NORTHEAST POWER COORDINATING COUNCIL, INC.

Northeast Power Coordinating Council (NPCC)



- One of six NERC Regional Entities throughout the US, Canada and portions of Mexico
- Area (sq. miles): 1.2 million
- Population: 56+ million people
- States (US): 7 Provinces (Canada): 4
- Registered Entities: 237, performing 502 functions
- Share of Eastern Interconnection Load: ~20%
- Share of NPCC Load: 43% US / 57% Canadian
- Share of Total Canadian Load within NPCC: ~65%



Sources of Grid Electricity in New England (Annual Net Energy for Load)



Source: ISO New England, generation data and Net Energy and Peak Load by Source Report

New England - State Renewable Portfolio Standards



PNORTHEAST POWER COORDINATING COUNCIL, INC. Energy Efficiency and Behind-the-Meter Solar Resources Are Reducing Peak Demand

Projected Summer Peak Demand (MWs) With and Without EE and PV Savings



- **28,130 MW:** all-time summer peak demand, set on August 2, 2006
- Energy efficiency (EE) and behindthe-meter (BTM) solar are reducing annual growth in peak demand
- Annual growth rates for 2022–2031:

+0.7% without EE and BTM solar

+0.3% with EE and BTM solar

• Electrification of heating and transportation will increase load

Source: ISO New England 2022 Forecast Data

NORTHEAST POWER COORDINATING COUNCIL, INC.

New England Changes in the Energy Mix

Percent of Total **Electric Energy** Production by Source (Past, Present, Future)



Source: ISO New England <u>Net Energy and Peak Load by Source</u>; data for 2022 is preliminary and subject to resettlement; data for 2040 is based on Scenario 3 of the ISO New England <u>2021 Economic Study</u>: Future Grid Reliability Study Phase 1. Renewables include landfill gas, biomass, other biomass gas, wind, grid-scale solar, behind-the-meter solar, municipal solid waste, and miscellaneous fuels.

NORTHEAST POWER COORDINATING COUNCIL, INC. New England Investments in Transmission

Transmission investment by year that projects are put into service (capital costs)

Source: ISO New England RSP Transmission Project Listing, October 2022 Estimated future investment includes projects under construction, planned and proposed.