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

Multiple Award Schedules (MAS)

<table>
<thead>
<tr>
<th>Large Category:</th>
<th>Professional Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subcategory:</td>
<td>Technical and Engineering Services (non-IT)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Large Category:</th>
<th>Scientific and Management Solutions</th>
</tr>
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<tbody>
<tr>
<td>Subcategory:</td>
<td>Testing and Analysis</td>
</tr>
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<table>
<thead>
<tr>
<th>Large Category:</th>
<th>Miscellaneous</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subcategory:</td>
<td>Complimentary Special Item Numbers</td>
</tr>
</tbody>
</table>

Contract Number: 47QRAA19D0078
Modification Number: MAS Mod A847
Effective Date: July 7, 2022
Business Size: Large
Contract Period: April 23, 2019 through April 22, 2024

MPR Associates, Inc.
320 King Street
Alexandria, VA 22314

Point of Contact – Contract Administrator: John A. Hillaert
(703) 519-0200
jhillaert@mpr.com

On-line access to contract ordering information, terms and conditions, up-to-date pricing, and the option to create an electronic delivery order are available through GSA Advantage!, a menu-driven database system. The INTERNET address for GSA Advantage!™ is: GSAAdvantage.gov.

For more information on ordering from the GSA Federal Supply Schedule click on the “Buying & Selling” – “Purchasing Programs” – “GSA Schedules” button at gsa.gov.

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MPR Associates, Inc.
CUSTOMER INFORMATION:

1a. Table of awarded Special Item Number (SIN) categories:

<table>
<thead>
<tr>
<th>SIN CATEGORY</th>
<th>DESCRIPTION OF SERVICES</th>
</tr>
</thead>
<tbody>
<tr>
<td>OLM</td>
<td>OLMs are supplies and/or services acquired in direct support of an individual task or delivery order placed against a Schedule contract or BPA. OLM pricing is not established at the Schedule contract or BPA level, but at the order level. Since OLMs are identified and acquired at the order level, the ordering contracting officer (OCO) is responsible for making a fair and reasonable price determination for all OLMs. OLMs are procured under a special ordering procedure that simplifies the process for acquiring supplies and services necessary to support individual task or delivery orders placed against a Schedule contract or BPA. Using this new procedure, ancillary supplies and services not known at the time of the Schedule award may be included and priced at the order level.</td>
</tr>
<tr>
<td>Large Category: Miscellaneous</td>
<td></td>
</tr>
<tr>
<td>Subcategory: Complimentary Special Item Numbers</td>
<td></td>
</tr>
<tr>
<td>SIN Title: Order-Level Materials</td>
<td></td>
</tr>
<tr>
<td>541330ENG</td>
<td>Services include: applying physical laws and principles of engineering in the design, development, and utilization of machines, materials, instruments, processes, and systems. Services may involve any of the following activities: provision of advice, concept development, requirements analysis, preparation of feasibility studies, preparation of preliminary and final plans and designs, provision of technical services during the construction or installation phase, inspection and evaluation of engineering projects, and related services.</td>
</tr>
<tr>
<td>Large Category: Professional Services</td>
<td></td>
</tr>
<tr>
<td>Subcategory: Technical and Engineering Services (non-IT)</td>
<td></td>
</tr>
<tr>
<td>SIN Title: Engineering Services</td>
<td></td>
</tr>
<tr>
<td>541380</td>
<td>Includes testing laboratory services and veterinary, natural, and life sciences; testing services and laboratories; and other professional, scientific, and technical consulting services. Testing and services include, but are not limited to: physical, chemical, analytical, or other testing services; quality assurance; fire safety inspections; training; safety audits; relying upon experimental, empirical, quantifiable data, relying on the scientific method, and professional services, tasks, and labor categories in the fields of biology, chemistry, physics, earth sciences, atmospheric science, oceanography, materials sciences, mathematics, geology, astronomy, veterinary medicine, statistics, systems science, etc., (excludes social and behavioral sciences). Examples of labor categories include, but are not limited to, Scientific Researchers, Biologists, Physicists, Mathematicians, Statisticians, Research Engineers, Meteorologists, Lab Technicians, Veterinarians and Veterinary Services, Chemists, Biochemical Engineers, Research Nurses.</td>
</tr>
<tr>
<td>Large Category: Scientific and Management Solutions</td>
<td></td>
</tr>
<tr>
<td>Subcategory: Testing and Analysis</td>
<td></td>
</tr>
<tr>
<td>SIN Title: Testing Laboratory Services</td>
<td></td>
</tr>
<tr>
<td>SIN CATEGORY</td>
<td>DESCRIPTION OF SERVICES</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td><strong>541420</strong></td>
<td>Services include creating and developing designs and specifications that optimize the use, value, and appearance of their products. These services can include determination of the materials, construction, mechanisms, shape, color, and surface finishes of the product, taking into consideration human characteristics and needs, safety, market appeal, and efficiency in production, distribution, use, and maintenance. Associated tasks include, but are not limited to computer-aided design, e.g. CADD, risk reduction strategies and recommendations to mitigate identified risk conditions, fire modeling, performance-based design reviews, high level detailed specification and scope preparation, configuration, management and document control, fabrication, assembly and simulation, modeling, training, consulting, analysis of single or multi spacecraft missions and mission design analysis.</td>
</tr>
<tr>
<td><strong>541715</strong></td>
<td>Service include conducting research and experimental development (except nanotechnology and biotechnology research and experimental development) in the physical, engineering and life sciences such as; such as agriculture, electronics, environmental, biology, botany, computers, chemistry, food, fisheries, forests, geology, health, mathematics, medicine, oceanography, pharmacy, physics, veterinary and other allied subjects. Typical tasks include, but are not limited to, analysis of mission, program goals and objectives, program evaluations, analysis of program effectiveness, requirements analysis, organizational performance assessment, special studies and analysis, training, and consulting; requirements analysis, cost/cost performance trade-off analysis, feasibility analysis, developing and completing fire safety evaluation worksheets as they relate to professional engineering services; operation and maintenance, evaluation of inspection, testing, and maintenance program for fire protection and life safety systems, program/project management, technology transfer/insertion, training and consulting.</td>
</tr>
</tbody>
</table>

1b. Lowest priced model number and lowest price: 
   Please refer to labor rates on page 7.

1c. Labor category descriptions:
   Please refer to Labor Category Descriptions beginning on page 13.

2. Maximum order:
   The maximum dollar value per order is shown below. (A delivery order that exceeds the maximum order may be placed in accordance with FAR 8.404.)

<table>
<thead>
<tr>
<th>SIN</th>
<th>Maximum Order</th>
</tr>
</thead>
<tbody>
<tr>
<td>OLM</td>
<td>$ 250,000</td>
</tr>
<tr>
<td>541330ENG</td>
<td>$ 1,000,000</td>
</tr>
<tr>
<td>541380</td>
<td>$ 250,000</td>
</tr>
<tr>
<td>541420</td>
<td>$ 1,000,000</td>
</tr>
<tr>
<td>541715</td>
<td>$ 1,000,000</td>
</tr>
</tbody>
</table>

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*MPR Associates, Inc.*
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. Quantity discount:
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.
Information for Ordering Offices: Prompt payment terms cannot be negotiated out of the contractual agreement in exchange for other concessions.

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.

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.

10. Foreign items: Not applicable.

11a. Time of Delivery: Contact Contractor.

11b. Expedited Delivery: Contact Contractor.

11c. Overnight and 2-day delivery. The Contractor will indicate whether overnight and 2-day delivery are available. Also, the Contractor will indicate that the schedule customer may contact the Contractor for rates for overnight and 2-day delivery:
Contact Contractor.

11d. Urgent Requirements:
Contact Contractor.

12. F.O.B Points(s): Destination

320 King Street
Alexandria, VA 22314
13b. Ordering procedures:
For supplies and services, the ordering procedures information on Blanket Purchase Agreements (BPA's) are found in Federal Acquisition Regulation (FAR) 8.405-3.

320 King Street
Alexandria, VA 22314

15. Warranty provision:
Three year extended warranty on all services.

16. Export Packing Charges (if applicable):
Not applicable.

17. Terms and conditions of Government purchase card acceptance (any thresholds above the micro-purchase level):
Not applicable.

18. Terms and conditions of rental, maintenance, and repair:
Not applicable.

19. Terms and conditions of installation (if applicable):
Not applicable.

20. Terms and conditions of repair parts indicating date of parts price lists and any discounts from list prices (if applicable):
Not applicable.

20a. Terms and conditions for any other services (if applicable):
Not applicable.

21. List of service and distribution points (if applicable):
Not applicable.

22. List of participating dealers (if applicable):
Not applicable.

23. Preventive maintenance (if applicable):
Not applicable.

24a. Environmental attributes, e.g., recycled content, energy efficiency, and/or reduced pollutants:
Not applicable.

24b. If applicable, indicate that Section 508 compliance information is available on Electronic and Information Technology (EIT) supplies and services and show where full details can be found:
Not applicable.
25. Data Universal Numbering System (DUNS) number: 047271358
26. Notification regarding registration in System for Award Management (SAM) database:
   MPR Associates, Inc. is registered in the SAM database.

Service Contract Act (SCA) Applicability Statement:

The Service Contract Labor Standards (SCLS) is applicable to this contract as it applies to the entire Multiple Award Schedule and all services provided. While no specific labor categories have been identified as being subject to SCLS due to exemptions for professional employees (FAR 22.1101, 22.1102 and 29 CFR 541.300), this contract still maintains the provisions and protections for SCLS eligible labor categories. If and/or when the Contractor adds SCLS labor categories/employees to the contract through the modification process, the Contractor must inform the Contracting Officer and establish a SCLS matrix identifying the GSA labor category titles, the occupational code, SCLS labor category titles and the applicable WD number. Failure to do so may result in cancellation of the contract.
GSA Schedule Pricing

SIN Categories: OLM, 541330ENG, 541380, 541420, and 541715

Note: Same pricing and labor categories apply to all SIN Categories.

<table>
<thead>
<tr>
<th>Labor Category</th>
<th>Government Hourly Rate ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering Aide</td>
<td>43.32</td>
</tr>
<tr>
<td>Analyst I</td>
<td>59.45</td>
</tr>
<tr>
<td>Technical Aide / Analyst II</td>
<td>70.53</td>
</tr>
<tr>
<td>Designer I</td>
<td>100.76</td>
</tr>
<tr>
<td>Designer II</td>
<td>119.90</td>
</tr>
<tr>
<td>Project Coordinator</td>
<td>117.88</td>
</tr>
<tr>
<td>Engineer I</td>
<td>77.58</td>
</tr>
<tr>
<td>Engineer II / Senior Research Analyst</td>
<td>96.73</td>
</tr>
<tr>
<td>Engineer III</td>
<td>139.04</td>
</tr>
<tr>
<td>Senior Engineer I</td>
<td>152.14</td>
</tr>
<tr>
<td>Senior Engineer II</td>
<td>163.22</td>
</tr>
<tr>
<td>Lead Engineer I</td>
<td>180.35</td>
</tr>
<tr>
<td>Lead Engineer II</td>
<td>198.49</td>
</tr>
<tr>
<td>Supervisory Engineer</td>
<td>221.66</td>
</tr>
<tr>
<td>Executive Engineer</td>
<td>243.83</td>
</tr>
<tr>
<td>Associate</td>
<td>261.96</td>
</tr>
<tr>
<td>Senior Associate</td>
<td>271.03</td>
</tr>
<tr>
<td>Principal</td>
<td>282.12</td>
</tr>
</tbody>
</table>

Discounts: For ask 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 warranty on all services
**Professional Services**

**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 approximately 200 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](http://www.mpr.com).)

MPR has a reputation as a top-quality and highly professional technical engineering organization. MPR’s 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 100,000 volumes and computerized search and retrieval systems, in-house testing laboratory facilities, and a variety of conference and meeting facilities. MPR's corporate headquarter 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 50+ year history, MPR has provided significant technology and engineering contributions to commercial clients in a wide variety of fields, including power generation, nuclear engineering, 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 coal gasification systems.
- Developed mathematical computer models of complex, dynamic transients.
- Prepared Quality Assurance and Design Control programs for industrial clients.
- Led the team that made first inspection of Three Mile Island’s damaged nuclear reactor core.
- Conducted training of personnel in nuclear quality assurance reviews and audits.
• Developed material and weld specifications for petrochemical clients.
• Developed the design and specifications for the first American industrial tower crane.
• Performed dynamic analysis of advanced military tracked vehicles.
• Provided member of the U.S. three-man team that inspected the damaged Chernobyl nuclear plant.
• Conducted shock analysis of aircraft instrumentation packages and mountings.
• Analyzed aerospace structures.
• Provided consulting to the National Institutes of Health on materials for artificial organs, including the first artificial heart.
• Designed and performed fabrication reviews of a 108-inch optical telescope.
• Performed studies of uranium mining methods.
• Developed conceptual designs and patents for the world's 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, over half of the MPR engineering staff has more than 20 years’ experience, and over one-quarter have greater than 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.

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.

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.

**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.

**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.

**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.

**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 contracting structures which invoke unique partnerships 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 technically challenging government contracts.
### Principal

**Category Description:** Experienced, highly-skilled professionals, who may also be corporate officers. Responsible for managing engineering, technology and business activities. Capable of directing technically sophisticated programs that involve the successful management of teams composed of engineers, scientists, and management professionals and business or government leaders. Strong technical skills in engineering and science. Strong, broad-based skills in business administration, program management and technology transfer.

**Minimum Education:** BS in engineering or equivalent  
**Minimum Experience:** 25 years

**Responsibilities and Experience:** Responsible for directing work for large and complex engineering programs requiring specialized knowledge. This includes programs for nuclear energy development, nuclear plant construction, nuclear reactor design, and renewable energy. Personnel in this category maintain a high degree of creativity, foresight, and judgment with respect to complex technical and management issues and provide technical, managerial and administrative direction and advice on organization-wide efforts. These are very senior members of the organization with more than 20 years’ experience with supervision and management of senior professional staffs. These individuals demonstrate advanced written and oral communication skills. The average level of experience for this category is 35 years.

### Senior Associate

**Category Description:** Experienced, highly-skilled professionals, with many years of experience and having unique technical and management responsibilities for leading major engineering and business activities. Capable of successful leadership of major projects that involve engineering and management teams composed of engineers, scientists, and management professionals. Fully capable of directing programs and projects that involve analyzing, designing, developing, integrating, testing, and maintaining complex systems and solutions. Strong technical skills in engineering and science. Strong business skills in program management, project management, and technology transfer.

**Minimum Education:** BS in engineering or equivalent  
**Minimum Experience:** 25 years

**Responsibilities and Experience:** Responsible for direction and management of major engineering programs requiring specialized technical knowledge and experience. Perform as high-level subject matter expert in engineering systems and applied technology, program management, and matters related to regulatory compliance. Personnel in this category are proficient and credible to testify as subject matter experts for commercial and government clients. These are very senior members of the organization with more than 20 years’ experience with supervision and management of senior professional staffs. Personnel in this category are responsible for overall management, control and reporting of multiple programs or business areas. Most have advanced degrees in engineering or science, or equivalent. These individuals demonstrate advanced written and oral communication skills. The average level of experience for this category is 35 years.
**Associate**

**Category Description:**
Senior engineering professionals with significant experience, having unique technical and management responsibilities for directing engineering and business activities. Capable of successful leadership of complex projects that involve engineering and management teams composed of engineers, scientists, and management professionals. Fully capable of directing large projects that involve analyzing, designing, developing, integrating, testing, and maintaining complex systems and solutions. Strong technical skills in engineering and science. Strong business skills in project management and technology transfer.

**Minimum Education:**  BS in engineering or equivalent

**Minimum Experience:**  20 years

**Responsibilities and Experience:**
Responsible for direction and management of large engineering projects requiring specialized technical knowledge and experience. Provide highly technical or specialized guidance and leadership for nuclear power, structural analysis, material performance, instrumentation and control, human factors engineering, systems operation, training, and system dynamics. Perform as high-level subject matter expert in engineering systems and applied technology, program management, and matters related to regulatory compliance. Personnel in this category are proficient and credible to testify as subject matter experts for commercial and government clients. These are very senior members of the organization with more than 15 years’ experience with supervision and management of senior professional staffs. Personnel in this category are responsible for overall management, control and reporting of multiple projects. Most have advanced degrees in engineering or science, or equivalent. These individuals demonstrate advanced written and oral communication skills. The average level of experience for this category is 30 years.

**Executive Engineer**

**Category Description:**
Senior technical leaders with significant experience, having technical and project management responsibilities for supporting engineering activities. Capable of successful leadership of projects that involve engineering and management teams composed of engineers, scientists, and management professionals. Fully capable of directing projects that involve analyzing, designing, developing, integrating, testing, and maintaining complex engineered systems and solutions. Strong technical skills in engineering and science.

**Minimum Education:**  BS in engineering or equivalent

**Minimum Experience:**  15 years

**Responsibilities and Experience:**
Responsible for direction and oversight of engineering projects requiring understanding of complex technical issues. Provide technical or specialized guidance in nuclear energy, structural analysis, material performance, instrumentation and control, human factors engineering, systems operation, training, and system dynamics. Perform as subject matter expert in engineering systems and applied technology, program management, or matters related to regulatory compliance. These are senior members of the organization with more than 10 years’ experience with supervision and management of senior professional staffs. Personnel in this category are responsible for all aspects of project performance including technical, contractual, administrative and financial management. Most have advanced degrees in engineering or science, or equivalent. Many demonstrate advanced written and oral communication skills. The average level of experience for this category is 30 years.
### Supervisory Engineer

**Category Description:** Experienced and competent engineers and scientists. Technical leaders having project management responsibilities for conducting engineering activities. Capable of successful leadership of projects that involve engineering and management teams composed of engineers, scientists, and management professionals. Capable of managing projects that involve analyzing, designing, developing, integrating, testing, and maintaining complex engineered systems and solutions. Strong technical skills in engineering and science.

**Minimum Education:** BS in engineering or equivalent  
**Minimum Experience:** 14 years

**Responsibilities and Experience:**  
Responsible for performing work on projects requiring understanding of complex technical engineering issues. Directly responsible for day-to-day project performance and supervision of junior technical staff. Carry out engineering activities in nuclear energy, structural analysis, material performance, instrumentation and control, human factors engineering, systems operation, training, and system dynamics. Performs as subject matter expert in engineering systems and applied technology, program management, or matters related to regulatory compliance. These are relatively senior members of the organization who routinely work on complex technology projects. Approximately half have advanced degrees in engineering or science, or equivalent. The average level of experience for this category is 25 years.

### Lead Engineer II

**Category Description:** Experienced and competent engineers and scientists with strong technical skills in engineering and science. Engineering project leader having responsibilities for conducting routine project execution activities. Capable of successful project leadership of teams composed of engineers, scientists, and management professionals. Capable of managing junior engineers in projects that involve analyzing, designing, developing, integrating, testing, and maintaining complex engineered systems and solutions.

**Minimum Education:** BS in engineering or equivalent  
**Minimum Experience:** 14 years

**Responsibilities and Experience:**  
Responsible for planning, leading and conducting work on projects that require understanding of complex technical engineering issues. Provide guidance in coordinating tasks and ensuring technical adequacy of the product. Responsible for project technical performance and successful completion. Maintain routine and frequent client contact. Responsible for day-to-day project performance and supervision of junior technical staff. Carries out engineering activities in nuclear energy, structural analysis, material performance, instrumentation and control, human factors engineering, systems operation, training, and system dynamics. Performs as subject matter expert in engineering systems and applied technology, program management, or matters related to regulatory compliance. These are mid-level to relatively senior-level members of the organization who routinely work on complex technology projects. Most have advanced degrees in engineering or science, or equivalent. The average level of experience for this category is 15 years.
**Lead Engineer I**

**Category Description:** Experienced and competent engineers and scientists with strong technical skills in engineering and science. Junior-level engineering project leader having responsibilities for conducting routine project execution activities. Capable of successful project leadership of teams composed of engineers, scientists, and management professionals. Capable of managing other engineers in projects that involve analyzing, designing, developing, integrating, testing, and maintaining complex engineered systems.

**Minimum Education:** BS in engineering or equivalent  
**Minimum Experience:** 10 years

**Responsibilities and Experience:** Responsible for leading and conducting work on projects that require understanding of complex technical engineering issues. Provide guidance in coordinating tasks and ensuring technical adequacy of the product. Responsible for project technical performance and successful completion. Maintain routine and frequent client contact. Responsible for day-to-day project performance and supervision of staff. Carries out engineering activities in nuclear energy, structural analysis, material performance, instrumentation and control, human factors engineering, systems operation, training, and system dynamics. These are mid-level members of the organization who routinely work on complex technology projects. Some have advanced degrees in engineering or science, or equivalent. The average level of experience for this category is 12 years.

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**Senior Engineer II**

**Category Description:** Competent engineers and scientists with strong technical skills in engineering and science. Mid-level professional engineering staff member having responsibilities for conducting more complex project execution activities. Capable of successful project execution of engineering activities under limited direction of more senior professional staff. Capable of directing other engineers in projects that involve analyzing, designing, developing, integrating, testing, and maintaining complex engineered systems.

**Minimum Education:** BS in engineering or equivalent  
**Minimum Experience:** 7 years

**Responsibilities and Experience:** Responsible for conducting work on projects that require understanding of complex technical engineering issues. 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. Responsible for project technical performance and successful completion. Carries out engineering activities in nuclear energy, structural analysis, material performance, instrumentation and control, human factors engineering, systems operation, training, and system dynamics. Approximately half have advanced degrees in engineering or science, or equivalent. The average level of experience for this category is 10 years.
**Senior Engineer I**

*Category Description:* Competent engineers and scientists with strong technical skills in engineering and science. Junior to Mid-level professional engineering staff member having responsibilities for conducting routine project execution activities. Capable of successful project execution of engineering activities under the direction of more senior professional staff. Capable of directing other engineers in projects that involve analyzing, designing, developing, integrating, testing, and maintaining complex engineered systems.

*Minimum Education:* BS in engineering or equivalent

*Minimum Experience:* 5 years

*Responsibilities and Experience:* Responsible for conducting work on projects that require understanding of complex technical engineering issues. 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. Responsible for project technical performance and successful completion. Carries out engineering activities in nuclear energy, structural analysis, material performance, instrumentation and control, human factors engineering, systems operation, training, and system dynamics. Approximately half have advanced degrees in engineering or science, or equivalent. The average level of experience for this category is 7 years.

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**Engineer III**

*Category Description:* Competent engineers or scientists with limited experience but exceptional academic achievement, including graduating with high academic honors, graduate study, or other specialized work including qualified nuclear power training by the military. Junior-level professional engineering staff member having responsibilities for conducting routine project execution activities. Capable of successful project execution of engineering activities under the direction of more senior professional staff. Capable of working in teams with other engineers in projects that involve analyzing, designing, developing, integrating, testing, and maintaining complex engineered systems.

*Minimum Education:* BS in engineering or equivalent

*Minimum Experience:* 3 years

*Responsibilities and Experience:* Responsible for conducting work on projects that require understanding of complex technical engineering issues. 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. Responsible for project technical performance and successful completion. Carries out engineering activities in nuclear energy, structural analysis, material performance, instrumentation and control, human factors engineering, systems operation, training, and system dynamics. Approximately half have advanced degrees in engineering or science, or equivalent. The average level of experience for this category is 5 years.
<table>
<thead>
<tr>
<th>Role</th>
<th>Category Description</th>
<th>Minimum Education</th>
<th>Minimum Experience</th>
<th>Responsibilities and Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Engineer II / Senior Research Analyst</strong></td>
<td>Experienced specialists and professionals with college degree or equivalent.</td>
<td>Bachelor's degree or equivalent</td>
<td>3 years</td>
<td>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. These are members of the technical staff with experience in specialty areas such as analysis, design, testing, or research of engineering and technology-related issues and nuclear energy. Some have advanced degrees. The average level of experience for this category is 20 years.</td>
</tr>
<tr>
<td><strong>Engineer I</strong></td>
<td>Specialists with exceptional technical skills in computer technology or other areas.</td>
<td>High school graduate</td>
<td>3 years</td>
<td>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. These are members of the technical staff with experience and exceptional skills in specialty areas of computer science, technology, or related disciplines. The average level of experience for this category is 20 years.</td>
</tr>
<tr>
<td><strong>Project Coordinator</strong></td>
<td>Experienced specialists with college degree or equivalent providing project management support services.</td>
<td>Bachelor's degree or equivalent</td>
<td>5 years</td>
<td>Participates in the management and oversight of projects including aspects such as project planning, budgeting, scheduling, document configuration control, subcontracting, invoicing and proprietary/confidentiality control requirements. Personnel in this category provide assistance for all aspects of project performance including contractual, financial management, subcontractor qualification and, to a limited extent, technical. These individuals are responsible for reporting project performance to senior project management personnel and demonstrate advanced written and oral communication skills. The average level of experience for this category is 15 years.</td>
</tr>
</tbody>
</table>
### Designer II

**Category Description:** Designers and technical graphic artists.

**Minimum Education:** Bachelor's degree or equivalent  
**Minimum Experience:** 5 years  

**Responsibilities and Experience:**  
Leads activities 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 experience with machine design, graphic representations, computations, and/or CAD. The average level of experience for this category is 10 years.

### Designer I

**Category Description:** Designers and technical graphic artists.

**Minimum Education:** High school graduate  
**Minimum Experience:** 0 years  

**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. These are members of the technical staff with experience in machine design, graphic representations, computations, and/or CAD. The average level of experience for this category is 5 years.

### 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:** High school graduate  
**Minimum Experience:** 4 years  

**Responsibilities and Experience:**  
Provides support to the engineers in a variety of technician and research assistant capacities. These are members of the staff providing technical support in such areas as computer programming, testing and scientific literature reviews/research. The average level of experience for this category is 8 years.
Analyst I

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

**Minimum Education:** High school graduate

**Minimum Experience:** 0 years

**Responsibilities and Experience:**
Provides support to the engineers in a variety of technician and research assistant capacities. These are members of the staff providing project support in such areas as analysis and technical subject matter research and development. The average level of experience for this category is 15 years.

Engineering Aide

**Category Description:**
Part-time or co-op engineering graduate or undergraduate students, doing well-defined tasks under close supervision.

**Minimum Education:** High school graduate

**Minimum Experience:** 0 years

**Responsibilities and Experience:**
Provides technical support to the engineers in a variety of technician roles and research assistant capacities. These are often engineering students. The average level of experience for this category is 2 years.

### Substitution Methodology for Degree Equivalency

<table>
<thead>
<tr>
<th>Degree</th>
<th>Equivalent Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate’s – General / Arts</td>
<td>5 years’ experience</td>
</tr>
<tr>
<td>Bachelor’s – General / Arts</td>
<td>10 years’ experience</td>
</tr>
<tr>
<td>Bachelor’s – General / Arts</td>
<td>Associate Degree plus 5 years’ experience</td>
</tr>
<tr>
<td>Bachelor’s – Engineering / Science</td>
<td>Associate Engineering Degree plus 5 years’ experience</td>
</tr>
<tr>
<td>Master’s – Engineering / Science</td>
<td>Bachelor’s Engineering Degree plus 5 years’ experience</td>
</tr>
<tr>
<td>Doctorate – Engineering / Science</td>
<td>Bachelor’s Engineering Degree plus 10 years’ experience</td>
</tr>
</tbody>
</table>

### Substitution Methodology for Experience Equivalency

<table>
<thead>
<tr>
<th>College Education</th>
<th>Equivalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 year of higher education</td>
<td>1 year of experience</td>
</tr>
<tr>
<td>2 years of higher education</td>
<td>2 years of experience</td>
</tr>
<tr>
<td>3 years of higher education</td>
<td>3 years of experience</td>
</tr>
<tr>
<td>4 years of higher education</td>
<td>4 years of experience</td>
</tr>
</tbody>
</table>