



Classification: Senior Oil and Gas Engineer (Specialist)	Position No. 8000-3727-001
CBID: R09	Office: Administration
Date Prepared: October 4, 2017	Division: Energy Assessments
KEY: (E) IS ESSENTIAL, (M) IS MARGINAL	

Under the general supervision of the Deputy Director of the Energy Assessments Division, the Senior Oil and Gas Engineer shall primarily perform natural gas hydraulic modeling and analysis of California’s natural gas utilities’ systems to assess operational conditions. This modeling and analysis will determine the risk posed to those systems and assist in developing contingency plans to maintain natural gas system reliability for end-use customer demand and electricity generation.

The incumbent will perform assignments that require the highest degree of knowledge and skill and will serve as the prime resource person in the subject area. Complex and sensitive work assignments include: preparing technical reports and studies, making complex calculations, practicing sound engineering practices, and serving as a team leader.

WORKING CONDITIONS. The work is performed primarily indoors in an office and meeting room setting and involves sitting, standing, and walking. Travel may be necessary to attend workshops, hearings, and meetings away from the Energy Commission’s headquarters.

DUTIES AND RESPONSIBILITIES:

- 40% Serves as the Energy Commission’s lead oil and gas engineer for natural gas and gas utility system operations in relation to grid reliability. Evaluates, selects, and runs appropriate natural gas hydraulic models to test variables, assumptions, and scenarios relating to natural gas supply and flow. Works with staff to develop new methods and applications for contingency planning specific to maintaining the reliability of California’s natural gas infrastructure and grid operations. Coordinates with staff to perform integrated electric and natural gas modeling to understand the electric grids dependency on natural gas. Identifies and reviews data received to verify completeness for modeling purposes. Ensures all data is properly handled and stored. (E)
- 30% Leads, coordinates and communicates with staff, utilities, government agencies, and industry stakeholders regarding natural gas and integrated gas and electric modeling, analysis results, and other relevant assessments. This includes convening and participating in meetings with stakeholders to strategize and discuss analysis and to monitor updates in the context of California energy policy, analytical uses, and program impacts on related forecasts. (E)
- 15% Performs additional complex analysis and assessments of natural gas infrastructure as needed in relation to state regulation and policy. Explores and develops scope for additional technical and analytical work that cannot be performed internally. This



includes developing study plans related to grid reliability. May direct and review the work of teams of engineering consulting firms performing these studies under contract. (E)

- 10% Provides training and mentoring to staff and serves as the technical resource lead on natural gas hydraulic modeling and analysis. Responds to complex requests for technical engineering analyses and information from management, state policy makers, industry and members of the public. (E)
- 5% Coordinates meetings and presents technical engineering reports on natural gas and electric reliability issues and research in Energy Commission workshops, utility workshops, and other forums as necessary. On request, testifies at Energy Commission hearings or on behalf of the Energy Commission before regulatory bodies on natural gas infrastructure and natural gas reliability related questions. Perform other duties consistent with the specifications of this classification. (M)

SIGNATURES	
I Certify That I Am Able To Perform, With Or Without The Assistance Of A Reasonable Accommodation, The Essential Job Duties Of This Position	
<hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> Employee Date Senior Oil and Gas Engineer	<hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> Sylvia Bender Date Deputy Director, Energy Assessments