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Assembly Bill 1257: “The Natural Gas Act”

2019 IEPR Commissioner Workshop on Revised Natural Gas Price Forecast and Draft Outlook/Electricity Modeling and Results



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California Energy Commission



Agenda

- AB 1257 requirements
- Legislation impacting AB 1257
- CEC compliance with AB 1257



AB 1257 Requirements

- CEC must “identify strategies to maximize the benefits” of natural gas:
 - Optimize natural gas as a transportation fuel.
 - Determine the role of natural gas-fired generation as part of a resource portfolio.
 - Optimize natural gas as a low-emission resource.
 - Optimize natural gas for heating, water heating, cooling, cooking, engine operation, and other end uses.
 - Identify implementation methods for the electric and natural gas industries.
 - Determine the need for a long-term infrastructure reliability policy.
 - Determine the role of natural gas in zero net energy buildings.
 - Optimize jobs development in the private sector, particularly in distressed areas.
 - Optimize facilitation of proposed strategies with state and federal policy.
 - Evaluate incremental economic and environmental costs and benefits of proposed strategies.



Major Legislation Impacting AB 1257

- SB 1374 (Hueso, Chap. 611, Stats. of 2018)
- AB 32 (Núñez, Chap. 488, Stats. of 2006)
- SB 350 (De León, Chap. 547, Stats. of 2015)
- SB 32 (Pavley, Chap. 249, Stats. of 2016)
- SB 100 (De León, Chap. 310, Stats. of 2018)



Legislation with Minor Impacts on AB 1257

- AB 118 (Núñez, Chap. 750, Stats. of 2007)
- AB 1613 (Blakeslee, Chap. 713, Stats. of 2007)
- SB 1122 (Rubio, Chap. 612, Stats. of 2012)
- AB 1420 (Salas, Chap. 601, Stats. of 2015)
- SB 1383 (Lara, Chap. 395, Stats. of 2016)
- SB 1369 (Skinner, Chap. 567, Stats. of 2018)
- SB 1440 (Hueso, Chap. 739, Stats. of 2018)
- SB 1477 (Stern, Chap. 378, Stats. of 2018)
- AB 3187 (Grayson, Chap. 598, Stats. of 2018)
- AB 3232 (Friedman, Chap. 373, Stats. of 2018)



AB 1257 Coordination

- Develop strategies in consultation with the CPUC, SWRCB, CAISO, CARB, DOGGR, and Department of Conservation.
 - Other legislation also impacts their collaboration with the CEC to meet AB 1257 requirements.



CEC Compliance with AB 1257

- Optimize natural gas as a transportation fuel:
 - CEC Natural Gas Research and Development Program and CTP support near-zero emission natural gas engine and fueling infrastructure development. (AB 118, AB 8)
 - State policies drove share of renewable natural gas (RNG) in California’s total transportation sector natural gas supply from 10% in 2013 to 70% in 2018.
- Determine the role of natural gas-fired generation as part of a resource portfolio:
 - CPUC PD on 9/12/2019 extended retirement of 2,500 MW to 3,750 MW of natural gas-fired OTC capacity on the South Coast beyond the current 12/31/2020 date.
 - CPUC Qualifying Facilities and Combined Heat and Power Program
 - Self-Generation Incentive Program
 - CPUC Distributed Energy Resources Tariff



CEC Compliance with AB 1257 (cont'd)

- Optimize natural gas as a low-emission resource:
 - CPUC adoption of biomethane procurement targets for natural gas IOUs (SB 1440)
 - CPUC D.17-12-004 directs natural gas IOUs to demonstrate pipeline injection of biomethane from dairy digesters (SB 1383).
 - CDFA funding for 6 pilot projects in the San Joaquin and Sacramento Valleys to demonstrate pipeline injection of biomethane from dairy digesters
 - CalRecycle funded nine biomethane-producing projects.
 - CPUC proceedings (e.g., R.13-02-008) to adopt RNG interconnection tariff, pipeline open access rules, standards, etc. (AB 3187)
- Optimize natural gas for heating, water heating, cooling, cooking, engine operation, and other end uses.
 - Homes use about two-thirds of California's natural gas, 90% of which is for space and water heating.
 - CEC/E3 report: *Deep Decarbonization in a High Renewables Future*: Building decarbonization via electrification is the lower-cost, lower-risk alternative to meet statutory climate goals.
 - Opportunities will remain for natural gas.



CEC Compliance with AB 1257 (cont'd)

- Identify implementation methods for the electric and natural gas industries.
 - Natural gas-fired generation to integrate renewable resources; to support load when other resources not reliable or cost-effective.
 - Biomethane merits support in numerous end uses.
- Determine the need for a long-term infrastructure reliability policy.
 - Methane leak reduction on the natural gas system
 - CH₄ as a GHG is 84 times as potent as CO₂.
 - CEC-funded research quantifying infrastructure leakage from wellhead to burner tip
 - CARB regulation March 2017: GHG Emission Standards for Crude Oil and Natural Gas Facilities
 - AB 1420 required DOGGR to implement stricter natural gas pipeline safety regulations.
 - Potential natural gas system impacts from H₂
 - Power-to-gas renewable energy storage technology (SB 1369)
 - Existing natural gas infrastructure can feasibly transport 5% to 15% H₂ blends.



CEC Compliance with AB 1257 (cont'd)

- Determine the role of natural gas in zero net energy buildings.
 - 2018 IEPR Update: California's aggressive GHG emission reduction policy initiatives support replacing ZNE policy goals with goals for low-carbon, zero-emission buildings.
- Optimize jobs development in the private sector, particularly in distressed areas.
 - CEC R&D funding for jobs in natural gas production from dairy digesters, MSW and wastewater treatment plants, wood waste plants, and other biomass sources.
 - CEC R&D funding requests comply with SB 350 and CEC policy ensuring fair and equal opportunities for economically disadvantaged and underserved communities to participate in and benefit from CEC programs.



CEC Compliance with AB 1257 (cont'd)

- Optimize facilitation of proposed strategies with state and federal policy.
 - CEC enables participation of all interested state, regional, and federal agencies in the preparation of the IEPR; AB 1257 report is part of the IEPR.
 - CEC works closely with state agencies with a role in implementing SB 100 and other renewables and decarbonization policies, such as CARB, CAISO and CPUC.
- Evaluate incremental economic and environmental costs and benefits of proposed strategies.
 - Legislature tasked CARB with these evaluations in AB 32.
 - CEC performs these evaluations of potential energy resource options, including impacts on natural gas and other fuels.



Questions and Comments

Thank you!

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California Energy Commission

Energy Assessments Division

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