



**Maine's Energy
Transition
Maine Public Utilities
Commission**





PUC Purpose under Title 35-A

Ensure safe, adequate, and reliable utility service at rates reasonable to customers and utilities while also helping achieve reductions in state greenhouse gas emissions.



PUC regulates

- Transmission & distribution electric utilities
- Natural gas utilities
- Water utilities
- Telephone (provider of last resort)
- 9-1-1 Emergency Services
- Casco Bay Ferry & Water Services



Maine's Climate Goals

Renewable

- 80% of retail electricity sales by 2030
- 100% of retail electricity sales by 2050

Decarbonization

- Carbon neutral by 2045

How Maine Measures up...

A recent Wall Street Journal article places Maine number three on its list of “States Producing Most Electricity from Renewable Sources”* trailing only #1 Vermont and #2 South Dakota.

3. Maine

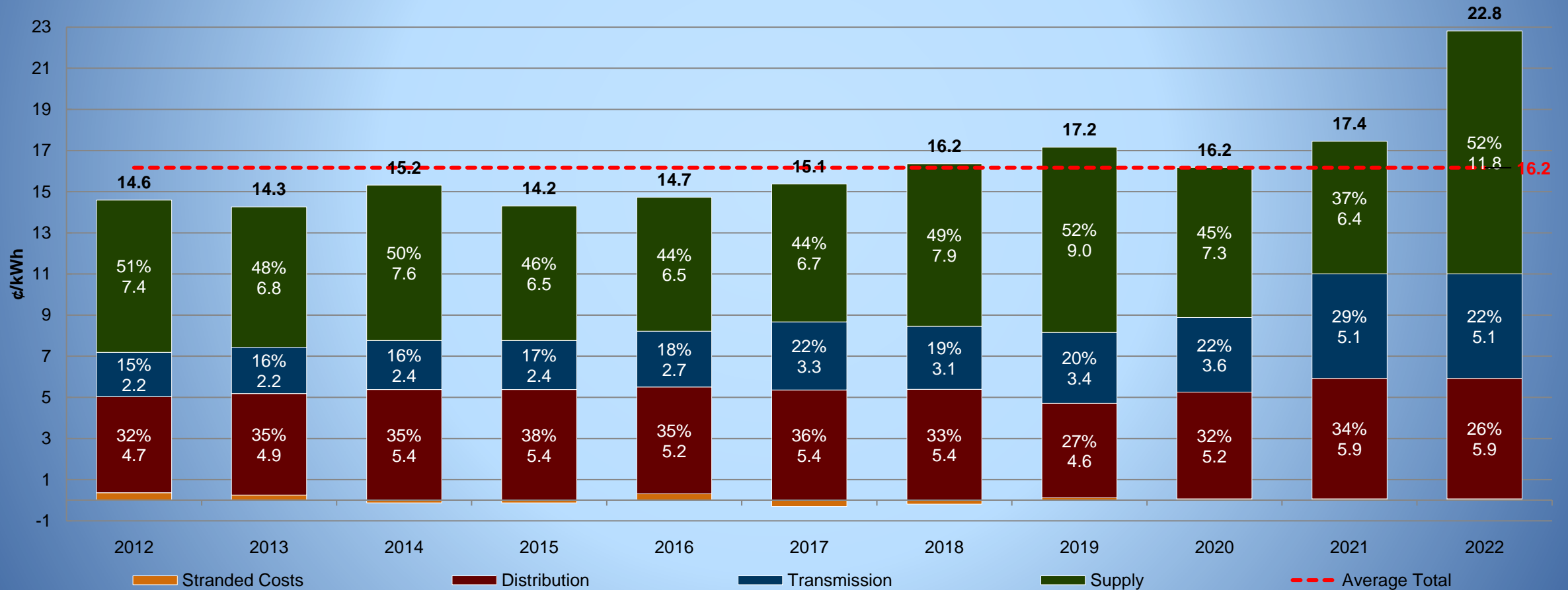
- ✓ **Electricity from renewables, 2020:** 76.7% of total (7.7 million MWh)
- ✓ **10-yr. change in share of renewable energy:** +29.9 ppt. (5th highest)
- ✓ **Largest renewable energy source:** Solar Thermal and Photovoltaic (1.4 million MWh)
- ✓ **Largest non-renewable energy source:** Natural Gas (14.2 million MWh)

*<https://247wallst.com/special-report/2022/05/15/states-producing-the-most-electricity-from-renewable-sources/11/>



Residential Electricity Prices by Component (CMP)

*chart reflects cents per kWh per component and percentage of total bill per component



Note: 2022 rates reflect T&D rates in effect on December 31, 2021, and supply rate as of January 1, 2022.



Meeting clean energy and carbon reduction goals will require significant investment, including:



Grid scale renewables (solar & wind), storage



Distributed Energy Resources (DERs), including storage



Incentives for beneficial electrification



Modernizing the grid



Transmission to unlock more renewables

Advancing Public Policy

- Renewable Energy Procurements
- Distributed Generation/Net Energy Billing
- Beneficial Electrification
- Northern Maine Procurement

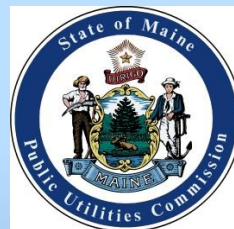
2019 Legislation directed PUC to conduct two RFPs to procure renewable energy projects for up to 14 percent of retail load.

September 2020 PUC approved 17 renewable energy projects for long-term contracts as required by the Maine Legislature totaling **546 MW**

- 14 solar projects
- 1 wind project
- 1 biomass project
- 1 hydro project

June 2021 PUC approved an additional seven renewable energy projects for long-term contracts totaling **422 MW**

- 6 new solar projects
- 1 existing wind project

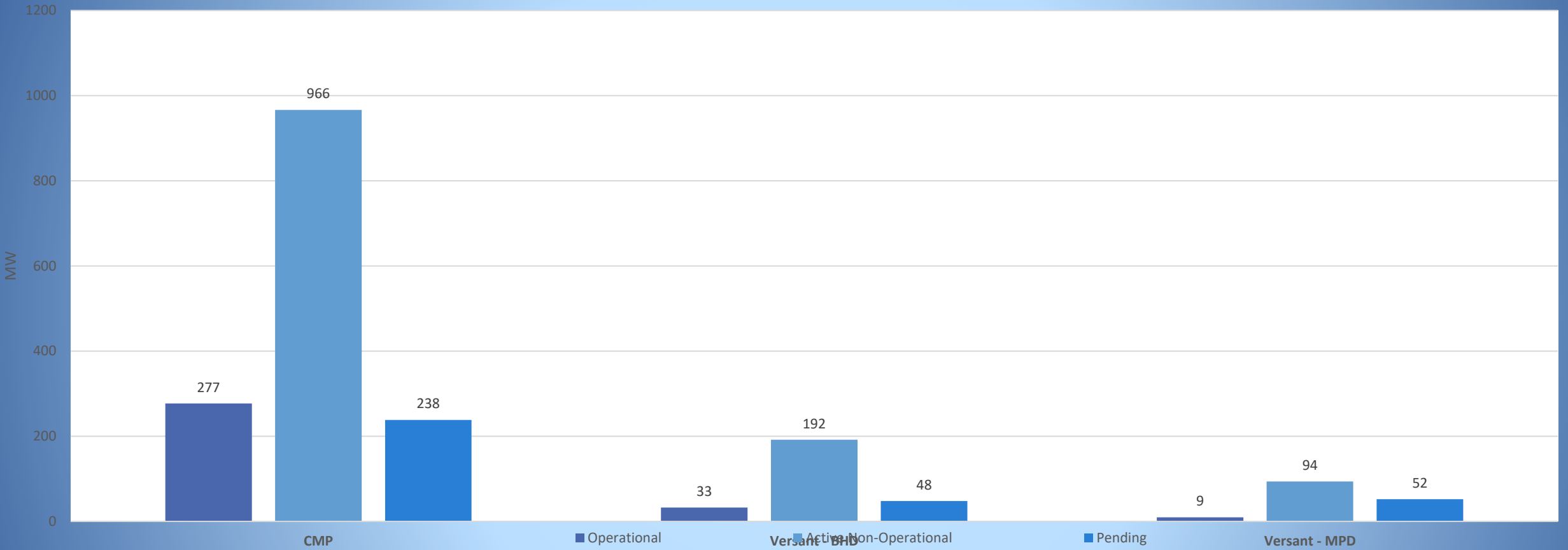




Net Energy Billing

- Owners of small generation (like rooftop solar) credit net generation delivered to the grid against consumption
- Generators allowed up to 5 MW; unlimited customers can subscribe
- Explosion of development in small solar sector
- More than 319 MW of projects online; 1,590 MW in development
- Cost of subsidies will be included in rates

Maine Net Energy Billing Enrollment August 2022



1. Operational projects are approximately 88% solar, 9% hydro and 2% wind. Virtually all non-operational projects are solar.

2. Active Non-Operational projects are projects with an executed NEB agreement but are not yet operational. Pending projects are projects that have filed an application but have not yet executed an NEB agreement.

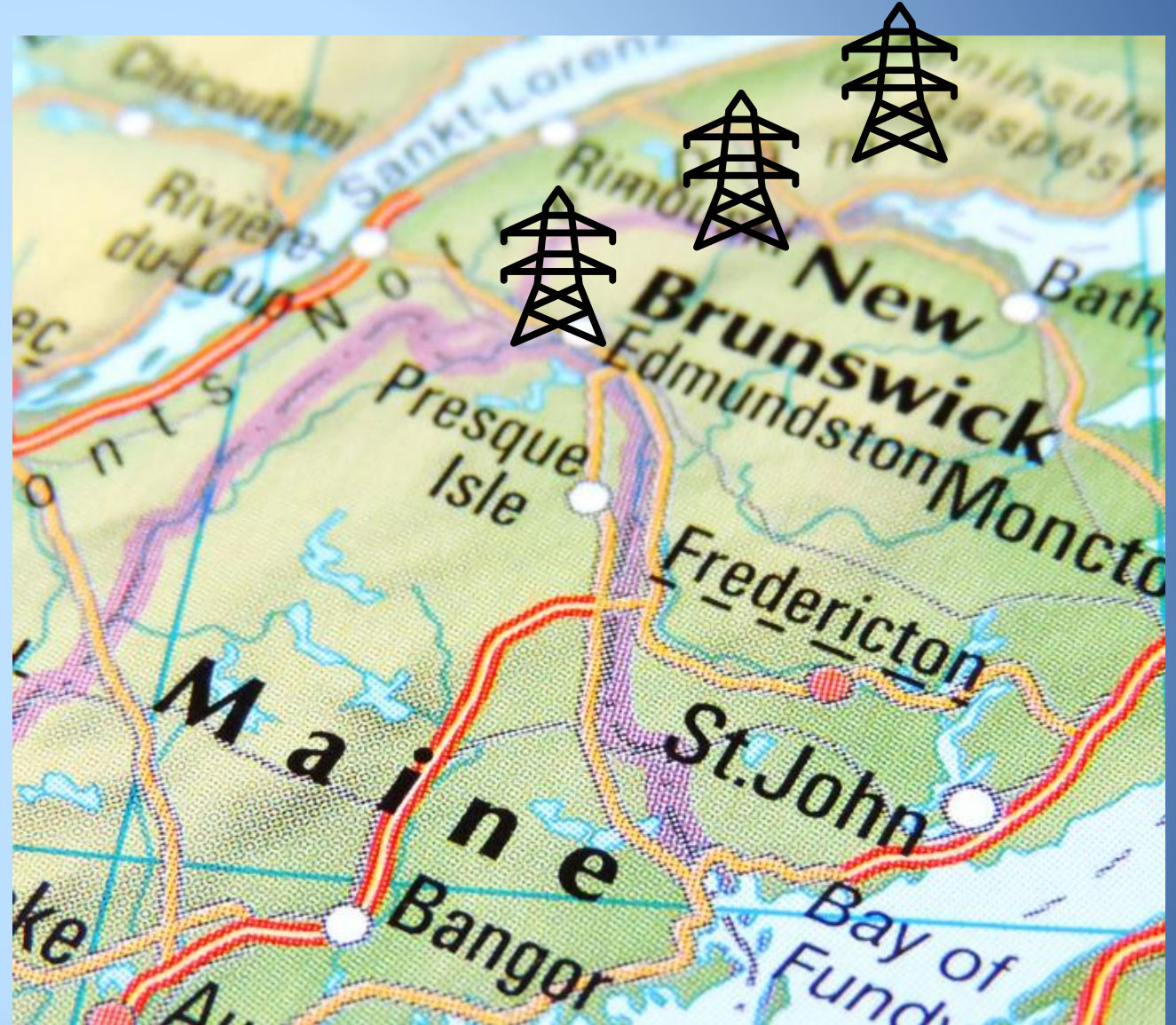
Beneficial Electrification

- August 2019: Commission Issued RFP for Pilot Programs to support Beneficial Electrification of the Transportation Sector.
- February 2020: Commission approved three proposals for pilot programs:
 - ✓ Two from CMP for Level 2 charging stations
 - ✓ One from Efficiency Maine Trust for a public education pilot program
- New Rate Designs adopted October 2022 to support EV charging, heat pumps and storage.



Northern Maine Line & Generation

- Issued RFPs
 - 345 kV generation connection line to connect renewable resources in northern Maine to the ISO-NE grid
 - renewable generation projects in northern Maine
- Transmission bids received March 1
- Generation bids received May 2
- Deadline 11/1/22 for the Commission to make decision



Regulatory Process

- Performance Standards
- Grid Modernization Proceeding
- Comprehensive Planning

Performance Standards

LD 1959 requires Commission to adopt rules governing the evaluation of investor-owned T&D utility service.

Commission analyzed seven metric categories and a customer report card:

- Service Reliability, Quality, Storm Restoration
- Customer Service
- Field Services
- Affordability and Cost Control
- Distributed Energy Resource (DER) Interconnection and Deployment
- Grid Modernization and Technologies
- Energy and Environmental Policies.

Rulemaking amendments approved for electric transmission and distribution utility service standards in several areas. Additional work to follow.



Grid Modernization

- Commission investigating future design and operation of the electric distribution system.
- Focus on distribution systems investor-owned transmission and distribution utilities-CMP and Versant Power.
- Grant from U.S. Department of Energy to support deployment of novel technologies to reduce emissions, promote efficiency, and drive grid modernization.

Integrated Grid Planning 35-A M.R.S. § 3147

- Every 5 years, beginning Nov. 1, 2022
- Stakeholder engagement/input followed by Commission Order identifying priorities
- T&Ds file plan within 18 months of Order
- Commission may order plan revisions following public comment

Climate Change Protection Plan 35-A M.R.S. § 3147

- Every 3 years, beginning December 31, 2023
- 10-year plan to include specific actions for addressing expected effects of climate change on the utility's assets.
- Opportunity for input from interested parties

Both plans may be used in rate cases or other proceedings.

Policy Considerations

- How much cost can/should ratepayers absorb at a time?
- How should those limited ratepayer dollars be allocated?
- How do we balance cost causation principles and equity considerations?
- What regulatory changes may be needed?

Questions?

