



# Electricity Market Regulation: Implications for Decarbonization

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ELI Summer School, June 2022

# Decarbonizing Electricity Generation is Key to All Pathways



## Pillars of Economy-Wide Decarbonization

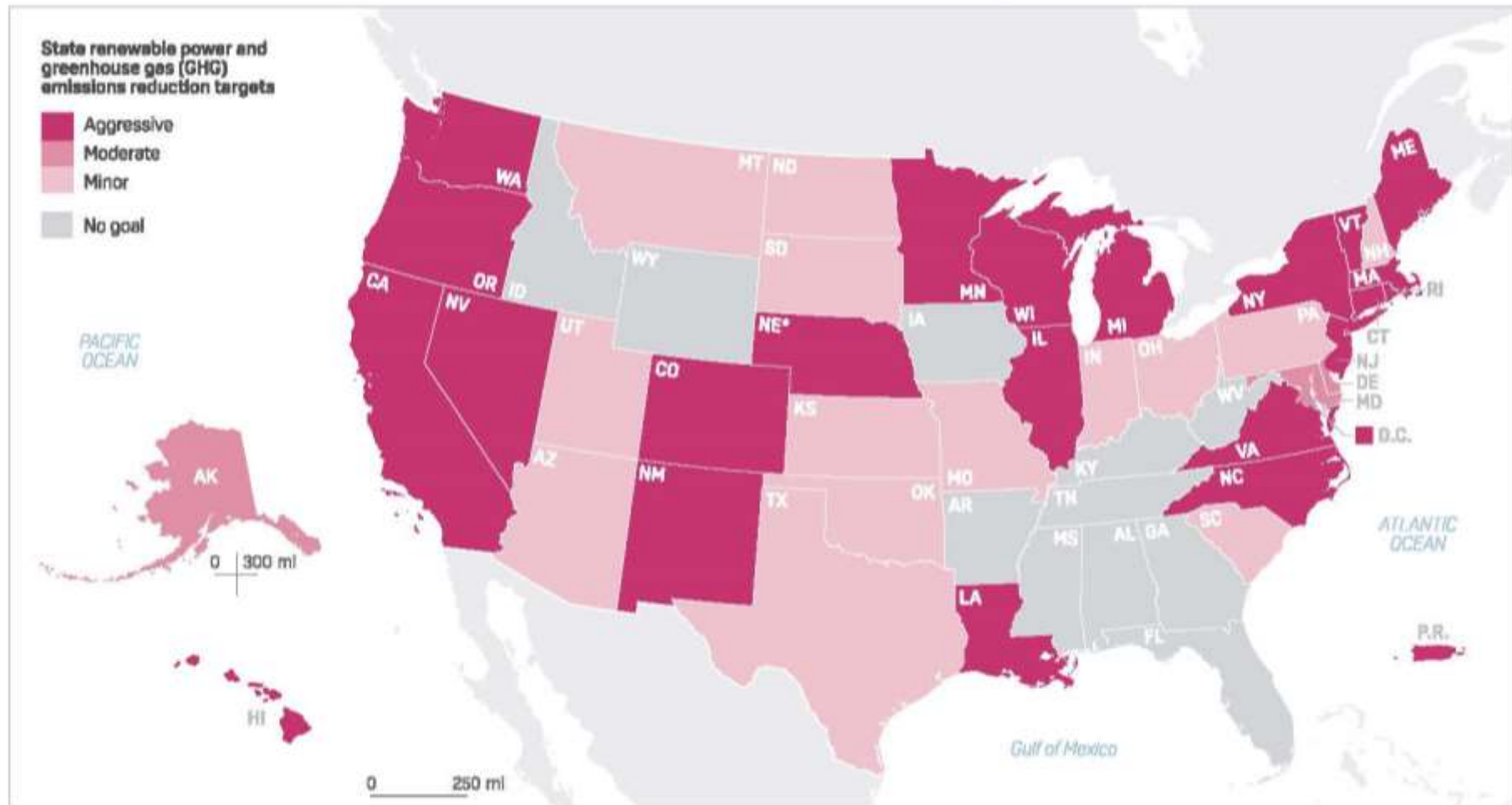
Producing all (or nearly all) electricity from carbon-free sources

Electrification and switching to lower-carbon fuels

Improve the energy efficiency of buildings, transportation and industry

# Decarbonizing Electricity Generation is Key to All Pathways

## NEARLY HALF OF US STATES HAVE AGGRESSIVE GOALS TO CUT GHG, ADD RENEWABLES

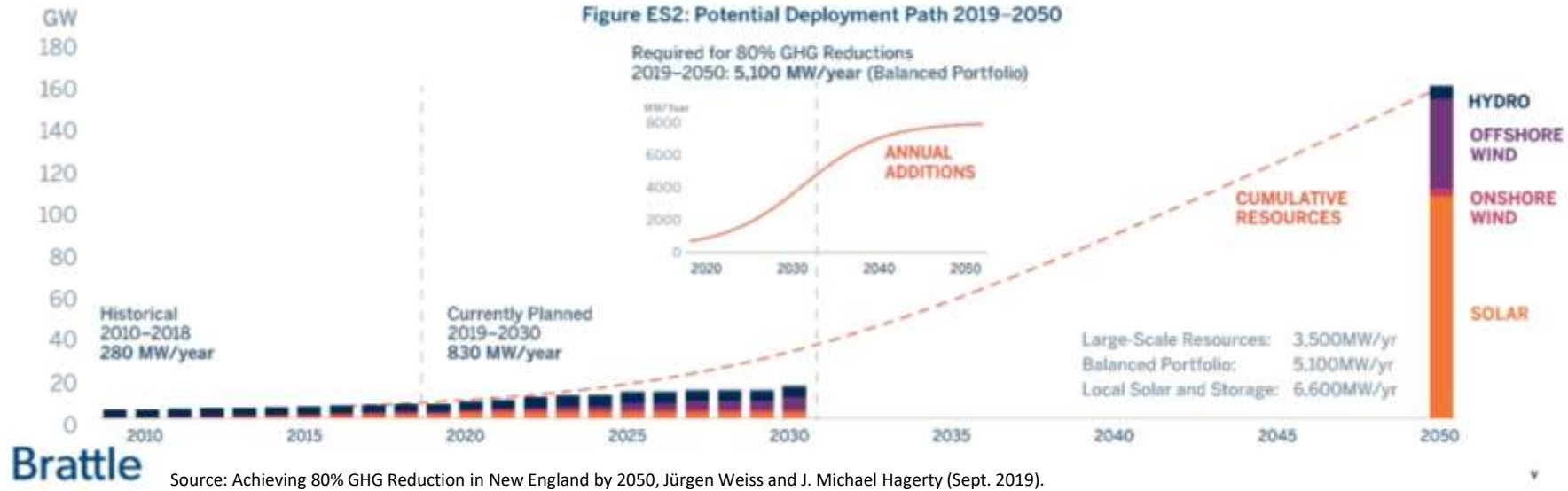


Data as of February 2022

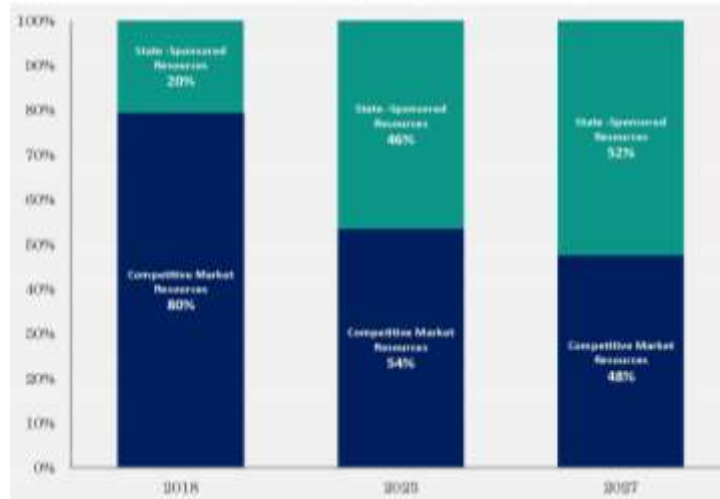
\*Nebraskans elect the boards of state utilities and effectively set their GHG goals.

Source: S&P Global Platts, EIA, National Conference of State Legislatures, other associated sources for individual states and territories

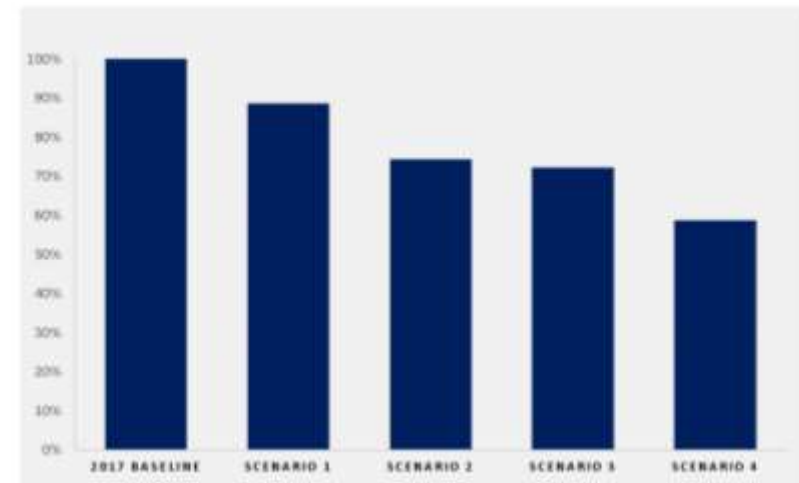
# Decarbonizing Electricity Supply: The New England Example



**Figure 2: State-Sponsored Resources v. Competitive Market Resources**  
 (Estimated Energy Production, MWh)



**Figure 5: Estimated Percentage Energy Market Revenue Reductions for Select Combined Cycles Due to Increased Clean Energy Resources (2017)**

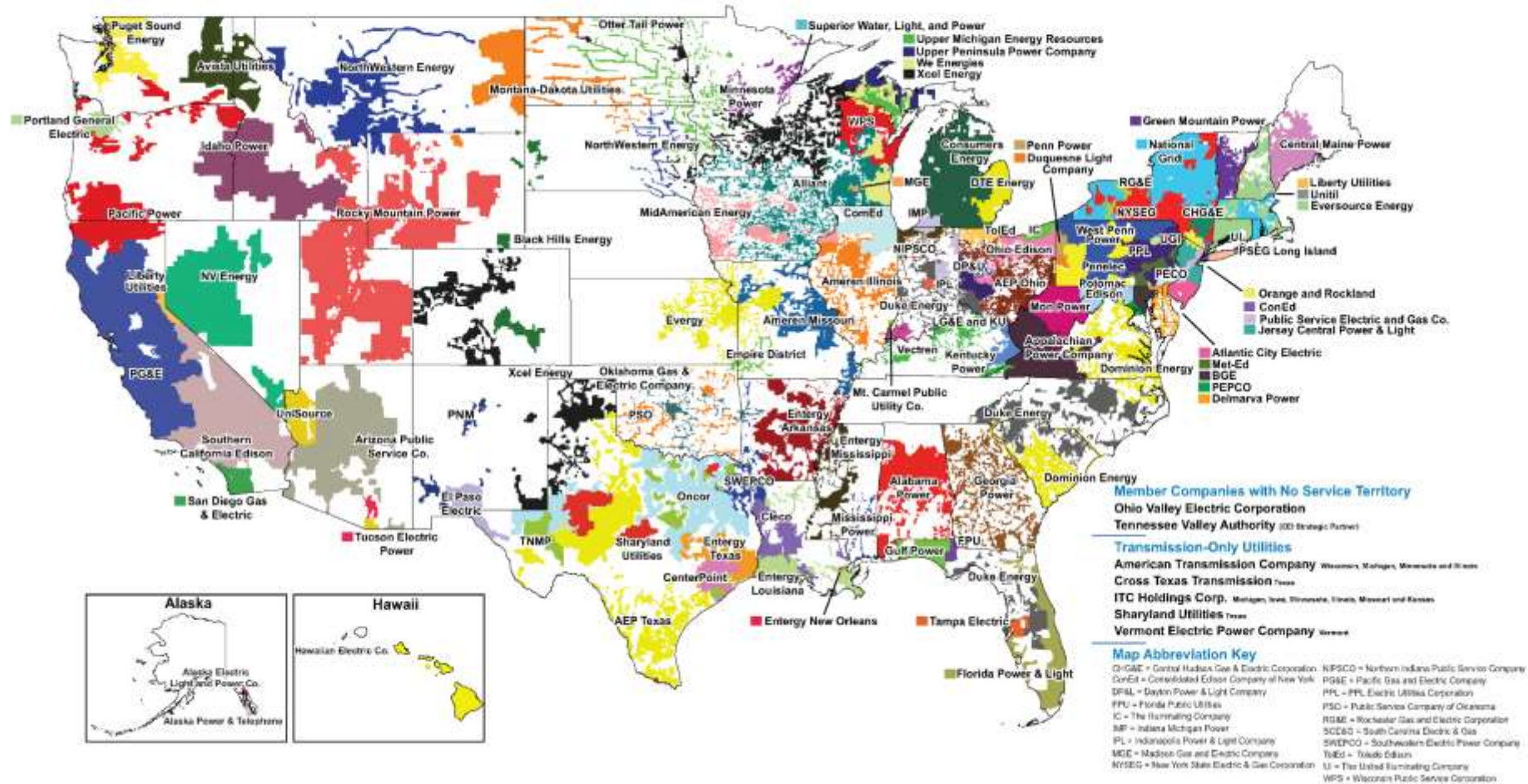


Source: Promoting Competitive Power Markets and Growing Zero-Emission Resources in New England, A. Joseph Cavicchi (Nov. 7, 2018)

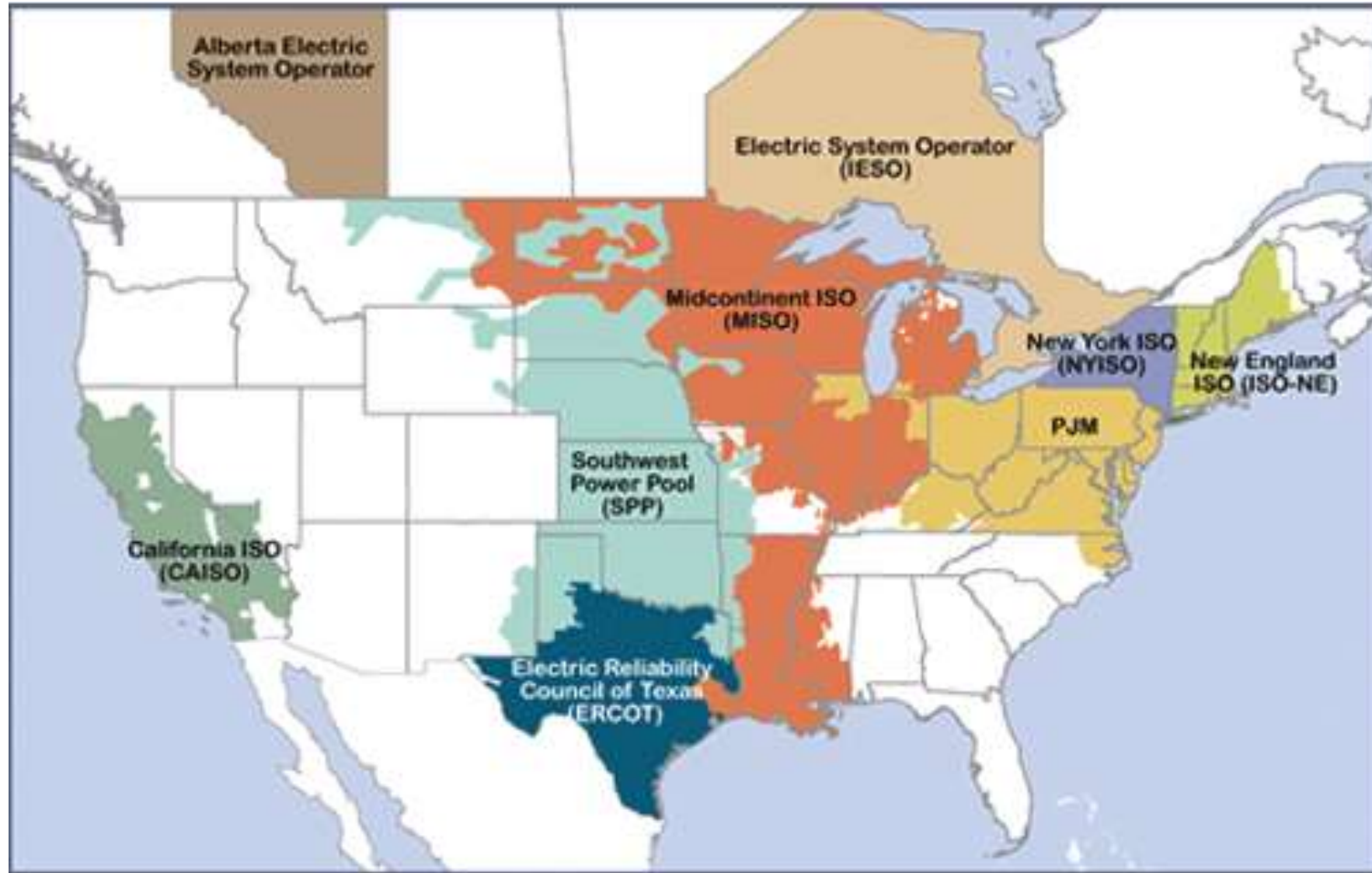
# Electric Utilities are Disaggregated...



## EEI U.S. Member Company Service Territories

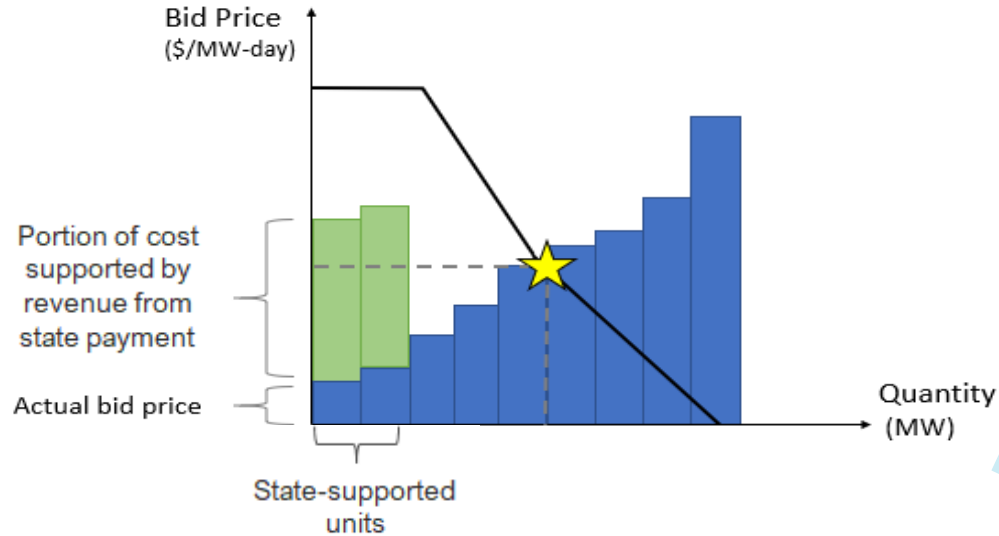


## But Wholesale Electricity Markets are Regional



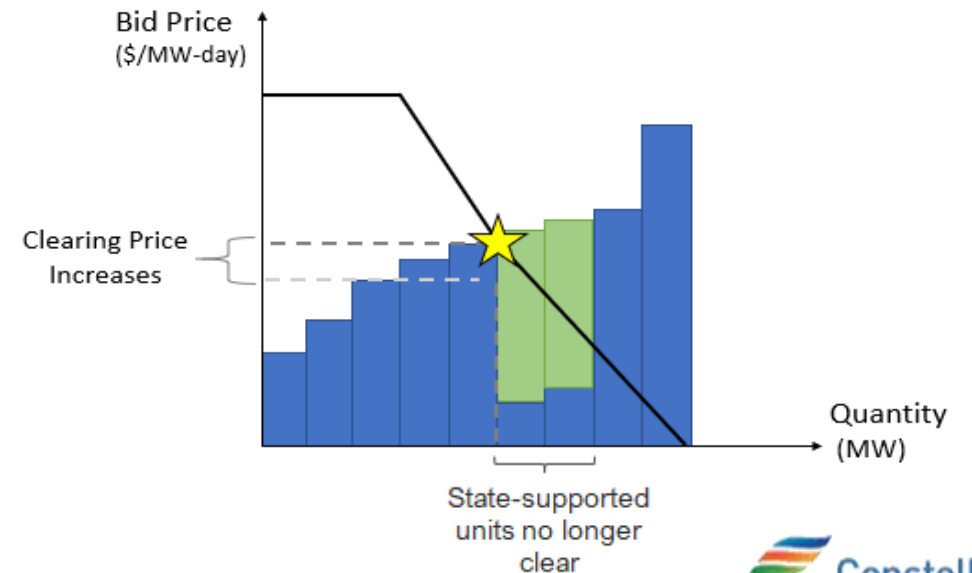
# Federal/State Misalignment: Minimum Offer Price Rule (MOPR) Example

Several regional markets use auctions to contract with resources for the future delivery of electricity, referred to as capacity. In the past, renewable and clean energy generators have been allowed to bid into these capacity auctions at whatever price they need to turn a profit after taking into account revenue they anticipate receiving from state clean energy programs.

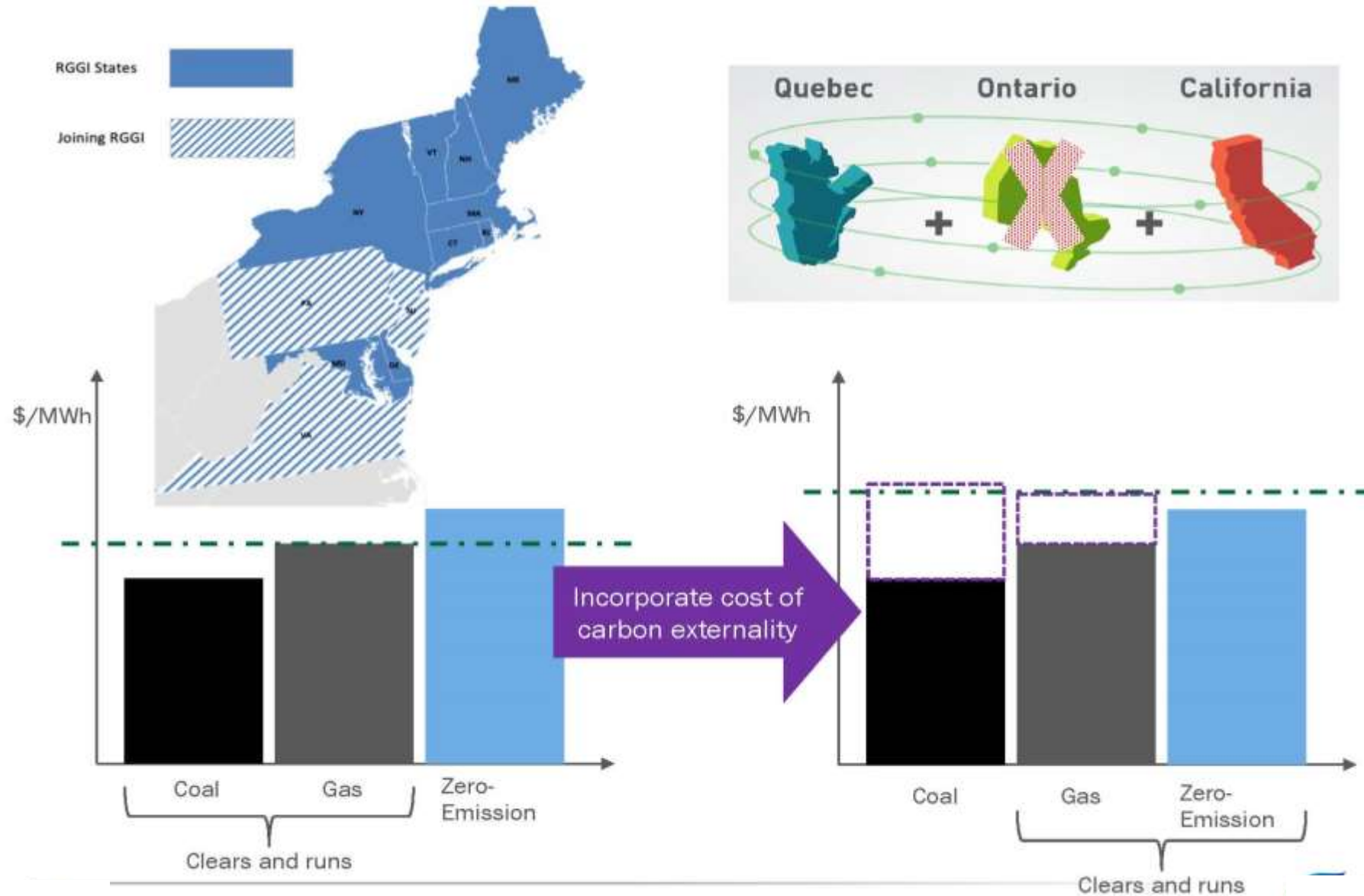


The MOPR establishes a floor below which generators cannot offer. When applied to state-supported generators, the market rule can result in clean generation losing capacity revenues as they get priced out of the market (below). The lost capacity revenues must be recouped by higher state payments in order to meet clean energy goals. Capacity prices also rise as redundant, emitting capacity is procured.

Applicability of the MOPR to state-supported clean resources has been the subject of extensive litigation at FERC, including a pending DC Circuit proceeding. While the current FERC majority opposes application of the MOPR, two commissioners have expressed in support in varying circumstances.



# Paths Forward: Expand Carbon Pricing Programs





# Paths Forward: Expand State Clean Resource Procurements



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November 12, 2015

## SPECIFIED STATE AGENCIES AND ELECTRIC DISTRIBUTION COMPANIES IN CONNECTICUT, MASSACHUSETTS AND RHODE ISLAND

NOTICE OF REQUEST FOR PROPOSALS FROM PRIVATE DEVELOPERS FOR CLEAN ENERGY AND TRANSMISSION

IMPLEMENTATION OF CERTAIN PROCUREMENT STATUTES

### INTRODUCTION

Pursuant to the clean energy goals of the States of Connecticut, Rhode Island, and the Commonwealth of Massachusetts (collectively the "Procuring States"), this Request for Proposals ("RFP") is soliciting offers for clean energy and transmission to deliver clean energy. The solicitation is conducted in accordance with and in fulfillment of certain legal requirements in the three states. The Soliciting Parties, as defined below, seek to identify projects that may enable parties in each state to achieve their respective state's clean energy goals more cost effectively than if each state were to proceed unilaterally while also complying with the applicable legal requirements of each state.

Accordingly, the Commissioner of the Connecticut Department of Energy and Environmental Protection ("CT DEEP") provides this RFP regarding the acceptance of proposals from developers pursuant to Sections 6 and 7 of Connecticut Public Act 13-303, *An Act Concerning Connecticut's Clean Energy Goals* (as amended by Sections 32 and 33 of Public Act 14-94, *An Act Concerning Connecticut's Recycling and Materials Management Strategy, The Underground Damage Prevention Program and Revisions to Energy and Environmental Statutes*), and Section 1(c) of Public Act 15-107, *An Act Concerning Affordable and Reliable Energy* as well as the Commissioner's authority under Connecticut General Statutes Section 16a-14. In addition, Fitchburg Gas and Electric Light Company, d/b/a Unitil, Massachusetts Electric Company and Nantucket Electric Company, d/b/a National Grid, and NSTAR Electric Company and Western



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BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Continue Implementation and Administration, and Consider Further Development, of California Renewables Portfolio Standard Program.

Rulemaking 18-07-003

**ASSIGNED COMMISSIONER AND ASSIGNED ADMINISTRATIVE LAW JUDGE'S RULING IDENTIFYING ISSUES AND SCHEDULE OF REVIEW FOR 2020 RENEWABLES PORTFOLIO STANDARD PROCUREMENT PLANS**

### **Summary**

Pursuant to the authority provided in Public Utilities (Pub. Util.) Code § 399.13(a)(1),<sup>1</sup> today's Ruling identifies the 2020 Renewables Portfolio Standard (RPS) Procurement Plan filing requirements for all retail sellers of electricity and sets a schedule for the Commission's review of the 2020 RPS Procurement Plans (RPS Plans).

<sup>1</sup> Pub. Util. Code § 399.13(a)(1) orders the Commission to "direct each electrical corporation to annually prepare a renewable energy procurement plan... to satisfy its obligations under the



# How will we achieve national clean energy goals?

## Plan for Clean Energy Revolution and Environmental Justice

- 100% clean energy economy no later than 2050
- Invest in communities hit first and worst by pollution
- Lead the world to exceed Paris Agreement
- Create good-paying jobs in clean energy, transportation, and infrastructure

