Job/Analysis Form

Position Title: General Engineer

Series, Grade: GS-0801-14

Subject Matter Expert:

Human Resources Specialist:

Competency Category (KSA/Job Criteria)	**FOR CATEGORY RATING:**
Basic Qualifications (Knowledge) Functional (Skills/Abilities) Interpersonal (Abilities)	BQ Category Range: 95 - 100 WQ Category Range: 85 - 94 Q Category Range: 70 - 84

Question Type

MC – Multiple Choice
MAMC – Multiple Answer Multiple Choice
LA – Long Answer
SA – Short Answer
YN – Yes No
AA – Applicant Assessment

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 directs the research and development, program planning and scheduling and implementation of an assigned program. Develops goals and objectives and advises management of relevant policy directives; and directs and coordinates the execution of programs through interaction with appropriate Headquarters elements and supporting DOE field offices and contractors.	Mastery of a variety of engineering disciplines sufficient to important present and future concepts and programs.	**MC**	GS-14 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. **#120062** 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	The position requires experience utilizing the theories, principles, and practices of engineering (electrical, mechanical, and civil) to oversee the operations and maintenance of a site facility. This includes utilities, roads, security access control, visitor safety, site surface and subsurface operation and maintenance. #12573	

			1. Scheduling field site operations and maintenance 2. Planning and budgeting field site operations and maintenance. 3. Overseeing the field and/or the site operations and maintenance. 4. None of the above.	
		MC	Which of the following program management duties have you performed? **#13298** 1. Policy Development 2. Strategic Plan Development 3. Program Budget Development 4. Program performance metrics development 5. Assessment of program performance.	
		MC	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. **#13306** 1. Establish goals and objectives for a research facility or research program. 2. Reviewed and evaluated research signs to determine their capability to meet research requirements. 3. Provided oversight of research programs that involved multiple investigators and multiple projects. 4. Reviewed and evaluated instrumental needs at research sites. 5. Managed a research group comprised of technical experts from a variety of scientific and engineering disciplines. 6. Evaluated research instrumentation needed for fundamental scientific research. 7. None of the above.	

Prepares scopes of work for obtaining contractor or laboratory assistance, and other program partners, such as the Project Management Center (PMC), in carrying out the activities required to accomplish the goals and objectives of projects under his/her direction.	Knowledgeable and skill in management tasks associated with the work of the office to which assigned.	**MC**	Analyze complex issues, identify problems, evaluate alternatives and make recommendations that lead to the resolution of complex technical issues. **#13302** 1. I have normally been consulted by others for expertise and assistance or have trained others in performing this task. 2. I have performed this task as a regular part of the job, independently and usually without review by supervisor or senior employee. 3. I have performed the task on the job, with close supervision from supervisor or senior employee. 4. I have had education or training in performing this task, but have not yet performed it on the job. 5. I have not had education, training or experience in performing this task.	
		Y/N	Do you have experience managing large and complex engineering projects in the energy related field? **#13305** 1. Yes 2. No	
		MC	Ability to participate and perform evaluations of impacts of new technologies, systems and policies of engineering analyses projects using standard techniques. **#14133** 1. I have not had education, training or experience in performing this task. 2. I have had education or training in performing this task, but have not yet performed it on the job. 3. I have performed this task on the job with close supervision from supervisor or senior employee. 4. I have performed this task as a regular part of the job, independently and usually without	

			review by supervisor or senior employee. 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.	
Monitors and evaluates on a continuing basis, through periodic program reviews, site reviews, presentations and reports, the grantee, contractor or laboratory performance in meeting work objectives, work quality, cost maintenance, and schedule milestones for assigned activities. Through the contracting officer, the incumbent initiates and implements modifications to project plans, contracts, grants and agreements resulting from changes or redirection of objectives or funding allocations in the assigned programs areas.	Mastery of the application of a wide-range of qualitative and quantitative techniques to evaluate complex issues.	**MC** **MC**	This position is responsible for preparing justifying, and supporting budgets for a basic research program. Select the budget activities you have performed .#13303 1. Prepared budget requests and related supporting documents. 2. Presented and defended annual budget justifications before high level officials within and outside the organization. 3. Monitored and tracked obligations and expenditures for assigned engneering or scientific programs and projects 4. Responded to adjustments in program budget. 5. None of the above. 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 1. I have experience in analyzing documents and determining how they will impact my tasks. 2. I have experience in locating and applying appropriate guidance to accomplish tasks. 3. I have experience in analyzing a problem, evaluating the guidance, and developing a solution. 4. I have experience in analyzing a problem and developing a solution, but believe I could do so.	
Represents the Office on interagency task forces, committees, and other groups or	Extensive knowledge of laws, rules, regulations, policies, precedents and procedures for assigned program areas.	**MAMC**	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.) **#13296**	

conferences relating to technical and policy issues. Works closely with other Federal, State and local government agencies, private sector and non-profit groups to identify opportunities for cooperation on energy efficiency and renewable energy technology transfer, energy-related research, training, education, and outreach. Coordinates these efforts with the subordinate Offices.			1. Reports that consolidated input (including contradictory viewpoints or recommendations) from a number of different sources. 2. Correspondence which conveys complex issues and includes persuasive arguments for obtaining support of a position. 3. Position papers, issue papers, statement of work, program plans and proposes, including analysis and recommendations. 4. Reports, which include options and recommendations, to advise managers on program operations and needs. 5. Procedural guidance.	
		MC	What is you project/program experience? **#14130** 1. Primarily research and technology 2. Conceptual development phrase 3. Full-scale design phase 4. Build/construction phase 5. Test phase 6. Production Phase 7. Full-scale operations 8. Retrofit/upgrade efforts 9. None of the above	
		MC	Select the response that test describes your experience in performing program management activities**. #14545** 1. I do not have training or experience in performing this task 2. I have assisted in performing program management activities 3. I have perform3ed program management activities regularly and independently. 4. I have performed program management activities involving major and complex organizational issues. Other individuals in my field consult me for my expertise on the	

			subject matter. I have trained others in my field.	
Represents the Program Manager/supervisor as a principal speaker or discussion member in a wide variety of workshops, seminars, etc.	Expert in oral and written communications techniques.	**MC** **MAMC** **MC**	Please select the answer below that best describes your skills in persuasion and negotiation techniques. **#13379** 1. I have negotiated compromises acceptable to multiple parties including all levels of Federal and contractor management using a high degree of tact and diplomacy. 2. I have negotiated compromises acceptable to multiple parties including all levels of Federal management using a high degree of tact and diplomacy. 3. I have negotiated compromises acceptable to different divisions of mid-level management using tact and diplomacy. 4. I have no related experience. This position is responsible for communicating a variety of issues on an interpersonal level. Please indicate which of the following types of interpersonal communication duties you have performed as a regular part of your job by checking the appropriate boxes (check all that apply). **#13381** 1. Negotiate changes to guidance and procedures 2. Mediate or facilitate problem resolution 3. Brief managers on organizational issues or similar topics 4. Defend recommendations on controversial issues to top managers 5. Facilitate coordination of efforts between organizations. Gather and evaluate technical information and prepare written reports and documents with recommendations to management for solving issues or problems. **#14138** 1. I have not had education, training or	

			experience in performing this task. 2. I have had education or training in performing this task, but have not yet performed it on the job. 3. I have performed this task on the job with close supervision from supervisor or senior employee. 4. I have performed this task as a regular part of the job, independently and usually without review by supervisor or senior employee. 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.	

General Engineer
GS-801-14

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 directs the research and development, program planning and scheduling and implementation of an assigned program. Develops goals and objectives and advises management of relevant policy directives. Directs and coordinates the execution of programs through interaction with appropriate Headquarters elements and supporting DOE field offices and contractors. The incumbent verifies that work plans adhere to policy, budget, and scheduling guidance provided by DOE management. The incumbent directs and oversees the preparation of technical reports, and other documentation required to support DOE positions related to assigned projects and programs.

Prepares scopes of work for obtaining contractor or laboratory assistance, and other program partners, such as the Project Management Center (PMC), in carrying out the activities required to accomplish the goals and objectives of projects under his/her direction. This includes the development of procurement plans, operating plans and budgets, financial management, technical direction, resolution of technical and management problems, and statements of work, cost estimates. Negotiates cost-sharing and other contractual terms with appropriate participation by procurement offices, Office of General Counsel, and patent counsel on projects involving millions of dollars annually. Develops, reviews and implements project plans which direct the work undertaken by laboratories, contractors and grantees. Monitors and evaluates on a continuing basis, through periodic program reviews, site reviews, presentations and reports, the grantee, contractor or laboratory performance in meeting work objectives, work quality, cost maintenance, and schedule milestones for assigned activities. Through the contracting officer, the incumbent initiates and implements modifications to project plans, contracts, grants and agreements resulting from changes or redirection of objectives or funding allocations in the assigned programs areas. Conducts periodic visits to provide on-site project or program reviews and the preparation of reports and related activities.

Represents the Office on interagency task forces, committees, and other groups or conferences relating to technical and policy issues. Works closely with other Federal, State and local government agencies, private sector and non-profit groups to identify opportunities for cooperation on energy efficiency and renewable energy technology transfer, energy-related research, training, education, and outreach. Coordinates these efforts with the subordinate Offices. Represents the Program Manager/supervisor as a principal speaker or discussion member in a wide variety of workshops, seminars, conferences for a governmental officials, trade and professional associations and interest groups to communicate the objectives, benefits, and offerings of the assigned program. Prepares input or review and comments on assigned reports and issues produced by interagency bodies. Develops technical briefs specifically designed to analyze and communicate the status of a particular program area for certain targeted group such as Congress, the States, business/industry, and professional organizations. Takes or initiates actions to alleviate problems, correct deficiencies, redirect activities or establish new methods and techniques to do the same. Prepares issue and briefing papers for senior management to share with key DOE officials and other Federal agencies concerning energy efficiency and renewable energy programs. Provides input to speeches, reports and congressional testimony relating to energy efficiency and renewable energy program direction and accomplishment.

Performs other duties as assigned that span the full scope of the Office Mission and actives, including planning, budgeting, developing, implementing, managing, and evaluating initiatives relating to: technical information resources, training and conferences, outreach materials and efforts, including the website, technical assistance project calls, design of energy efficient new construction and retrofits of existing buildings for both standard and high energy intensity facilities (labs), energy efficiency product procurement, operations and maintenance, alternative finance, new technology deployment, Departmental energy management; and utility and load management.

Factor 1 – Knowledge Required by the Position

Mastery of a variety of engineering disciplines sufficient to modify and extend practices in technology while serving as the office representative for engineering concepts and developments to recommend actions which result in significant improvements to important future concepts and programs;

Mastery of the application of a wide-range of qualitative and quantitative techniques to evaluate complex issues of effectiveness, efficiency, and productivity of administrative or technical programs; develop options; and recommend solutions;

Expert in oral and written communications to convey information, explain issues, and persuade management, individuals and/or groups to accept a position or recommendations and accomplish objectives with which they might initially disagree or are hesitant to accept;

Knowledgeable and skillful in management tasks including planning, directing, controlling, assessing and integrating management and engineering activities associated with the work of the office to which assigned.

Comprehensive knowledge of the Federal budget process;

Extensive knowledge of laws, rules, regulations, policies, precedents and procedures for assigned program areas. For example, Energy Policy Act of 2005 EPA Act); Energy Performance Contracting, Survey of Federal Buildings; Demonstration Program of Energy Saving Technology, Executive Orders 13123 and 12759; the Energy Policy and Conservation Act; the Energy Security Act; the Motor Vehicle and Information Act; and the Federal Energy Management Improvement Act.

Factor 2 – Supervisory Controls

Works under the direction of the Office Director or other senior manager. Assignments are very broad in scope; involve interaction with HQDOE officials, private firms and other government agencies, and are usually made in the form of a brief discussion, with a minimum of constraints imposed. Opportunity is present for the maximum exercise of inventiveness, originality of thought, and incisive analysis to satisfy management's responsibilities. The incumbent works with policy guidance and relies on experience and skills to choose proper courses of action to solve problems and perform duties. The incumbent is a recognized expert in his/her specialty field. Work is evaluated for potential influence on broad DOE policy objectives and program goals. Findings and recommendations are usually accepted without significant change.

Factor 3 – Guidelines

Problems faced in this position are numerous and varied and are not specifically covered by guidelines. Broad guidelines concerning Headquarters DOE and the immediate office require considerable judgment and discretion in determining the intent and how they must be applied to specific problems. The incumbent must stay abreast of the latest program developments and adapt guidelines to be in keeping with the intent of regulations, while allowing innovation in solving problems. Guidelines include DOE, and engineering manuals, guides and regulations. As a technical authority with broad and extensive experience, the incumbent exercises unusual originality, ingenuity, and effort frequently deviating from or conceiving new scientific approaches to plan and carry out studies, provide technical guidance, and review and assess organization operations.

Factor 4 – Complexity

The duties in the subject position are extremely complex both from a technical and a programmatic aspect. The nature of the work and the current resource environment require expert knowledge and superior analytical skills to solve problems. Innate complexity and interrelationships of tasks require extensive research and originality of thought to arrive at the optimal solution. The many variables to be taken into consideration in analyzing the problem require trade-offs involving several probable solutions from which the most feasible is selected.

Factor 5 – Scope and Effect

The work involves developing, testing, and advising on new technologies, methods, approaches, and guides; or providing expertise and advice on program planning and policy-making functions covering a broad range of engineering or scientific programs. The work results affect the efficiency, feasibility, security, integrity, and safety of a wide range of engineering activities. It also affects the work of other engineering experts and high –level officials both within and outside the DOE. The work of the incumbent also affects the development of activities or achievement of desired outcomes for major aspects of the office's engineering or scientific programs or missions.

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: 3690
GRADE CONVERSION TABLE:
Point Range: 3605-4050 = GS-14

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