OPA Review of NREL LA100: Summary

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OPA/RPA Review of NREL's LA100 Study

- The OPA commissioned the Brattle Group to assist in monitoring and developing a review of the NREL LA100 study. The following slides summarize the discussion draft of this review.

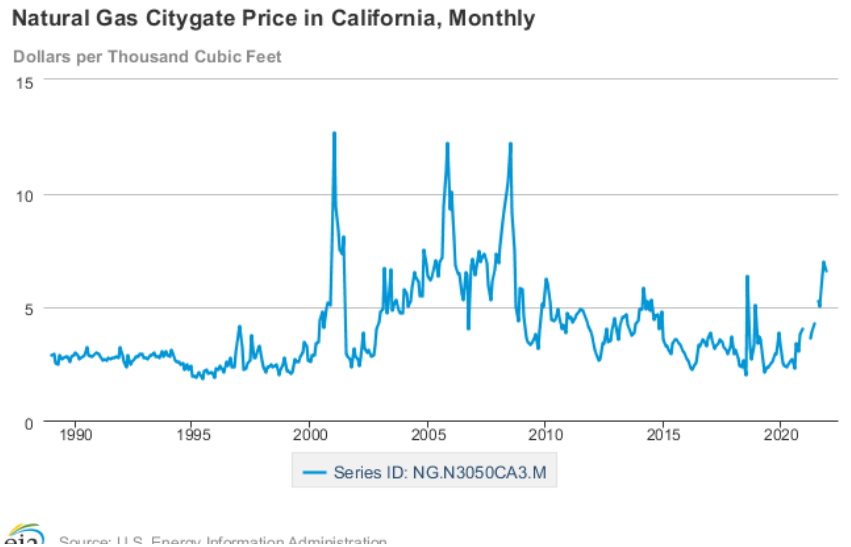
- Background on the LA100 study:
  - The focus was on impacts from 2030 to 2045. The OPA review looks at 5 year steps 2025-45.
  - The LA100 cost estimates are for the power sector. While LA100 included the cost of providing power for transportation and building electrification, the cost of electrifying transportation and buildings is not included.

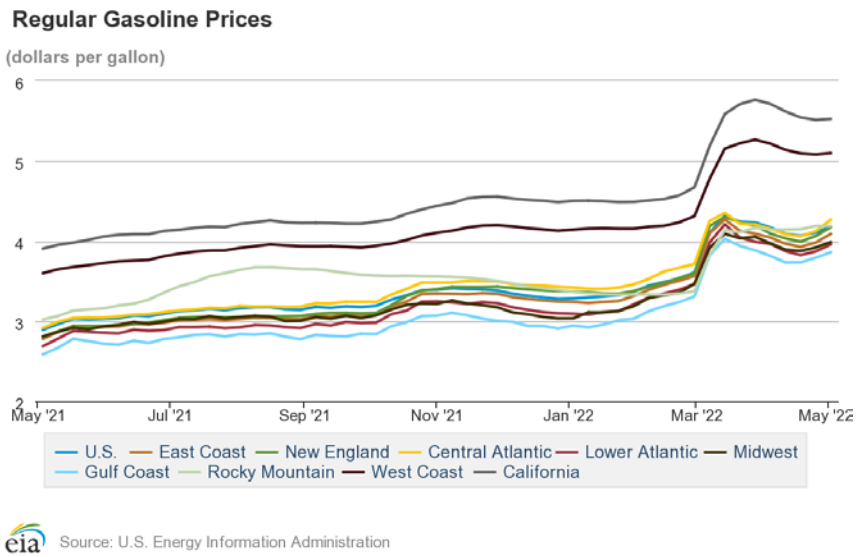
Power Industry Investment Timeline

- You need to be building now what you expect to need by the end of the 5 years, or be contracted with others to do so.
- You need to be finalizing plans now for what you hope to build or contract in 5 to 10 years.
- You plan for the period beyond 10 years, but recognized the uncertainties in those plans.

Additional Uncertainties: Geo-Politics & Energy

- Russian invasion of Ukraine, and the EU reactions, have created large and continuing changes in oil and natural gas markets.
- US natural gas prices are sharply higher for a major electric generation fuel.
- Gasoline prices are higher, making EV's more attractive.





OPA Conclusions

- LADWP is committed and working hard to eliminate its last coal generation by 2025.
- In the 2025 to 2030 time period, LADWP's system needs to be strengthened to manage:
  - ever higher levels of clean resources and
  - evolving levels of electricity use and utility sales,
  - while avoiding early over-commitment to technologies whose cost may drop and performance may improve over time, while needs may change.
- The most important keys to success are outside LADWP, in transportation and building electrification.

SUPPLEMENTAL SLIDES

Note Brattle slide page number:

- 4-7 for introduction
- 10 local air pollution impacts
- 16 total cumulative cost by year and pathway
- 26 PPA share of of operating costs by pathway
- 27 Power sector annual GHG emissions
- 40 Cumulative unit cost of GHG reductions all sectors
- 41-42 GHG by year for all sectors for SB100 and Early/No Biofuels
- 50 Rate impacts and uncertainties
- 53 Load forecasting uncertainties
- 56 Technology cost uncertainties
- 62 Technology adoption uncertainties
- 64 Summary on uncertainties
- 66-68 Brattle summary of observations