

S.1 – Ryegate Energy Considerations

February 4, 2021

DEPARTMENT OF PUBLIC SERVICE
BEFORE SENATE FINANCE COMMITTEE
ED MCNAMARA



Key Provisions (for DPS)

The bill does not set the contract price, it sets the process

- Public Utility Commission proceeding creates transparency, opportunity to engage on issues

Requires PUC to consider a mechanism for encouraging more economic dispatch

- *“Mechanisms for encouraging dispatch of the proposed plant relative to the ISO New England wholesale energy price and value of regional renewable energy credits, while also respecting the physical operating parameters and fixed costs of the proposed plant.”*
- Wholesale prices vary considerably over the year; this provision allows exploration of mechanism to reduce dispatch during low-priced periods

Helps maintain a baseload renewable resource and promotes resource diversity

In-State Renewable Resources

390 MW Solar PV

200 MW In-state hydro

150 MW Wind

70 MW Biomass

11 MW Landfill gas

5 MW Methane Digesters

Electricity Products from Ryegate

Energy

- Baseload production provides consistent source of renewable electricity
- Energy prices tend to be low except during cold weather

Capacity

- Plant has a high capacity factor and rating in ISO-NE Forward Capacity Market
- Regional capacity prices continue to be fairly low

Renewable Energy Credits

- Plant produces high value RECs
- There can be considerable volatility in regional REC prices

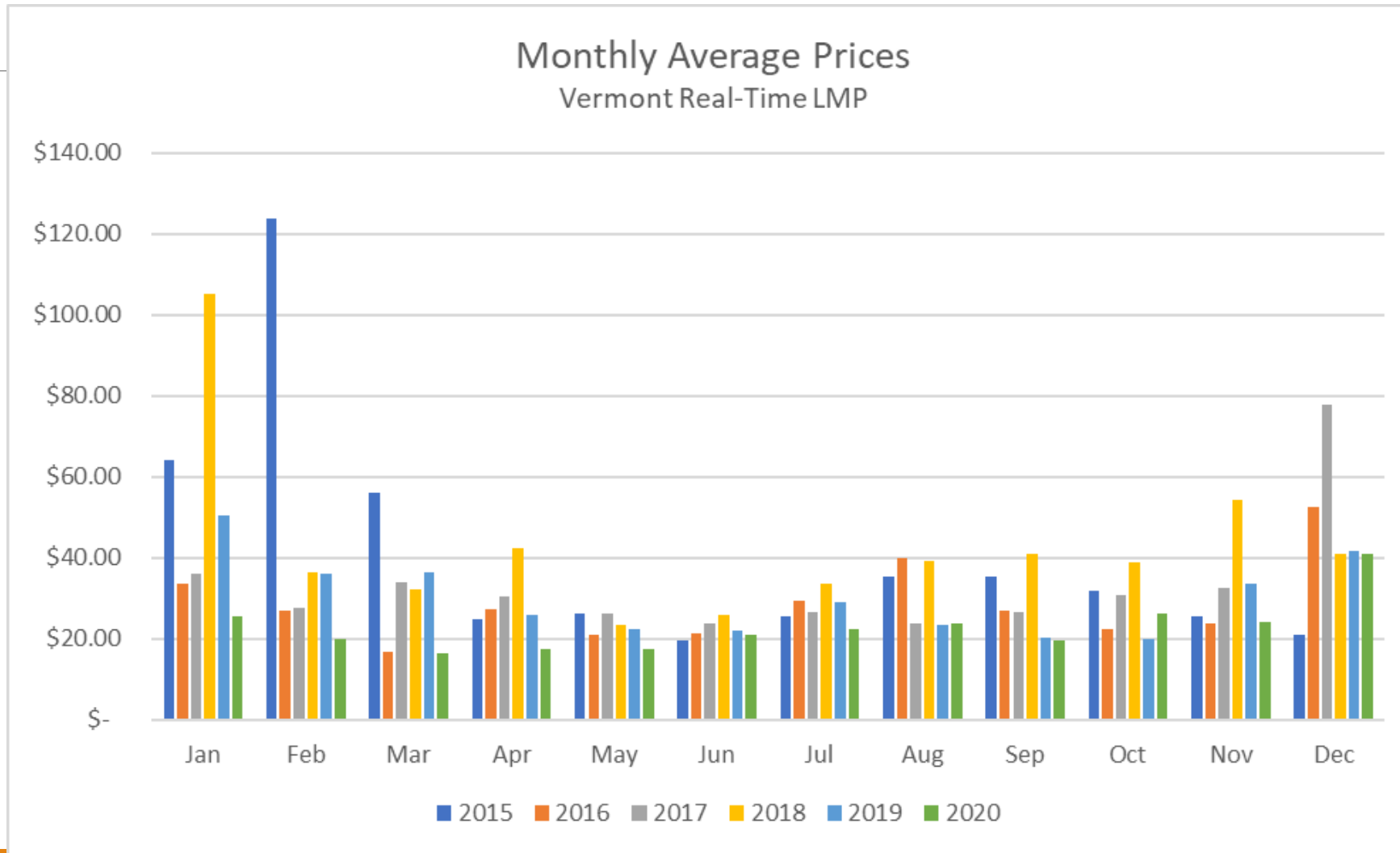
Ryegate Costs vs. market prices

Estimated 10-year levelized market prices

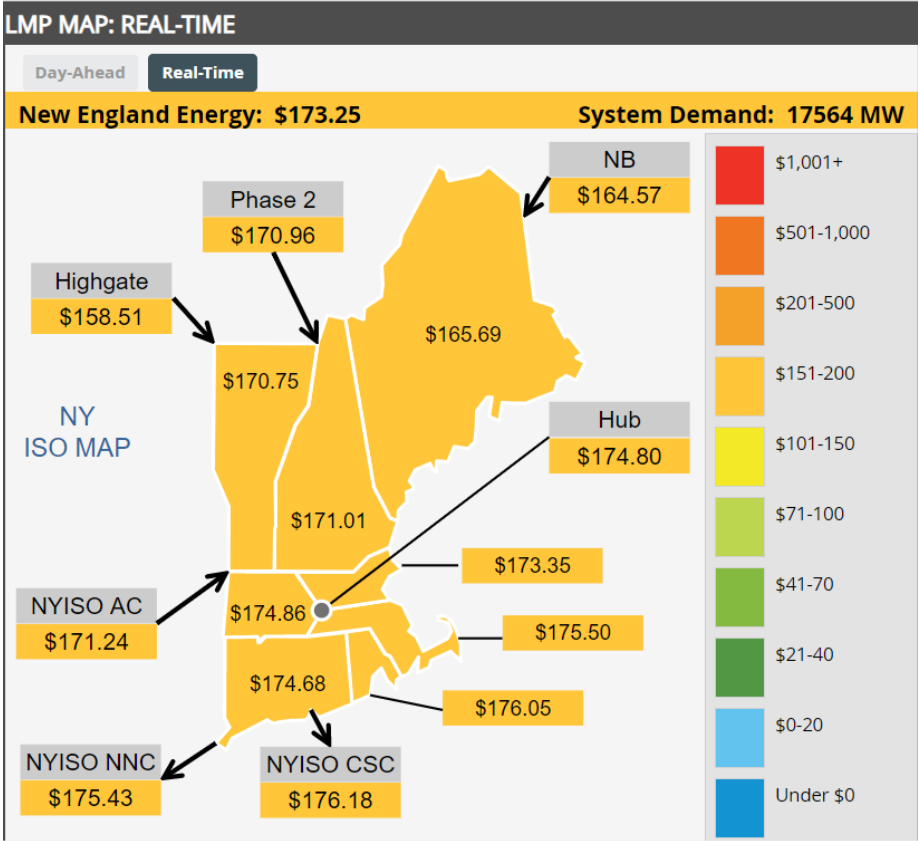
Energy	\$37.80	\$/ MWh
Capacity	\$4.79	\$/MWh
RECs (Class I)	\$31.50	\$/MWh
Total	\$74.09	\$/MWh

Ryegate's existing contract price:
\$103/MWh

New England Wholesale Energy Prices



Cold weather and Wholesale Energy Prices

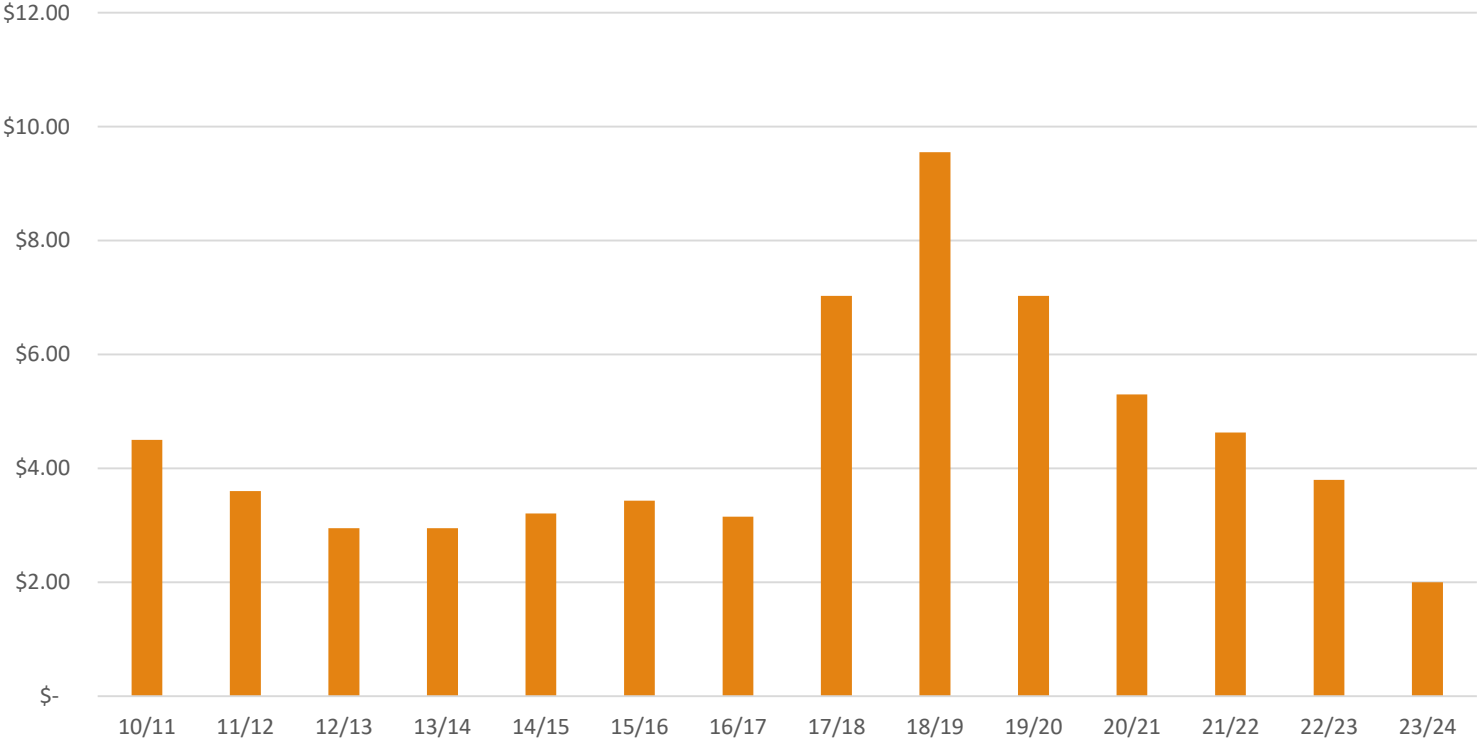


Friday, January 29, 2021
 9:55 am
 ISO-NE Express

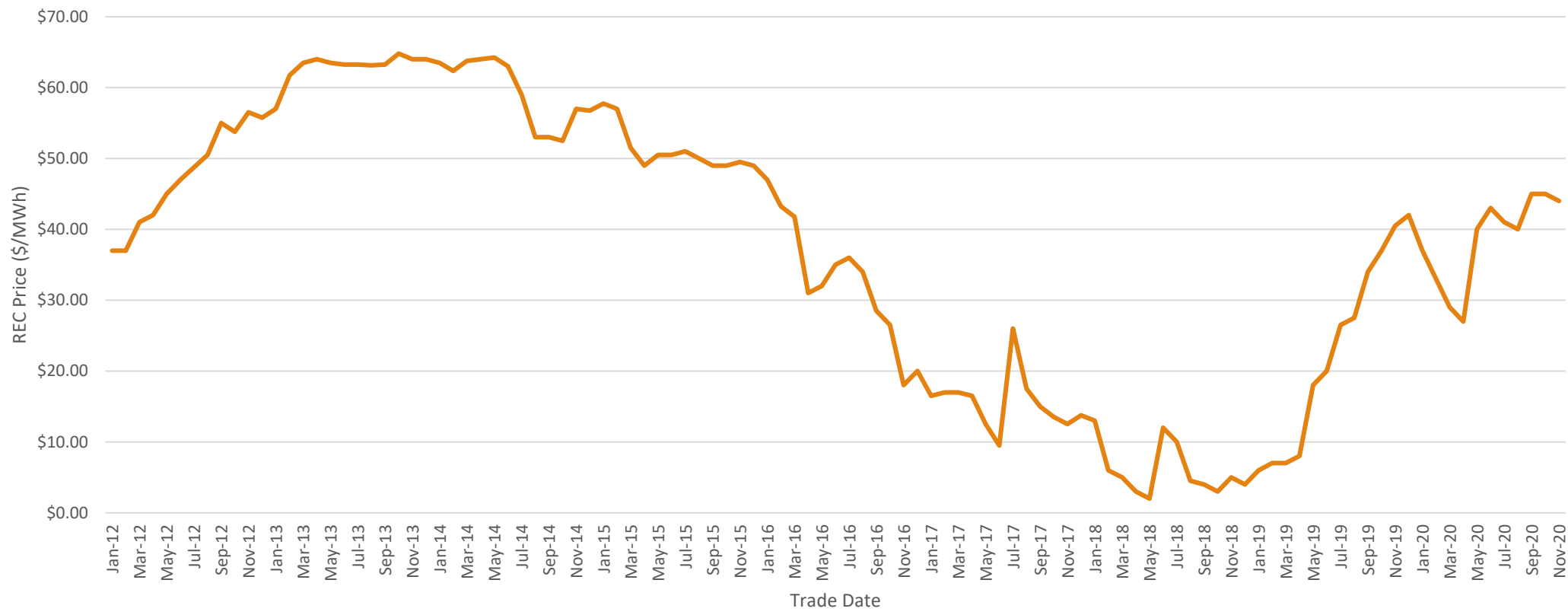
8 degrees in Boston and Hartford
 7 degrees in Montpelier

New England Capacity Prices

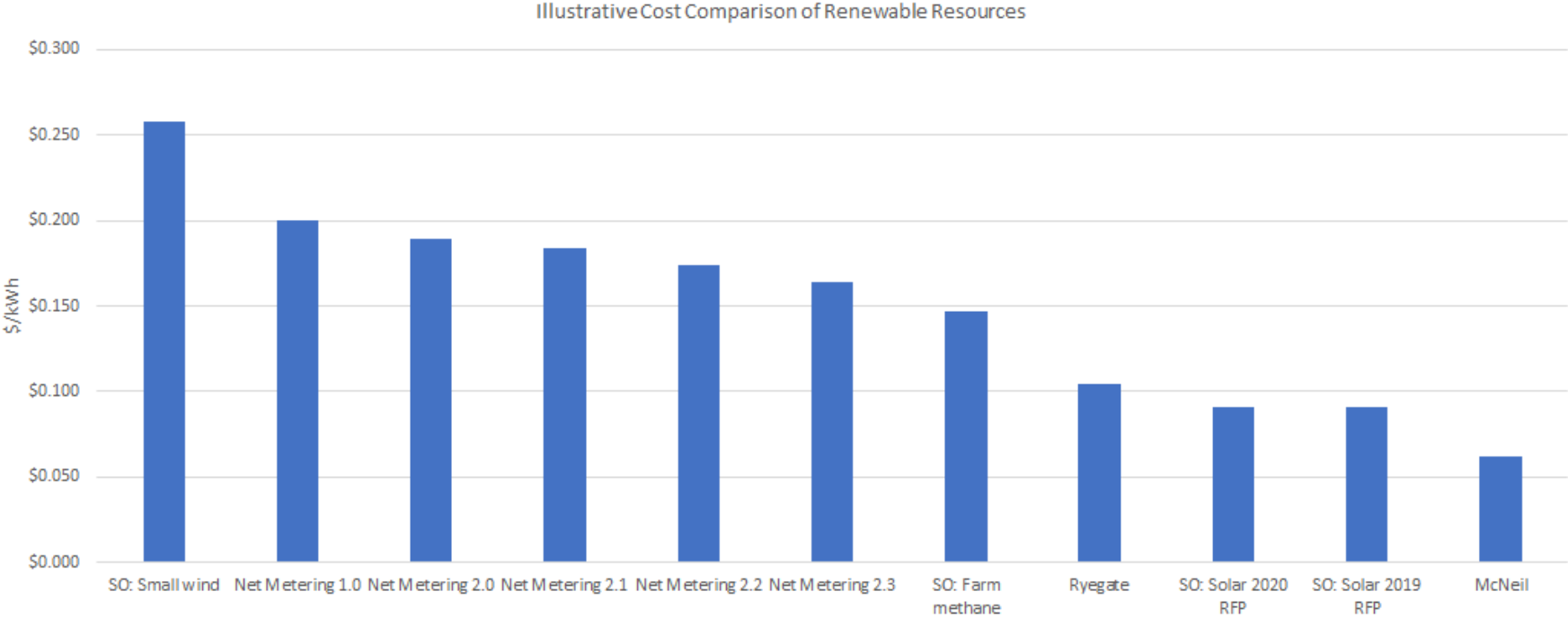
FCA Prices (\$/kW-month)



MA Regional Class I REC Prices



Cost Comparison of Renewable Resources



Ryegate Costs in perspective (2019)

Resource	MWh	Total dollars	Average \$/kWh
Ryegate	130,866	\$13,322,497	\$0.102
Standard Offer	112, 185	\$22,273,981	\$0.199
Net Metering	278,088	\$56,958,854	\$0.205