

## Job/Analysis Form

<b>Position Title: General Engineer</b>	<b><u>Competency Category (KSA/Job Criteria)</u></b> Basic Qualifications (Knowledge) Functional (Skills/Abilities) Interpersonal (Abilities)	<b><u>FOR CATEGORY RATING:</u></b> BQ Category Range: 95 - 100 WQ Category Range: 85 - 94 Q Category Range: 70 - 84		
<b>Series, Grade: GS-0801-13</b>	<b><u>Question Type</u></b>			
<b>Subject Matter Expert:</b>	MC – Multiple Choice      MAMC – Multiple Answer Multiple Choice LA – Long Answer          SA – Short Answer YN – Yes No                  AA – Applicant Assessment			
<b>Human Resources Specialist:</b>				
Major Duties - PD	Competency Category (KSA/Job Criteria)	Question Type	QuickHire Questions and Responses (New or Existing)	SCORE (For Use in HR Office Only)
The incumbent is responsibilities in an assigned area within the Office, oversees the technical planning of complex research, development and demonstrations activities, and serves as the principal Departmental contact with outside individuals and organizations for matters pertaining to the assigned programs/project.	Mastery of various engineering disciplines sufficient to important present and future concepts and programs.	MC	GS-13 You must have one year of specialized experience equivalent to the next lower grade in the federal service which has equipped you with the knowledge, skills, and abilities to perform successfully the duties of the position. Select the choice which best describes your specialized experience. <b>#26938</b>  1. I have one (1) full year of specialized experience equivalent in responsibility and scope to the next lower grade level as described in the vacancy announcement under the specialized experience requirements. 2. I do not meet or exceed the 1 year of specialized experience as described as the vacancy announcement.	
		MC	Analyze complex issues, identify problems, evaluate alternatives and make recommendations that lead to the resolution of complex technical issues. <b>#14901</b>  1. I do not have training or experience in performing this task. 2. I have analyzed complex issues and identifies	

			<p>problems that lead to the resolution of complex technical issues.</p> <ol style="list-style-type: none"> <li>3. I have analyzed complex issues, identified problems, and evaluated alternatives and mad recommendations that lead to the resolution of complex technical issues.</li> <li>4. I have analyzed complex issues, identified problems, evaluated alternatives and made recommendations that lead to the resolution of complex technical issues.</li> </ol> <p><b>MC</b> Which of the following program management duties have you performed? <b>#13298</b></p> <ol style="list-style-type: none"> <li>1. Policy Development</li> <li>2. Strategic Plan Development</li> <li>3. Program Budget Development</li> <li>4. Program performance metrics development</li> <li>5. Assessment of program performance.</li> </ol> <p><b>MC</b> This position is responsible for establishing program goals and objectives, and examining and ascertaining the research needs as opportunities of DOE research program. Indicate which of the following activities you have performed in a regular and recurring basis. <b>#13306</b></p> <ol style="list-style-type: none"> <li>1. Establish goals and objectives for a research facility or research program.</li> <li>2. Reviewed and evaluated research signs to determine their capability to meet research requirements.</li> <li>3. Provided oversight of research programs that involved multiple investigators and multiple projects.</li> <li>4. Reviewed and evaluated instrumental needs at research sites.</li> <li>5. Managed a research group comprised of technical experts from a variety of scientific and engineering disciplines.</li> <li>6. Evaluated research instrumentation needed for</li> </ol>	
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			fundamental scientific research. 7. None of the above.	
Evaluates proposals, participates in selection process, and recommends candidate contractors; monitors contractor performance through regular meetings with contractors and evaluation of deliverables; recommends action as necessary to modify or terminate programs/ project efforts.; and advises supervisor and field activities on unusual, difficult or controversial technical matters	Broad engineering knowledge to provide significant and innovative recommendations for advancing programs and/or methods;	MC	Analyze complex issues, identify problems, evaluate alternatives and make recommendations that lead to the resolution of complex technical issues. #13302  <ol style="list-style-type: none"> <li>1. I have normally been consulted by others for expertise and assistance or have trained others in performing this task.</li> <li>2. I have performed this task as a regular part of the job, independently and usually without review by supervisor or senior employee.</li> <li>3. I have performed the task on the job, with close supervision from supervisor or senior employee.</li> <li>4. I have had education or training in performing this task, but have not yet performed it on the job.</li> <li>5. I have not had education, training or experience in performing this task.</li> </ol>	
		MC	Please indicate which of the following contractor oversight functions you have performed. #14899  <ol style="list-style-type: none"> <li>1. Budge development &amp; compliance</li> <li>2. Schedules compliance</li> <li>3. Adherence to schedules</li> <li>4. Technical quality</li> <li>5. Development of performance measures</li> <li>6. Regulatory compliance</li> <li>7. None of the above</li> </ol>	
		MC	Ability to participate and perform evaluations of impacts of new technologies, systems and policies of engineering analyses projects using standard techniques. #14133  <ol style="list-style-type: none"> <li>1. I have not had education, training or experience in performing this task.</li> <li>2. I have had education or training in performing</li> </ol>	

			<p>this task, but have not yet performed it on the job.</p> <ol style="list-style-type: none"> <li>3. I have performed this task on the job with close supervision from supervisor or senior employee.</li> <li>4. I have performed this task as a regular part of the job, independently and usually without review by supervisor or senior employee.</li> <li>5. I have supervised performance of this task and/or I have trained others in performance and/or am normally consulted by others as an expert for assistance in performing this task.</li> </ol>	
<p>Provides input to the preparation, justification, and support of the budget for assigned programs/ projects, and supplies justification as to the importance of efforts and the consequences of not providing the necessary funding; reviews the budget and supervises budget expenditures for assigned area; and meets, as requested, with the supervisor to advise on status of specific programs/project assignments.</p>	<p>Mastery of and ability to apply the application of a wide-range of qualitative and quantitative techniques to evaluate complex issues.</p>	<p><b>MC</b></p>	<p>This position is responsible for preparing justifying, and supporting budgets for a basic research program. Select the budget activities you have performed. #13303</p> <ol style="list-style-type: none"> <li>1. Prepared budget requests and related supporting documents.</li> <li>2. Presented and defended annual budget justifications before high level officials within and outside the organization.</li> <li>3. Monitored and tracked obligations and expenditures for assigned engineering or scientific programs and projects</li> <li>4. Responded to adjustments in program budget.</li> <li>5. None of the above.</li> </ol>	
		<p><b>MC</b></p>	<p>From the list below select the type of experience you have had which indicates your ability to identify and analyze problems and develop solutions to those problems. #13355</p> <ol style="list-style-type: none"> <li>1. I have experience in analyzing documents and determining how they will impact my tasks.</li> <li>2. I have experience in locating and applying appropriate guidance to accomplish tasks.</li> <li>3. I have experience in analyzing a problem,</li> </ol>	

			<p>evaluating the guidance, and developing a solution.</p> <p>4. I have experience in analyzing a problem and developing a solution, but believe I could do so.</p>	
<p>Makes presentations on program/project objectives, content, and progress to a variety of professional audiences; participates in professional society meetings, and reports reception of objectives to supervisor.</p>	<p>Expert in oral and written communications techniques.</p>	<p><b>MAMC</b></p>	<p>Indicate which of the following types of documents, reports, papers, etc. you have written as a regular part of your job. (Check all that apply.) <b>#13296</b></p> <ol style="list-style-type: none"> <li>1. Reports that consolidated input (including contradictory viewpoints or recommendations) from a number of different sources.</li> <li>2. Correspondence which conveys complex issues and includes persuasive arguments for obtaining support of a position.</li> <li>3. Position papers, issue papers, statement of work, program plans and proposes, including analysis and recommendations.</li> <li>4. Reports, which include options and recommendations, to advise managers on program operations and needs.</li> <li>5. Procedural guidance.</li> </ol>	
		<p><b>MC</b></p>	<p>What is your project/program experience? <b>#14130</b></p> <ol style="list-style-type: none"> <li>1. Primarily research and technology</li> <li>2. Conceptual development phase</li> <li>3. Full-scale design phase</li> <li>4. Build/construction phase</li> <li>5. Test phase</li> <li>6. Production Phase</li> <li>7. Full-scale operations</li> <li>8. Retrofit/upgrade efforts</li> <li>9. None of the above</li> </ol>	
		<p><b>MC</b></p>	<p>Select the response that best describes your experience in performing program management activities. <b>#14545</b></p>	



		<p style="text-align: center;"><b>MC</b></p>	<p style="text-align: center;">similar topics</p> <ol style="list-style-type: none"> <li>4. Defend recommendations on controversial issues to top managers</li> <li>5. Facilitate coordination of efforts between organizations.</li> </ol> <p>Gather and evaluate technical information and prepare written reports and documents with recommendations to management for solving issues or problems. <b>#14138</b></p> <ol style="list-style-type: none"> <li>1. I have not had education, training or experience in performing this task.</li> <li>2. I have had education or training in performing this task, but have not yet performed it on the job.</li> <li>3. I have performed this task on the job with close supervision from supervisor or senior employee.</li> <li>4. I have performed this task as a regular part of the job, independently and usually without review by supervisor or senior employee.</li> <li>5. I have supervised performance of this task and/or I have trained others in performance and/or am normally consulted by others as an expert for assistance in performing this task.</li> </ol>	
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**General Engineer  
GS-801-13**

**INTRODUCTION**

This is a General Engineer position, the incumbent of which is assigned anywhere within Office of Energy Efficiency and Renewable Energy organization.

**MAJOR DUTIES**

Serves as a general engineer with program/project manager responsibilities in an assigned area within the Office. Oversees the technical planning of complex research, development and demonstrations activities. Serves as the principal Departmental contact with outside individuals and organizations for matters pertaining to the assigned programs/project. Evaluates programs/project needs and prepares procurement requests to support those needs. Evaluates proposals, participates in selection process, and recommends candidate contractors. Monitors contractor performance through regular meetings with contractors and evaluation of deliverables. Recommends action as necessary to modify or terminate programs/project efforts. Advises supervisor and field activities on unusual, difficult or controversial technical matters.

Provides input to the preparation, justification, and support of the budget for assigned programs/projects, and supplies justification as to the importance of efforts and the consequences of not providing the necessary funding. The incumbent reviews the budget and supervises budget expenditures for assigned area. Meets periodically as requested with the supervisor to advise on status of specific programs/project assignments and progress.

The incumbent makes presentations on program/project objectives, content, and progress to a variety of professional audiences; participates in professional society meetings, and reports reception of objectives to supervisor. Represents the Office in intradepartmental and interagency groups for exchange of information on research, development, demonstration, and evaluation of energy efficient technologies, and makes presentations at management reviews and technical meetings prepares comprehensive technical reports and participates in conferences and demonstrations to present technical reports.

Performs other duties as required.

**Factor 1 – Knowledge Required by the Position**

Mastery of, and skill in applying, expertise in various engineering disciplines, principles, concepts, standards, and methods sufficient to resolve unique or novel problems, conditions, or issues;

Knowledge to provide expert advice to senior colleagues and/or Department of Energy officials responsible for broad program operations;

Broad engineering knowledge to provide significant and innovative recommendations for advancing programs and/or methods;

Mastery of and ability to apply the application of a wide-range of qualitative and quantitative techniques to evaluate complex issues.

In-depth knowledge of the Federal budget process;

Knowledge and skill to serve as a team leader and as a member of panels, work groups, and conferences and to present in-depth technical briefings at all levels on a variety of issues relative to the assigned programs.

**Factor 2 – Supervisory Controls**

The employee works under general supervision with responsibility for independently planning, analyzing, coordinating and directing actions necessary to accomplish analysis

of the program activities. The employee has wide latitude in the selection of the methodology and techniques to complete assigned projects. Within a framework of approved project plans and priorities, develops funding and overall team goals for the program based on cost estimates derived from analysis of data received from management. Completed projects and program effectiveness are reviewed by the supervisor against broad performance metrics.

### **Factor 3 – Guidelines**

Guidelines consist of general administrative policies and broad policies, procedures and regulations which require adaptation and interpretation for application to unique issues and problems. Such policies and precedents provide only a very basic outline of results desired and the employee must use judgment and discretion in interpreting and revising existing policy and regulatory guidance for use within or outside of the activity. Uses exceptional initiative and resourcefulness in developing guidelines where existing guides are scarce or nonexistent.

### **Factor 4 – Complexity**

The work requires the employee to define the problem areas based on in-depth analysis of numerous types of data, to determine steps necessary to resolve problems in order to achieve a more effective level of support and to coordinate the activities of a great variety of functional and support elements to meet user or mission requirements. Decisions regarding what must be done are complicated by extreme diversity of the functional support elements; changing priorities and goals; policies, regulations and other information which are often conflicting or inadequate; and by resource constraints. The work requires extensive coordination to gather information, conduct research, analyze the material and integrate into the assigned program. The employee independently resolves unique issues based upon research, where efforts often involve conflict resolution where policy or precedents do not exist. The employee must consider the impact of actions taken on the total support effort, weigh all factors involved to recommend “trade-off” and analyze the interrelationships of widely diverse program requirements to achieve overall objectives and goals.

### **Factor 5 – Scope and Effect**

The work of the position involves investigating, evaluating, advising on, and resolving unusual problems, issues, and conditions; adapting precedents to unusual conditions and projects; addressing project and program effectiveness and providing consultant or advisory services on problems, conditions, programs, and functions to a broad customer base. The work results affect the efficiency, feasibility, accuracy, adequacy, and safety of a wide range of DOE activities and the planning, completion, and direction of engineering projects.

### **Factors 6 and 7 – Personal Contacts and Purpose of Contacts**

Contacts are with officials, managers, and other engineers within the organization and other offices of the Department of Energy, including manufacturers, suppliers, and contractors.

Contacts are to exchange information, coordinate on projects, obtain information, and resolve problems of activities. Some contacts require the employee to influence or persuade other engineers to adopt technical points where there are disagreements, such as in the selection of one approach from a number of alternatives.

### **Factor 8 – Physical Demands**

Work is primarily sedentary and requires slight physical effort to lift and carry items.

### **Factor 9 – Work Environment**

The work is performed in a typical office setting. There are no undue risks imposed by the physical surroundings.

TOTAL POINTS: 3190

GRADE CONVERSION TABLE:

Point Range: 3155-3600 = GS-13

Professional Work in the Engineering and Architecture Group, 0800, November 2008