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<td><strong>Docket Number:</strong> 19-IEPR-08</td>
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Background

Natural Gas Outlook Report:

- Produced every two years as part of the California Energy Commission’s (CEC) IEPR
- CEC statutory requirements:
  - Section 25302 of the California Public Resources Code requires that the IEPR contains an overview of major energy trends and issues facing the state.
  - Section 25303 of the California Public Resources Code requires the CEC to conduct natural gas (and electricity) forecasting and assessment activities in support of the IEPR.
Report Structure

- Chapter 1 – Introduction
- Chapter 2 – Natural Gas Price Outlook
- Chapter 3 – Supply and Production
- Chapter 4 – Demand
- Chapter 5 – Infrastructure and Reliability
- Appendix A – Production Cost Methodologies
Natural Gas Price Outlook

• NAMGas (North American Market Gas - trade model)
• 2019 IEPR common cases
  • High demand/low price case
  • Mid demand case
  • Low demand/high price case
    – Cases assume Senate Bill 100 (sets state target of zero carbon electricity sources for power generation by 2045)
Natural Gas Supply and Production

• United States
  – Production increasing largely due to shale production
  – Largest producer of natural gas in the world since 2009
  – Became net exporter in 2017

• California
  – Reliance on out-of-state sources (approx. 90%)
  – Starting 1/1/2020, CARB will annually publish GHG emissions from natural gas produced, processed, etc. imported to CA from out-of-state sources (AB 2195).
• Canada
  – Production is growing at rate of 2.5% per year
  – Natural gas serves 1/3 of country’s energy requirements

• Mexico
  – Natural gas development lags behind U.S. and Canada
  – Rising consumption and need for imports
  – Pipeline projects from U.S. moving forward
Natural Gas Demand

• United States
  – Since 2005, most growth in power generation, industrial and LNG export / growth flat for residential and commercial
  – Transportation is growing but still a very small part of consumption
  – Increased demand outside CA - shift away from coal generation and low natural gas prices

• California
  – Declining consumption in residential sector will continue
  – Slight decline in power generation looking ahead
  – Growth of RNG for transportation; expected to continue
• United States
  – Production from Permian Basin expected to double by 2025
  – Three new pipelines on-line 2020 and 2023 will transport this gas to Texas Gulf Coast for LNG export

• California
  – No new pipelines or storage facilities expected to be built
  – Aging infrastructure
    • Costs to maintain
    • RNG and hydrogen may need this infrastructure
Sempra/Southern California Gas Company
  – Pipeline maintenance issues
  – Future of Aliso Canyon

PG&E
  – Storage strategy
    • Possibly ceasing operations of two storage facilities by 2021
    • CPUC approved plan to sell Pleasant Creek and Los Medanos facilities
      – Sales plan and reliability study (Los Medanos)
Conclusion

• Natural Gas chapter in 2019 IEPR summarizes issues/makes policy recommendations
• Appendix A of NG Outlook describes production cost methodologies
• Appendix A of 2019 IEPR covers AB 1257 requirements
Thank you!

Jennifer Campagna
(916) 654-4710
Jennifer.campagna@energy.ca.gov
Natural Gas Unit, Energy Assessments Division