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| Classification: Mechanical Engineer | Position No. 3300-3583-xxx |
| CBID: R09 | Office: Energy Systems Research Office |
| Date Prepared: July 2017 | Division: Energy Research and Development |
| KEY: (E) IS ESSENTIAL, (M) IS MARGINAL | |

Under the general supervision of the Energy Resources Specialist III (Supervisor) in the Energy Systems Research Office, the incumbent serves as a member of the Energy Technology System Integration team to develop, implement and administer public interest energy research, development and demonstration (RD&D) for natural gas energy technologies and systems. The incumbent performs complex and difficult analyses, develops and manages the more complex research projects and assists in the development of public interest energy research supporting the Natural Gas Energy Research and Development program. The incumbent provides technical leadership, direction, and coordination efforts for an interdisciplinary team or teams and assists the Technical Lead with program planning and implementation in the natural gas infrastructure safety and integrity subject area.

The goal of the public interest energy research program is to conduct research, development and demonstration to advance science and technologies not adequately provided by the regulated and competitive markets. The incumbent is knowledgeable of advanced natural gas safety and integrity system concepts, technologies, and practices; performs time-critical and subject matter-critical technical or market analyses to support public interest energy RD&D funding; manages complex RD&D projects; and consults with experts in the field.

WORKING CONDITIONS

The work is performed primarily in an indoor office and meeting room setting involving sitting, standing, and walking as well as sitting for long periods of time. Travel is required to conduct project site visits, attend workshops, hearings and meetings. Additional hours beyond an eight-hour workday or forty-hour workweek may be required. While performing the duties described below, the incumbent will be required to work alone and/or in a team environment; utilize a personal computer and appropriate Energy Commission software such as Microsoft suite of software, electronic mail, Internet and analytical models. The incumbent will be required to plan, organize, assist and/or participate in meetings with other Energy Commission staff, staff from other federal and state agencies, consultants, contractors, and other parties active in energy-related research and development.

DUTIES AND RESPONSIBILITIES:

- 50% Technology assessment. Provide technical assessments to identify energy-related R&D needs in natural gas infrastructure and integrity. Perform one or more complex engineering evaluations relating to energy efficiency, mechanical system performance, environmental controls, material selection and specification, performance and suitability of components, economics of engineering design options, cost and performance as well as the engineering requirements related to the development and deployment of advanced natural gas infrastructure technologies. (E)
- 15% Assist the team lead with solicitation planning and development activities. Develop and manage complex research projects and contracts. Coordinate with utilities, other governmental agencies, industry and other market players to facilitate the coordination of public interest energy research programs and studies with market actions. Depending upon the technology being addressed, the incumbent may perform one or more complex engineering evaluations of energy systems. (E)



- 15% Serve as a lead technical specialist and prime resource for R&D needs related to natural gas safety and infrastructure. Identify and analyze technology trends and market developments applicable to the natural gas sectors. Provide expert guidance and direction for complex technical issues, prepare innovative analytical assessments and evaluations, and provide technical leadership, direction, and coordination efforts for an interdisciplinary team related to the development and implementation of the Natural Gas Research Plans. Provide analytical support in the development of policy options and core area program initiatives for consideration by the Manager for the Energy Systems Research Office, the Deputy Director for Energy Research and Development, the Executive Office, Energy Commissioners, and the Legislature. Provide expert direction on contract development and management, including contract management strategies, technical analyses, and consistent professional practices within the natural gas safety and infrastructure program area. (E)
- 10% Implement solicitations and collaborative strategies to meet the public interest energy research program objectives and goals; and provide program and policy recommendations to the Team Lead, the Manager for the Energy Systems Research Office, the Deputy Director for Energy Research and Development, and the Executive Office. (E)
- 5% Organize, prepare and make presentations at workshops, seminars and conferences; write technical papers for professional journals and industry publications; provide expert testimony on technical problems relating to the natural gas program area at hearings and proceedings sponsored by the Legislature, the Energy Commission, other state and federal agencies, utilities, and other entities related to natural gas RD&D. (M)
- 5% Perform other duties as required consistent with the specifications of this classification. (M)

| SIGNATURES | | | |
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| I Certify That I Am Able To Perform, With Or Without The Assistance Of A Reasonable Accommodation, The Essential Job Duties Of This Position | | | |
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| Incumbent | Date | Supervisor | Date |