



ATS Engineer - Job Profile Matrix

Line of Business: Electric Operations Function: Asset Management Reports to (Job Title): Supervisor, Applied Technology Services	Effective Date of Job Profile: 4/10/13 Last Updated: 1/17/13, 2/27/13
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Job Family Summary	The Applied Technology Services (ATS) Engineering staff provides engineering, testing and analysis services and expertise across multiple disciplines to various company organizations to identify, diagnose and solve technical problems. The staff provides consultation and advice to clients to proactively avoid future problems by specifying equipment, materials and methods that are best practices in the industry. Services include inspections, failure analysis, performance assessments, and evaluations on a wide variety of systems and components ranging from in-service concrete to hydroelectric turbine blades to distributed generation. The engineering staff partners with management in the creation of bid proposals for requested client work. The incumbents maintain knowledge of and adhere to all company and regulatory safety and quality processes and procedures.				
Job Title	ATS Engineer, Associate	ATS Engineer	ATS Engineer, Senior	ATS Engineer, Expert	ATS Engineer, Principal
Position Title	Various, use job title when possible.				
PGE Job Level	Associate	Career	Senior	Expert	Principal
SAP Job Code	51522715	51522716	50010898	51522720	51522721
Job Responsibilities	<ul style="list-style-type: none"> Applies basic engineering principles and scientific theory to perform testing, calculations and analysis under direction of senior peers or supervisor. Typically assigned to routine work where precedents, standards, protocols and techniques exists. May design the tests for assignments/projects and select standards, methods and protocols. Reviews design and protocols with senior peer or supervisor. Develops knowledge in a specific ATS area of specialty or discipline. Partners with senior technical peers to develop proficiency in a variety of issues. Assists with the more complex projects by compiling and providing technical data. Participates on one or more special ATS site initiative teams. 	<ul style="list-style-type: none"> Independently performs routine engineering analysis and performs lead role in determining scope, schedule, budget and resources needed. Prepares cost and materials estimates for use in client bid proposals. Assists senior peers on more complex tests and projects, participating in planning, budgeting and testing. Begins to develop knowledge in other areas of specialty/discipline or continues to focus on one area and increases depth of knowledge. Completes multiple projects concurrently. Prepares tests and studies. Evaluates performance of parts, assemblies or systems under simulated operating conditions. Records results and makes recommendations based on findings. Collaborates with peers to prepare technical reports and specifications and to identify, define, and solve problems. May review test design of Associate level engineers to determine effectiveness and if objectives of project 	<ul style="list-style-type: none"> Partners with senior peers and leadership to prepare estimates for client bid proposals. Completes assignments of broad scope and complexity with few precedents or standards requiring integration of information from a variety of sources. Performs lead role in determining scope, schedule, budget and resources needed. Provides some coaching and oversight to lower level peers. Reviews test designs of lower level peers to determine applicability, feasibility and if objectives of project will be obtained. May assist higher level peers on the most complex and innovative tests. Expands knowledge in other areas of specialty or discipline, developing breadth or further develops expertise and specialization on one area. Collaborates with peers to prepare technical reports and specifications and to identify, define, and solve problems. Develops test protocols, models, technologies and analyzes data. Evaluates performance of parts, assemblies or 	<ul style="list-style-type: none"> Exercises independent judgment in leading and resolving problems of large impact, scope and complexity with few precedents or standards requiring integration of information from a variety of sources. Leads team determining scope, schedule, budget and preparing client bid proposals. Is recognized as a subject matter expert in one discipline or type of ATS service and provides breadth of knowledge and performs analysis and projects across several disciplines. Searches for new practical solutions to highly complex problems. Assesses business conditions, identifies opportunities and develops projects & solutions from a multifunctional or multidisciplinary perspective. Leads project teams performing tests to identify, define, solve problems and prepare technical reports and specifications. Prepares and delivers presentations and recommendations to clients based on project results/findings. Oversees assembly of technical systems 	<ul style="list-style-type: none"> Exercises independent judgment in leading teams on the most complex projects with the high financial impact to PG&E and/or the client. Leads projects, determining scope, schedule, budget and preparing and presenting client bid proposals. Is the authority in one discipline or type of ATS service and offers breadth of knowledge and performs analysis and projects across several disciplines. Develops, prepares and presents findings, conclusions and recommendations to senior leadership using a broader perspective, knowledge of the business and understanding of longer term implications to the client. Provides leadership and expertise in developing new standards, codes, guidelines, polices, techniques, procedures in PG&E technical services. Utilizes a broad business understanding to solve the most complex problems in creative ways, ensuring solutions consider both short and long term business impact. Leads project teams in the performance of tests and the preparation of technical reports and specifications. Prepares and delivers



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		<p>will be obtained.</p> <ul style="list-style-type: none"> Develops test protocols, models, test technologies and analyzes data. May assist in the development of technical policies and procedures. Participates in identifying innovations and cost-reduction potential of new and existing technologies. May interface with clients regarding status of project or to collect more information. Ensures client expectations for project are met. 	<p>systems under simulated operating conditions, and records results. Compiles project test results and prepares presentations, recommendations for client and/or ATS leadership.</p> <ul style="list-style-type: none"> Modifies electrical prototypes, parts, assemblies, and systems to correct functional deviations. Continually identifies testing or process improvements. Identifies innovations and cost-reduction potential of new and existing technologies. Determines customer expectations and ensures project deliverables meet customer satisfaction objectives. 	<p>and prototypes according to engineering standards and knowledge of related principles.</p> <ul style="list-style-type: none"> Modifies prototypes, parts, assemblies, and systems to correct functional deviations. Continually identifies testing or process improvements. Develops, evaluates and deploys new technologies. Identifies innovations and cost-reduction potential of new and existing technologies. May provide expert opinion or information related to projects or other issues to external customers, agencies or other parties. Interfaces with clients to understand expectations, concerns and ensure strong customer satisfaction. May represent PG&E at industry association meetings or seminars. 	<p>presentations and recommendations based on project results/findings, advice and expertise, frequently to senior leadership.</p> <ul style="list-style-type: none"> Identifies new technologies, innovations and cost-reduction opportunities. Conceives and investigates new areas; contributes new designs and techniques regarded as major advances in the company or industry. Interfaces with clients, handling the more sensitive issues, to understand expectations, concerns and ensure strong customer satisfaction. Represents PG&E and provides testimony or information related to projects or other issues to external customers, agencies or other parties. Recognized outside the company as an expert or authority on a particular engineering/technical field or discipline. Represents PG&E and speaks at conferences or seminars. May write articles in trade journals. Influences industry developments.
Supervisory Responsibility	None	None	None	None	Provides leadership to lower level peers. May have one to two direct reports.
Education Minimum	Bachelor's degree in Engineering with emphasis in a discipline related to assignments. (i.e., mechanical, civil or electrical engineering, etc.)	Bachelors' degree in Engineering with emphasis on related/assigned discipline (i.e., mechanical, civil or electrical engineering, etc.)	Bachelors' degree in Engineering with emphasis on related/assigned discipline (i.e., mechanical, civil or electrical engineering, etc.)	Bachelors' degree in Engineering with emphasis on related/assigned discipline (i.e., mechanical, civil or electrical engineering, etc.)	Bachelors' degree in Engineering with emphasis on related/assigned discipline (i.e., mechanical, civil or electrical engineering, etc.)
Desired	Masters degree	Masters degree	Masters degree	Masters degree	Masters degree
License/Certification Minimum					
Desired	PE	PE	PE	PE	PE
Experience Minimum	0 – 2 years related experience	3 years of related experience	5 years of related experience	7 years of related experience	10 years related experience
Desired					
Knowledge, Skills, Abilities (Desired)	<ul style="list-style-type: none"> Basic knowledge in engineering research and testing concepts, theories, practices, methods, techniques. 	<ul style="list-style-type: none"> Proficiency in engineering research and testing concepts, theories, practices, methods, techniques. Thorough investigative skills 	<ul style="list-style-type: none"> Broad understanding of engineering research and testing concepts, theories, practices, methods, techniques in area of specialty as well as general understanding 	<ul style="list-style-type: none"> Expertise in engineering research and testing concepts, theories, practices, methods, techniques in area of specialty. May have thorough understanding of other 	<ul style="list-style-type: none"> Deep expertise in one or more specific areas of engineering research and testing concepts, theories, practices, methods, techniques. Breadth of knowledge in several other



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	<ul style="list-style-type: none"> • Basic investigative skills. • Communication and interpersonal skills. • Good customer service orientation. • Understanding of quality assurance and control concepts and practices. • Good organizational and analytical problem solving skills. • Collaboration and teamwork. 	<ul style="list-style-type: none"> • Good customer service orientation. • Understanding of quality assurance and control concepts and practices. • Good analytical and organizational skills. • Communication, interpersonal and team collaboration skills. • Basic team leadership and project management skills. • Understanding of customer service concepts. 	<ul style="list-style-type: none"> • of other engineering specialties. • Understanding of quality assurance and control concepts and practices. • Strong investigative and analytical problem solving skills • Excellent organizational and project management skills. • Competency in team leadership. • Communication, presentation and teamwork skills. • Proficiency in team leadership and project management. • Good customer service orientation. 	<ul style="list-style-type: none"> • engineering specialties. • Knowledge of current and new technologies used in technical testing in area of specialty. • Thorough understanding of quality assurance and control concepts and practices. • Expertise in investigative and analytical problem solving methods and techniques. • Excellent organizational skills to effectively monitor and lead technical tests. • Excellent communication and presentation skills to effectively deliver findings and recommendations to clients of various levels. • Project management and team leadership skills. • Strong customer service orientation, adapting project plan and team leadership to customer needs as appropriate. 	<ul style="list-style-type: none"> • engineering disciplines, or company business operations. • Expertise in current and new technologies used in technical testing in area of specialty. • Depth and breadth of knowledge of quality assurance and control concepts and practices. • High level and effective project management and team leadership skills to lead the most complex and high impact projects. • Expertise in investigative and analytical problem solving methods and techniques. • Excellent organizational skills to effectively monitor and lead technical tests. • Excellent communication and presentation skills to effectively deliver findings and recommendations to senior leadership. • Strong customer service orientation, adapting project plan and team leadership to customer needs as appropriate.
Supplemental Information	Travel required; frequency depends on assignment (10% -75%).				