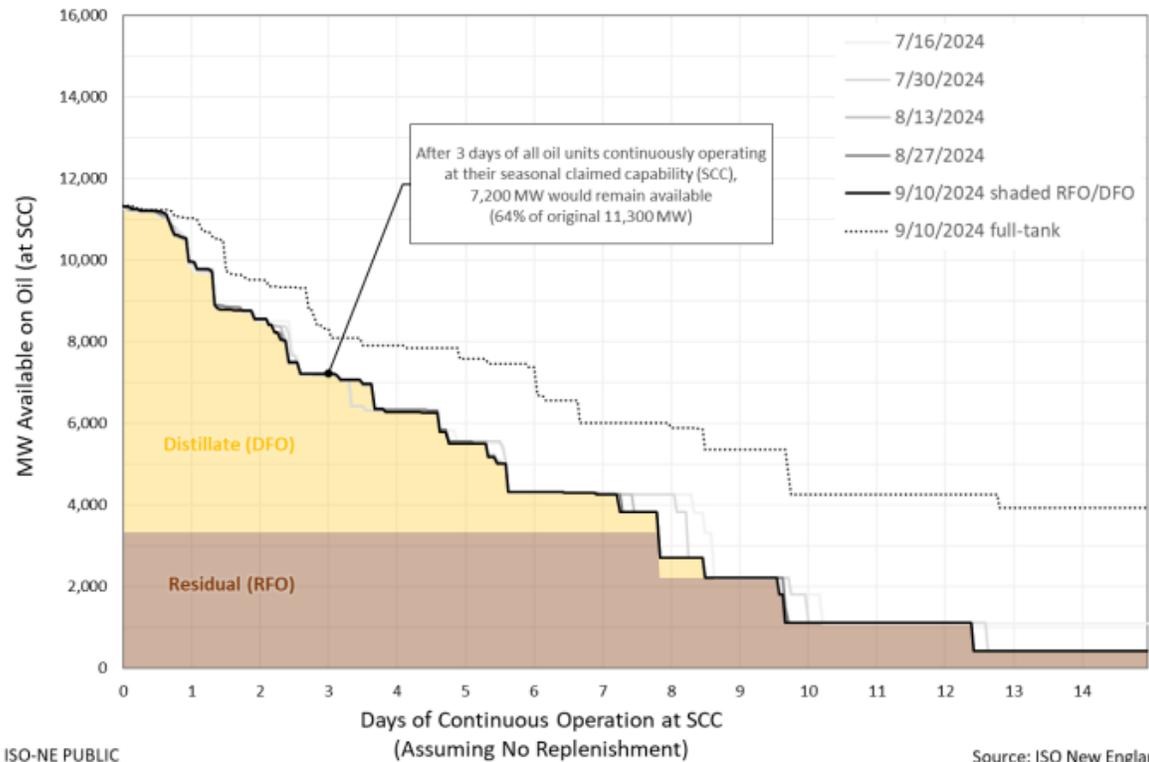
New England's summers have long been more energy-intensive than its winters because more electricity is used for cooling than for heating. But that's changing, and peak demand is now expected to be higher in winter than in summer by the mid-2030s. That could happen even sooner if the region experiences a very cold winter.



On-site fuel storage at power plants

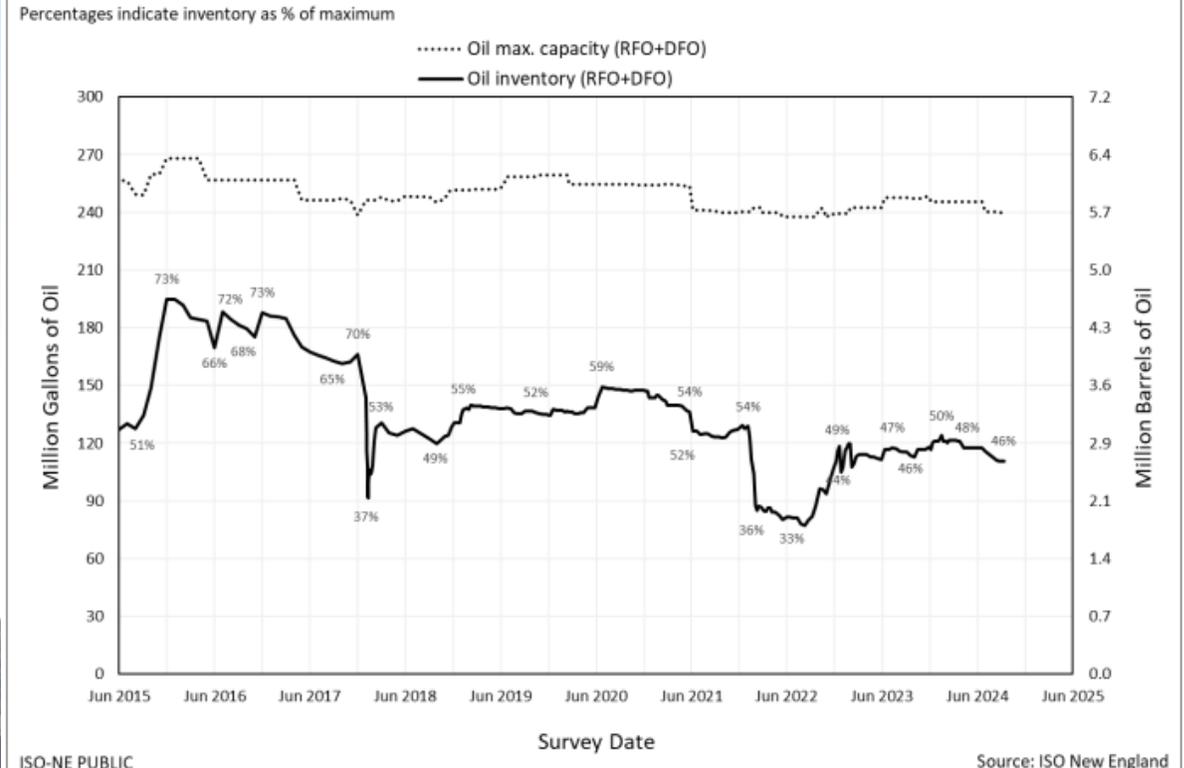
Oil and Electricity Depletion: 5 Most Recent Surveys

Based on OP-21 generator surveys received from market participants



Fuel Oil Usable Inventory: June 2015 - June 2025

Based on OP-21 generator surveys received from market participants



[ISO New England, Fuel Oil Charts, Most Recent Data as of September 10, 2024](#)

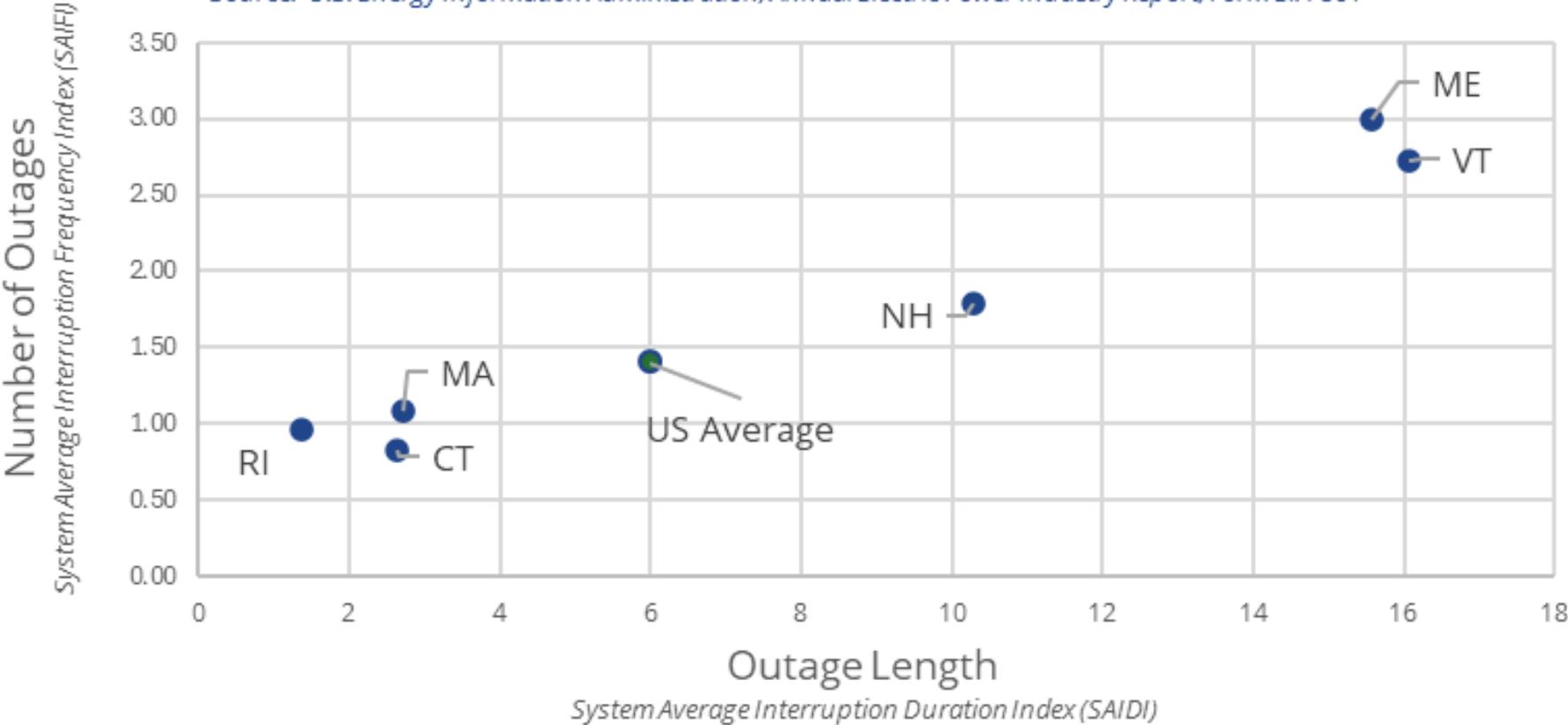


MAINE GOVERNOR'S
Energy Office

Statewide electric grid reliability

Electricity outages in Maine compared to New England and the United States

Source: U.S. Energy Information Administration, Annual Electric Power Industry Report, Form EIA-861

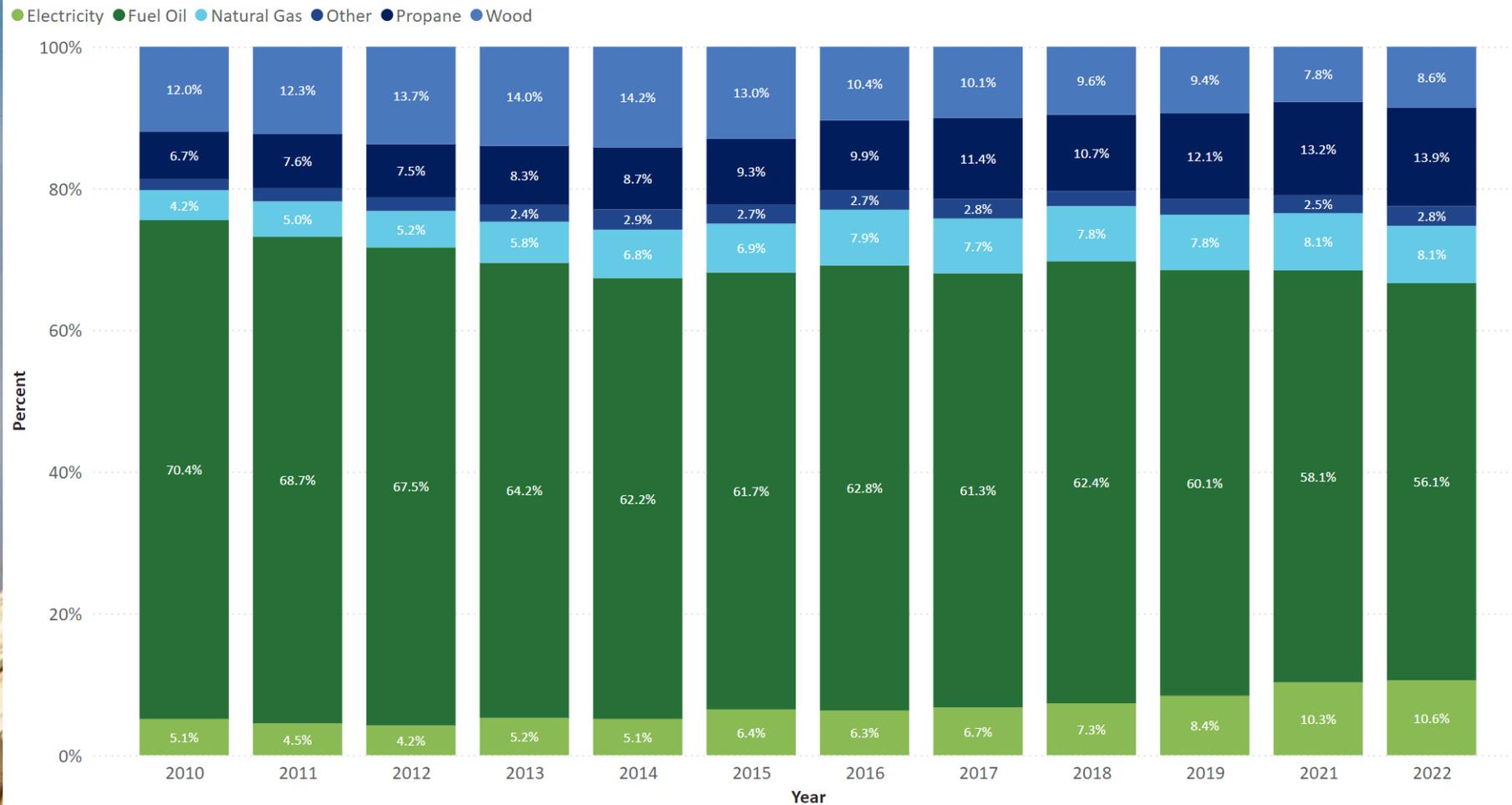


Delivered Fuels Sector

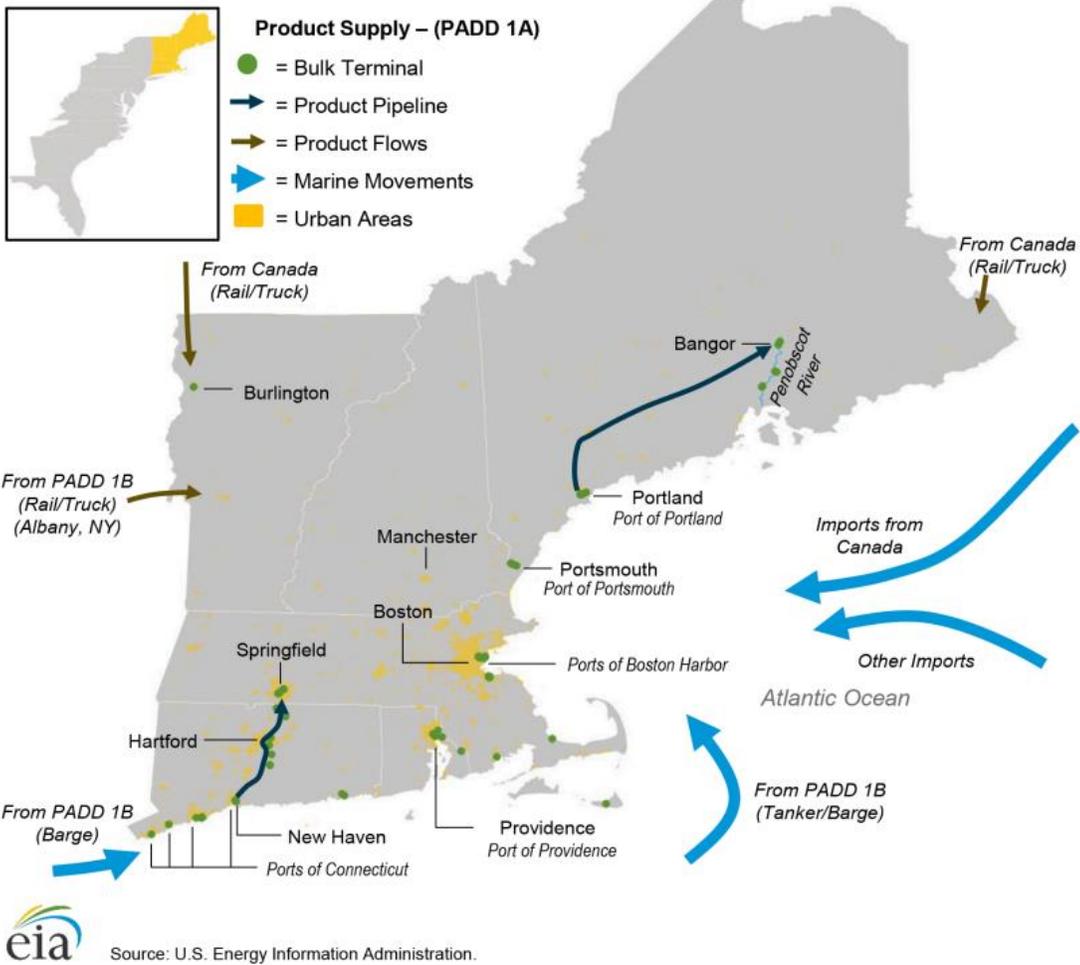
Maine is the most heating oil dependent state in the country



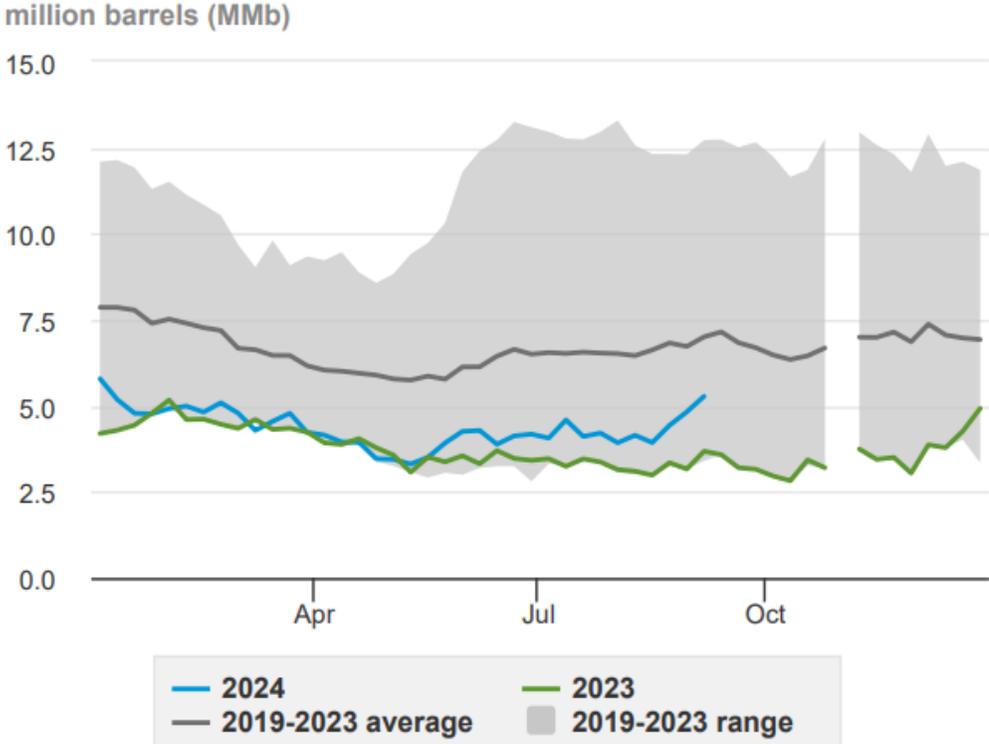
Share of Energy Sources Consumed for Residential Heating, Maine



New England heating fuel supply chains



Weekly distillate oil stocks in New England (PADD 1A)



Source: U.S. Energy Information Administration, Weekly New England (PADD 1A) Ending Stocks of Distillate Fuel Oil

Energy Emergency Proclamations

2023-2024

- December 19, 2023
- January 11, 2024
- April 5, 2024



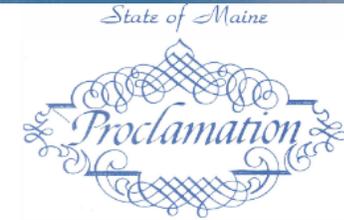
Governor Janet Mills ✓

@GovJanetMills

I have signed a proclamation in the wake of Monday's devastating storm allowing fuel delivery crews to stay on the road longer to help Maine people access the fuel they need for heat and transportation.



Proclamation of Energy Emergency



WHEREAS, the State of Maine has experienced a severe storm with heavy rains and unusually high winds causing widespread power outages, property damage, and road damage; and

WHEREAS, fuel delivery crews will need to work continuously to ensure continuity of supply during the storm recovery effort; and

WHEREAS, temperatures below freezing are forecast throughout Maine in the coming days; and

WHEREAS, the widespread loss of power combined with road closures, winter weather conditions, and potential fuel shortages present a direct and immediate threat to the public health, safety, and welfare; and

WHEREAS, pursuant to 49 CFR § 395, federal regulations limit the number of hours that certain drivers of vehicles may operate unless, as contemplated by 49 CFR § 390.23(a)(1)(i)(A), an Energy Emergency is declared pursuant to 37-B M.R.S. § 742(2); and

WHEREAS, this declaration of an Energy Emergency will facilitate a waiver from the U.S. Department of Transportation Federal Motor Carrier Safety Administration to allow, subject to the limitations set forth below, relief from 49 CFR Pts. 395.3 & 395.5;

NOW, THEREFORE, I, Janet T. Mills, Governor of the State of Maine, pursuant to Me. Const. Art. V, Pt. 1, §§ 1 and 12, do hereby find that these conditions constitute an Energy Emergency under 37-B M.R.S. § 742(2)(A), and therefore by this Proclamation declare an Energy Emergency. This Proclamation shall constitute the exemption recognized by federal law that will enable work crews to operate in Maine free from otherwise applicable hours of service limitations, provided that no motor carrier operating under this proclamation shall require or allow an ill or fatigued driver to operate a motor vehicle. A driver who notifies a motor carrier that such driver needs immediate rest shall be given at least ten (10) consecutive hours off-duty before returning to service. Drivers operating under this Proclamation shall carry a copy as evidence of their direct emergency service to the people of Maine. This Proclamation shall expire fourteen (14) days from its signature, unless otherwise terminated or extended.

In testimony whereof, I have caused the Great Seal of the State to be hereunto affixed GIVEN under my hand at Augusta and dated this nineteenth day of December, Two Thousand Twenty-Three.



Shenna Bellows

Shenna Bellows
Secretary of State

TRUE ATTESTED COPY

Janet T. Mills

Janet T. Mills
Governor



MAINE GOVERNOR'S
Energy Office

Maine Energy Policy Requirements

• Renewable Portfolio Standard

- 80% of electricity delivered in Maine to be renewable by 2030
- Supports hydroelectric, biomass, tidal, waste-to-energy, wind, and solar
- Targeted support for new and existing resources including solar, wind, biomass, hydro, and wood-fired CHP

• Offshore Wind

- Goal of 3,000 megawatts from the Gulf of Maine by 2040
- GEO to establish procurement schedule and process with stakeholder input

• Energy Storage

- Goal of 400 megawatts by 2030
- GEO to develop procurement program for up to 200 megawatts

• Solar

- Goal of 750 megawatts of distributed generation
- GEO to implement distributed solar and storage program
- Targeted procurement for solar on contaminated lands

• Electrification

- Oil dependence reduction
- Electrification of heating and transportation to achieve emissions reduction requirements

Grid Planning & Modernization

Ensuring the electrical grid is resilient, reliable, and ready to serve Maine's current and future needs.

- Utilities must file **integrated grid plans** every 5 years
 - Predict electric demand, assess capacity, and identify needed investments
 - Support state's emission reduction goals
 - Stakeholder-driven
- **Climate change plans** must be filed every 3 years
 - Support grid resilience goals



Ongoing Planning Efforts

Maine Energy Plan: Pathway to 2040

Ongoing analysis underway to support development of a comprehensive, integrated energy plan consistent with Maine law to meet the Governor's 100% clean electricity by 2040 goal and beyond

State Energy Security Plan (SESP)

Requirement of all state energy offices (SEOs), as outlined in section 40108 of the Bipartisan Infrastructure Law

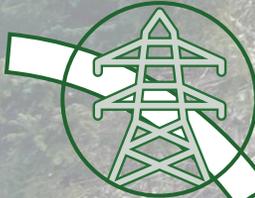
Purpose is to identify, assess, and mitigate risks to energy infrastructure to better prepare for, respond to, and recover from events that disrupt energy supply

When complete, the SESP will become an emergency support function annex of the state's comprehensive emergency operations plan



Maine Grid Resilience Program

Round One Awards



More than 50 miles of distribution lines upgraded



Enhanced vegetation management



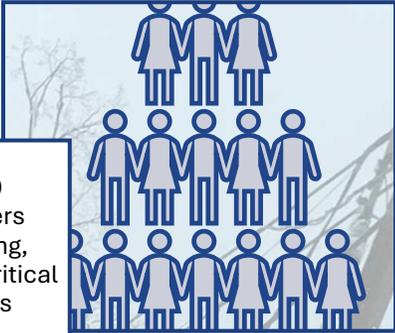
New and upgraded grid hardening technologies



Battery storage microgrid



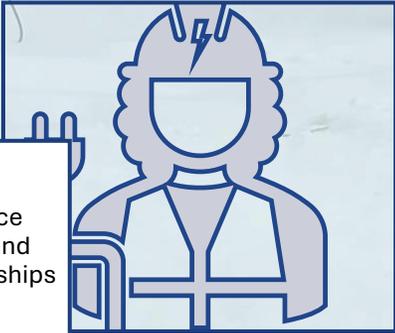
22,000 customers benefitting, including critical facilities



30 communities across Maine



Workforce training and apprenticeships



Draft Recommendations



Conduct and publish baseline assessments of outage data and grid vulnerabilities within existing planning processes



Enable the adoption of clean energy technologies that enhance storm resilience, especially for vulnerable populations and critical services



Explore innovative solutions to enhance the resilience of the distribution system, including microgrids



Engage regionally to advance cost-effective winter reliability solutions that ensure cost-efficient generation and transmission reliability



Understand and plan for the challenges of increasingly volatile/vulnerable fuels and especially the impact to home heating





MAINE GOVERNOR'S
Energy Office

Thank You

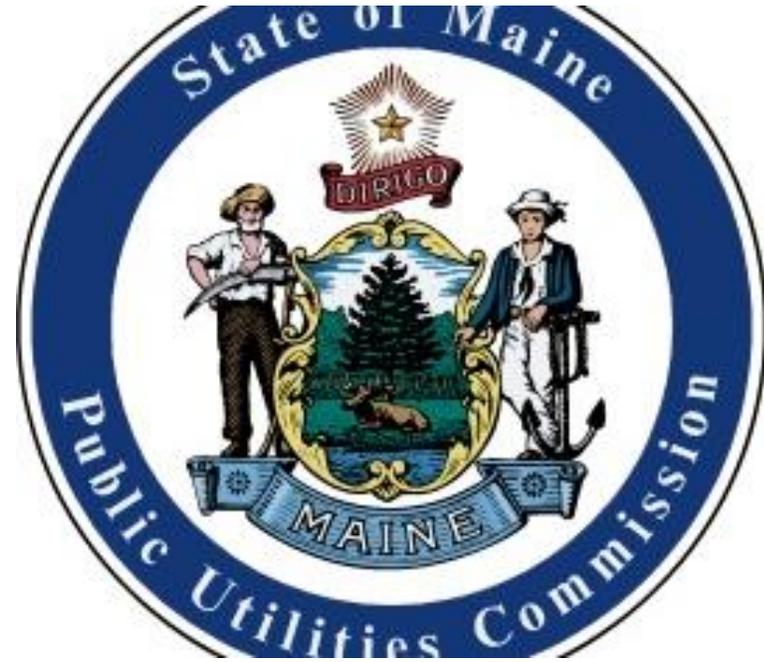
dan.burgess@maine.gov

www.maine.gov/energy

Speakers

Carrie Gilbert, Maine Public Utilities Commission





INFRASTRUCTURE REBUILDING AND RESILIENCE COMMISSION SEPTEMBER 18, 2024

AGENDA

- Integrated Grid Planning
- Climate Change Protection Plans
- Commission Initiated Resiliency Docket

INTEGRATED GRID PLANNING (DOCKET 2022-00322)

- **November 1, 2022** – Commission Opened Grid Plan Proceeding
 - Commission to identify priorities to be addressed in grid plans filed by Maine’s investor-owned T&D utilities that will assist in the cost-effective transition to a clean, affordable, and reliable electric grid. 35-A M.R.S. § 3147.
 - 10-year integrated grid plans designed to improve system reliability and resiliency and enable the cost-effective achievement of the State’s greenhouse gas (GHG) reduction obligations and climate policies.
 - Commission opened inquiry docket (Docket 2022-00290) beforehand to seek input on the process for this proceeding
- **Stakeholder Engagement**
 - Commission hired a consultant and conducted a transparent, collaborative and robust process accessible to all stakeholders
 - Commission held 13 meetings and workshops with stakeholders and solicited input on the priorities and a variety of other topics through written comments
 - Included presentations from the utilities, Efficiency Maine Trust, Governor’s Energy Office (GEO), Maine Utility/Regulatory Reform and Decarbonization Initiative, Lawrence Berkeley National Laboratory (Berkeley Lab) and Portland General Electric
 - Established technical working groups on forecasting, solution evaluation criteria and data availability/collection
 - Issued a straw proposal or outline of expected content of the grid plans for stakeholder input and memos outlining additional issues for stakeholder input

INTEGRATED GRID PLANNING ORDER

- **July 12, 2024** – Commission Issued First Grid Priorities Order
 - The priorities are:
 - Reliability and resilience improvements;
 - Improve data quality and integrity; and
 - Promote flexible management of consumers’ resources and energy consumption.
 - The Order also identified potential steps to achieve the priorities and other information to be contained in the utilities’ initial grid plans. This includes:
 - The utilities’ visions over the next 10 years and how the utilities’ proposed investments and operations will achieve the priorities;
 - The forecasts to be used in developing the plans;
 - A scorecard for evaluating proposed investments and technologies;
 - Detailed information regarding the utilities’ progress related to technology integration and system investments;
 - Proposals to measure or evaluate and track environmental, equity and environmental justice impacts of the grid plans in the near and longer term; and
 - Proposals to measure the effectiveness of the grid plans in making progress towards the priorities and in improving reliability and resiliency and enabling the cost-effective achievement of the State’s’ climate and GHG reduction policies.
 - Keeping costs affordable and facilitating the achievement of the State’s climate action and GHG emissions reduction policies are overarching principles that apply to all the priorities.
 - Commission also established requirements for a stakeholder process during the 18-month period utilities are developing the grid plans

INTEGRATED GRID PLANNING: NEXT STEPS



CLIMATE CHANGE PROTECTION PLANS

- 10-year plans, filed every 3 years (35-A M.R.S. § 3146)
- Plans are to address specific actions T&D utilities must take to address climate change
- First plans filed December 2023 (Docket 2023-00282)
- Several utilities doing vulnerability assessments and resiliency/mitigation plans as part of this process



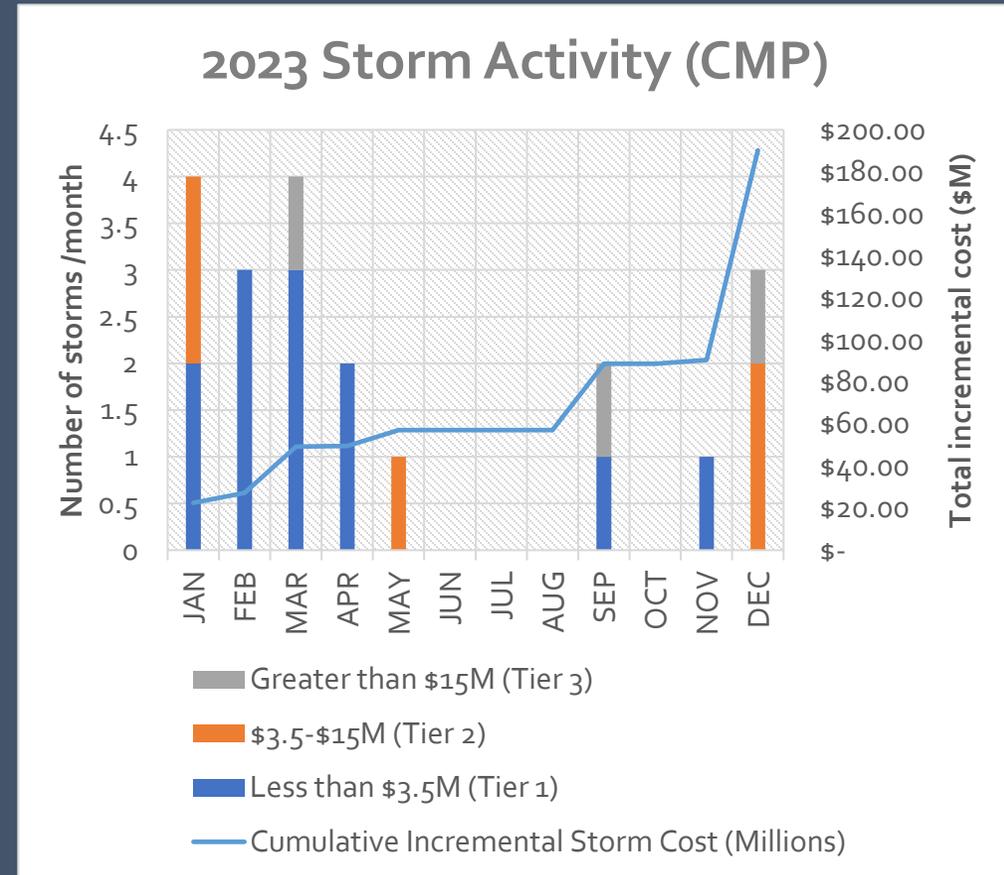
Photo Credit: Maine Public <https://www.mainepublic.org/environment-and-outdoors/2024-03-08/sunday-storm-to-bring-rain-wind-coastal-flooding-and-could-have-impacts-akin-to-january-storms>

CLIMATE CHANGE PLANS TIMELINE



RESILIENCY INQUIRY (2024-00191)

- Initiated in response to increased storm activity and outages
- Goal is to identify ways to reduce damage and improve resiliency to power outages
- Initial comments were due September 4
- Planning workshop for mid-late October



THANK YOU!

Speakers

Marguerite Harden, Colorado Resilience Office

John Parks, Colorado Energy Office





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Energy Office



COLORADO
Department of Local Affairs

Colorado Grid Resilience Strategy & Funding

Agenda

- Grid Resilience Funding, Planning & Policy Overview
- Microgrids for Community Resilience Program & Lessons
- Q&A

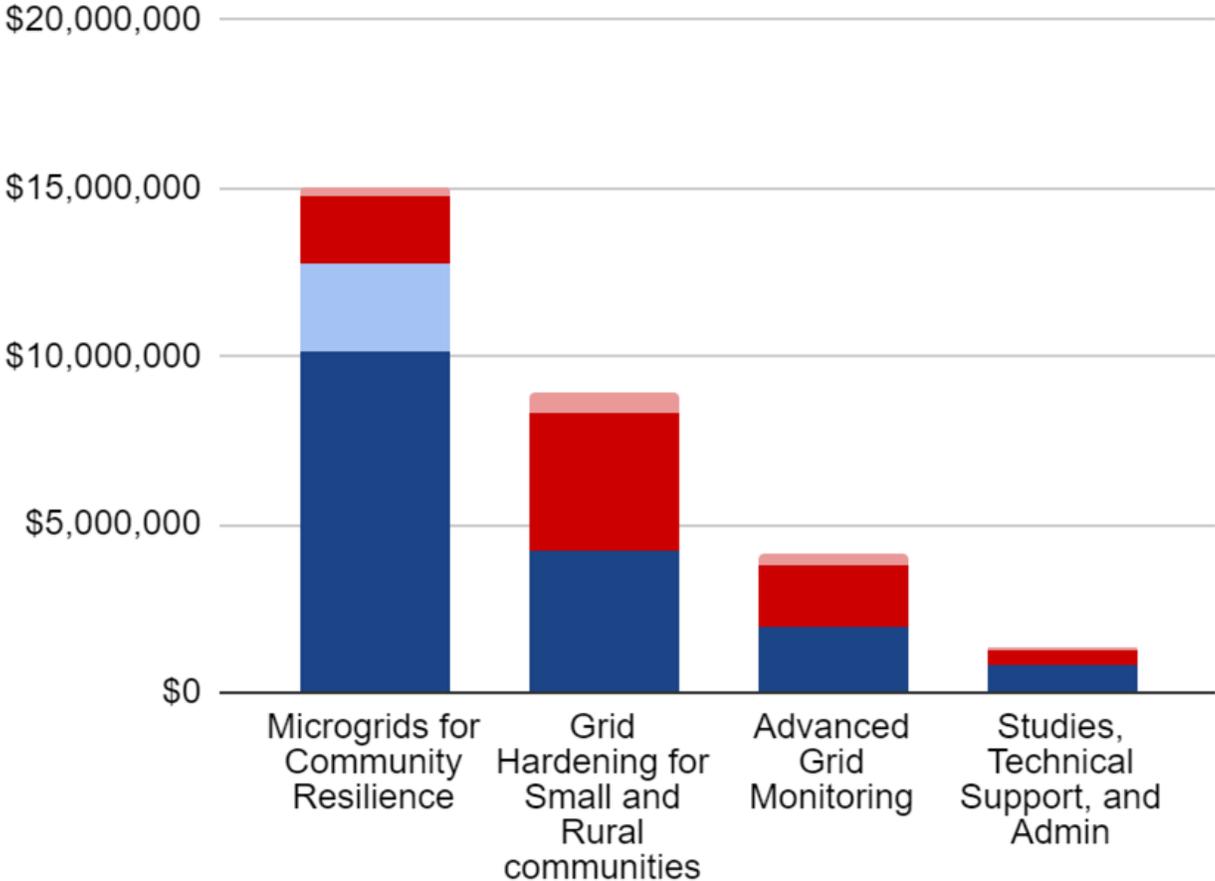


Grid Resilience Funding, Planning, & Policy Overview



Federal Funding Overview

Years 1-3 of 40101d Funding



- Year 3 Match
- Year 3 Allocation
- Year 1 & 2 Match
- Year 1 & 2 Allocation

Total Allocation: \$25,608,965
 Total Match: \$3,841,344



of Sub-Awards To-Date/Pending:

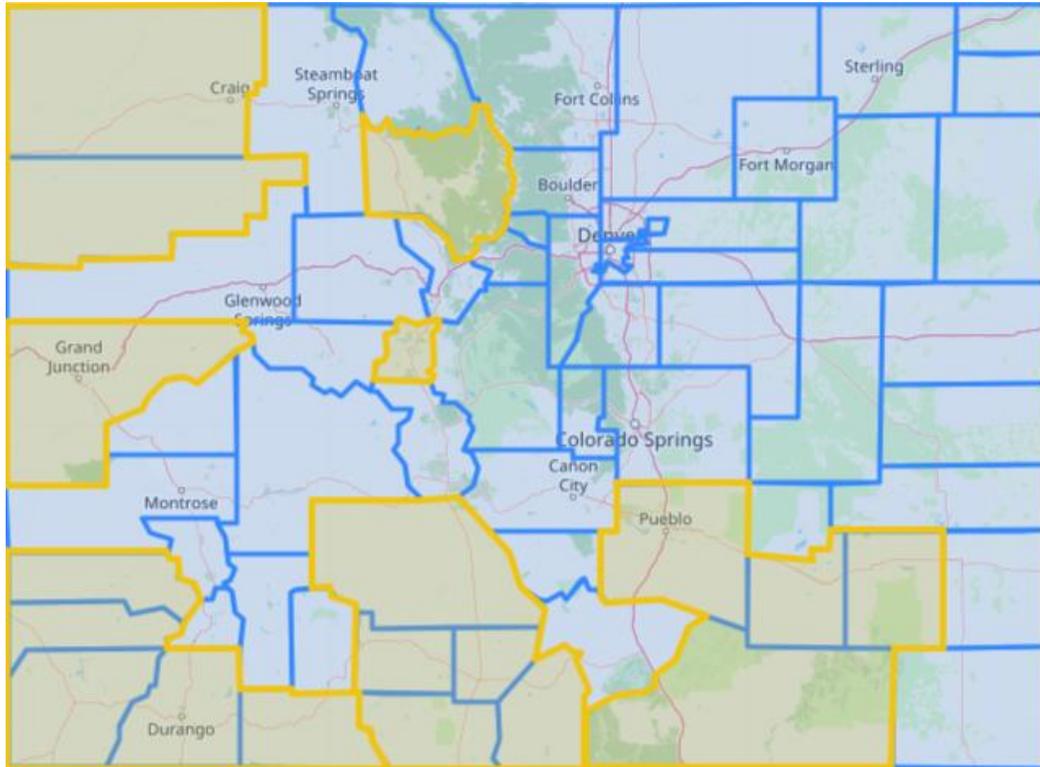
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State Legislation for Microgrids 2022

Vulnerable CO Regions



HB22-1249 (managed by CEO)

- [Draft Microgrids Roadmap](#) currently available; Final Roadmap available January 2025
- Policy Pathways

HB22-1013 (managed by CRO)

- Parameters for microgrids grant program [Microgrids for Community Resilience](#)
- Initial \$3.5M focused on rural cooperatives and municipal-owned utilities

Vulnerabilities: Infrastructure,
Social, Climate



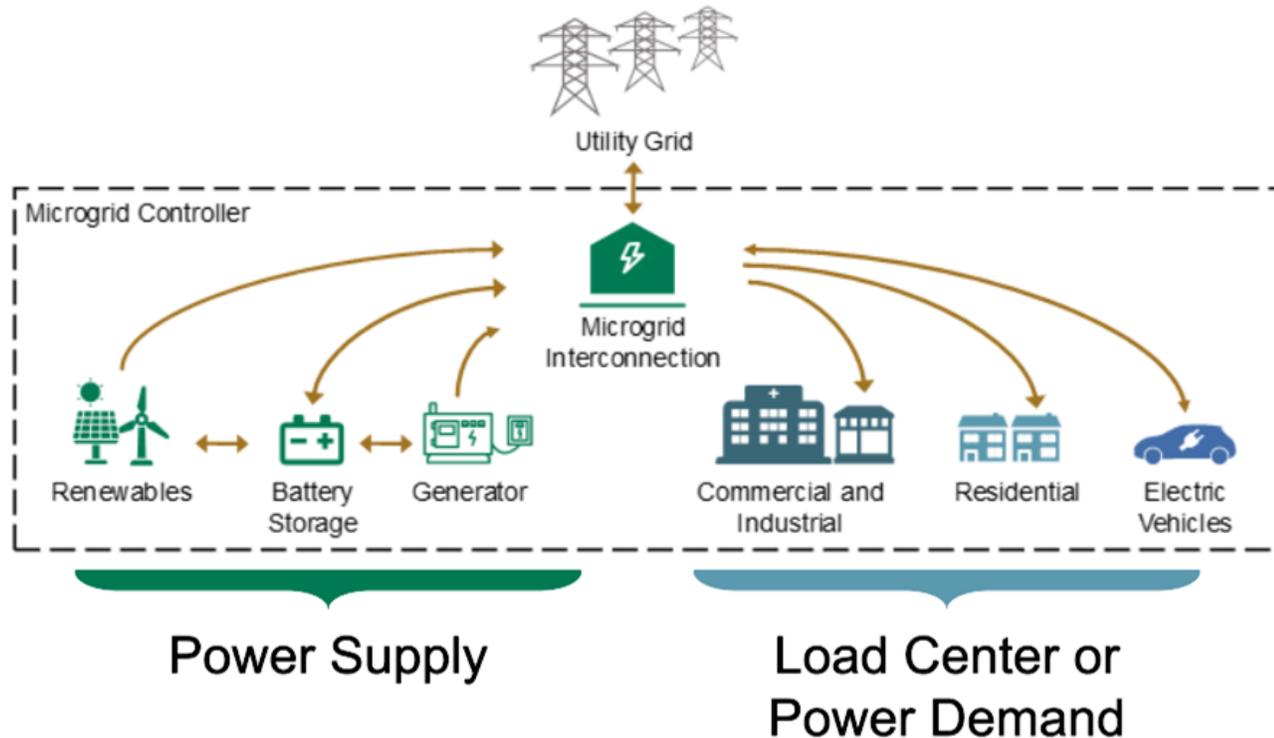
Microgrids for Community Resilience

Program Overview



Microgrids for Community Resilience (MCR) Program

Purpose: Enhance community-level resilience through investments in planning and construction of microgrid and energy storage components.

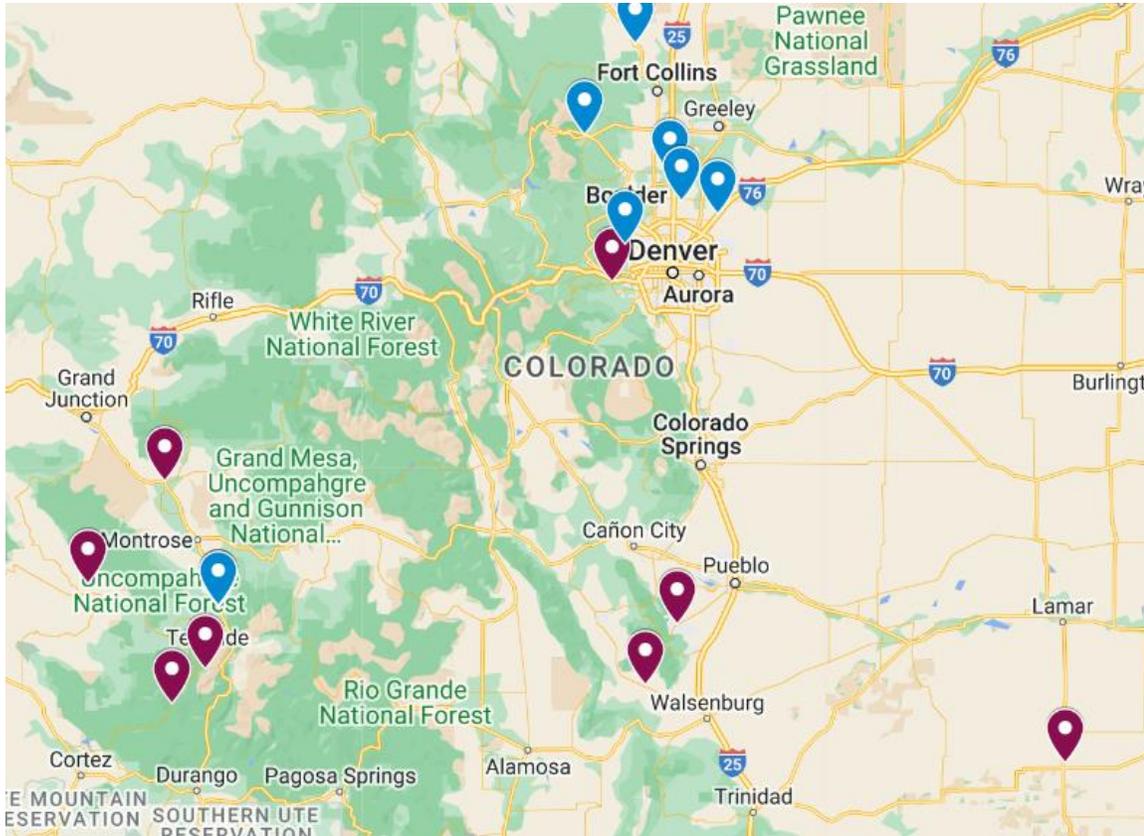


Microgrid:

A group of interconnected loads and distributed energy resources with clearly defined electrical boundaries that functions as a single controllable entity with respect to the grid, **capable of balancing supply and demand** to maintain stable electrical service to customers. It can connect and disconnect from the grid to enable it to **operate in both grid-connected or island mode** as physical and/or economic conditions dictate and maintain electrical supply to connected critical infrastructure.

MCR Grants Awarded To-Date

See the [full list of publicly announced awardees](#)



Rounds of Funding: 3

Total Awardees: 25 projects, \$17.7M*

- **Planning Grants: 11 awards**
 - **Required match: 25%**
 - **Min / Max Project Budget: \$15K / \$70K**
- **Construction Grants: 14 awards**
 - **Required match: 1/3 of budget request**
 - **Min / Max Project Budget: \$70K / \$2.5M**

**includes ~\$16M in pending awards and local match; without local match, we have ~\$10.7M in grant awards*



MCR Metrics & Outcomes

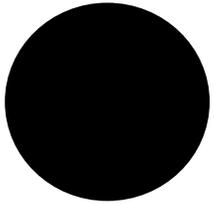
(As of April 2024)

- **25 Projects Representing 30 Microgrids**
- **Serving Disproportionately Impacted (DI) Communities**
56% (14 awards) serve DI communities as defined by [Colorado EnviroScreen](#), including 5 awards that serve 140 communities.
- **Education, Awareness of Grid Vulnerabilities & Solutions**
Creating a pipeline of microgrid and grid resilience projects.



Microgrids Across Scales

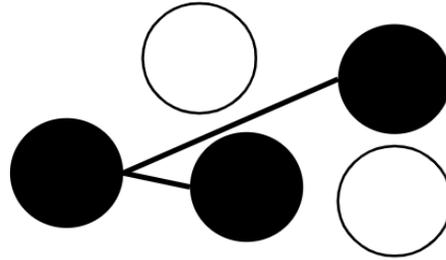
Level 1: Single Building



San Miguel Power Association - Ridgway

- Resilience Hub supporting a public Community Room
- 4.8 kW solar and 37 kW battery
- 1.5 days of backup power

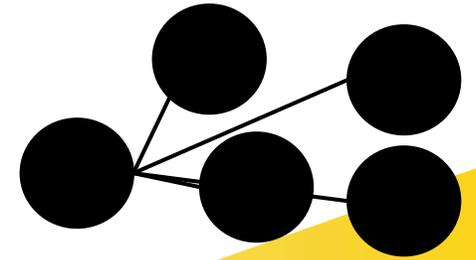
Level 2: Campus (Partial Feeder)



San Miguel Power Association - Rico

- Remote community with radial feeder
- 1,320 kWh storage w/ future solar install
- Will support residents & businesses of this 300-person town

Level 3: Community (Full Feeder)



Platte River Power Authority - Estes Park

- Leasing a 5 MW (20 MWh) battery on a feeder line in Estes Park, CO
- Serves critical facilities such as Protection District and Hospital.

Microgrid Benefits

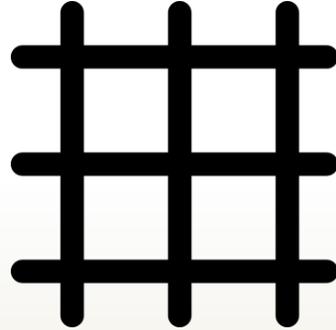
Communications Resilience



San Miguel Power Association - Utility Office

- 74 kWh battery (w/ 3.5 kW solar)
- Supports utility's comms equipment
- Not an “anchor institution” but resilience benefits to full utility service area

Grid Resilience



City of Delta

- Feasibility study for adding Combined Heat and Power (CHP)
- Also exploring adding solar or other renewables to reach carbon neutrality.

Economic Resilience



Poudre Valley Rural Electric Association

- 70 kW Solar (State funding) and 350 kW battery (Federal funding)
- Battery installed at the Livermore Fire Station and serving a retail store, restaurant, school, post office, gas station & more

Microgrid Benefits (*Proposed/Pending)

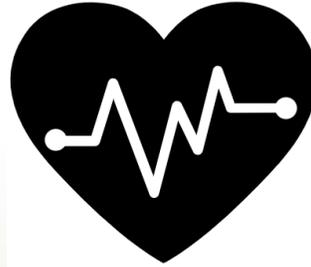
Education & Engagement



City & County of Denver*

- Students at 9 Denver High Schools join a competition to design a resilience hub
- Winning school will install a 250 kW battery, curriculum inclusion

Public Health



Pueblo Community Health Center, Inc.*

- Federally Qualified Health Center (FQHC)
- Prior RE investments
- 1,214 kWh battery in 5 critical hospital loads
- Support from [Collective Energy](#)

Supporting Vulnerable Populations



City of Westminster*

- **Microgrid 1:** 75 kW microgrid system at a Mature Adult Center - the City's primary emergency shelter
- **Microgrid 2:** 50 kW battery at newly built resilience hub

MCR Application Highlights

- **Prioritizing Vulnerable Communities**

Launched a [MCR Vulnerabilities Tool](#) to combine *quantitative* measures of social, climate, and grid vulnerabilities, but also allow *qualitative* responses.

- **Anchor Institution-Focus**

Qualifying local governments and nonprofits for 40101d funding and 1/3 match. Providing guidance on [Resilience Hubs](#).

- **Planning Support for Project Pipelines**

Funding for planning/scoping (including service-territory-wide planning), feasibility, preliminary designs, or final design studies. We also offer and refer grantees to local and national [technical assistance opportunities](#).



Community Anchor Institutions:

Schools; libraries; [public and non-profit] hospitals or other health-care facilities; law enforcement, emergency medical service providers, or other public safety agencies; government offices; community organizations that support marginalized communities; or other critical community service facilities

– [HB22-1013](#) (pg 2-3)

Critical Facility Prioritization Guidance

A process for communities and utilities to partner in identifying, understanding, and prioritizing the critical infrastructure and facilities in their communities to focus resilience planning

Step 1:
Develop a Committee and Process

Step 2:
Research
Background
Info

Step 3:
Inventory
Critical
Infrastructure
& Facilities

Step 4:
Prioritization
of Critical
Infrastructure
& Facilities

Step 5:
Energy
Resilience
Solutions
Investigation

See more at the [Process Overview](#)



Questions?

**Grid Hardening Grants for Small
and Rural Communities**

**Advanced Grid Monitoring Grant
Program**

Microgrid Roadmap

Contact:

john.m.parks@state.co.us

gridresiliency@state.co.us

**Microgrids for Community
Resilience Construction and
Planning**

Contact:

Marguerite.Harden@state.co.us

Julia.Masters@state.co.us



[Sign up for Grid Resiliency Updates](#)

Thank you



COLORADO

Department of Local Affairs



COLORADO

Energy Office

Speakers

Joe Purington, Central Maine Power

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Grid Resiliency at CMP

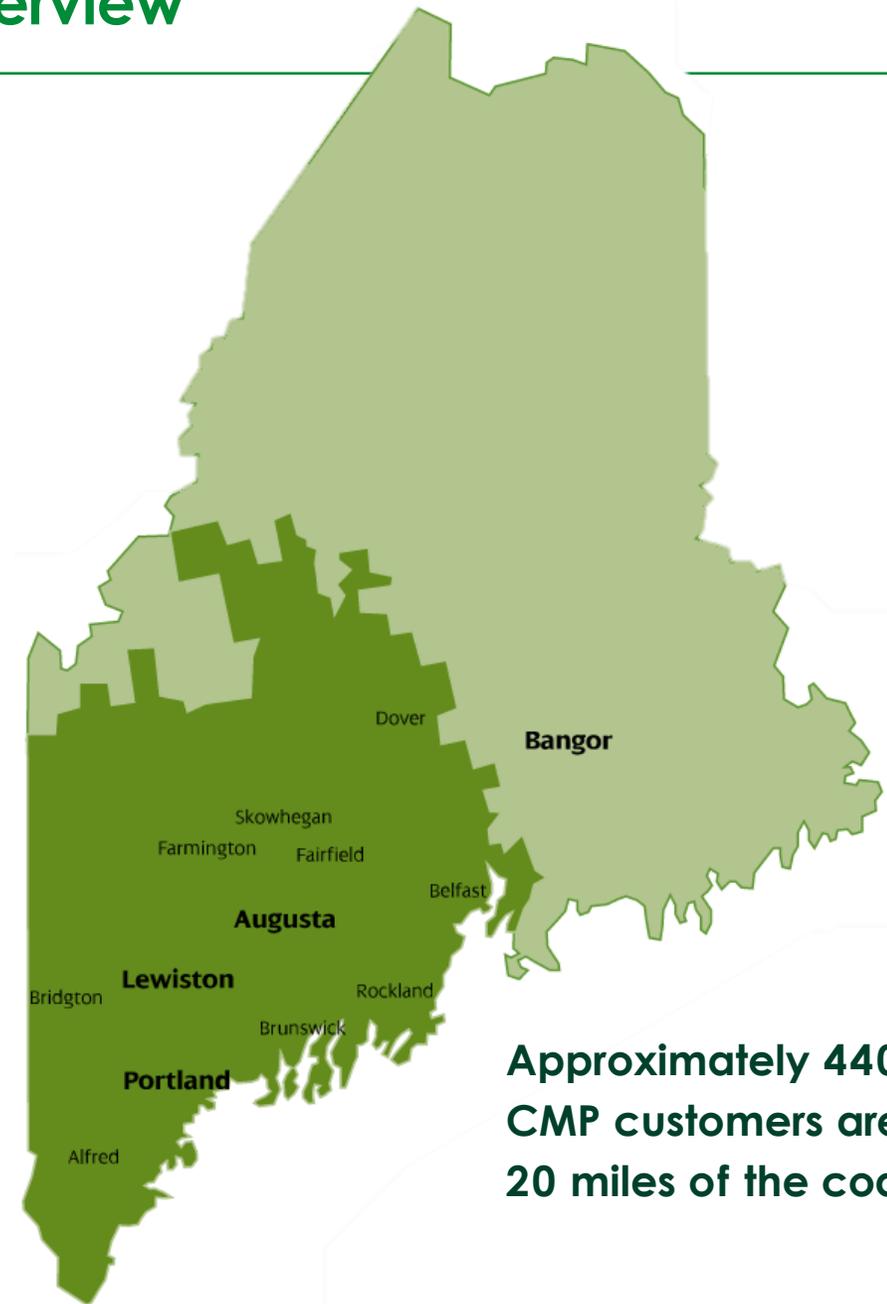
Presentation to the Maine Infrastructure Rebuilding and Resilience Commission

September 18, 2024

Central Maine Power Company: Network Overview



- Approximately **675,000** electricity customers
- **11,000 square-mile service area** in central and southern Maine
- CMP's **25,000 miles of power lines** would encircle the Earth
- Maine is the **most heavily forested state** in the nation
- Average annual usage per residential customer: **6,590 kWh**
- System peak demand: **1,716.4 MW**



CMP's Obligation to Provide Safe, Reliable Service at Just and Reasonable Rates



CMP's role in delivering power to customers:

- CMP is an electricity delivery company; **CMP maintains wires and poles, reads meters and restores power during an outage**
- Maine utilities are **not allowed to own generation**
- Regulators must:
 - “ensure **safe, reasonable and adequate service** . . .
 - “[**minimize**] **the cost of energy** available to the State’s consumers . . .
 - “ensure that the rates of public utilities subject to rate regulation are **just and reasonable** to customers and public utilities and . . .
 - “**reduce greenhouse gas emissions** to meet . . . greenhouse gas emissions reduction levels...” 35-A MRSA s. 101.

The three components of the electric bill:

Delivery:

- the cost of CMP's investment in and operation of the electric grid
- *distribution* regulated by Maine PUC
- *transmission* regulated by FERC & ISO-NE



Supply:

- the cost of generating electricity
- *CMP passes this amount on to the supplier*



Public policy:

- “stranded costs” including NEB; low income assistance; energy efficiency
- *all programs with no impact on CMP revenue*



Reliability and Resiliency Challenges



➤ **Concentration of customers within 20 miles of the coast**

- High customer vulnerability
- Limited options for rerouting power when outages occur

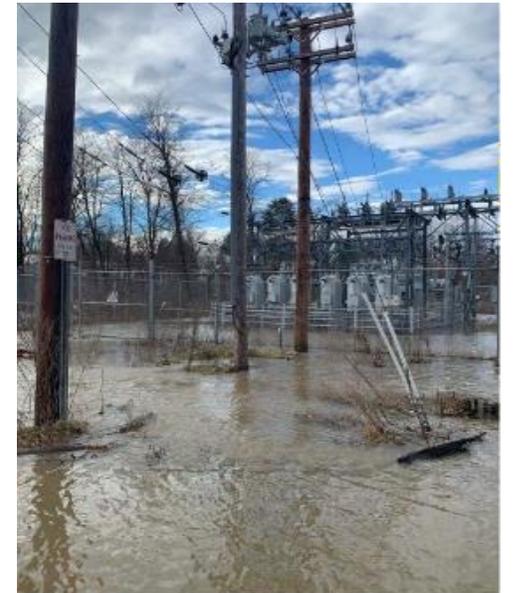
➤ **Rural network**

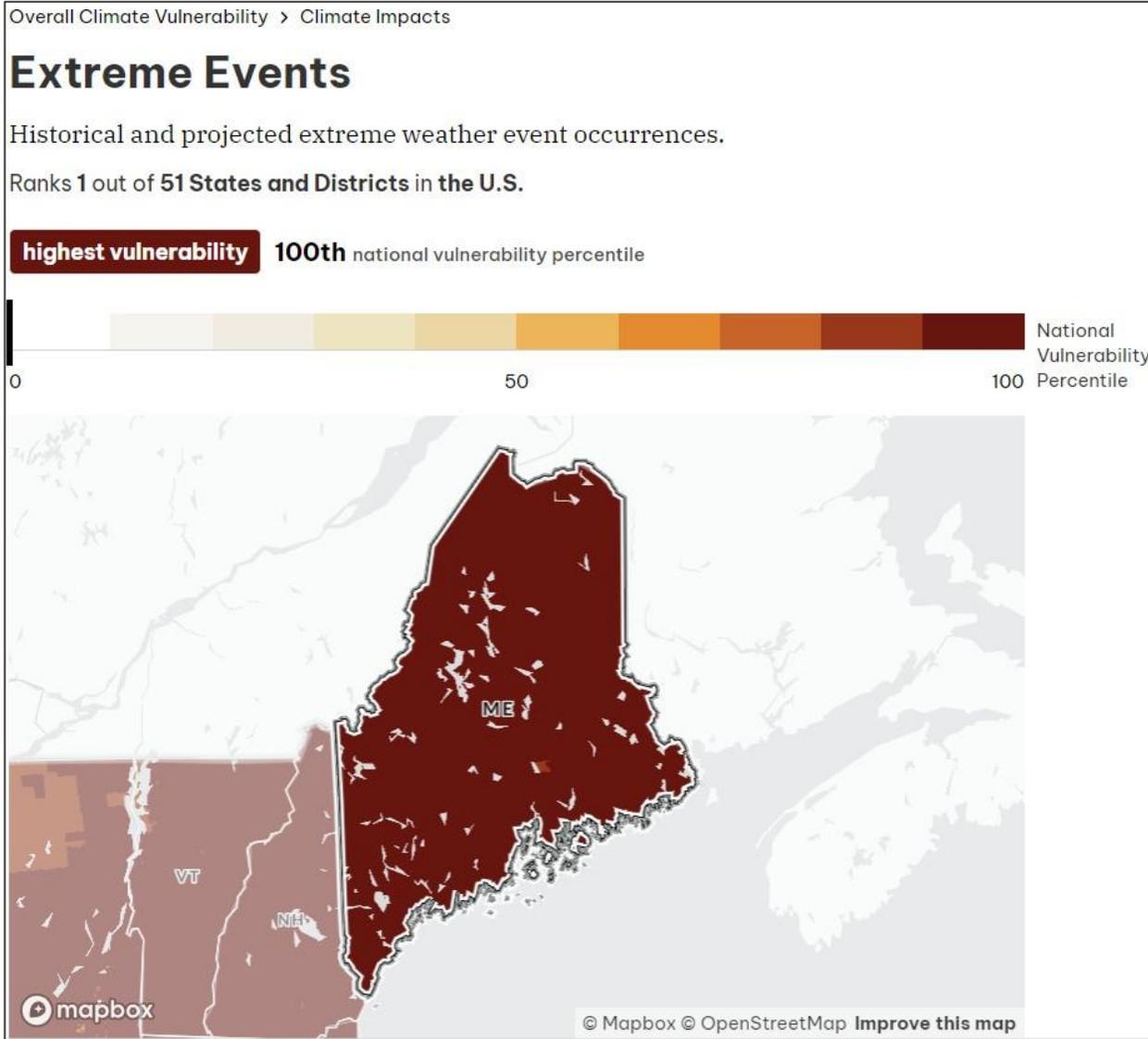
- Long, radial, overhead lines
- Limited remotely-switchable equipment: only about 10% of circuits have some automation
- Better reliability with higher population densities, mostly on I-95 and I-295 corridors

➤ **Climate impacts**

- More frequent storm events
- Wetter ground and changing prevailing wind direction
- Weather intensity is increasing: more hot days; more precipitation; more wind and snow events

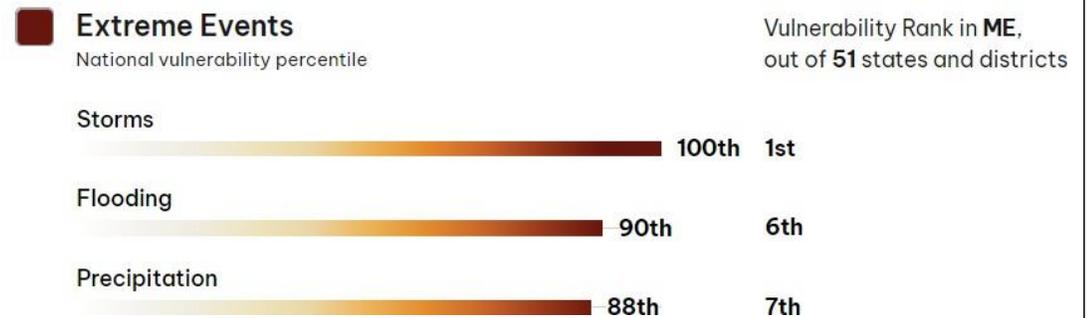
Flooded substation in Skowhegan





The US Climate Vulnerability Index, a tool developed by the Environmental Defense Fund and Texas A&M University, ranks Maine **31st in the nation for overall climate vulnerability**, but **first for vulnerability to extreme events**.

Top Drivers of Climate Impacts: Extreme Events

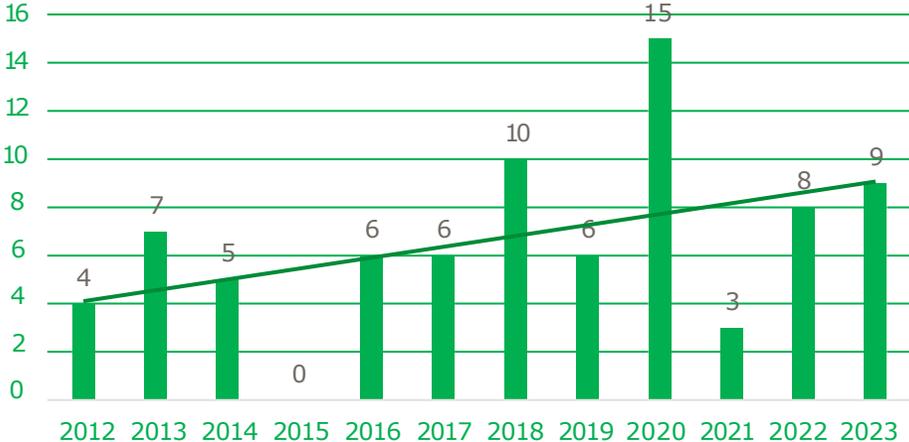


Source: U.S. Climate Vulnerability Index, climatevulnerabilityindex.org

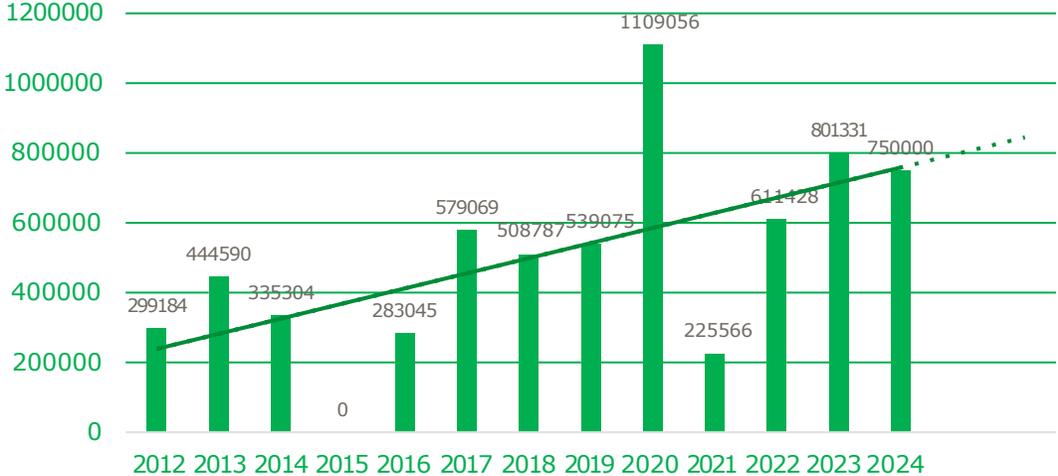
Storm Frequency and Storm Intensity Experienced is Increasing



Major Storms by Year

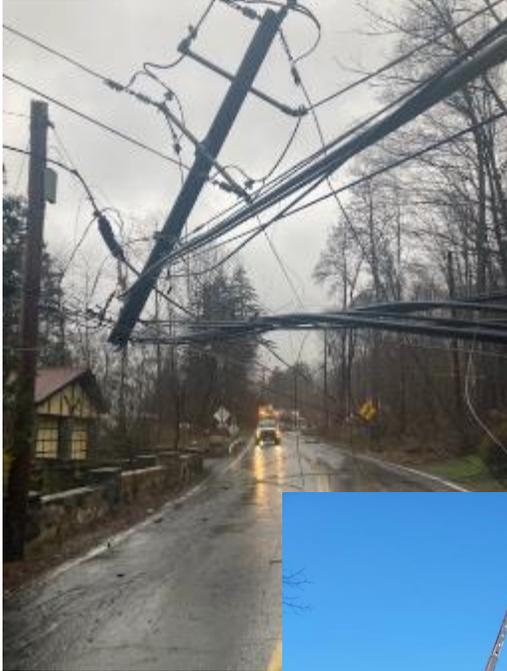


Customers Affected by Major Storms

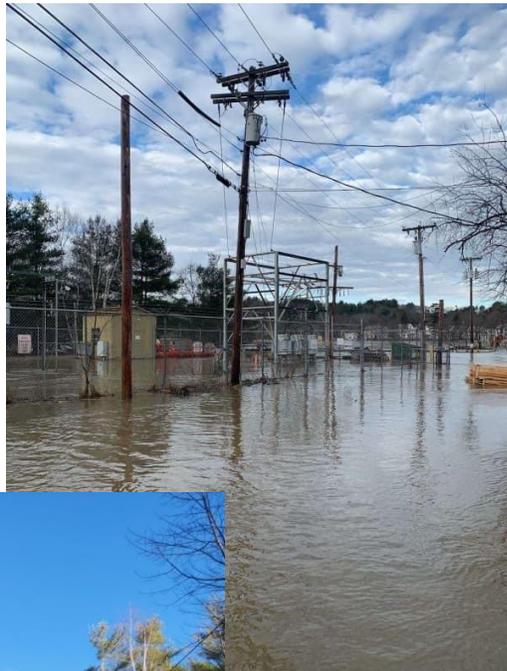


*2024 based on preliminary data through April 15

December 18, 2023 Storm



Broken Pole Top



Substation flooding



Tree removal by crane

- On December 18, 2023 a region-wide, slow-moving storm system with widespread rains, flooding and high winds caused extensive damage throughout the CMP territory
- Damage to distribution and transmission systems:
 - Approximately individual **7,515 incidents**
 - Almost **1,000 broken poles**
 - Over **1,500 Emergency Management Agency (EMA) requests**
- Power restored within 7 days to **424,589 customers**; peaking at over 355,000 without power
- CMP deployed 1,600 distribution crews and approximately 545 vegetation crews during restoration
- Nearly every customer was restored by Christmas Eve

December 2023 Storm (continued)



Tree falls on pad mount transformer and house



Tree on powerlines, blocking road



Barn blown across the road into the distribution system



Crews restoring power in Scarborough, ME



Temporary Shelters set up with local schools, and EMA Partners

- On April 3, 2024 a strong complex storm system impacted the CMP service territory with high winds, heavy wet snow, icing and flooding rains
- Power restored within 4.5 days to over 390,000 customers. At the peak there were 330,000 customers without power
- Damage to distribution, transmission systems with **6,910 incidents**, **391 broken poles** and over **1,600 Emergency Management Agency (EMA) requests**
- CMP deployed 1,600 distribution crews and 700 vegetation crews
- This event occurred leading up to the solar eclipse weekend and lodging was scarce once restoration entered the weekend
- Worked with local colleges, schools and other facilities to set up temporary lodging for the incoming crews

April 3, 2024 Storm (continued)



Tree on wire in Windham, ME



Broken Pole in Brunswick, ME



Trees impacting distribution system



Clearing Vegetation from roads



Clearing Vegetation from the lines in South Portland



Address Foundational Grid Needs

- Automation: decrease outage impacts and duration
- Back-up circuit ties: provide redundant power sources
- System hardening: reduce outages resulting from storm-damaged equipment
- Enhanced vegetation management: reduce outages from tree contact
- Increased capacity: enable load growth

Help Maine Achieve its Climate Goals

- Facilitate the infrastructure needs and smart technology necessary to enable climate goals
- Empower customers to manage their energy use

Maintain Affordability and Equity

- Determine the most cost-effective solutions
- Build awareness of each customer's "total energy wallet"



Speakers

John Flynn, Versant Power

Infrastructure Rebuilding and Resilience Commission | September 18, 2024 |

GOVERNOR'S OFFICE OF
Policy Innovation
and the Future



MAINE
Emergency
Management Agency



Fall timeline

September 4	1-4pm	Commission meeting #4 – zoom	New content presentations and discussion
September 6	9:30-11am	Northern Maine visit (optional, Zoom or in-person)	
September 18	1-4pm	Commission meeting #5 – zoom	
October 2	1-4pm	Commission meeting #6 – in person, Augusta	Review and deliberation <ul style="list-style-type: none"> • Status update to Governor – early Oct • Interim report – Nov 15
October 30	1-4pm	Commission meeting #7 – zoom	
November 12	1-4pm	Commission meeting #8 – in person, Augusta	



Thank you

- More information on the Resilience Commission, including meeting dates and a Commission Contact form, is available on the Maine Governor's Office of Policy Innovation and the Future's website:
- <https://www.maine.gov/future/infrastructure-commission>

