Economic Modeling

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August 1, 2017

Session Agenda

2:15-2:25	Overview of Economic Modeling/ Clarification Questions
2:25-2:35	Overview of Proposed Scenarios/ Trends from the Comments
2:35-3:15	Discussion

Economic Modeling: Goals

- Determine the economic value of storing gas in the off season for high season use
- Determine the economic value of having stored gas during price spikes
- Estimate impact of minimizing or eliminating Aliso on natural gas commodity costs for core and noncore customers

Reason for Economic Modeling

- The commodity cost of gas is a pass-through cost, meaning it is passed on to core customers.
- Increased commodity costs impact core customers directly.
- For noncore customers, increased commodity costs increase their cost of doing business.

The Gas Company's gas commodity cost per therm for your billing period:

Jul. . . . . .$.54641 Jun. . . . . .$.51185

Economic Modeling: Requirements

- Dynamically model market and consumer reaction to changes in gas storage
- Consider composition of California's electricity market and its dependence on renewables
- Consider any undue burdens on user group segments including low-income households and high-use industries

Proposed Scenarios

- Model in the near (2018), medium (2022), and long term (2027).
- Run model for two to three Aliso inventory levels:
  - closed,
  - 715 report maximum, and
  - at the level determined by hydraulic modeling.
- Model each scenario using a range of natural gas prices: low, mid, and high.

Trends from the Comments

- Modeling dates:
  - 2019 instead of 2018
  - April-March: 2020, 2025, and 2030
  - Running summer and winter models may not make sense for economic modeling

Trends from the Comments

- Is it reasonable to forecast low, mid, and high natural gas prices?
  - Too complex and have a minimal impact on supply
- Recommended data set
  - NYMEX Forwards
  - Integrated Energy Policy Report (IEPR)
  - Same in all studies

Suggestions from the Comments

- Model:
  - Cost and value of mitigation measures
  - Cost of risk of another future gas leak
  - Impact of potentially higher gas costs on the wider economy
  - Costs related to a decrease in reliability
  - Cost of firm transportation contracts

Suggestions from the Comments

- Clarify whether noncore customers will be assumed to be able to purchase storage.
- Only model impacts on core customers.
- Include a sensitivity analysis.

Questions

1. Are the proposed modeling dates reasonable?
2. Are the proposed Aliso inventory levels appropriate?
3. Is it reasonable to model low, mid, and high forecasts of natural gas prices?

Questions (cont.)

4. Is there an existing gas price forecast dataset that would be appropriate to use in this model?
5. Are there any other inputs or assumptions that should be considered?
6. Are there any other questions that should be considered?

Thank you!

For Additional Information:

http://www.cpuc.ca.gov/aliso/

http://www.cpuc.ca.gov/AlisoOII/