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**GENERAL SERVICES ADMINISTRATION  
Federal Supply Service  
Authorized Federal Supply Schedule Price List**

**Professional Engineering Services**

**FSC Group:** 87

**Class:** 871

**SINs:** 871-1, 871-1RC Strategic Planning for Technology Programs/Activities

871-2, 871-2RC Concept Development and Requirements Analysis

871-3, 871-3RC System Design, Engineering and Integration

871-4, 871-4RC Test and Evaluation

871-5, 871-5RC Integrated Logistics Support

871-6, 871-6RC Acquisition and Life Cycle Management

**Contract Number:** GS-23F-0087J, PS-0005

**Contract Period:** July 31, 2004 through July 30, 2009

**MPR Associates, Inc.**

**320 King Street**

**Alexandria, VA 22314**

**(703) 519-0200**

**(703) 519-0224 Fax**

*Revision 8  
Effective Date: January 1, 2008*



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**Contractor's Name, Address, and Phone Number:**

**MPR Associates, Inc.**

320 King Street  
Alexandria, VA 22314  
(703)519-0200  
(703)519-0224 Fax

**Business Size:** NAICS Code 541330 – Large  
NAICS Code 541710 – Small

**Up-to-Date Pricing:** Listed pricing for the period from January 1, 2008 through December 31, 2008.

**Terms and Conditions:** Refer to GSA award contract document.

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**On-line access to contract ordering information.** For orders exceeding the micro-purchase threshold (\$2,500), the orders should be placed with the Schedule Contractor that presents the best value. Before placing an order, ordering offices should consider reasonably available information about the services offered under MAS contracts by using the *GSA Advantage!*<sup>TM</sup> on-line shopping service, or by reviewing the catalog/pricelists of at least three Schedule Contractors and selecting the delivery and other options available under the schedule that meets the agency's needs. In selecting the service representing the best value, the ordering office may consider: (i) special features of the service that are required in effective program performance and that are not provided by a comparable service; and (ii) past performance.

**CUSTOMER INFORMATION:**

1. Table of awarded special item number(s):

<b>SPECIAL ITEM NUMBER</b>	<b>DESCRIPTION OF SERVICES</b>
<p><b>871-1 and 871-1RC Strategic Planning for Technology Programs/Activities</b></p>	<p>Services include the definition and interpretation of high-level organizational engineering performance requirements such as projects, systems, missions, etc., and the objectives and approaches to their achievement. Typical associated tasks include, but are not limited to, an analysis of mission, program goals and objectives, requirements analysis, organizational performance assessment, special studies and analysis, training, privatization and outsourcing.</p>
<p><b>871-2 and 871-2RC Concept Development and Requirements Analysis</b></p>	<p>Services include abstract or concept studies and analysis, requirements definition, preliminary planning, the evaluation of alternative technical approaches and associated costs for the development or enhancement of high level general performance specifications of a system, project, mission or activity. Typical associated tasks include, but are not limited to, requirements analysis, cost/cost-performance trade-off analysis, feasibility analysis, regulatory compliance support, technology conceptual designs, training, privatization and outsourcing.</p>
<p><b>871-3 and 871-3RC System Design, Engineering and Integration</b></p>	<p>Services include the translation of a system (or subsystem, program, project, activity) concept into a preliminary and detailed design (engineering plans and specifications), performing risk identification/analysis/mitigation, traceability, and then integrating the various components to produce a working prototype or model of the system. Typical associated tasks include, but are not limited to, computer-aided design, design studies and analysis, high level detailed specification preparation, configuration management and document control, fabrication, assembly and simulation, modeling, training, privatization and outsourcing.</p>
<p><b>871-4 and 871-4RC Test and Evaluation</b></p>	<p>Services include the application of various techniques demonstrating that a prototype system (subsystem, program, project or activity) performs in accordance with the objectives outlined in the original design. Typical associated tasks include, but are not limited to, testing of a prototype and first article(s) testing, environmental testing, independent verification and validation, reverse engineering, simulation and modeling (to test the feasibility of a concept), system safety, quality assurance, physical testing of the product or system, training, privatization and outsourcing.</p>
<p><b>871-5 and 871-5RC Integrated Logistics Support</b></p>	<p>Services include the analysis, planning and detailed design of all engineering specific logistics support including material goods, personnel, and operational maintenance and repair of systems throughout their life cycles. Typical associated tasks include, but are not limited to ergonomic/human performance analysis, feasibility analysis, logistics planning, requirements determination, policy standards/procedures development, long-term reliability and maintainability, training, privatization and outsourcing.</p>

SPECIAL ITEM NUMBER	DESCRIPTION OF SERVICES (continued)
<b>871-6 and 871-6RC Acquisition and Life Cycle Management</b>	Services include planning, budgetary, contract and systems/program management functions required to procure and/or produce, render operational and provide life cycle support (maintenance, repair, supplies, engineering specific logistics) to technology-based systems, activities, subsystems, projects, etc. Typical associated tasks include, but are not limited to, operation and maintenance, program/project management, technology transfer/insertion, training, privatization and outsourcing.

2. Maximum order:

The maximum dollar value per order for Professional Engineering Services is \$750,000. A delivery order that exceeds the maximum order may be placed in accordance with FAR 8.404.

3. Minimum order:

The minimum dollar value per order to be issued is \$100.

4. Geographic coverage (delivery area):

Worldwide

5. Point of production:

Alexandria, Virginia (USA)

6. Discount from list prices or statement of net price:

Prices shown are net prices which include a Government discount.

7. Other discounts.

For task orders with a value between \$750,000 and \$1,500,000, a 1% discount in the Government hourly labor rate will be applied. For task orders with a value over \$1,500,000, a 2% discount in the Government hourly labor rate will be applied.

8. Prompt payment terms:

Net 30 days. No additional discount.

- 9a. Notification that Government purchase cards are accepted below the micro-purchase threshold:

Government purchase cards will be accepted for orders less than or equal to the micro-purchase threshold of \$2,500.

- 9b. Notification whether Government purchase cards are accepted or not accepted above the micro-purchase threshold:

Government purchase cards will not be accepted for orders greater than the micro-purchase threshold of \$2,500.

10. Ordering address: MPR Associates, Inc.  
320 King Street  
Alexandria, VA 22314

11. Payment address: MPR Associates, Inc.  
320 King Street  
Alexandria, VA 22314

12. Export packing charges, if applicable:

Not applicable to professional engineering services.

13. Terms and conditions of Government purchase card acceptance (any thresholds above the micro-purchase level):

Terms and conditions for acceptance will be in accordance with Government purchase card requirements and regulations.

14. Year 2000(Y2K) compliant:

“Year 2000 compliant” means technology that accurately processes date/time data from and between the twentieth and twenty-first centuries, and leap year calculations. The Contractor warrants that each hardware, software, and firmware product delivered under this contract shall be able to accurately process data from and between the twentieth and twenty-first centuries, including leap year calculations, when used in accordance with the product documentation provided by the Contractor, provided that all listed and unlisted products used in combination with such listed products properly exchange date data with it. The duration of this warranty and the remedies available to the Government shall be as defined in, and subject to, the terms and conditions of the Contractor’s standard commercial warranty.

15. Environmental attributes, e.g., recycled content, energy efficiency, and/or reduced pollutants:  
Not applicable to professional engineering services.
16. Data Universal Number System (DUNS) number:  
DUNS 047271358
17. Notification regarding registration in Central Contractor Registration (CCR) database:  
MPR Associates, Inc. is registered in the CCR database.

**DATA TO ASSIST GOVERNMENT ORDERING OFFICE COMPLETION OF STANDARD FORM 279:**

- Block 9: G - Order/Modification under Federal Schedule
- Block 16: DUNS Number 047271358
- Block 31: Woman-Owner Small Business - No
- Block 36: Contractor's TIN: 52-0804505

***GSA Schedule Pricing from January 1, 2008 through December 31, 2008***

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**Special Item Number (SIN): 871-1, 871-1RC, 871-2, 871-2RC, 871-3, 871-3RC, 871-4, 871-4RC, 871-5, 871-5RC, 871-6, and 871-6RC**

- Notes:** 1. Same pricing and labor categories apply to all SINs.  
 2. Applicable PED categories include Chemical, Civil, Electrical and Mechanical

<b>Labor Category</b>	<b>Government Hourly Rate (\$)</b>
	January 1 through December 31, 2008
Engineering Aide	32.96
Analyst I	43.64
Technical Aide / Analyst II	54.32
Designer	78.56
Engineer I	60.12
Engineer II / Senior Research Analyst	72.72
Engineer III	104.76
Senior Engineer	115.40
Lead Engineer I	131.92
Lead Engineer II	150.32
Supervisory Engineer	168.72
Executive Engineer	185.24
Associate	193.00
Senior Associate	197.88
Principal	201.76

**Other Direct Costs:**

Other direct costs with the exception of travel pertaining to task orders are negotiated at the task order level. Travel related expenses are billed at cost and in compliance with government travel regulations.

**Discounts:** For task orders with a value between \$750,000 and \$1,500,000, a 1% discount in the Government hourly labor rate will be applied. For task orders with a value over \$1,500,000, a 2% discount in the Government hourly labor rate will be applied.

**Other:** Three-year extended warrantee on all services

## Professional Engineering Services

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**MPR Associates, Inc.** is a multi-disciplinary engineering firm founded in 1964. The company was founded to provide professional services meeting the highest level of engineering quality. Today, with over 100 engineers, scientists and technicians from a broad range of technical disciplines, the firm serves a diverse group of commercial, government, and industrial clients throughout the world. (For further background about the engineering services of MPR Associates, please refer to <http://www.mpr.com>.)

MPR has a reputation as a top-quality, highly technical engineering organization. Technical services are tailored specifically to each client's needs, ranging from strategic planning, engineering design, analysis, operation, and maintenance, to problem-solving, technical assessments and root cause analyses, always consistent with the firm's strong professional standards and ethics. MPR's closely integrated, interdisciplinary approach delivers results that are timely, creative, and cost-effective; results that keep satisfied clients coming back. In fact, virtually every client served in MPR's earliest years remains with the firm today.

MPR's facilities are well equipped to provide a full range of engineering and support services including an in-house technical library with more than 80,000 volumes and computerized search and retrieval systems, three in-house testing laboratory facilities, and a variety of conference and meeting facilities. MPR's metro-area Washington, D.C. location in Alexandria, VA is easily accessible for both U.S. and international clients, and is close to major universities, government agencies, institutions, and regulatory bodies.

### Corporate Experience in Professional Engineering

MPR provides responsive professional engineering support services to a diverse mixture of industry and government. The company's interdisciplinary team strategy assures that the necessary expertise and experience are applied to each project, whether original design, technical problem solving, or retrofit engineering. Over the company's 35-year history, MPR has provided significant engineering contributions to commercial clients in a wide variety of fields, including power generation (nuclear and fossil), marine engineering, general construction, aerospace, petrochemical, pharmaceutical, medical research and many, many others. A few examples of the diversity of MPR engineering projects are listed below.

- *Prepared conceptual designs of particulate recycle systems for a coal gasification system.*
- *Developed mathematical computer models of complex dynamic transients.*
- *Prepared Quality Assurance and Design Control programs for industrial clients.*
- *Led team that made first inspection of Three Mile Island's damaged reactor core.*
- *Conducted training of personnel in quality assurance reviews and audits.*

- *Developed material and weld specifications for oil piping.*
- *Developed the design and specifications for the first American industrial tower crane.*
- *Performed dynamic analysis of advanced military tracked vehicles.*
- *Provided key member of U.S. team that inspected the damaged Chernobyl nuclear plant.*
- *Conducted shock analysis of aircraft instrumentation packages and mountings.*
- *Analyzed aerospace structures including wing tanks and landing gear.*
- *Provided consulting to the National Institutes of Health on materials for artificial organs.*
- *Designed and performed fabrication review of a 108-inch optical telescope.*
- *Performed studies of uranium mining methods.*
- *Developed conceptual designs and patents for the first precision ultrasonic flowmeter.*
- *Designed and analyzed special high pressure vessels for industrial and military purposes.*
- *Designed and developed drug production facility for pharmaceutical manufacturer.*

The key to MPR's proficiency in the field of engineering is the quality and experience of our personnel. Each year MPR interviews and recruits exemplary engineering graduates from across the country, selecting only the most qualified graduates for employment. As a gauge of the capability of MPR's engineers, approximately one-half of MPR's engineers have advanced degrees (MS or higher), professional engineer's licenses, or both. With respect to experience, one out of every three MPR engineers has over 20 years experience and one out of every five has over 30 years experience. This combination of personnel skills, technical capability and experience is unique in the industry and sets MPR apart as a company dedicated to high-quality professional engineering services.

#### **871-1 and 871-1RC *Strategic Planning for Technology Programs/Activities***

Services include the definition and interpretation of high-level organizational engineering performance requirements such as projects, systems, missions, etc., and the objectives and approaches to their achievement. Typical associated tasks include, but are not limited to, an analysis of mission, program goals and objectives, requirements analysis, organizational performance assessment, special studies and analysis, training, privatization and outsourcing.

Our experience includes analyses to define top level requirements for projects and systems and first-of-a-kind engineering to integrate top level approaches into definitions of performance requirements. MPR has developed top level objectives which have been used as the basic development objective for numerous R&D programs.

#### **871-2 and 871-2RC *Concept Development and Requirements Analysis***

Services include abstract or concept studies and analysis, requirements definition, preliminary planning, the evaluation of alternative technical approaches and associated costs for the development or enhancement of high level general performance specifications of a system, project, mission or activity. Typical associated tasks include, but are not limited to, requirements analysis,

cost/cost-performance trade-off analysis, feasibility analysis, regulatory compliance support, technology conceptual designs, training, privatization and outsourcing.

MPR's work has involved analyzing the characteristics of equipment and systems, reviews of the functional requirements for use, and assessments of safety and regulatory standards. From these analyses, MPR has defined performance requirements, requirements for regulatory compliance, and design constraints. MPR has evaluated basic technologies to assess the feasibility of meeting requirements and constraints and to identify alternative technical approaches to meeting requirements. Promising alternatives have been evaluated in depth with a variety of design analyses, tests and cost trade-off assessments. Implementation approaches and program plans have been prepared.

### **871-3 and 871-3RC *System Design, Engineering and Integration***

Services include the translation of a system (or subsystem, program, project, activity) concept into a preliminary and detailed design (engineering plans and specifications), performing risk identification/analysis/mitigation, traceability, and then integrating the various components to produce a working prototype or model of the system. Typical associated tasks include, but are not limited to, computer-aided design, design studies and analysis, high level detailed specification preparation, configuration management and document control, fabrication, assembly and simulation, modeling, training, privatization and outsourcing.

One of MPR's core strengths is in the translation of a concept into a preliminary and detailed design, conducting risk analysis, and integrating the results into a working prototype or model. We routinely use computer-aided design methods for our work, and sometimes actually develop the computation methods based on engineering and scientific principles. We perform design studies and analysis, detailed specification preparation, configuration management and document control as part of our routine business. We are sometimes involved with fabrication and assembly, and with simulation and modeling, particularly on complex dynamic analysis projects. We have conducted training at various levels, including broad-based engineering principles training of professional engineers, specific technical training for complex or highly technical projects, as well as a variety of operator training and quality assurance training programs.

### **871-4 and 871-4RC *Test and Evaluation***

Services include the application of various techniques demonstrating that a prototype system (subsystem, program, project or activity) performs in accordance with the objectives outlined in the original design. Typical associated tasks include, but are not limited to, testing of a prototype and first article(s) testing, environmental testing, independent verification and validation, reverse engineering, simulation and modeling (to test the feasibility of a concept), system safety, quality assurance, physical testing of the product or system, training, privatization and outsourcing.

MPR has directed numerous large scale and small scale test and evaluation programs. Some of these programs have been used to demonstrate new design concepts and/or first articles. Many of these tests have involved environmental testing to assess areas such as seismic response, shock, multi-frequency vibration, temperature, fire exposure, etc. for specific engineered components as well as engineered systems. Often our tests are used to perform a design validation or a verification

of a simulation or modeling result for an engineered system. We have performed significant safety testing and our work has included assessments of human factors. We also have experience in the performance of human subject testing.

### **871-5 and 871-5RC *Integrated Logistics Support***

Services include the analysis, planning and detailed design of all engineering specific logistics support including material goods, personnel, and operational maintenance and repair of systems throughout their life cycles. Typical associated tasks include, but are not limited to, ergonomic/human performance analysis, feasibility analysis, logistics planning, requirements determination, policy standards/procedures development, long-term reliability and maintainability, training, privatization and outsourcing.

MPR's experience with integrated logistics support tends to concentrate in the technical aspects, such as analysis and design. We have developed large scale programs associated with life cycle maintenance and repair, and we were responsible for policy development of the very earliest concepts of conditioned based maintenance approaches in the late 1960's and early 1970's. Our engineering concepts were used by the Navy as the technical basis for extending the overhaul schedule for nuclear submarines and surface ships. We have performed feasibility analyses and policy assessments to support technical justification for such programs. We have also carried out detailed reliability and maintainability assessments of equipment and systems and developed standards and procedures for logistics support.

### **871-6 and 871-6RC *Acquisition and Life Cycle Management***

Services include planning, budgetary, contract and systems/program management functions required to procure and/or produce, render operational and provide life cycle support (maintenance, repair, supplies, engineering specific logistics) to technology-based systems, activities, subsystems, projects, etc. Typical associated tasks include, but are not limited to, operation and maintenance, program/project management, technology transfer/insertion, training, privatization and outsourcing.

MPR Associates has provided program management and technical oversight support for acquisition and life cycle management for various projects. Our work has included:

- Evaluation of technology options,
- Development and evaluation of strategies for procurement of services, including commercialization of the mission,
- Selection of government and commercial sites on which to accomplish the mission (including consideration of life cycle maintenance and capital improvement issues, logistics support and coordination of multiple site activities),
- Preparation of test plans,
- Quality Assurance planning,
- Development and review of project implementation schedules and cost estimates,
- Preparation of technical specifications and bid evaluation criteria to support the procurement efforts,

- Direction of technical review teams to support the source selection official in the evaluation of bids and award of the contract, and
- Continuing participation in design reviews and resolution of program technical concerns.

Our work has resulted in contract structures invoking a unique partnership of public and private sector entities, the application of advanced technologies to further United States security interests, and timely award of large multi-million dollar, complex, highly visible and controversial government contracts.

## Labor Category Descriptions

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### Principal

*Category Description:* Experienced, highly-skilled professionals, who are also corporate officers, responsible for managing engineering and business activities.

*Minimum Education/Training:* BS in engineering or equivalent.

*Typical Functional Responsibilities and Experience:* Responsible for directing work for a variety of engineering projects requiring specialized knowledge, a high degree of creativity, foresight, and judgment for complex technical issues. Provides technical, managerial and administrative direction and advises on organization-wide efforts. Typically, these are very senior members of the organization with 30 or more years experience with complex engineering projects and at least 20 years experience with supervision and management.

### Senior Associate

*Category Description:* Senior engineering professionals with many years of experience, having unique technical and management responsibilities for directing major engineering and business activities.

*Minimum Education/Training:* BS in engineering or equivalent.

*Typical Functional Responsibilities and Experience:* Responsible for direction and management of major engineering programs requiring specialized technical knowledge and experience with complex issues. May perform as high-level subject matter expert in engineering systems and applied technology, program management, or matters related to regulatory compliance. Responsible for overall management, control and reporting of multiple programs or business areas. Typically, these are very senior members of the organization with more than 25 years of engineering experience and at least 15 years experience with engineering program management. Most have an advanced degree in engineering or science, or equivalent.

## Labor Category Descriptions (continued)

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### Associate

*Category Description:* Senior engineering professionals with many years of experience and unique technical and management competence.

*Minimum Education/Training:* BS in engineering or equivalent.

*Typical Functional Responsibilities and Experience:* Responsible for direction and oversight of work for large scale engineering projects requiring specialized knowledge and understanding of complex technical issues. Provides highly technical or specialized guidance for such subject areas as structural analysis, material performance, instrumentation and control, human factors engineering, systems operation, training, and system dynamics. May perform as high-level subject matter expert in engineering systems and applied technology, or matters related to regulatory compliance. Responsible for overall direction, control and reporting of multiple projects. Typically, these are very senior members of the organization with 25 or more years experience and at least 15 years experience with supervision and management. Most have an advanced degree in engineering or science, or equivalent.

### Executive Engineer

*Category Description:* Technical leaders with project management responsibilities.

*Minimum Education/Training:* BS in engineering or equivalent.

*Typical Functional Responsibilities and Experience:* Provides direction and oversight for work on projects requiring understanding of complex technical issues. Responsible for all aspects of project performance including technical, contractual, administrative and financial. Organizes and assigns responsibilities and oversees successful completion of the project. Provides technical oversight for projects, ensures appropriate use of resources, and defines the requirements for use of specialized guidance and subject matter experts. May perform as high-level subject matter expert in engineering systems and applied technology, or matters related to regulatory compliance. Typically, these are senior members of the technical staff with 20 or more years experience and at least 10 years experience with supervision and management. Most have an advanced degree in engineering or science.

## Labor Category Descriptions (continued)

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### **Supervisory Engineer**

*Category Description:* The most experienced and competent engineers and scientists of the firm who are not Executives.

*Minimum Education/Training:* BS in engineering or equivalent.

*Typical Functional Responsibilities and Experience:* Performs work on projects requiring understanding of complex technical issues. Directly responsible for project technical performance and supervision of technical staff. Supervises personnel involved in all areas of project activity. Organizes and assigns technical responsibilities and oversees successful completion of all technical aspects of the project. May perform as high-level subject matter expert in engineering systems and applied technology, or matters related to regulatory compliance. Typically, these are senior members of the technical staff with 15 or more years experience. Most have an advanced degree in engineering or science.

### **Lead Engineer II**

*Category Description:* More experienced Lead Engineers with increased project responsibilities.

*Minimum Education/Training:* BS in engineering or equivalent.

*Typical Functional Responsibilities and Experience:* Plans, leads, and conducts broad assignments including complex engineering studies and assessments of complex technical issues. Provides guidance in coordinating tasks and ensuring technical adequacy of the product. Directly responsible for project technical performance and successful completion. Maintains routine and frequent client contact. May perform as subject matter expert in engineering systems and applied technology, or matters related to regulatory compliance. Typically, these are senior members of the technical staff with 15 or more years experience. Most have an advanced degree in engineering or science or a Professional Engineers license.

## Labor Category Descriptions (continued)

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### Lead Engineer I

*Category Description:* Highly-experienced professionals, with proven competence in applicable scientific or engineering specialties.

*Minimum Education/Training:* BS in engineering or equivalent.

*Typical Functional Responsibilities and Experience:* Performs work on projects requiring understanding of complex technical issues. Responsible for technical performance and successful completion of projects. Performs system engineering involving design, analysis, prototype testing, fabrication, specification development, in-field testing, operations and support of electrical and mechanical systems and their controls, including the development of software to support all systems engineering aspects of the project. Typically, these are senior members of the technical staff with 8 or more years experience with systems analysis, design, testing, and operation of complex systems. Most have an advanced degree in engineering or science or a Professional Engineers license.

### Senior Engineer

*Category Description:* Engineers or scientists with several years applicable experience and advanced degrees or equivalent.

*Minimum Education/Training:* BS in engineering or equivalent.

*Typical Functional Responsibilities and Experience:* Conducts engineering design, analysis, prototype testing, fabrication, specification development, in-field testing, operations and support of components, structures, systems and their controls. Performs evaluation of system alternatives. Typically, these are members of the technical staff with 4 or more years experience with analysis, design, testing, and operation of complex systems. Typically, one-third have an advanced degree in engineering or science or a Professional Engineers license.

## Labor Category Descriptions (continued)

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### **Engineer III**

*Category Description:* Engineers or scientists with limited experience but exceptional academic achievement, usually including graduate study or other specialized work.

*Minimum Education/Training:* BS in engineering or equivalent.

*Typical Functional Responsibilities and Experience:* Participates, under direct supervision, in system engineering involving design, analysis, prototype testing, fabrication, specification development, in-field testing, operations and support of structures, components, electrical and mechanical systems and their controls. Performs the design, development, and enhancement of engineering systems and components. Typically, these are junior members of the technical staff with up to 8 years experience.

### **Engineer II / Senior Research Analyst**

*Category Description:* Experienced specialists and professionals with college degree or equivalent.

*Minimum Education/Training:* Bachelors degree or equivalent.

*Typical Functional Responsibilities and Experience:* Participates in analysis, prototype testing, fabrication, specification development, in-field testing, operations and support of engineering projects, including conducting literature reviews and subject matter research. Typically these are members of the technical staff with 3 or more years experience in specialty areas such as analysis, design, testing, or research of engineering and technology-related issues.

### **Engineer I**

*Category Description:* Specialists with exceptional technical skills in computer technology or other areas.

*Minimum Education/Training:* High school graduate.

*Typical Functional Responsibilities and Experience:* Participates in analysis, prototype testing, fabrication, specification development, in-field testing, operations and support of engineering projects, including conducting literature reviews and subject matter research. Typically, these are members of the technical staff with one to 10 years experience or exceptional skills in specialty areas such as computer science, technology, science or other disciplines.

## Labor Category Descriptions (continued)

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### Designer

*Category Description:* Designers and technical graphic artists with several years experience.

*Minimum Education/Training:* High school graduate.

*Typical Functional Responsibilities and Experience:* Participates in design, analysis, prototype testing, fabrication, specification development, in-field testing, operations and support of engineering projects. Work encompasses electrical, electronic, mechanical, structural and nuclear disciplines. Includes some computations, field measurements and computer-aided design. Typically, these are members of the technical staff with college degrees and 5 to 20 years experience with machine design, graphic representations, computations, and CAD.

### Technical Aide / Analyst II

*Category Description:* Specialists providing support to the engineers in such areas as computer programs, testing, analysis, technical research and development.

*Minimum Education/Training:* High school graduate.

*Typical Functional Responsibilities and Experience:* Provides support to the engineers in a variety of technician and research assistant capacities. Typically, these are members of the staff with 3 to 20 years experience with providing technical support in such areas as computer programming, testing and scientific literature reviews/research.

### Analyst I

*Category Description:* Specialists providing support to the engineers in such areas as analysis and technical research and development.

*Minimum Education/Training:* High school graduate.

*Typical Functional Responsibilities and Experience:* Provides support to the engineers in a variety of technician and research assistant capacities. Typically, these are members of the staff with up to 5 years experience with providing project support in such areas as analysis and technical subject matter research and development.

## Labor Category Descriptions (continued)

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<b>Engineering Aide</b>
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*Category Description:* Part-time or co-op engineering graduate or undergraduate students, doing well-defined tasks under close supervision.

*Minimum Education/Training:* High school graduate.

*Typical Functional Responsibilities and Experience:* Provides technical support to the engineers in a variety of technician roles and research assistant capacities. Typically these are engineering students.