

5.D. Authorization for Renewable Energy Power Purchase Agreements

Rochester Public Utilities Board Meeting
August 26, 2025



All Wind & Solar | 100% Net Renewable Energy by 2030 (thru 2038)

Current Goal Portfolio Options

Existing Resources

- Lake Zumbro Hydro
- Valley High Solar
- Olmsted Waste to Energy
- Distributed Energy Resources

Projects/PPA Under Consideration

- Wind 1 (smaller scale)
- Wind 2 (smaller scale)
- Wind 3
- Solar 50 MW
- Future Distributed Energy Resources

Future Project

- Wind 50 MW

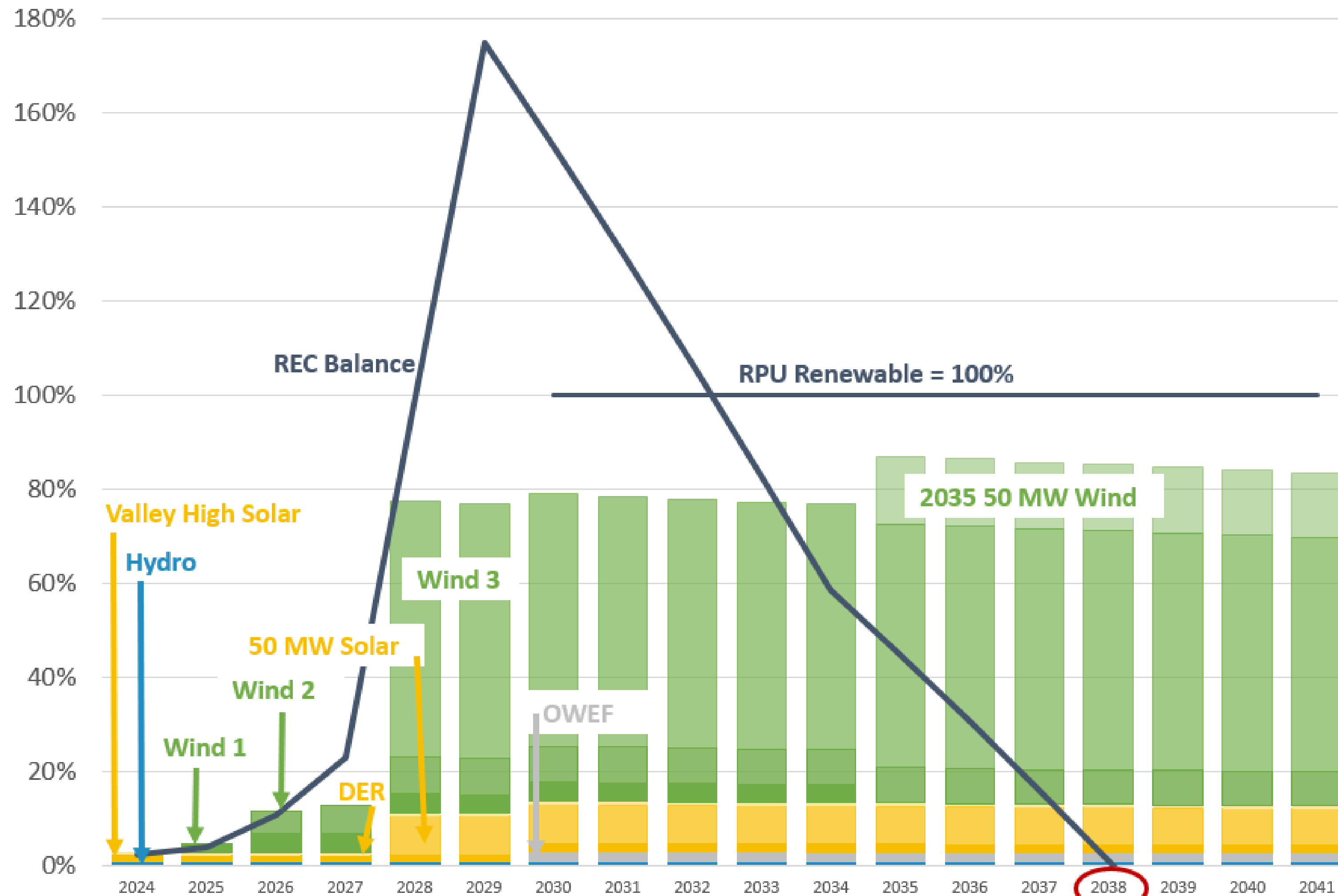
2030 Average Net Cost at Project Node

- Min / Ave / Max = \$6 / \$25 / \$37 million per year

2030 Total Net Cost at Project Node

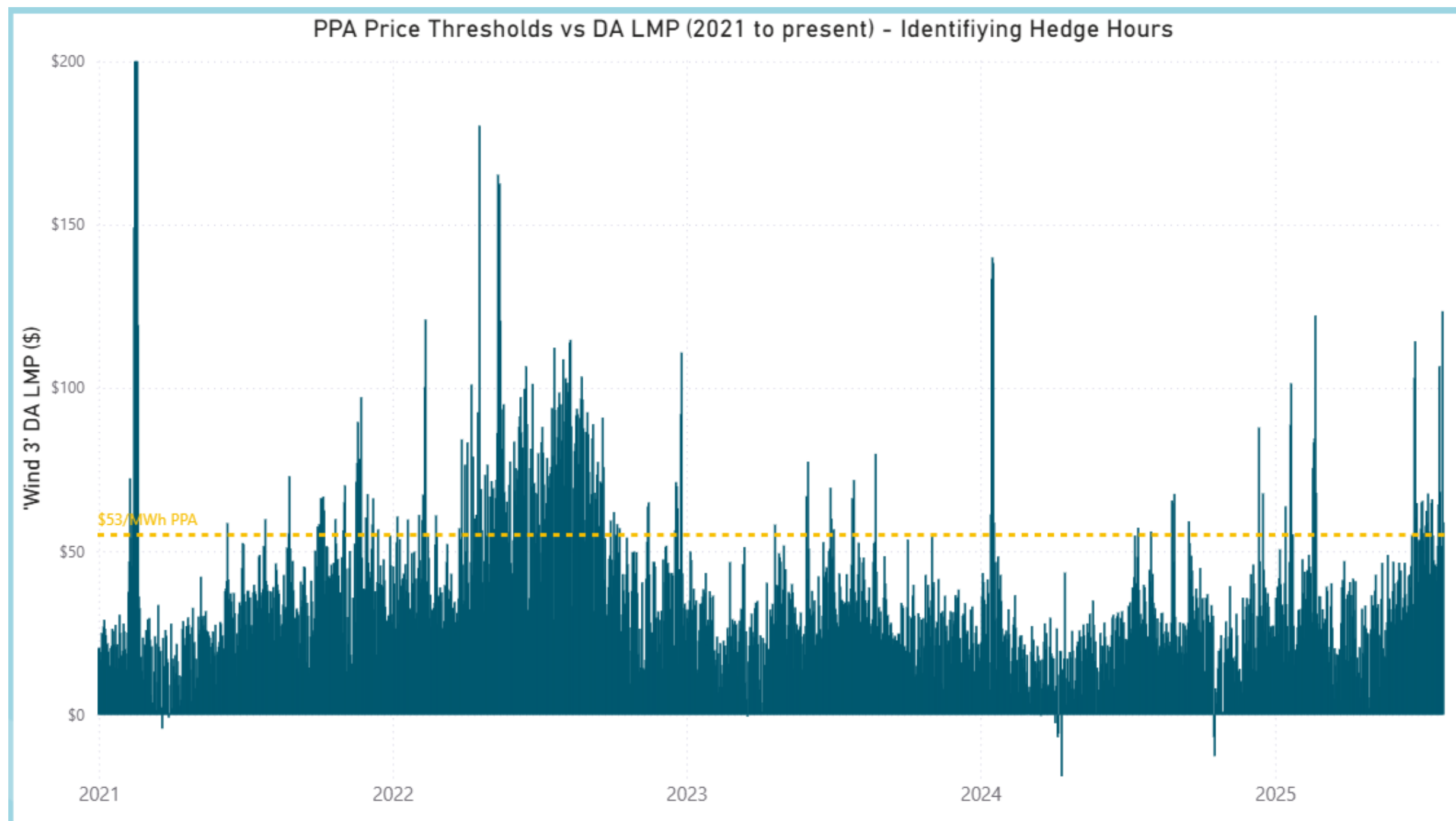
- Min / Ave / Max = \$5 / \$24 / \$35 per MWh

REC Production and Balance 100% Renewable



Wind 1, Wind 2, Wind 3 - Hedge Summary

Year	Wind 1 Avoided Cost	Proj. Cost at Node	# of Hedged Hours	Wind 2 Avoided Cost	Proj. Cost at Node	# of Hedged Hours	Wind 3 Avoided Cost	Proj. Cost at Node	# of Hedged Hours
2021	\$1,145,787	(\$553,935)	283	\$666,641	\$994,783	202	\$4,323,647	\$11,091,311	160
2022	\$1,612,561	(\$1,278,661)	356	\$943,457	\$75,710	309	\$7,271,024	\$586,052	288
2023	\$166,363	\$1,110,553	247	\$96,553	\$2,068,304	182	\$943,501	\$17,364,798	133
2024	\$314,485	\$993,671	233	\$207,630	\$2,127,255	172	\$1,253,808	\$19,872,431	110
2025	\$432,668	\$20,505	185	\$242,761	\$1,296,775	161	\$1,887,243	\$12,022,570	129

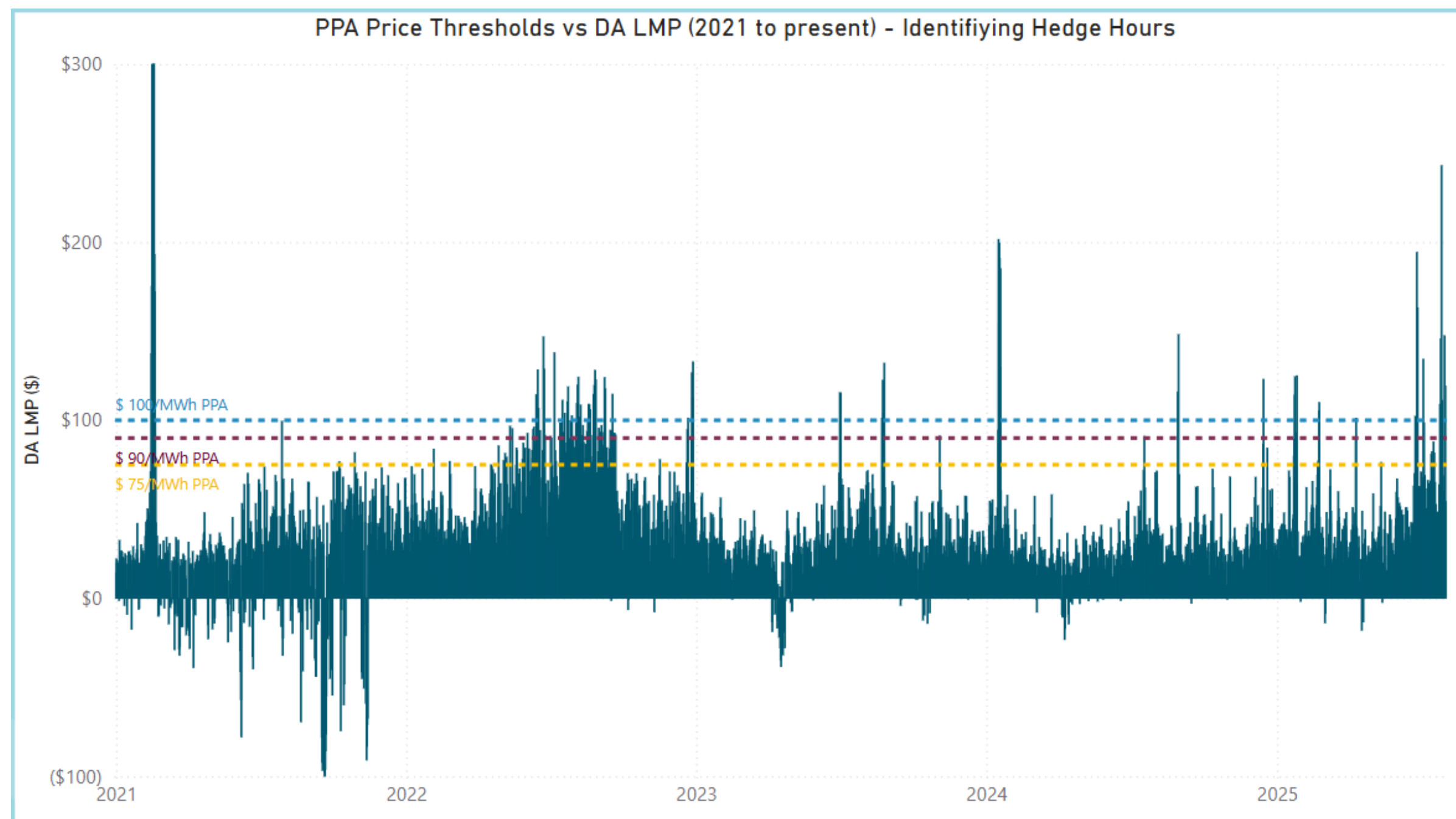


- Across the portfolio, hedge value is **present but uneven**, with Wind 1 and Wind 2 showing more balanced avoided costs relative to expected project costs.
- Wind 3 provides **substantial avoided cost**, but effective nodal price and PPA Price reduce net hedge efficiency, signaling a **risk-potential profile**.
- Forecasted hedged hours range from ~110 to 356 annually, signaling **modest coverage** relative to market exposure.



50W Solar Hedge Summary

Market Scenario	\$75/MWh PPA Avoided Cost	Project Cost at Node	# of Hedged Hours	\$90/MWh PPA Avoided Cost	Project Cost at Node	# of Hedged Hours
Low	\$69,287	\$5,610,787	132	\$43,796	\$7,317,127	86
Medium	\$270,481	\$4,997,676	453	\$165,454	\$6,704,017	244
High	\$618,583	\$3,004,326	1288	\$280,401	\$4,710,666	654
2025	\$194,601	\$4,198,762	340	\$146,135	\$5,905,102	196



- Across the portfolio, hedge value is present but shows **disparity**, reflecting the uneven balance of avoided costs relative to expected project costs across different market scenarios.
- The 2025 scenario highlights a future risk-potential profile due to substantial avoided costs being undermined by elevated node costs and PPA prices.
- Forecasted hedged hours range from ~86 to 654 annually, signaling **low coverage** relative to market exposure, suggesting limited protection against market volatility.



Top Wind Project Candidates | Restore Renewables (Wind 1 & 2)

- **22 MW Adams Wind Project**

- Currently off contract
- ~54,000 MWh annually
- Existing interconnection
- Owner will repower
- Repowering results in modeled cost for wind

- **40 MW Dodge Center Wind Project**

- Currently contracted
- ~83,000 MWh annually
- 56% available May 2026
- 76% available Sep 2027
- 100% available Feb 2028

Risk mitigation

- Secures wind supply that is currently generating and not overly reliant on federal tax policy
- Is very close to RPU pricing node
- Provides near-term RECs
- Provides some diversification of supply



Top Wind Project Candidates | North Hills Wind (Wind 3)

- **180 MW Wind Project**
 - Northeastern Iowa
 - 25 Year Power Purchase Agreement Contract
 - 710,000 MWh annually
 - More than 50% of RPU Load
 - Is in proximity to RPU Load Zone
- **Pricing dependent on production tax credits extended by the Inflation Reduction Act**
- **Expected Start Date: Early 2027**
 - RPU can contract and bank certificates until they are needed for compliance



Renewable Energy | Recommended Adjustments

- **Pursue projects most likely to qualify for tax credits within our risk tolerance**
 - Projects in advanced stage of development
 - Interconnection agreement with known interconnection costs
 - All or most permits in hand
 - Able to start construction before July 2026 and be safe harbored or able complete project before end of 2027
 - **Authorize Wind 1,2 & 3 PPAs on Aug 26 (RPU Board) and Sep 8 (City Council)**
- **Purchase output of projects before 2030, as early as 2026**
 - Will expose RPU to some market price risk
 - Ensure projects are built and available for 2030 compliance
 - Bank renewable energy credits (RECs)
- **Explore phasing in 100% net renewable electricity goal**
 - Focus on elimination of largest components of emissions like Sherco 3.
 - Secure projects that cover the majority of our renewable energy needs and long-term cost hedges
 - Provides time for policy to settle and lessen economic impact
 - Explore shifting to distributed solar development strategy
 - Lead by Example vs. Cautionary Tale





Wind Only | 100% Net Renewable Energy by 2030 (thru 2034)

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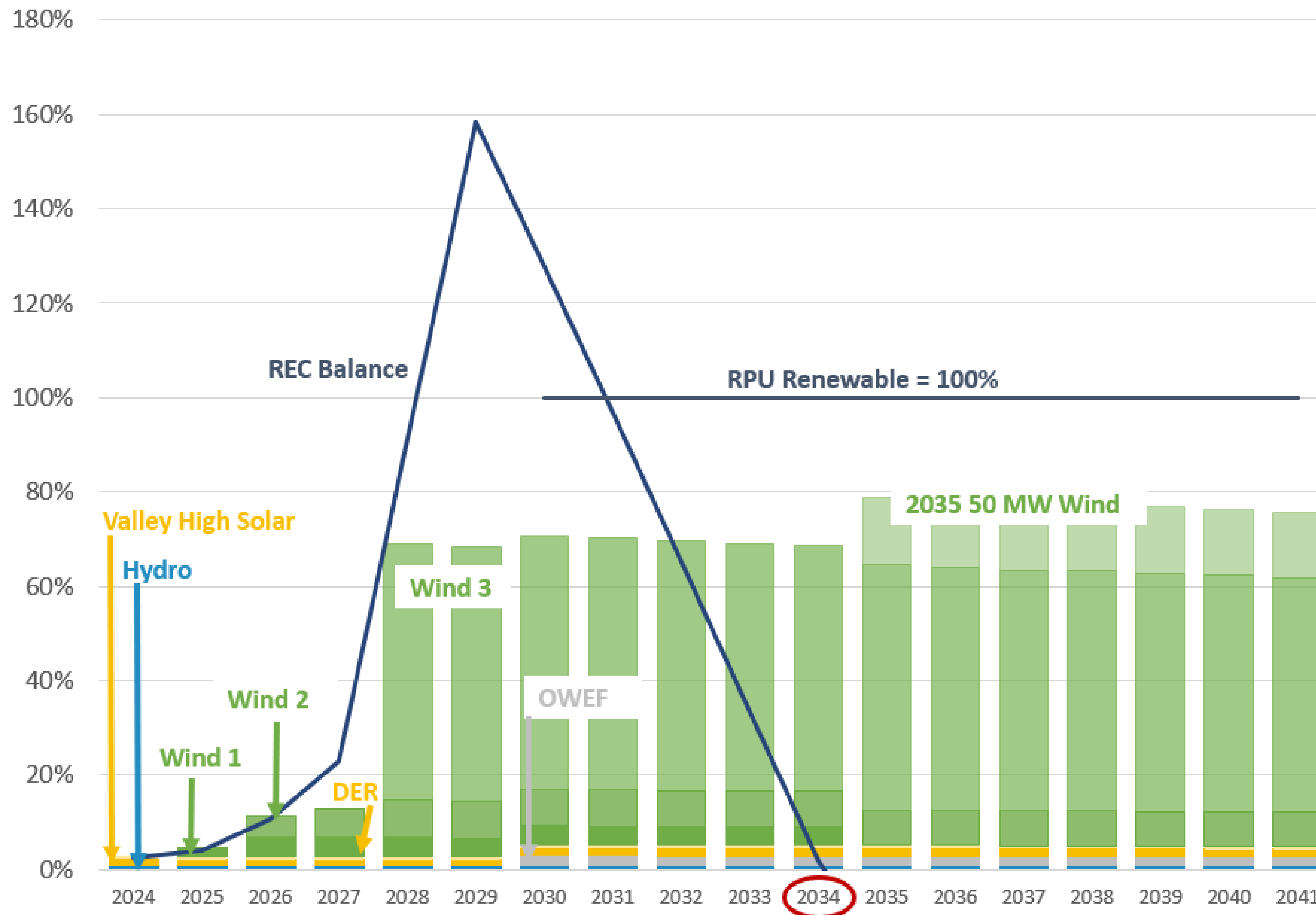
2030 Average Net Cost at Project Node

- Min / Ave / Max = \$2 / \$19 / \$30 million per year

2030 Total Net Cost at Project Node

- Min / Ave / Max = \$2 / \$20 / \$31 per MWh

REC Production and Balance 100% Renewable





Questions