

## 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-0801-11</b>	<b><u>Question Type</u></b>			
<b>Subject Matter Expert:</b>	MC – Multiple Choice LA – Long Answer YN – Yes No	MAMC – Multiple Answer Multiple Choice SA – Short Answer 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)
Manages a variety of projects in the area of assignment. The incumbent generally accomplishes routine and limited portions of large, complex activities under the direction of a higher level engineer.	Professional knowledge of and skill in applying, a wide range of engineering concepts, principles, standards, and methods to determine and/or execute actions.	<b>MC</b>	GS-11 In addition to meeting the basic entry qualification requirements, applicants must have specialized experience and/or directly related education in order to meet the requirements for the GS-11 grade level. You may meet the qualifications for the GS-11 with education and/or experience. Select the choice which best describes your education and/or experience.  <ol style="list-style-type: none"> <li>1. I have a PhD or equivalent doctoral degree</li> <li>2. I have three (3) years of progressively higher level graduate education leading to a PhD degree or equivalent doctoral degree.</li> <li>3. I have a combination of education and experience – college-level education, training, and/or technical experience that furnished (1) a thorough knowledge of the physical and mathematical sciences underlying professional engineering and(2) a good understanding both theoretical and practical, of the engineering sciences and techniques and their applications to one of the branches of engineering, along with experience that together meet the qualification requirements for this position.</li> </ol>	

		<p>MC</p> <p>MC</p> <p>MC</p>	<p>4. I have one (1) full year of specialized experience as defined on the vacancy announcement, at or equivalent to GS-9 level.</p> <p>5. I do not meet any of the above statements.</p> <p>What is your experience in analyzing data and technical problems related to engineering projects? #26936</p> <ol style="list-style-type: none"> <li>1. Analyze data and provide comments that will be included in program planning guidance for use by others in a program office.</li> <li>2. Analyze data and provide comments that will be included in engineering projects conducted by a team</li> <li>3. Analyze data and write own conclusion of engineering projects conducted independently</li> <li>4. None of the above.</li> </ol> <p>What is your project/program experience? #14130</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>Ability to perform segments of engineering analyses projects or units of special research projects or planning and evaluation studies of continuing and future distribution requirements and production capabilities. #14172</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</li> </ol>	
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			<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>Reviews previous project proposals, technical successes, etc, to gather supplementary data on which to base recommendations and makes calculations and analyzes proposals and research findings.</p>	<p>Knowledge to formulate, execute, advise on, and explain recommendations or solutions to modify standard practices, processes, and techniques and resolve simple to complex problems;</p>	<p><b>MC</b></p>	<p>Ability to perform research, gather, analyze, and evaluate data; and prepare information for Supervisory use. Check all of the statements that apply to your experience.</p> <ol style="list-style-type: none"> <li>1. Perform research and prepares correspondence for supervisor's signature</li> <li>2. Prepare outlines for speeches for supervisor's use.</li> <li>3. Develop visual aids and/or handout materials needed for supervisor's use in speaking engagements.</li> <li>4. Research and prepare statements outlining supervisor's views for distribution outside the organization.</li> <li>5. Arrange for materials and equipment needed to facilitate informational meetings and conferences.</li> <li>6. Obtain information from outside the organization for supervisor's use in decision making or policy development.</li> <li>7. Research and gather information from a variety of source to recommend changes to other actions and prepare briefing papers for supervisor's use.</li> <li>8. Write clearly, logically and persuasively for varied audiences.</li> </ol>	

		<p><b>MC</b></p>	<p>Select the choice that describes your experience in developing priorities, milestones and references of problem definitions by assigned projects.</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>	
		<p><b>MC</b></p>	<p>Collaborate with others or work as a team member to accomplish work-related activities.</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>	



		<p style="text-align: center;"><b>MC</b></p>	<p>between organizational entities.</p> <ol style="list-style-type: none"> <li>3. Prepared written reports on program/project status</li> <li>4. Presented, defended and/or negotiated specific mission goals and needs with senior managements and contract representatives</li> <li>5. Briefed senior management on organizational issues or similar topics</li> <li>6. Defended recommendations on controversial issues to senior management or private industry</li> <li>7. Independently planned, conducted and hosted meetings</li> <li>8. Served on panels, committees or task forces on technical, programmatic and/or professional issues.</li> <li>9. Regularly consulted by others on technical programmatic and/or professional issues.</li> <li>10. Organize and present controversial decisions, conclusions, findings or recommendations to high-level management officials</li> <li>11. Make impromptu presentations to various groups, sometimes with opposing points of view.</li> <li>12. Present briefings to higher level management officials</li> <li>13. None of the above.</li> </ol> <p>Gather and evaluate technical information and prepare written reports and documents with recommendations to management for solving issues or problems.</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</li> </ol>	
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			<p>the job, independently and usually without review by supervisor or senior employee.</p> <p>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</p>	
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**General Engineer  
GS-801-11**

**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**

The incumbent manages a variety of projects in the area of assignment. The incumbent generally accomplishes routine and limited portions of large, complex activities under the direction of a higher level engineer. The incumbent reviews previous project proposals, technical successes, etc, to gather supplementary data on which to base recommendations. Makes calculations and analyzes proposals and research findings.

The incumbent monitors milestones and funding requirements, and makes recommendations to keep projects on track and within funding constraints. Analyzes technical and administrative problems and makes recommendations to the supervisor on viable solutions.

The incumbent writes summaries and analyses of reviews, and makes recommendations regarding solutions to deficiencies, discrepancies, and deviations in areas that contain some complexities or difficulties that need to be resolved. The incumbent prepares a variety of program reports using data from various sources and disseminates information to concerned official in DOE headquarters, field organizations and other agencies as appropriate.

Performs other duties as assigned.

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

Professional knowledge of, and skill in applying, a wide range of engineering concepts, principles, standards, and methods sufficient to determine and/or execute actions for a wide range of assignments involving combinations of involved features;

Knowledge to formulate, execute, advise on, and explain recommendations or solutions to modify standard practices, processes, and techniques and resolve Simple to complex problems;

Knowledge and skill to act as a principal contributor on team-based projects or coordinate a team project and provide technical oversight and direction;

Knowledge of and ability to apply the application of qualitative and quantitative techniques to evaluate issues, some complex.

Basic knowledge of the Federal budget process.

Ability to communicate both orally and in writing in order to coordinate and monitor activities performed by supporting organizations and contractors, write scopes of work and technical reports and present recommendations and findings.

**Factor 2 – Supervisory Controls**

The supervisor provides background information and guidance on specific objectives. The incumbent independently adapts and applies standard engineering practices, guidelines, and methods in the performance of assigned projects. Completed projects are reviewed for clarity and compliance with policies and procedures. The incumbent plans and carries out the assignment independently as to approach, methods and procedures, and works with senior employees to resolve problem areas. Progress is discussed with the supervisor periodically. Work is reviewed in detail during critical phases of the project. Work is reviewed for technical adequacy,

soundness of decisions or recommendations and consistency with objectives as well as compatibility with the total project and related projects.

### **Factor 3 – Guidelines**

The incumbent uses a wide variety of DOE and engineering reference materials and manuals which are not always directly applicable to the work and may have gaps in specificity. Precedents are available outlining the preferred approach to more general problems or issues. The employee considers precedents and uses judgment to research, select, interpret, modify, adapt, and apply available guidelines to specific problems or issues.

### **Factor 4 – Complexity**

The work consists of a variety of engineering assignments involving many different and unrelated processes and methods. The incumbent decides what needs to be done by researching, analyzing, and evaluating information, unusual circumstances, unconventional issues, conditions, and problems. The incumbent considers different, incomplete, and often conflicting information and alternatives; and determines efficient, effective, and feasible solutions to meet the project requirements and constraints. The incumbent exercises judgment and originality in planning and prioritizing the sequence, direction, and progress of the work; in devising solutions and actions to resolve issues, conditions, and problems; in justifying actions, determinations, and recommendations; and in modifying, adapting, and/or refining existing applications, processes, precedents, and techniques.

### **Factor 5 – Scope and Effect**

The engineering work of this position involves applying precedents and established techniques to resolve a variety of conventional problems, issues, or conditions. The work affects broader project planning and execution activities in EE and/or EERE program strategies.

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

Personal contacts consist of employees within DOE and the organization assigned. Some contacts may be with the general public in a moderately structured setting. Contacts may also include professionals and specialists from other occupations or functions, e.g., other engineers/scientists, attorneys or contractors. Contacts within DOE may be with employees at various levels, such as headquarters and field locations.

The purpose of these contacts is to plan, coordinate, or advise on work efforts, or to resolve issues or operating problems. These contacts may involve influencing or persuading people who have a cooperative attitude and mutual goals. Discussions may typically involve identifying options for resolving problems.

### **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: 2365

GRADE CONVERSION TABLE:

Point Range: 2355-2750 = GS-11

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