

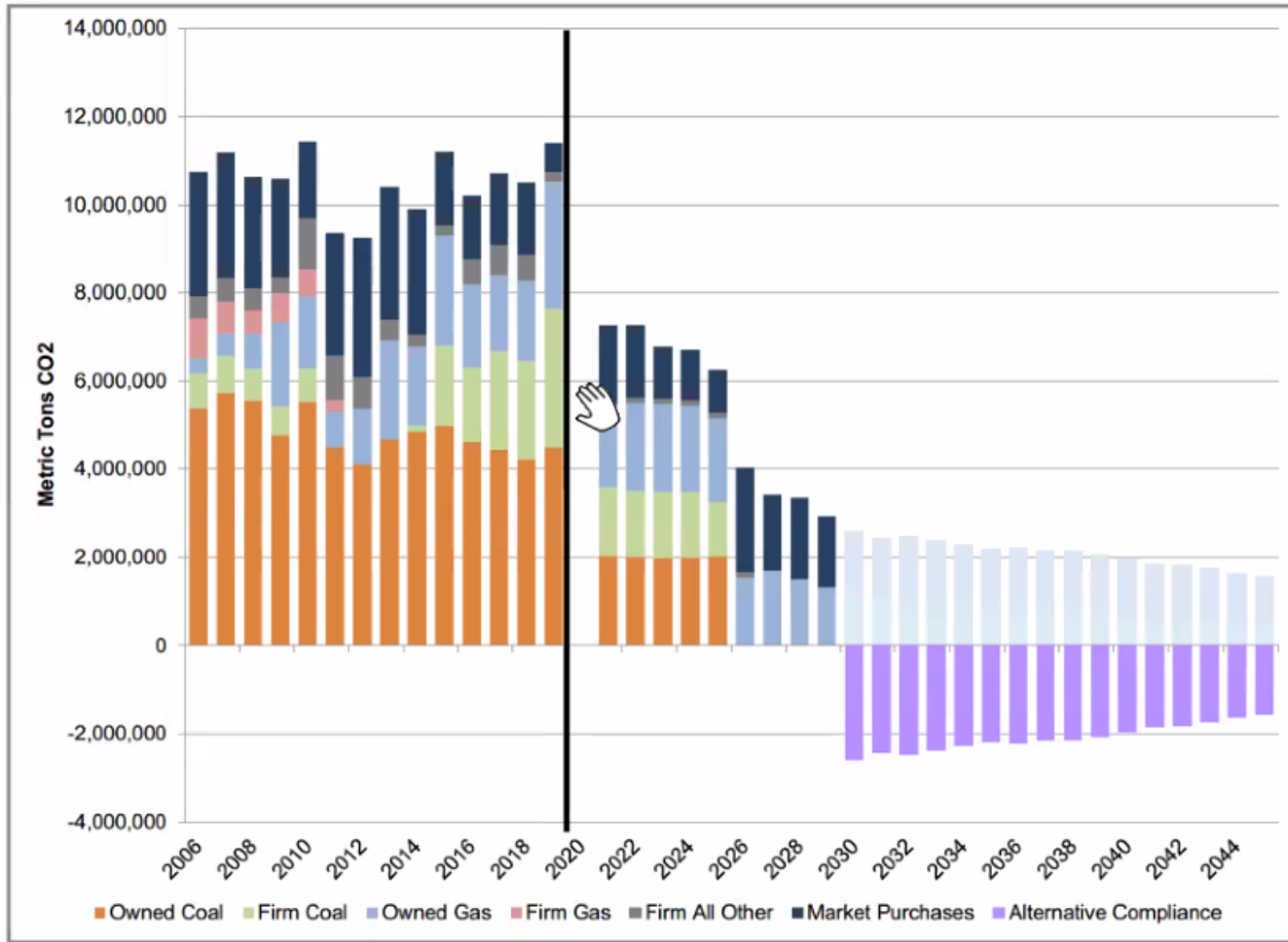
# Transition to 100% clean electricity

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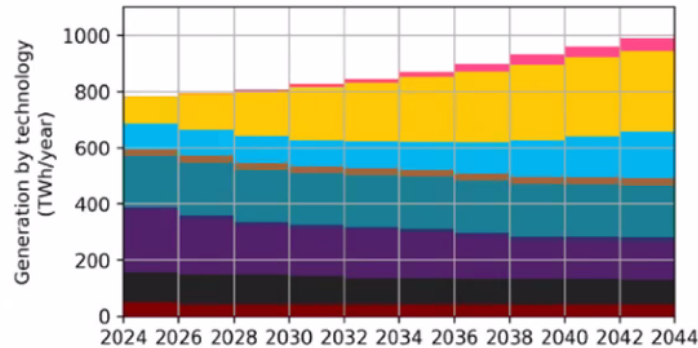
- 2025: Eliminate coal from retail portfolios
- 2030: Greenhouse gas neutral standard
  - At least 80 percent of electricity delivered to load must be renewable or non-emitting
  - Alternative compliance options for up to 20 percent
- 2045: 100 percent renewable or non-emitting retail electricity supply



Figure 1-5: Reduction in PSE Greenhouse Gas Emissions



# Reference, Increasing Clean Energy Demand Scenario Results



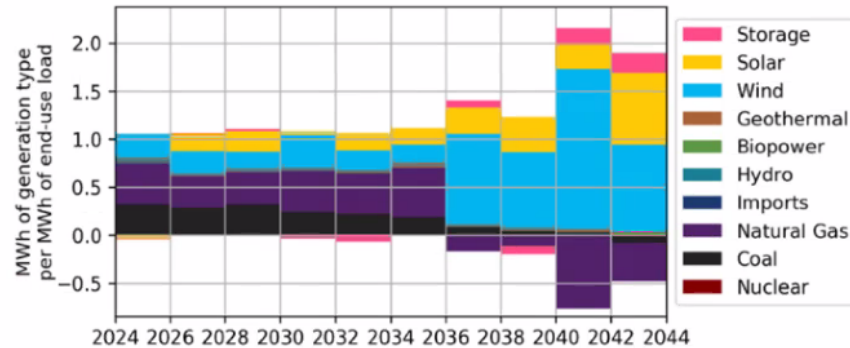
Total generation by technology across the Western Interconnection, in the baseline run of the *Reference, Increasing Clean Energy Demand* scenario

### Comments:

- Long-run marginal CO<sub>2</sub>e emission rate: 0.44 lb per kWh of end-use electrical load
- CETA becomes analytically binding\* in 2034 in this scenario

\* In this analysis we use the term *analytically binding* to indicate when CETA's requirements could not be met by resources that would have been built even in absence of the policy. In ReEDS, this is identified by a non-zero shadow price on the constraint representing CETA.

\*\* The difference figures (right) were calculated by subtracting the annual generation by technology for the baseline run from each of the perturbation runs, and dividing the technology's generation difference by the change in end-use load for that perturbation run. The results – differences in generation by technology per unit change in end-use load – were then averaged across the six perturbation runs to get the final values visualized here. These values were only generated for visualization purposes, with the reported LRMER values calculated from differences in emission rates as described previously on slide 6.



Difference between the generation mixtures of the baseline run and the load perturbation runs of the *Reference, Increasing Clean Energy Demand* scenario\*\*