Functions and Disciplines Definitions (continued)

<u>Code</u>

Function

AIT

IT Administration (continued)

Discipline

AIT080

IT Training/Documentation

- . Develops, coordinates and conducts IT training, educational and orientation programs for users
- Develops and maintains documentation of information technology systems and applications and coordinates incorporation of documentation within applications (e.g., online help)
- Develops, implements and/or approves training and documentation policies, standards and procedures
- Maintains records and prepares documentation of training programs, scheduling, employee attendance and training program effectiveness

AIT090

Voice Communications

- Performs technical analysis of software, hardware and transmission systems for voice communications
- Ensures that remote hardware and communication facilities have procedures for installation and support of voice communications systems
- Collaborates with internal and external customers and vendors to determine voice communications system requirements

AIT100

IT Asset Management

- Establishes and implements hardware and software acquisition, protection, maintenance and retention
 policies, standards and procedures that are aligned with IT standards and strategy
- Investigates available hardware and software products; evaluates and recommends products based on user requirements
- Coordinates with the procurement function to interview, select and negotiate with hardware and software vendors in order to purchase the appropriate equipment at the lowest cost
- Reviews licenses and/or contracts to ensure that hardware and software equipment is covered by the contract and properly documented

AIT110

IT Outsourcing Management

- Outsources IT activities in order to lower information technology costs and enable the organization to focus on its core business operations
- Develops and implements outsourcing policies, standards and procedures that are aligned with the organization's IT standards and strategy
- Develops and administers contracts with outsourcing services (e.g., data center operations, help desk) in coordination with the organization's procurement and legal functions
- Analyzes and reports on outsourcing vendor performance
- Manages the organization's relationship with outsourcing vendors and ensures that the outsourcing vendor's performance meets the organization's requirements

AIT130

IT Performance Management

- Monitors and measures relevant performance metrics to assess the performance of IT resources
- Devises measures and targets to assess and optimize the performance of IT functions, services, projects and any related improvement initiative
- Identifies and analyzes performance measures and metrics, develops and maintains balanced scorecards and dashboards, and evaluates and monitors performance in IT-related areas
- May include network performance management, application performance management (APM), (operating) system performance management (physical and virtual/cloud) and business transactions performance

Functions and Disciplines Definitions (continued)

Code

Function

AIT

IT Administration (continued)

Discipline

AIT560

Critical Infrastructure Protection Compliance Audit

- Develops and implements programs to evaluate adherence to North American Electric Reliability Corporation Critical Infrastructure Protection (CIP) compliance efforts to improve physical and cyber-security for the electric power system as it relates to reliability
- Ensures that identified critical cyber asset systems comply with CIP standards and internal policies to prevent incidents that may compromise or degrade the infrastructure
- Utilizes appropriate CIP tools and procedures for infrastructure analysis, assessment, remediation, indications, warnings, mitigation, response and reconstitution activities that occur before, during and after events which may result in infrastructure compromise or disruption
- Responsibilities are within the IT Administration Function but are not described in other Discipline summaries

AIT999

IT Administration - No Applicable Discipline

 Responsibilities are within the IT Administration Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

<u>Code</u> <u>Function</u> **ALG Legal**

Provides legal advice and services on issues concerning the rights, obligations and privileges of the organization. Represents the organization to customers, suppliers, competitors and government agencies. Provides resolution of business or technical issues by identifying legal solutions and recommending a course of action. Examines legal data to determine advisability of defending or prosecuting lawsuits.

Applicable Career Bands

M (Supercisory, Management)

Particles and

Discipline

ALG000 Legal Generalist/Multidiscipline

- Provides a full range of legal advice and services
- Responsibilities are within the Legal Function as a generalist or in a combination of Disciplines

ALG005 Corporate/Company Secretary

- Prepares and maintains official corporate notices, records and actions of the Board of Directors and ensures compliance with statutory reporting requirements
- Arranges Board of Directors meetings, prepares minutes of Board meetings and communicates with stockholders with regard to general corporate policy and annual meetings
- May monitor and develop procedures set in place by the Board of Directors/executive team regarding corporate governance, follow developments affecting corporate governance and make recommendations to the Board on development of best practices

ALG010 Contract Law

- · Reviews, drafts and negotiates a broad range of commercial contracts
- Ensures that contracts are in compliance with legal, regulatory and organization policies
- Monitors the contract process to assure compliance with the organization's contractual guidelines, satisfaction of customer specifications and adherence to organization policy
- May act as a contract liaison between the organization and customers/vendors, including participation in precontract discussions, contract negotiations and contract changes
- Assesses commercial risk of contracts

ALG050 Merger and Acquisition Law

- · Provides legal advice to the organization on mergers and acquisitions
- Participates in negotiations on behalf of the organization regarding mergers, acquisitions and divestitures
- Works closely with Strategic Planning/Corporate Development

ALG065 Corporate Governance

- Creates efficient monitoring systems and incentives to ensure that executive behavior aligns with the interests of stakeholders
- Plans and monitors relationships among stakeholders, Board of Directors, executive officers, independent
 auditors and the Board Audit Committee to ensure compliance with rules and policies of the organization
- Identifies and resolves issues and recommends preventive and corrective measures

ALG070 Regulatory Compliance Law

- Interprets laws and government regulations affecting the operation of the organization
- Implements policies and procedures to ensure organization compliance with regulations and regulatory reporting requirements
- Investigates and resolves compliance problems and responds to questions from internal sources and regulatory agencies

Functions and Disciplines Definitions (continued)

Code Function

ALG Legal (continued)

Discipline

ALG100 IS and Cyber Security Law

- Focuses on information technologies and communication laws and regulations
- Advises and represents the organization in legal issues concerning information systems (IS) and cyber security risks and violations
- Specializes in IS and cyber defense, cybercrime (e.g., hacking) and personal data

ALG999 Legal - No Applicable Discipline

Responsibilities are within the Legal Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

Code Function

ALS Legal Support

Provides support for a variety of law-related activities that do not require a law degree, including legal or factual research, contract administration, document preparation and analysis, citation checking and trial preparation.

Applicable Career Bands

M (Suretelean Management)

Protestional)

Uliforences Schools

Discipline

ALS000 Legal Support Generalist/Multidiscipline

- Provides support for a variety of law-related activities that do not require a law degree, including legal or factual research, contract administration, document preparation and analysis, citation checking and trial preparation
- Responsibilities are within the Legal Support Function as a generalist or in a combination of Disciplines

ALS010 Paralega

- · Performs a variety of law-related tasks under the direction of the organization's attorneys
- · Conducts legal research, drafts legal documents and performs other related duties
- Has or is working towards a paralegal designation

ALS020 Contract Administration

- Participates in the development and fulfillment of contract requirements in the purchase or sale/delivery of equipment, materials, products or services
- · Evaluates contract compliance and advises others on contractual rights and obligations
- · Requests or approves amendments to contract terms or contract extensions
- Prepares bids or requests for proposals (RFPs), including specifications and requirements; negotiates contract terms and participates in the determination of acceptable bids

ALS040 Legal Secretarial/Administrative Assistance

- Performs secretarial duties that require knowledge of legal procedures and terminology
- · Prepares papers and correspondence such as contracts, briefs, summonses, complaints and motions
- May maintain files and calendars, schedule appointments, schedule meetings and make travel arrangements

ALS999 Legal Support - No Applicable Discipline

Responsibilities are within the Legal Support Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

<u>Code</u>

Function

AMK Marketing

Markets the organization's products, brands and/or services. Designs, develops and implements communication programs to advertise the organization's products/brands/services using media (e.g., print, broadcast, digital), events and sales promotions. Develops and evaluates pricing strategies and structures. Designs and maintains websites to promote and sell the organization's products through the Internet.

Applicable Career Bands

Mil-Busineson Managements

Participation -

U.R. surve Barnett

Discipline

AMK000

Marketing Generalist/Multidiscipline

- Designs, develops and implements marketing programs and/or pricing strategies to support the organization's products, services or market sector
- Uses specific marketing strategies and media (e.g., print, broadcast, digital) to launch and position products and services in a sector
- Identifies and implements marketing strategies and programs in collaboration with sales and technical teams
- Responsibilities are within the Marketing Function as a generalist or in a combination of Disciplines

AMK020

Advertising/Marketing Communications

- Coordinates the development of advertising/marketing communications materials by creative design and creative writing services to effectively represent the products, services, brands and/or the organization to customers and prospects
- Applies various communication strategies to create an impression, raise awareness, and encourage a
 preference and response by the target audience for the organization and its products, services and brands
- Develops and coordinates multimedia packages (e.g., letters, brochures, video, point-of-purchase displays)
- May involve use of sponsorship, events and sales promotions

AMK025

Advertising

- Promotes the sale of the organization's products, services, brands and/or the organization through various advertising media (e.g., print, broadcast, digital) and other methods
- Oversees creation and placement of advertisements using various media and coordinates efforts with advertising agencies
- Designs, develops and implements advertising/promotion policies and monitors results
- Coordinates with internal clients (e.g., product/brand managers, business unit managers) to source and produce advertising materials

AMK030

Market/Segment Development

- Identifies new business opportunities and creates appropriate business plans
- Identifies new market opportunities (i.e., products/services, technologies, markets)
- Monitors organization's market share and competition

AMK040

Market Research/Intelligence

- Performs analyses and prepares forecasts and recommendations in the areas of product preferences, sales coverage, market penetration, market practices and sales trends
- · Researches market conditions to determine potential sales of a product

Functions and Disciplines Definitions (continued)

Code

Function

AMK

Marketing (continued)

Discipline

AMK041

Customer Insight and Research Generalist/Multidiscipline

- Undertakes detailed quantitative analyses of consumer databases and external data sources and develops a data driven insight into customers, their behaviors, buying preferences and patterns
- Identifies and communicates initiatives that enhance the positioning and offering of products and services
 to customers
- Performs multiple functions of analytics, modeling, data management or reporting solutions

AMK042

Customer Data Management

- Develops and maintains customer information database (usually specific data marts) to support analysis, application development and data driven marketing techniques
- Manages information security, data protection, data quality and exchange
- Liaises with the IT and other data management functions as required both internally and externally

AMK043

Customer Research Analytics and Modeling

- Undertakes detailed analysis of data and mining for insights and employs modeling techniques that offer actionable marketing benefits informing the organization's or client's strategy
- Integrates data analysis and models into commercial systems which support marketing and product management/development decision making
- Develops new analysis methodologies and influences design of technologies supporting future analytical capabilities

AMK050

Product Management

- Develops and directs marketing programs for a significant product or product category
- Compiles and evaluates research on the market's product requirements and identifies enhancements to current features and functionality
- Establishes marketing strategies, including product direction, advertising, packaging, pricing, expense budgets, profit plans and future product development, to manage a product or product category's life cycle
- Interfaces with engineers, designers, suppliers and customers to develop product requirements and specifications
- Prepares and coordinates product introductions and updates

AMK060

Direct Marketing

- Markets the organization's products and services using customer marketing databases
- · Creates direct mail marketing plans, targeting specific market segments with specialized offers
- Collaborates with market research in developing response models and other database improvements
- May conduct data mining analyses of customer data to develop marketing trends

AMK070

Brand Marketing

- · Promotes and maintains the brand image at local, national or international levels
- Coordinates marketing strategies, including packaging, pricing, expense budgets, advertising and promotion of the brand
- · Develops associated advertising campaigns for the brand

AMK080

Pricing

- Develops pricing strategies to meet customers' needs while providing a profit for the organization
- Determines core business costs of service in support of pricing/tariff development
- · Designs, implements and maintains pricing infrastructures
- Evaluates effectiveness of pricing strategies and modifies pricing structures as needed
- Provides reporting and documentation of pricing structures and serves as the point-of-contact for pricing inquiries from internal sales department, but not customers

Functions and Disciplines Definitions (continued)

Code

Function

AMK

Marketing (continued)

Discipline

AMK090

Marketing Program Management

- Designs, develops and coordinates marketing programs for various service offerings
- Develops marketing plans for program implementation, monitoring and evaluation

AMK120

Digital Content Management/Production

- Ensures that the organization's websites provide up-to-date and comprehensive product/service information that is easily available to existing and potential customers
- Establishes and maintains an information architecture that is well organized, user-friendly, and presents a
 consistent corporate look and feel
- Coordinates the development, integration, format design and release of content from writers and designers
- Analyzes the use of website content and design; takes steps as necessary and affordable to improve information content architecture and design
- Employs focus groups, surveys, web statistics, email, etc., to elicit feedback and improve website content
 and organization

AMK999

Marketing - No Applicable Discipline

· Responsibilities are within the Marketing Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

<u>Code</u> <u>Function</u>

AMS Customer Support/Operations

Provides new and existing customers with the best possible service in relation to billing inquiries, service requests, suggestions and complaints. Includes Call Center - Outbound, Call Center/Customer Service and e-Commerce Customer Service.

Applicable Career Bands

M (Sucarcassy Niamacament)

Pallioners.com

Q. Buchess Suppost

Discipline

AMS000

Customer Support/Operations Generalist/Multidiscipline

- Provides new and existing customers with the best possible service in relation to billing inquiries, service requests, suggestions and complaints
- Resolves customer inquiries and complaints fairly and effectively
- Provides product and service information to customers and identifies upselling opportunities to maintain and increase income streams from customer relationships
- Recommends and implements programs to support customer needs
- Responsibilities are within the Customer Support/Operations Function as a generalist or in a combination of Disciplines

AMS010

Customer Service

- · Provides customer services relating to sales, sales promotions, installations and communications
- Ensures that good customer relations are maintained and customer claims and complaints are resolved fairly, effectively and in accordance with the consumer laws
- Develops organization-wide initiatives to proactively inform and educate customers
- Develops improvement plans in response to customer surveys

AMS020

Customer Contact Center Generalist/Multidiscipline

- Provides timely responses to customer inquiries by telephone and/or email in an in- or outbound service center, consistent with service and quality standards
- Processes customer orders, bills and accounts, and applications for service, maintenance and termination
- Troubleshoots and resolves customer complaints

AMS030

High Volume Customer Billing

- Prepares, generates, prints, records and mails customer bills for monthly services, such as energy and telecommunications, using an automated high volume billing system
- Ensures that the automated billing system is operated and maintained in a manner that efficiently produces accurate bills
- Prepares daily, monthly and other periodic billing summary reports and financial statements
- Maintains, monitors and analyzes account records

AMS040

Customer Billing Resolution

- Investigates, analyzes, negotiates, resolves, documents and reports on consumer and commercial billing issues and complaints against the organization
- Identifies solutions that address billing issues and presents appropriate resolution options to customers
- · Negotiates and authorizes billing settlements within established limits and adjusts customer accounts

AMS500

Customer Billing Systems Planning and Analysis

- Develops business cases for and proposes cost-effective improvements to customer billing and collection software to maximize system effectiveness
- Works closely with information management, accounting and legal staff to ensure systems meet internal and external standards and requirements
- Ensures that billing systems are compliant with regulations established by rate-setting, taxing and postal authorities
- Maintains extensive knowledge of customer billing government regulations

Functions and Disciplines Definitions (continued)

Code

Function

AMS

Customer Support/Operations (continued)

Discipline

AMS530

Utilities Customer Support

- Process all types of service orders (establishing/discontinuing utilities service, ordering/repairing equipment, scheduling service calls)
- Addresses customer service questions related to products and services, billing, collections, deposits and outages
- May provide customers with information regarding energy usage and ways to increase energy efficiency and make recommendations regarding the organization's products and services

AMS999

Customer Support/Operations - No Applicable Discipline

 Responsibilities are within the Customer Support/Operations Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

Code Function

AMT Technical Customer Support

Provides post-sale technical support services to customers, including installation, troubleshooting, problem resolution and maintenance. Responds to customer questions regarding operation and malfunctions. Advises customers on preventive maintenance and configuration adjustments to improve product performance and customer satisfaction.

Applicable Career Bands

M (Supervisory/Management)

PiProfessional:

Tyleshessal Support

Discipline

AMT000

Technical Customer Support Generalist/Multidiscipline

- Provides post-sale technical support services to customers, including installation, troubleshooting, problem resolution and maintenance of products and services
- Responsibilities are within the Technical Customer Support Function as a generalist or in a combination of Disciplines

AMT999

Technical Customer Support - No Applicable Discipline

 Responsibilities are within the Technical Customer Support Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

Code

Function

A00

Outsourced/Contract Manufacturing

Identifies, hires and oversees contract manufacturing vendors. Ensures that outsourced manufacturing operations meet established standards and specifications for quality and timeliness.

Applicable Career Bands

M (Supantically Elanogement)

Parkstern (1)

Tyliacheka, Pappesti U (Series-3 Sappest)

Discipline

AOO000

Outsourced/Contract Manufacturing Generalist/Multidiscipline

- Develops and maintains relationships with outsourced/contract manufacturers and suppliers of associated critical business services
- Monitors outsourced/contract manufacturers and suppliers methods of operation to ensure that
 merchandise is produced according to established schedules, volumes, costs and guality standards
- Works with merchandising, technical design and sourcing to establish and maintain policies and standards for specifications, sourcing and contract manufacturing
- Estimates manufacturing costs, determines time standards, and recommends product and process requirements for new and existing products
- · Maintains records and reporting systems for coordination of contract manufacturing operations
- Responsibilities are within the Outsourced/Contract Manufacturing Function as a generalist or in a combination of Disciplines

AOO999

Outsourced/Contract Manufacturing - No Applicable Discipline

 Responsibilities are within the Outsourced/Contract Manufacturing Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

Code Function

AOM Manufacturing/Operations

Oversees manufacturing and/or production operations, including assembly, machinery, processing and/or packaging. Sets production schedules based on product introduction, equipment efficiency, materials supply, staffing resources and volume required to meet demand and to ensure maximum production quantity and quality.

Applicable Career Bands

Micenett sirkMikicarkisgo3) M

P (Professional)

T (Technical Support) W (ProductionsSanual Labor)

Discipline

AOM000

Manufacturing/Operations Generalist/Multidiscipline

- Manufactures sufficient quantities of quality products at or below budgeted production costs in order to meet marketplace demand
- Sets up equipment operation feed, speed and temperature
- Follows established procedures for operating various conventional and/or CNC (computerized numerical
 control) manufacturing equipment for tasks such as cutting, punching, forming, drilling, tapping, turning,
 milling and stamping to fabricate, form or shape manufactured parts, tools or parts assemblies from raw
 materials
- Selects and measures raw materials and parts to specifications to prepare for production processing
- Resolves issues related to the organization's production, machinery, processing and/or packaging Operations
- Responsibilities are within Manufacturing/Operations Function as a generalist or in a combination of Disciplines

AOM500

Refinery Operations Generalist/Multidiscipline

- Plans, directs and controls refinery/manufacturing/plant activities within the organization
- Conducts operating activities to ensure approved products are manufactured/produced on schedule and within quality standards and cost objectives
- Monitors refining/manufacturing/production capacity and inventory levels
- Coordinates with engineering, maintenance, and other refining/manufacturing/plant support functions

AOM510

Refinery Production Planning and Scheduling

- Plans and prepares refinery production schedules and departmental workflows based on analyses of inventory, demand, market pricing and plant availability in order to optimize utilization and maximize profitability
- Establish sequence and lead time of each refinery production operation
- Liaises with supply and distribution department and analyzes refinery/plant capacity and production requisitions to determine manufacturing processes and required resources
- · Prepares production reports

AOM515

Refinery Production Operations

- · Operates the refinery production process in a safe and economical way
- Monitors meters, gauges, valves, flow ratios, temperatures, pressures, and related controls and guidelines to ensure adherence to the refinery's production/process specifications
- Reports any malfunctions or abnormalities and makes minor adjustments and repairs to equipment
- Performs all work in accordance with established safety procedures"
- Operates the refinery production process in a safe and economical way

AOM999

Manufacturing/Operations - No Applicable Discipline

 Responsibilities are within the Manufacturing/Operations Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

Code

Function

APA

Plant Administration

Responsible for two or more nontechnical plant support functions such as Accounting, Human Resources, Training, Payroll, Document Control/Records Management, Materials Management, Security and Facilities Management.

Applicable Career Bands

羅 globert sory Manager enti-

Discipline

APA000

Plant Administration Generalist/Multidiscipline

- Develops, coordinates, implements and supervises nontechnical plant support activities such as Accounting/Finance, Personnel Administration, Payroll, Process Control Computer Systems, Document Control/Records Management, Materials Management, Training, and Facilities Management Functions
- May also be responsible for IT, procurement, and business-planning activities

APA999

Plant Administration - No Applicable Discipline

 Responsibilities are within the Plant Administration Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

Code Function

APM Project/Program Management

Plans, monitors and manages internal projects from initiation through completion. Secures required resources and uses formal processes and tools to manage resources, budgets, risks and changes. Manages projects to ensure on-time completion according to specifications and within budgeted costs. At the higher levels, incumbents manage large multifaceted projects; at lower levels, incumbents may be concerned with clearly identifiable elements or functions within a larger project. Typically incumbents matched to this function are working towards or have achieved certification in project management.

Applicable Career Bands

M Barreson Bustrement

Participant Comment

U.S. amas Segment

Discipline

APM000

Project/Program Management Generalist/Multidiscipline

- Plans, monitors and manages internal projects from initiation through completion
- Leads or coordinates project planning, resourcing, staffing, supply and subcontract management, progress reporting, troubleshooting and people management
- Ensures project results meet requirements regarding technical quality, reliability, schedule and cost
- Monitors performance and recommends schedule changes, cost adjustments or resource additions
- Responsibilities are within the Project/Program Management Function as a generalist or in a combination of Disciplines

APM010

Information Technology Project Management

- Manages all aspects of a diverse IT project or multiple IT projects, typically involving multiple Disciplines in the IT Function
- Utilizes expertise and leadership skills to direct staff and to resolve issues to ensure project goals and requirements are met
- At senior levels may employ Scrum Master techniques in Agile development practices

APM020

Facilities Construction Project Management

- Leads or coordinates construction projects such as developing a new facility; the addition, expansion or
 extension of an existing facility; or renovation/alterations to a facility in collaboration with project team,
 construction site and management
- Develops assignments, timetables and responsibilities for team members for the duration of the project
- Organizes and directs construction personnel and ensures that materials and equipment resources are delivered on time

APM027

Construction Project Control Services

- Collaborates with project managers on the development and review of project plans, estimates, costs, contracts, schedules and resources
- Develops and implements project controls and monitoring procedures to ensure the achievement of project scope, schedule and cost objectives
- Collects, analyzes and reports on project data and costs from various stakeholders (e.g., engineering, procurement, construction and accounting)

APM030

Engineering Project Management

- Leads or coordinates project planning, resourcing, staffing, progress reporting, people management and troubleshooting for engineering projects
- Ensures project results meet requirements regarding technical quality, reliability, schedule and cost

APM510

Major Construction Project Management

- Leads major construction project planning, resourcing, staffing, supply and subcontract management, progress reporting, troubleshooting and people management
- Develops assignments, timetables and responsibilities for team members
- Ensures that materials and equipment resources are delivered on time
- Interfaces between the project team, construction site and management

Functions and Disciplines Definitions (continued)

Code

Function

APM

Project/Program Management (continued)

Discipline

APM530

Electric Transmission and/or Distribution Project Management

- Takes responsibility for projects involving transmission systems that carry high-power (typically above 34.5 KV) electricity from generating plants to substations and/or distribution systems that carry electricity (typically 34.5 KV and below) from substations to final consumers
- Typical projects include substation construction, generator interconnection, new transmission line construction, rebuilding and replacing switching equipment, breakers, transformers, GSUs (generator stepup transformers), or rebuilding and installing new transmission lines

APM540

Gas Transmission and/or Distribution Project Management

- Takes responsibility for projects involving gas transmission systems that transport natural gas by pipeline, including incidental storage and/or gas distribution systems that transport natural gas to the final consumer
- Typical projects include system expansion, installation and construction of pipelines, compression, storage, measurement, and meter and pump station facilities

APM550

Fossil Power Generation Project Management

- Takes responsibility for projects involving fossil power generating units that use coal, oil or natural gas
- Typical projects include plant renovation, modification or rehabilitation; replacement of the turbine, generator or boiler feed-pump; installation of gas recirculation systems; SCR (selective catalytic reduction) systems; or wet and dry scrubbers and flue gas desulphurization

APM560

Hydroelectric Power Generation Project Management

- Takes responsibility for projects involving hydroelectric power generating units that use the force of water being released from a reservoir through a dam
- Typical projects include modernization, automation and rehabilitation of the generator, spillway gate, headway or water passage, replacement of the turbine runner or exciter, fire protection system upgrades, and aeration system installation or improvements

APM570

Nuclear Power Generation Project Management

- Takes responsibility for projects involving nuclear power generating units that use energy produced by splitting uranium atoms (i.e., fission)
- Typical projects include construction design, construction studies, engineering, evaluation, NRC (Nuclear Regulatory Commission) submittals, replacement of head or steam generator, and outage-related projects

APM999

Project/Program Management - No Applicable Discipline

 Responsibilities are within the Project/Program Management Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

Code

Function

AQY

Quality Assurance Methods

Develops and implements programs to establish and maintain quality standards of existing products and services, as well as developing programs to focus employees on quality improvement. Develops policies, procedures and methods to check product, material, components and/or operational quality and improve same.

Applicable Career Bands

M (Supervisors d'absercation)

Parassocia.

U(Business Sugmail)

Discipline

AQY000

Quality Assurance Methods Generalist/Multidiscipline

- Develops policies, procedures and methods to evaluate and improve the quality of products, materials, components and/or operations
- Develops, assures and maintains the quality of products and processes, including standard procedures (e.g., ISO 9001:2000, ISO 14000 family of standards), quality audits/review, Taguchi methods, process reengineering, etc.
- Responsibilities are within the Quality Assurance Methods Function as a generalist or in a combination of Disciplines

AQY010

Quality Systems/Customer Satisfaction

- Implements the Total Quality Management (TQM) philosophy
- Measures customer satisfaction and takes action as appropriate
- Implements "just in time" techniques

AQY020

Business Process Improvement

- Analyzes and measures the effectiveness of existing business processes and develops sustainable, repeatable and quantifiable business process improvements
- Researches best business practices within and outside the organization to establish benchmark data
- Collects and analyzes process data to initiate, develop and recommend business practices and procedures that focus on enhanced safety, increased productivity and reduced cost
- Determines how new information technologies can support reengineering business processes
- May specialize in one or more of the following areas: benchmarking, business process analysis and reengineering, change management and measurement, and/or process-driven systems requirements

AQY030

Six Sigma Process

- Develops, implements and sustains process improvement initiatives utilizing Six Sigma methodologies
- Drives process improvement initiatives throughout the organization, often extending them to suppliers and customers
- Typically requires or is working towards Six Sigma certification (i.e., Master Black Belt, Black Belt)

AQY040

Supplier Quality Assurance

- Collaborates with suppliers to assure the quality of their products, materials, components and/or operations
- Monitors supplier performance and supports efforts to develop and implement changes to improve the production process
- Follows up with suppliers on quality deviations and ensures that solutions are identified and implemented

AQY999

Quality Assurance Methods - No Applicable Discipline

 Responsibilities are within the Quality Assurance Methods Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

<u>Code</u>

Function

ARE Real Estate and Facilities

Plans, controls and directs real estate activities such as site location and acquisition, right-of-way negotiation, building and land acquisition and disposition, space leasing, property management and maintenance of properties.

Applicable Career Bands

M (Separvisory Management)

Pirional Royal

(thorque segment). U

Discipline

ARE000

Real Estate and Facilities Generalist/Multidiscipline

- Plans, controls and directs real estate activities; identifies, acquires or leases land and buildings for the organization's operations
- · May negotiate right-of-way easements
- Ensures the optimal utilization of the organization's facilities
- Disposes of facilities that are no longer required by the organization
- Responsibilities are within the Real Estate and Facilities Function as a generalist or in a combination of Disciplines

ARE010

Real Estate/Property Management

- Manages real estate to ensure maximum return and profitability
- Advises and assists with site selection, site acquisition, leasing space and other functions relating to land acquisition, negotiation and sale

ARE020

Facilities Management

- Ensures the optimal utilization of the organization's facilities
- Assesses and evaluates the physical space requirements of the organization and recommends plans to meet needs
- Ensures proper functioning of facilities through ongoing inspection and maintenance

ARE040

Land/Right-of-Way

- · Obtains right-of-way easements for overhead or underground use
- Checks property titles to determine ownership, negotiates easements and price to be paid, prepares assessments and arranges payment to grantor
- Assists in land acquisition for building facilities by obtaining land options
- Maintains permits and inspects completed work
- May coordinate acquisition activities with municipalities, governmental and regulatory agencies to ensure compliance with acquisition and easement requirements

ARE500

Conduit Joint Use Agreement Coordinator

- Administers joint use agreements between the utility and other organizations that use conduit (utility poles, trenches, etc.)
- Maintains joint use conduit billing, receivables and accruals
- Monitors joint use conduit permit process and validates locations, attachments and ownership
- Coordinates with electrical contractors and inspectors

ARE550

Land Management

- Conducts various land management activities, including lease negotiation, acquisition, contracting and administration
- Oversees surface or subsurface/mineral ownership/lease rights
- Liaises with industry contacts and identifies business development initiatives

Functions and Disciplines Definitions (continued)

Code Function

ARE Real Estate and Facilities (continued)

Discipline

ARE551 Land Administration

- Responsible for ensuring the proper documentation of all company land assets and associated contracts
- Puts forward recommendations with respect to land tenure strategy, land title problems, contract interpretation or land information systems

ARE552 Land Contracts

• Responsible for preparing and administering contracts and agreements for farm-outs, farm-ins, poolings, options, clarification, notice of assignment, purchase and sale conveyancing in compliance with regulations

ARE553 Land Negotiations

- Responsible for conducting studies and making recommendations concerning the negotiation of oil and gas deals, including farm-ins, farm-outs, pooling agreements, joint ventures and other agreements
- Serves as the organization's representative in significant land negotiations and ensures that participants fulfill their obligations

ARE999 Real Estate and Facilities - No Applicable Discipline

 Responsibilities are within the Real Estate and Facilities Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

Code Function

ARS Research Science

Performs basic theoretical and experimental scientific and technological investigation directed toward the acquisition of new knowledge. Research activities are typically outside the normal planning horizon of the organization's business units and encompass such endeavors as enlarging and systematizing the knowledge base in science and technology, and understanding the limitations of technology and how to apply its capabilities. Publishes activities, findings and conclusions in recognized scientific publications and presents same at appropriate scientific conferences and forums.

Applicable Career Bands

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Discipline

ARS000

Research Science Generalist/Multidiscipline

- Performs basic theoretical and experimental scientific and technological investigation directed toward the acquisition of new knowledge
- Prepares comprehensive documented observations, analyses and interpretations of results, including technical reports, summaries, protocols and quantitative analyses
- Publishes activities, findings and conclusions in recognized scientific publications and presents same at appropriate scientific conferences and forums
- Documents research leading to patent disclosure or technical and/or scientific advancement
- Responsibilities are within the Research Science Function as a generalist or in a combination of Disciplines

ARS999

Research Science - No Applicable Discipline

 Responsibilities are within the Research Science Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

Code

Function

ARU Research Science Support

Conducts analytical, experimental, investigative and other fact-finding work using standard scientific approaches and techniques to support principal scientific researchers. Participates in research experiments in the physical, health, life or computer sciences, or mathematics or statistics. Observes, calculates, records and interprets the results of tests and analyses, and designs, constructs, modifies, calibrates, operates and maintains equipment used for these purposes or devised as a result of the work.

Applicable Career Bands

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Discipline

ARU000

Research Science Support Generalist/Multidiscipline

- Conducts analytical, experimental, investigative and other fact-finding work to support principal scientific research
- Observes, calculates, records and interprets the results of tests and analyses and constructs, modifies and calibrates equipment used for these purposes or devised as a result of the work
- Interprets parts of the data and provides input into related papers and project narratives
- Modifies, refines, adapts or develops lab techniques and analytical procedures to meet specific experimental goals
- Responsibilities are within the Research Science Support Function as a generalist or in a combination of Disciplines

ARU999

Research Science Support - No Applicable Discipline

 Responsibilities are within the Research Science Support Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

<u>Code</u>

ASC Supply Chain and Logistics

Function

Performs supply chain and logistics functions, which may include, but are not limited to, material procurement, production planning, inventory control, outsourcing, vendor selection and distribution. Creates integrated processes among internal functions such as operations, purchasing and logistics, and outside suppliers. Focuses resources on continuous improvement of the movement of materials through various production processes and establishes key performance metrics and benchmarks relating to supply chain planning/forecasting to measure actual performance against goals on a regular basis. Promotes alignment by understanding and communicating customer needs and requirements throughout the organization.

Applicable Career Bands

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Discipline

ASC000

Supply Chain and Logistics Generalist/Multidiscipline

- Performs supply chain and logistics functions such as material procurement, production planning, inventory control, outsourcing, vendor selection and distribution
- Creates integrated processes among internal functions (e.g., operations, purchasing and logistics) and outside suppliers
- Responsibilities are within the Supply Chain and Logistics Function as a generalist or in a combination of Disciplines

ASC012

Supplier Development

- Coordinates the development of new products, materials and/or services with suppliers
- Provides specifications and collaborates with suppliers on the organization's technical, operational and quality requirements
- · Collaborates with suppliers on technical aspects of development work such as selecting materials
- Administers a roster of approved suppliers

ASC013

Supplier Diversity Program Management

- Develops, implements and coordinates a strategic sourcing/supplier diversity program to ensure equal opportunity in the organization's daily and strategic procurement activities
- Establishes and maintains an extensive network of diverse suppliers for sourcing opportunities;
 participates in diversity councils and supplier diversity outreach events
- Develops and maintains goals and metrics to measure and report activity, including contracts and spend with diverse suppliers
- Administers all related programs to promote and encourage procurement activity among diverse suppliers such as minority and women-owned businesses

ASC020

Materials Management

- Coordinates incoming and outgoing movement and storage of raw materials, finished products and parts
 that include functions such as warehousing, shop and delivery services to ensure material availability and
 delivery when needed to meet production schedules
- Compiles data on order volume, production schedules and forecasts and applies statistical methods to estimate future materials requirements

ASC022

Forklift Operations

 Transports merchandise using a forklift truck or reach truck to designated locations within the warehouse, which may include loading, unloading and order picking

Functions and Disciplines Definitions (continued)

Code Function

ASC Supply Chain and Logistics (continued)

Discipline

ASC030

Logistics

- Coordinates inbound and outbound logistical operations, including inventory management, warehousing and transportation to ensure sufficient supply of goods and products
- Controls the commercial impact of the complete range of activities from receiving, locating and dispatching, sourcing, purchasing and optimizing inventory levels
- Administers an effective system that meets the organization's inventory control needs through efficient transportation of raw materials, component parts and/or finished goods

ASC040 Warehousing

- Administers and operates the organization's warehouses, including processing, packaging and storage of supplies, materials and equipment
- · Accounts for all materials and supplies in the stores facilities; audits goods received into warehouse
- Oversees receipt, storage and shipment of materials, and related reporting in accordance with established procedures
- Prepares and coordinates schedules for shipping and receiving materials to control the flow of goods and regulate warehouse space
- Ensures the effectiveness of operating procedures, space utilization, and maintenance and protection of facilities and equipment

ASC050 Transportation

- Analyzes transportation and distribution systems and procedures to ensure the efficient and economical delivery of the organization's products
- Reviews proposals and makes recommendations for modifications in rates and transportation regulations
- Evaluates freight classifications, tariff rates and operating efficiency to ensure the proper delivery
 of products
- Plans and coordinates fleet operations, including acquisition, scheduling, maintenance service and repair, and disposal of trucks, and hires common carriers (third-party transportation companies) as appropriate

ASC052 Transportation - Delivery Vehicle Operations Generalist/Multidiscipline

- Operates trucks, vans or similar vehicles to pick up and deliver products, supplies and equipment to and from organization, supplier and customer sites
- Actions may involve complex pickups and deliveries, e.g., night deliveries, international travel, transport of dangerous and hazardous products

ASC060 Purchasing Generalist/Multidiscipline

Negotiates favorable terms, volume discounts and long-term contracts with suppliers and prepares and
processes requisitions and purchase orders for the procurement of goods, services and supplies for
customer-related business processes or for internal use as a generalist or in a combination of Purchasing
Disciplines

ASC090 Technical Purchasing

- Negotiates favorable terms, volume discounts and long-term contracts with suppliers and prepares
 and processes requisitions and purchase orders for the procurement of technical equipment,
 custom engineered products, systems, software or components
- Acquires and maintains understanding of technology trends, market forces, cost trends and supplier technology road maps
- Reviews purchase order claims and contracts for conformance to organization policy and discusses defects and delivery problems with suppliers and negotiates refunds

Functions and Disciplines Definitions (continued)

Code Function

ASC Supply Chain and Logistics (continued)

Discipline

ASC510

Petroleum and LNG Downstream Products Supply and Logistics

- Plans, directs and coordinates purchasing, logistics and distribution of fuel, LNG, lubricants and other company products (not including shop merchandise) for the service station network
- Ensures adequate supply levels and timely distribution to maximize sales potential and inventory control
- Coordinates transport and warehousing either directly or through external forwarders
- Ensures cost-effectiveness, quality and full compliance with company policy and legal regulations (tax, customs)

ASC999

Supply Chain and Logistics - No Applicable Discipline

 Responsibilities are within the Supply Chain and Logistics Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

Code Function

AZE Engineering

Performs engineering work in operations, production, construction or maintenance environments. Designs and scales up manufacturing processes, instruments and equipment and tests manufactured products to maintain quality. Plans, designs and estimates time and cost and oversees construction and maintenance of structures, facilities, systems and components. Analyzes and develops solutions to engineering problems related to manufacturing equipment and systems or the causes of component failures. Develops and applies engineering standards and procedures and provides advice on issues within the engineering field.

Applicable Career Bands

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Discipline

AZE000 Engineering Generalist/Multidiscipline

- Performs engineering work in operations, production, construction or maintenance environments
- Responsibilities are within the Engineering Function as a generalist or in a combination of Disciplines

AZE010 Chemical Engineering

- Performs engineering work related to the operation of chemical plant equipment and processes
- Maintains and operates chemical production equipment such as condensers, absorption and evaporation towers, columns and stills
- Coordinates maintenance and operation of chemical production equipment such as mixing, crushing, heat transfer, distillation, oxidation, hydrogenation and polymerization
- May specialize in the processes pertaining to specific chemical products such as gasoline, synthetic rubber, plastics, detergents, cement, or paper and pulp

AZE020 Petroleum Engineering

- Develops and designs drilling equipment and devises techniques for petroleum extraction
- Analyzes geological studies to determine the most efficient drilling methods to be used; assesses the land's composition, the location of deposits and other critical conditions at well sites
- Installs equipment designed to process and refine petroleum into its various forms for commercial and consumer use

AZE030 Quality Assurance Engineering

- Develops and implements methods and procedures for process control, process improvement, testing and inspection to ensure that the products are free of flaws and function as designed
- Designs and installs sophisticated testing equipment and performs product testing and analysis to maintain quality levels and minimize defects and failure rates
- Analyzes reports and defective products to determine trends and recommend corrective actions
- Collaborates with supplier representatives on quality problems, ensures that effective corrective actions
 are implemented and contributes to supplier quality improvement programs

AZE040 Civil Engineering

- Plans and designs structures and facilities such as bridges, railroads, roads, airports, harbors, dams, irrigation projects, pipelines, tunnels, power plants and other projects
- Analyzes proposed projects to ensure structural reliability, resource efficiency and cost-effectiveness
- May construct models to identify project specifications and meet related needs

AZE050 Electrical Equipment Engineering

 Plans and implements the design, manufacture, installation and/or maintenance of electrical systems and apparatus, such as electric motors, machinery controls, lighting, wiring and power systems/devices, for the generation, transmission and control of electric power

AZE055 Electro-Mechanical Engineering

Develops and modifies process formulations, methods and controls to meet quality standards

Functions and Disciplines Definitions (continued)

Code Function

AZE Engineering (continued)

Discipline

AZE060 Process Engineering

- · Develops and modifies process formulations, methods and controls to meet quality standards
- · Recommends and implements improvements, modifications or additions to document work
- Reviews product development requirements for compatibility with processing methods to determine costs and schedules
- Integrates equipment and material capabilities to meet process module target specifications and technology target specifications

AZE100 Sustainable Engineering

- Supports in-service operating systems to ensure continued operation and maintenance and optimization throughout
- Determines, selects and implements technically feasible and economically viable alternatives for sustainment
- Analyzes and evaluates how to improve a system and/or equipment's sustainability under continued operation, maintenance and unexpected change
- Develops design changes to resolve operational issues, introduces new materials and revises product, process and test specifications to enhance product quality, design integrity, reliability and manufacturability
- Collects and evaluates service use and maintenance data; conducts root-cause analyses of in-service problems (e.g., operational hazards, deficiency reports, parts obsolescence, corrosion effects, reliability and maintainability trends, safety hazards, and failure causes and effects) and implements corrective action

AZE110 Mechanical Engineering

- Directs and coordinates fabrication, installation, operation, application, maintenance and repair of mechanical or electromechanical machines, equipment, tools, engines and systems
- Ensures that quality levels and industry standards are maintained or improved in the manufacturing process
- Oversees installation, operation, maintenance and repair of equipment such as centralized heat, gas, water and steam systems
- Evaluates mechanical products to determine their cost effectiveness and efficiency
- May evaluate field installations and recommend design modifications to eliminate malfunctions

AZE120 Environmental Engineering

- Analyzes environmental conditions and recommends changes to prevent or eliminate dangerous substances and materials
- Ensures compliance with regulatory agency policies, including government legislation pertaining to the preservation of the environment
- Develops, designs and may operate gauging equipment to determine the amounts of toxic pollutants present in air, land and water to ensure compliance with regulatory agency policies

AZE130 Computer Control Systems Electronics Engineering

- Implements, tests, troubleshoots and improves electronic automation and controls systems in manufacturing/production/operations processes to increase production quality, efficiency and volume
- Checks control system schematics and specifications and uses software and testing equipment to diagnose and resolve system malfunctions
- Develops and defines control system applications for various machinery and equipment using technologies
 or platforms such as ladder logic programming for programmable logic controllers (PLCs), human machine
 interfaces (HMIs), data control systems (DCSs), supervisory control and data acquisition (SCADA),
 computerized numerical control (CNC) systems or motion control technology

Functions and Disciplines Definitions (continued)

Code

Function

AZE

Engineering (continued)

Discipline

AZE160

Safety Engineering

- Identifies, analyzes and controls occupational hazards and promotes worksite or product safety by applying knowledge of industrial processes, mechanics, psychology, physiology, and industrial health and safety laws
- Advises on structural safety requirements based on failure mode analysis of such factors as fatigue, stability, stress, concentration and creep
- Designs protective equipment or safety devices for machines and redesigns machines and plant equipment to eliminate occupational hazards
- Develops standards which set tolerances, stress ratios, strength of materials and other related engineering requirements
- Reviews proposed occupational safety policies, guidelines and standards to determine their consistency with accepted engineering principles and practices; recommends technical changes as needed

AZE165

Welding Engineering

- Develops welding techniques, procedures, and application of welding equipment to problems involving fabrication of metals by utilizing knowledge of production specifications, properties and characteristics of metals and metal alloys, and engineering principles
- Conducts research to develop and test new fabrication processes and procedures, improve existing or develop new welding equipment, develop new or modify current welding methods, techniques, and procedures or discover new patterns of welding phenomena
- Establishes welding and inspection procedures that comply with regulatory code requirements and serve as guides for production and welding personnel
- Ensures quality control and welding personnel are qualified/certified and maintains compliance with established procedures
- Maintains current knowledge of regulatory developments in welding/hot tapping fields

AZE170

Structural/Facilities Engineering

- Develops and implements capital improvement projects, such as construction, remodeling, renovation, and maintenance of buildings and facilities, including preliminary concept development, detailed engineering design and bidding
- Conducts preliminary surveys and prepares schematics and work drawings for the construction and maintenance of new or remodeled structures and facilities
- Examines and approves engineering and architectural drawings and design computations for buildings and facilities to ensure compliance with sound engineering practices and codes; incorporates functional requirements into facility requirements
- Estimates cost of projects; writes contracts and specifications for labor, materials and equipment for construction projects; secures bids from contractors
- Conducts periodic inspections of work in progress and advises construction supervisors and contractors on plans and specifications
- Inspects existing facilities and prepares reports on the condition, deficiencies observed, designs necessary for repairs and estimated cost of repairs

Functions and Disciplines Definitions (continued)

Code Function

AZE Engineering (continued)

Discipline

AZE517 Bulk Power Market Operations Engineering

- Coordinates the day-to-day operation of the bulk power market to efficiently and reliably operate an energy imbalance market across the regional bulk electric transmission grid
- Administers on a continuous basis the bulk power market, ensuring market participants comply with applicable market protocols in real time
- Develops and maintains market protocols and systems needed to facilitate the markets
- Notifies the reliability coordinator of conditions that threaten system reliability and complies with reliability directives issued by the reliability coordinator
- Makes decisions and takes actions to ensure effective operation of the market and protection of the
 reliability of the bulk electric system consistent with reliability directives issued by the reliability coordinator
- Determines the adequacy of energy and capacity available in the market and works with market
 participants, reliability coordinators and others to ensure that the market has an adequate supply of energy
 and capacity
- May have North American Electric Reliability Corporation (NERC) certification

AZE526 Reservoir Engineering

- Evaluates oil and gas reserves, supplies and properties
- · Estimates oil, liquids and gas reserves and provides estimates of long-term availability
- May undertake both reservoir and production engineering activities

AZE528 Pipeline Engineering

- Develops initial criterion for pipeline routing, lateral and compression facilities in accordance with environmental studies and obtains regulatory approvals
- Receives design drawings and supervises construction
- May also supervise pigging operations and troubleshooting

AZE533 Electric System/Grid Operations Engineering

- Develops, implements and monitors engineering applications, processes and services associated with the
 performance of all coordinated operations responsibilities assigned to the Independent Coordinator of
 Transmission (ICT) to prevent power outages and maintain reliable electric service
- Requests and collects information, prepares and validates data and executes computer runs for current, next-day and other operational assessments of the transmission network to support coordination and approval of generation and transmission maintenance outage requests and to comply with external standards and requirements, including reporting for market participants, government entities and legal
- Participates in identification of issues and researches, analyzes and resolves disputes and inquires relating to market and grid operations data
- Develops and periodically updates network model data as necessary for the Interchange Distribution Calculator (IDC) load flow model
- Develops, maintains and supports coordinated operations applications, processes and documentation
- Identifies opportunities for improved analyses of electric system operations data and prioritizes, develops and implements improvements, including automated tools for monitoring and reporting operations data

AZE540 Electric Transmission Asset Planning and Operations Engineering

- Plans and designs transmission systems with voltage levels typically above 34.5K
- Designs transmission lines, bulk and distribution substations, and system protection and relaying
- Focuses on transmission circuits, system interconnections and bulk substations
- Determines need, size, location and timing of system development to balance economic, environmental, social and regulatory constraints and reliability needs
- Coordinates activities with other utilities and non-utilities generation
- Tests and maintains on a system-wide basis the relay protective and control equipment essential to system operation and tests the condition of insulation of all major system electric apparatus

Functions and Disciplines Definitions (continued)

<u>Code</u>

Function

AZE

Engineering (continued)

Discipline

AZE543

Electric Distribution Engineering

- Plans and designs distribution systems with voltage levels typically 34.5K and below
- Determines need, size, location and timing of system development to balance economic, environmental, social and regulatory constraints and reliability needs

AZE545

Electric Systems Construction Design Standards Engineering

- Develops construction working drawings and instructional standards, material and tool specifications, and acceptable suppliers lists
- Directs or performs the investigative, testing and technical work necessary for developing design specifications and material lists

AZE550

Fossil Power Generation Engineering

- Designs, develops, and improves fossil power plant operations and/or maintains plant facilities and mechanical equipment in safe, efficient and economical working conditions through the direction or performance of maintenance activities
- May also be involved in engineering effectiveness studies relating to installation, calibration, maintenance and repair of instrumentation

AZE555

Hydroelectric Power Generation Engineering

 Designs, develops, and improves hydroelectric power plant operations and/or maintains plant facilities and mechanical equipment in safe, efficient and economical working conditions through the direction or performance of maintenance activities

AZE557

Renewable/Alternative Power Generation Engineering

- Designs, develops, and improves renewable/alternative power generation operations and/or maintains
 plant/installation facilities and mechanical equipment in safe, efficient and economical working conditions
 through the direction or performance of maintenance activities
- Participates in engineering effectiveness studies relating to installation, calibration, maintenance and repair of renewable/alternative power generation instrumentation

AZE560

Nuclear Power Plant Design and Systems Engineering

- Evaluates, monitors and conducts trend analyses on the performance of assigned nuclear systems and/or components
- Troubleshoots systems, performs predictive and root-cause analysis, and determines and initiates corrective action
- · Conducts and reviews systems surveillance
- Designs, performs and verifies analysis of preventive maintenance programs of assigned systems and/or components
- Takes responsibility for design changes and execution of component changeouts
- May establish testing programs for reactors and reactor components
- May perform detailed inspection of reactor components and recommends overhaul work where necessary
- Provides technical oversight and support for maintenance activities

AZE570

Gas Transmission Engineering

- Plans, designs and engineers pipelines and compressor stations and meter and regulator stations for natural das transmission
- Installs and inspects rectifier stations and anodes used to minimize corrosive effects of static-electricity discharge between gas pipeline and ground

AZE573

Gas Distribution Engineering

- Plans, designs and engineers the distribution systems for natural gas
- Installs and inspects rectifier stations and anodes used to minimize corrosive effects of static-electricity discharge between gas pipeline and ground

Functions and Disciplines Definitions (continued)

Code Function

AZE Engineering (continued)

Discipline

AZE579 Major Construction Engineering Generalist/Multidiscipline

- Plans, directs and participates in the design, cost and scheduling of major construction projects
- Prepares plans, designs and analyses in accordance with established codes, standards and drawings
- · Develops and maintains project budgets, forecasts and cash flows
- Provides overall project schedule development, monitoring, progress measurement and change order management
- Monitors and analyzes performance of subcontractors
- Inspects construction work in progress to ensure compliance with design specifications and recommends corrective action and/or improvements as needed
- Communicates with government agencies to ensure that building code regulations are met

AZE583 Major Construction Cost Engineering

- Develops and maintains project budgets, forecasts and cash flows for major construction projects
- · Analyzes blueprints and other documentation to prepare estimates and support budget forecasts
- Monitors and analyzes performance of subcontractors on major construction projects
- · Prepares project change orders to obtain budget for work
- Sets up cost monitoring and reporting systems and procedures

AZE591 Drilling Engineering

- Analyzes geological studies to determine the most efficient drilling methods to be used
- Develops and designs drilling techniques and ensures appropriate utilization of drilling equipment

AZE593 Oil Sands Mining Engineering

Conducts investigations and studies to determine the structure and composition of oil sands to recover oil
from sand

AZE999 Engineering - No Applicable Discipline

Responsibilities are within the Engineering Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

Code Function

AZT Technical Specialty/Skilled Trade

Provides technical support to engineers and scientists in areas such as production, operations, maintenance, safety, testing, process improvement or product development. Uses schematics, diagrams, written and verbal descriptions or defined plans to perform testing and troubleshooting on electronic or mechanical components, equipment or systems. Gathers, maintains, formats, compiles and manipulates technical data using established formulae and procedures and performs detailed mathematical calculations.

Applicable Career Bands

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Discipline

AZT000

Technical Specialty/Skilled Trade Generalist/Multidiscipline

- · Provides technical support to engineers and scientists on a variety of technical tasks
- Develops and recommends procedures and methods and prepares technical reports and documentation
- Performs technical evaluations of events to determine root cause; recommends corrective action
- Responsibilities are within the Technical Specialty/Skilled Trade Function as a generalist or in a combination of Disciplines

AZT010

Equipment Maintenance Technical Specialty

- Performs preventive maintenance and repairs on equipment and systems (e.g., mechanical, electrical)
- Evaluates and recommends equipment improvements to improve availability, capability and yield
- Performs equipment failure analyses (including preventive and unscheduled maintenance)
- Troubleshoots and diagnoses equipment problems
- Prepares technical reports to document equipment modifications and equipment maintenance procedures

AZT015

Civil Engineering Technical Specialty

- Supports engineers in the planning, design, and supervision of the construction of structures and facilities such as bridges, railroads, roads, airports, harbors, dams, irrigation projects, pipelines and tunnels
- Monitors and inspects completed and in-progress construction work and may performs tests to ensure quality standards are met
- Compiles and analyzes traffic patterns, hydrological and meteorological information and other engineering data
- Prepares detailed site layouts and specifications
- · Reviews and analyzes design drawings for feasibility, performance, safety and durability

AZT020

Calibration Technical Specialty

- Performs precise calibrations and preventive and corrective maintenance on measuring and test
 equipment, instruments, tools, gauges and fixtures
- Sets up test equipment and conducts tests on performance and reliability of mechanical, structural or electromechanical equipment
- Develops calibration operating procedures and documentation for all instruments
- · Selects and procures instrument spare parts to minimize machine downtime
- Coordinates calibration with outside contractors for equipment that cannot be maintained internally

AZT050

Process Technical Specialty

- Provides technical support to engineers to achieve improvements in cycle-time, yield, unit cost, quality, safety and compliance of production and operations processes
- Monitors instruments and equipment and collects operating data, including calibration, inspection, testing and repair activities, to assist in making on-line adjustments to instruments, equipment or products
- Analyzes and resolves malfunctions and deviations of instruments and control systems to identify and resolve problems
- Conducts analyses and prepares reports using metrics from salvage tracking, trending, reporting and root-cause analyses
- Maintains process designs to optimize process and facility use while conforming to standard operating procedures (SOPs) and Good Manufacturing Practices (GMPs)

Functions and Disciplines Definitions (continued)

Code

Function

AZT

Technical Specialty/Skilled Trade (continued)

Discipline

AZT060

Quality Control/Inspection Technical Specialty

- Provides technical support to the quality and quality engineering (QE) functions
- Conducts nondestructive examination (NDE) and quality control (QC) inspections on products, materials, components, parts, etc., at various stages of the production process to ensure compliance with established quality and reliability standards
- Captures and analyzes statistical data from processes to either confirm compliance with established standards or identify deviations from standards
- Recommends new or enhanced methods, procedures and standards

AZT070

Test Equipment Technical Specialty

- Plans, lays out, assembles, modifies, validates and maintains test equipment and related structural assemblies by reading and interpreting blueprints, engineering drawings and sketches
- Assists engineers in operating test equipment to obtain performance data on parts and assemblies under varying operating conditions
- Collects, compiles and summarizes test data and reviews results with Engineering to resolve problems such as product or equipment issues, malfunctions and incomplete test data
- Diagnoses test equipment malfunctions and services and repairs equipment as required

AZT080

CAD/CAE Drafting Technical Specialty

- Prepares and maintains detailed design drawings, schematics or specifications typically using computeraided design software
- Works closely with design originators (e.g., engineers, designers) to resolve design details or discrepancies or to prepare drawings of unusual, complex or original designs which require a high degree of precision using computer-aided drafting (CAD) or computer-aided engineering (CAE) equipment
- Creates, modifies and controls detailed two- and three-dimensional parts and assembly drawings from engineers' and technicians' sketches, plans and written and verbal instructions
- Develops and maintains drafting standards and procedures
- Evaluates and recommends purchase of CAD/CAE-related computer hardware and software

AZT090

Production/Operations Laboratory Technical Specialty

- · Assists engineers and scientists with a variety of laboratory tasks
- Performs chemical and/or physical analyses or scientific tests using both routine and special techniques in compliance with all safety and infection control standards
- · Collects, analyzes and processes laboratory samples
- Records results of tests, organizes data, performs basic computations, and prepares reports and analyses using standard procedures and guidelines
- Installs, operates, maintains and repairs laboratory test equipment, apparatus, systems and supplies

AZT110

Chemistry Technical Specialty

- Assists chemists and chemical engineers conducting chemical and physical laboratory tests using
 instrumental techniques in making qualitative and quantitative analyses of solids, liquids and gaseous
 materials related to product development or quality control of production processes or products
- Performs quantitative and qualitative analyses in organic, inorganic, physical, analytical chemistry, photochemistry or electrochemistry to determine the chemical and physical properties of materials, liquids and gases

Functions and Disciplines Definitions (continued)

Code

Function

AZT

Technical Specialty/Skilled Trade (continued)

Discipline

AZT115

Environmental Waste Technical Specialty

- Provides technical laboratory support to engineers in the collection, storage, treatment and utilization of environmental waste
- Ensures compliance with the applicable laws and regulations regarding waste management programs
- Identifies procedures that do not comply with regulations and helps implement actions to resolve issues
- · Conducts onsite inspections and provides reports and improvement suggestions
- Provides technical laboratory support to engineers in the collection, storage, treatment and utilization of environmental waste

AZT120

Stationary Engineering Technical Specialty

- Operates, monitors, adjusts, maintains and repairs stationary engines and mechanical equipment and systems used in production and operations under the overall guidance of stationary engineers
- Ensures that equipment such as generators, motors, turbines, boilers and complex fire safety systems in buildings and plants operate safely, economically and within established limits by monitoring meters, gauges and computerized controls either on-site or from a central location
- Performs repairs ranging from a complete overhaul to replacing defective valves, gaskets or bearings
- · Records relevant events and facts concerning the operation and maintenance of equipment
- Conducts routine maintenance to maintain or improve operating efficiency such as lubricating moving parts, replacing filters, removing soot and corrosion from boilers, and adding chemicals to boiler water to prevent corrosion and harmful deposits

AZT140

Skilled Trade Generalist/Multidiscipline

- Performs installations, preventive maintenance and repairs on buildings, mechanical equipment and utility systems using one or more trade skills (e.g., electrical, mechanical, plumbing, carpentry)
- Prepares and maintains records of completed maintenance repair work
- Maintains current knowledge of all applicable procedures and safety measures

AZT150

Electrical Skilled Trade

 Repairs, installs, replaces and tests electrical circuits, equipment and appliances using hand tools and testing instruments to supply electrical power for lighting, equipment and machine operations

AZT160

Welding Skilled Trade

- Welds all types of commonly used metals and alloys of various sizes, shapes and thicknesses, including dissimilar metals such as copper to steel
- Operates various hand-welding, flame-cutting, hand-soldering or brazing equipment to weld or join metal components or to fill holes, indentations or seams of fabricated metal products
- May set up, operate and/or tend to robots that weld, braze, solder or heat treat metal products, components or assemblies

AZT170

Mechanical Skilled Trade

- Repairs and maintains machinery and mechanical equipment such as motors, pumps, conveyors, belts, fans, air conditioners, etc.
- Examines mechanical equipment to diagnose malfunctions
- · Adjusts, cleans and lubricates parts of mechanical devices as necessary
- · Requisitions replacement parts and equipment
- Oversees contractors at supervisory/management level

Functions and Disciplines Definitions (continued)

<u>Code</u>

Function

AZT

Technical Specialty/Skilled Trade (continued)

Discipline

AZT180

Machinery/Millwright Skilled Trade

- Installs, modifies, moves, troubleshoots, repairs and dismantles machinery and equipment according to requisition documentation, layout plans, blueprints or other drawings
- Prepares installation site by constructing foundations and aligns and fastens machinery to the foundation using hoists, dollies, rollers, trucks, tools, squares, rules and micrometers
- Performs operational tests on newly installed, modified, repaired and moved machinery and equipment to ensure that it meets technical specifications
- · Fabricates metal parts for prototype equipment based on drawings
- Programs PLCs (programmable logic controllers)

AZT502

Engineering Technical Specialty

- Assists engineers with drawings related to drilling, facilities, pipeline, production or reservoir engineering
- Carries out calculations and selects most appropriate processes as a result of the information provided by the engineering group

AZT505

Geographical Information Systems Technical Specialty

- Develops and maintains geographical information systems (GIS) databases, applications and tools
- · Compiles geospatial data, conducts analyses, develops models, and produces maps and reports
- · Maintains and refines existing map databases to reflect the latest data

AZT506

Geosciences Technical Specialty

 Assists geologists and geophysicists in planning and implementing programs of hydrocarbon and mineral extraction

AZT507

Geological Technical Specialty

 Completes drawings, extending calculations from seismic shot-points, well log data and a variety of other information and provides interpretation for geophysical programs in concert with professional geologists

AZT508

Geophysical Technical Specialty

- Conducts tests and analysis resulting from sample materials provided by engineers, chemists, geologists and/or field technicians
- · Tests and certifies products to ensure quality control; supports research and development activities

AZT510

Bulk Power Market/Electric System/Grid Technical Specialty

- Supports engineers, economists, mathematicians or other quantitative professionals in the development of new Independent System Operator (ISO) markets and in making continuous improvements to existing ISO market designs
- Assists with the development and implementation of new functionality and enhancements to existing
 functionality of the wholesale electricity markets to improve operating performance of the ISO's market and
 system operations functions, improve market performance and ensure that markets provide appropriate
 economic incentives to all participants
- Conducts analyses of existing market rules, manuals and operating procedures to quantify the competitive performance of the marketplace and recommends market design enhancements
- Monitors development activities in other ISO/RTO markets to identify best practices, potential risks or failures, and undesirable behaviors by market participants experienced in other markets which may be precluded by effective market designs

Functions and Disciplines Definitions (continued)

Code

Function

AZT

Technical Specialty/Skilled Trade (continued)

Discipline

AZT528

Field Metering Technical Specialty

- Maintains and repairs of all pipeline and metering equipment and auxiliary measurement equipment
- This is a fully qualified pipeline field position with full working knowledge of field measurement equipment and procedures
- Designs and implements meter proving schedules
- Takes a lead role in resolving measurement discrepancies and product volume balance issues
- Works with field operations staff to ensure accuracy of measurement data, proving meters, calculation proving reports and ensuring completion of supporting documentation

AZT530

Maintenance Planning - Onshore

- Performs onshore maintenance planning; develops, plans and executes upgrade and maintenance projects
- Prepares designs, drawings and schedules of tasks to be performed
- Selects suppliers and controls the quality of materials and services provided by them
- Ensures the conservation of equipment and platforms and the quality of customer service

AZT538

Renewable/Alternative Power Grid Interconnection Technical Specialty

- Assists engineers and renewable/alternative power project development staff in determining the feasibility
 and cost of interconnecting new renewable/alternative power projects to the transmission grid
- Assists the organization's representatives on a variety of interconnection issues dealing with Regional Transmission Organizations (RTOs), and/or Independent System Operators (ISOs), Regional Reliability Councils (RRCs), and regional and national governmental and regulatory authorities

AZT544

Electric Transmission and/or Distribution Technical Specialty

- Provides expert technical support for transmission systems that carry high-power electricity from generating plants to substations and/or distribution systems that carry electricity from substations to final consumers
- Focuses on transmission circuits, system interconnections, bulk substations and/or distribution systems, including activities such as testing and maintaining relay protective and control equipment and testing the condition of insulation of all major system electric apparatus

AZT550

Fossil Power Generation Technical Specialty

- Provides expert technical support for electric power generating units that use either coal, oil or natural gas
- Focuses on fossil power plant operations and/or maintenance of plant facilities and mechanical
 equipment, including activities such as studies relating to installation, calibration, instrumentation
 maintenance and repair

AZT555

Hydroelectric Power Generation Technical Specialty

- Provides expert technical support for electric power generating units that use the force of water being released from a reservoir through a dam
- Focuses on improving hydroelectric power plant operations and/or maintenance of plant facilities and mechanical equipment

AZT557

Renewable/Alternative Power Generation Technical Specialty

- · Provides expert technical support for renewable/alternative power generating units
- Focuses on plant operations and/or maintenance of plant facilities and mechanical equipment, including activities such as studies relating to installation, calibration, instrumentation maintenance and repair

AZT560

Nuclear Power Generation Technical Specialty

- Provides expert technical support for nuclear power generating units that use energy produced by splitting uranium atoms (i.e., fission)
- Focuses on improving nuclear power plant operations and/or maintenance of plant facilities and mechanical equipment, including activities such as trend analyses of assigned nuclear systems and/or components

Functions and Disciplines Definitions (continued)

Code Function

AZT Technical Specialty/Skilled Trade (continued)

Discipline

AZT563 Inspector Technical Specialty

- Examines pressure equipment during fabrication and repair
- Inspects and monitors pressure equipment and on-stream corrosion monitoring and provides records and plans for complex units

AZT571 Gas Transmission and/or Distribution Technical Specialty

- Provides expert technical support for gas transmission systems that transport natural gas by pipeline, including incidental storage and/or gas distribution systems that transport natural gas to the final consumer by pipeline
- Focuses on pipeline and compressor systems for natural gas transmission and/or distribution, including activities such as installing and/or inspecting rectifier stations and anodes used to minimize corrosive effects of static-electricity discharge between gas pipeline and ground

AZT579 Major Construction Technical Specialty Generalist/Multidiscipline

- Supports major construction engineers in the preparation of plans, designs and analyses; development and maintenance of cost estimates; and drafting and monitoring of work schedules
- Inspects construction work in progress to ensure compliance with design specifications
- Maintains and reviews vendor design documentation to ensure compliance with design requirements
- · Researches government building code regulations

AZT580 Major Construction Design Technical Specialty

- Supports construction design engineers in the preparation of plans, designs and analyses in areas such as steel, concrete and formwork/falsework
- Inspects construction work in progress to ensure compliance with design specifications
- Maintains and reviews vendor design documentation to ensure compliance with design requirements
- · Researches government building code regulations

AZT583 Major Construction Cost Technical Specialty

- Supports construction cost engineers in the development and maintenance of cost estimates and tracking actual costs vs. budgets for major construction projects
- Reviews blueprints and other documentation to prepare cost estimates
- Collects information from engineers, architects, contractors and subcontractors regarding changes and adjustments to cost estimates
- · Maintains cost monitoring and reporting systems following established procedures

AZT999 Technical Specialty/Skilled Trade - No Applicable Discipline

 Responsibilities are within the Technical Specialty/Skilled Trade Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

Code Function

AZU Manual/Unskilled Labor

Performs a variety of general manual labor tasks (e.g., sweeping and cleaning floors and work areas, picking up papers and refuse from grounds, assisting in the handling of heavy materials, making minor repairs, mowing lawns, shoveling snow, cleaning, dusting, washing windows, moving and polishing furniture and equipment). Follows specific processes and procedures to maintain the buildings, facilities and grounds.

Applicable Career Bands

W (Supervisors Management)

With other was Manual Labora

Discipline

AZU000

Manual/Unskilled Labor Generalist/Multidiscipline

- Performs miscellaneous manual labor activities (e.g., sweeping and cleaning floors and work areas, picking up papers and refuse from grounds, heavy lifting and moving materials, making minor repairs, moving lawns and shoveling snow)
- Performs janitorial activities, such as cleaning, dusting, washing windows, moving and polishing furniture and equipment

AZU999

Manual/Unskilled Labor - No Applicable Discipline

 Responsibilities are within the Manual/Unskilled Labor Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

Code Function

CAM Account/Relationship Management

Builds and maintains effective long-term relationships with a defined customer base to ensure a high level of satisfaction and increase revenues. Identifies, develops and typically closes new sales opportunities. Serves as the primary interface for all products and services, and creates demand for the organization's products and services by raising their profile with customers. Typically has a limited number of key/strategic accounts and maintains relationships with clients at the senior management or executive level.

Applicable Career Bands

Michael viscou Management

Signatura Chent Management and Adas)

Discipline

CAM000

Account/Relationship Management Generalist/Multidiscipline

- Builds and maintains effective long-term relationships and a high level of satisfaction with key senior-level decision makers and influencers at an assigned group of customer accounts that may include major strategic customers within a geographic or industry focus
- · Identifies, develops and typically closes new sales opportunities
- · Creates demand for the organization's products and services by raising their profile with customers
- Achieves revenue targets by increasing revenue spend per account
- May conduct regular status and strategy meetings with the customer's senior management to understand their needs and link them to the organization's product/service strategies
- Responsibilities are within the Account/Relationship Management Function as a generalist or in a combination of Disciplines

CAM500

Key Accounts

- Manages accounts of customers with substantial energy usage such as commercial or industrial consumers, universities and local municipalities
- · Identifies, develops and typically closes new sales opportunities

CAM510

Industrial/Commercial - Account/Relationship Management

- Manages accounts of industrial or commercial customers such as office complexes, hotels, hospitals and production sites
- Identifies, develops and typically closes new sales opportunities

CAM999

Account/Relationship Management - No Applicable Discipline

 Responsibilities are within the Account/Relationship Management Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

<u>Code</u>

Function

CBM

Bid Management

Manages the bidding process from initial contact through to contract signing, but excluding the ongoing account management once the contract has been signed. Manages the preparation of bids and tenders with particular emphasis on establishing the organization's trading terms. Identifies and manages appropriate resources and team support to develop package and price custom solutions.

Applicable Career Bands

Mission visory Manager conti

\$ (Customer Client Management and Sales)

U Pasinosii Sopperii

Discipline

CBM000

Bid Management Generalist/Multidiscipline

- Manages the preparation of bids and tenders with particular emphasis on establishing the organization's trading terms
- Collaborates with business developers and account managers to obtain and clarify customer requirements
- Identifies and manages appropriate resources and team support to develop, package and price custom solutions
- May coordinate legal sign-off on bids and proposals, placement of supplier orders and acceptance of customer orders

CBM999

Bid Management - No Applicable Discipline

 Responsibilities are within the Bid Management Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

<u>Code</u> <u>Function</u>

CSC Channel Sales

Maximizes revenues from sales of the organization's products and/or services through a base of reseller partners such as dealers, systems integrators, value-added resellers (VARs), distributors or retailers. Locates, evaluates and recruits potential channel partners. Supports partners throughout the sales process in all sales-oriented activities, such as marketing, advertising, sales promotions and training, to achieve revenue targets.

Applicable Career Bands

M (Supervisory/Management)

\$ (Casterno VI) at Monagen entiplia Salas)

Discipline

CSC000 Channel Sales Generalist/Multidiscipline

- Maximizes revenues from sales of the organization's products and/or services through a base of reseller partners in specific assigned channels and/or vertical markets
- Locates, evaluates and recruits potential channel partners, including systems integrators, value-added resellers (VARs), distributors, dealers or retailers
- Supports partners throughout the sales process in all sales-oriented activities, including marketing, advertising, sales promotions and training to achieve revenue targets
- Responsibilities are within the Channel Sales Function as a generalist or in a combination of Disciplines

CSC999 Channel Sales - No Applicable Discipline

• Responsibilities are within the Channel Sales Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

Code Function
CSD Direct Sales

Closes direct sales of products and/or services in order to meet individual/team quotas and the organization's business objectives. Creates, monitors and revises lead generation plans to ensure a substantive sales opportunity pipeline. Typically, sales cycles are relatively short.

Applicable Career Bands

M (Supervisory, Management)

Si Cristoniai Chare Macamement and Sales:

Discipline

CSD000 Direct Sales Generalist/Multidiscipline

- Promotes and sells a portfolio of technical and/or nontechnical products and/or services and solutions directly to current and new end customers
- Informs customers of new product/service introductions and prices
- Creates, monitors and revises lead generation plans to ensure a substantive sales opportunity pipeline
- Responsibilities are within the Direct Sales Function as a generalist or in a combination of Disciplines

CSD500 Key Accounts Sales

 Manages accounts of customers with substantial energy usage such as commercial or industrial consumers, universities and local municipalities

CSD510 Industrial/Commercial Sales

 Manages accounts of industrial or commercial customers such as office complexes, hotels, hospitals and production sites

CSD520 Residential Development Sales

 Manages accounts of developers of individual residences such as single-family homes, multifamily homes and apartment buildings

CSD550 Energy Facilities Capacity Sales

- Plans, organizes and controls the marketing and sales related to physical facilities
- Works with operations and transportation personnel to promote customer service
- May coordinate advertising and public relations activities for processing plants and pipeline capacity

CSD999 Direct Sales - No Applicable Discipline

Responsibilities are within the Direct Sales Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

Code Function

CUS Sales Support and Administration

Supports sales representatives and channel partners in administrative areas such as order processing, sales quotes, sales information management, product training and financing. Tracks transactions and prepares reports regarding information such as order status, sales results, leads, sales quotas and sales representative earnings.

Applicable Career Bands

M (Sucervisory Management)

F (Professionar)

U (Business Superior)

Discipline

CUS000

Sales Support and Administration Generalist/Multidiscipline

- Supports sales representatives and channel partners in administrative areas such as order processing, customer quotes, sales information management, product training and financing
- Responsibilities are within the Sales Support and Administration Function as a generalist or in a combination of Disciplines

CUS010 Sales Training

- Develops, plans and conducts training on techniques for selling the organization's products and/or services for sales representatives and reseller partners
- · Designs training classes and training materials and prepares documentation
- Conducts sales training needs assessments and analyzes employee training needs to determine requirements for new program development
- Monitors and evaluates sales training programs, assesses results and implements enhancements as needed to ensure effectiveness of programs

CUS060

Sales Operations Support

- Provides operational support to sales management
- Plans and coordinates projects to improve the operational efficiency and effectiveness of the sales force
- Develops processes and procedures to support the sales process and participates in the development of requirements for sales support systems
- Maintains information of sales activities that support sales performance metrics and sales process improvement

CUS999

Sales Support and Administration - No Applicable Discipline

 Responsibilities are within the Sales Support and Administration Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

<u>Code</u>

Function

EDD

Energy Delivery/Distribution

Directs, coordinates, implements and plans distribution activities that provide electric and/or gas service to customers, including operation, line construction and/or maintenance.

Applicable Career Bands

M (Suconiach Maragement)

PiProfessionali

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Discipline

EDD000

Energy Delivery/Distribution Generalist/Multidiscipline

- Directs and coordinates distribution activities that provide electric and/or gas service to customers
- Has responsibilities that typically include operations, line construction and/or maintenance and field engineering
- Plans, directs and coordinates activities to prevent electric service interruptions and minimize the impact and restoration time of service interruptions
- Schedules maintenance, trouble operations/service restoration, metering operations and operations planning work
- Provides adequate, accurate information to the customer service centers to keep affected customers properly informed
- Ensures compliance with all safety, training and auditable guidelines, policies, practices, organization standards and government regulations

EDD010

Electric Distribution Systems Operations

- Operates electric power distribution system to ensure adequate distribution of electricity to meet power demands
- Calculates load estimates according to corrected weather and consumer-demand records and notifies
 power supply function of electric power required to meet fluctuating demands
- Monitors control board showing operating condition of lines and equipment throughout the system and makes adjustments or directs workers to make adjustments as conditions warrant
- Directs substations to de-energize malfunctioning circuits or adjusts switches to ensure safety of maintenance crew and avoid interruptions of service during repairs
- Notifies maintenance crew of location and de-energization of troubled sector and verifies that workers are clear of repaired equipment before directing energization of circuit
- May operate computer console programmed to automatically perform load-control functions

EDD020

Electric Distribution Construction and/or Maintenance

- Constructs, removes and maintains electric distribution facilities and equipment, including cable, transformers, breakers and other associated devices
- May be responsible for sub transmission facilities (transmission lines of voltages between transmission voltages and distribution voltages, generally between 69 KV to 138 KV)
- · May be responsible for field engineering and/or operating activities
- Coordinates, schedules and supervises line crews (underground, overhead or substation) engaged in the construction, removal and maintenance of electric distribution facilities and equipment
- Dispatches field crews, troubleshooters and testers engaged in the construction, maintenance and emergency restoration of electric distribution facilities and customers' service facilities
- · Responsibilities may be limited to an assigned district or area

EDD030

Electric Distribution/Substation Equipment Testing/Repair

- Plans, schedules and coordinates distribution systems equipment testing, including construction testing, maintenance testing, and protective and control scheme testing
- Ensures that equipment systems meet organization standards
- Tests equipment such as reclosures, sectionalizers, transformers and other major equipment systems
- Maintains knowledge of current test equipment and procedures

Functions and Disciplines Definitions (continued)

Code

Function

EDD

Energy Delivery/Distribution (continued)

Discipline

EDD040

Gas Distribution System Operations

- Calculates and controls the flow of natural gas through the system to maintain volume and pressure for adequate supply
- Monitors telemetric instruments to determine gas pressure, volume and consumption
- Reviews supply and demand data such as gas quality, pressure, weather conditions and time of day to forecast load adjustment

EDD050

Gas Distribution Construction and/or Maintenance

- Constructs, removes and maintains gas distribution facilities and equipment, including pipe, gauges and valves
- May be responsible for field engineering and/or operating activities
- Coordinates, schedules and supervises crews engaged in the construction, removal and maintenance of facilities and equipment for gas distribution
- Dispatches field crews engaged in the construction, maintenance and emergency restoration of gas service
- Responsibilities may be limited to an assigned district or area

EDD060

Corrosion Control

- Installs and inspects rectifier stations and anodes used to minimize corrosive effects of static-electricity discharge between gas pipeline and ground
- Measures electric current present in ground using voltmeter, ammeter and resistivity meter
- Compares electrical quantities with written standard to identify ground areas in which electric current exceeds permissible maximum
- · Periodically tests rectifiers to verify efficiency and replaces defective units

EDD070

Distribution Meter Services Generalist/Multidiscipline

- Reads electric and/or gas meters and records usage data (manually or electronically)
- Tests, repairs and maintains stocks of metering equipment and meter testing equipment, including smart
 meters.
- Installs, removes, field tests and maintains customer electric and/or gas meters in accordance with regulatory standards and organization's guidelines
- May interact with customers by answering questions (e.g., about billing/energy usage, smart meters) or directing them to customer service or collections representatives

EDD080

Quality Control/Inspection

- Develops, implements and maintains assessment, inspection, testing and maintenance programs for power lines, poles and gas distribution pipelines
- Supports and conducts nondestructive examination (NDE), quality engineering (QE), and quality control (QC) inspections
- Researches, interprets and explains inspection results
- · Recommends changes to maintain compliance with regulatory requirements
- Maintains documentation to ensure proper test methodologies

EDD090

Proprietary Telecommunications Systems

- Designs, builds and maintains the organization-owned communications system and facilities (e.g., fiber optic network installed on electric transmission or delivery lines, microwave)
- Schedules regular maintenance and emergency maintenance, testing and inspecting all telecommunications facilities and equipment
- Develops a long-term plan for communications facilities, budgets and equipment requirements

EDD999

Energy Delivery/Distribution - No Applicable Discipline

 Responsibilities are within the Energy Delivery/Distribution Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

Code Function

EDE Energy Efficiency/Conservation

Develops, implements and coordinates energy efficiency (EE), demand side management (DSM), demand response (DR) and conservation programs to meet established goals. EE programs include tighter building envelopes (e.g., insulation) upgrades, duct repair, high-efficiency HVAC upgrades and HVAC tune-ups that reduce energy consumption. DR programs include reliability-based programs (i.e., load response programs) such as direct load control and curtailable/interruptible load and market-based programs (i.e., price response programs) such as real-time/critical peak pricing and demand bidding/buyback.

Applicable Career Bands

M. Supervisory Man reconcert

P Professional

T. Townson Suggest

Discipline

EDE000

Energy Efficiency/Conservation Generalist/Multidiscipline

- Develops, promotes, and implements energy efficiency (EE), demand side management (DSM), demand response (DR) and conservation programs to meet established goals
- Develops, promotes and implements EE programs for new construction and upgrades to existing buildings such as tighter building envelopes (e.g., insulation) and HVAC ducts, high-efficiency HVAC equipment and HVAC tune-ups to reduce energy demand and meet regulatory and corporate goals
- Develops, promotes and implements DSM programs such as energy surveys, weatherization, load management, efficient lighting retrofits and tighter building envelopes
- Develops, promotes and implements DR programs such as load management, standby generation, pricing signals and interruptible service
- Provides customers with technical advice and assistance to design, procure and install energy efficient equipment and adopt demand-reduction initiatives
- Conducts cost-benefit analyses and evaluates the impact of EE, DSM and DR programs
- Ensures that programs are in compliance with regulatory guidelines and may be responsible for Public Utility Commission (PUC) funds awarded for DSM/EE programs

EDE999

Energy Efficiency/Conservation - No Applicable Discipline

 Responsibilities are within the Energy Efficiency/Conservation Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

Code

Function

EFS

Energy Supply

Negotiates and administers long-term energy commodity supply/purchase contracts to meet the organization's needs. Coordinates with the organization's energy marketing and trading group as necessary to ensure profitable transaction terms.

Applicable Career Bands

Wilders and American Street

B. Professor SP

Discipline

EFS000

Energy Supply Generalist/Multidiscipline

- Plans and secures adequate supplies of one or more energy commodities to meet the organization's needs
- Develops long-term supply agreements, which may include transportation and storage arrangements
- Ensures all contracts and transactions are conducted within prescribed legal policies and procedures and works closely with other functions to determine pricing and terms of new contracts
- Negotiates purchase contracts
- Develops forecasts of needed supply, transportation requirements and available storage
- Manages relationships with suppliers
- · Administers and monitors existing purchase and sale contracts
- Identifies new long-term supply opportunities and assists in determining prices and contract terms for
 profitable transactions in conjunction with the energy marketing and trading group

EFS010

Crude Oil Supply

- Plans and secures adequate supplies of crude oil to meet the organization's needs
- Develops long-term supply, which may include transportation and storage arrangements
- Ensures all contracts and transactions are conducted within prescribed legal policies and procedures and works closely with other groups to determine pricing and terms of new contracts
- Negotiates crude oil purchase contracts with suppliers and, as required, with transportation organizations and storage operators
- Develops forecasts of needed supply, transportation requirements and available storage
- Manages relationships with suppliers
- Administers and monitors existing purchase and sale contracts
- Identifies new long-term supply opportunities and assists in determining prices and contract terms for
 profitable transactions in conjunction with the energy marketing and trading group

EFS020

Natural Gas Supply

- Plans and secures adequate supplies of natural gas to meet the organization's needs
- Develops long-term supply agreements, which may include transportation and storage arrangements
- Ensures all contracts and transactions are conducted within prescribed legal policies and procedures and works closely with other functions to determine pricing and terms of new contracts
- Negotiates gas purchase contracts with suppliers and, as required, with transportation organizations and storage operators
- Develops forecasts of needed supply, transportation requirements and available storage
- · Manages relationships with suppliers
- Administers and monitors existing purchase and sale contracts
- Identifies new long-term supply opportunities and assists in determining prices and contract terms for profitable transactions in conjunction with the energy marketing and trading group

EFS999

Energy Supply - No Applicable Discipline

Responsibilities are within the Energy Supply Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

<u>Code</u> <u>Function</u>

EGF Fossil Power Generation

Operates and maintains fossil fuel-based electric generator units and associated equipment, fossil fuel handling and waste disposal equipment. Maintenance activities include maintenance engineering to meet system load requirements and maintaining power plant electrical and mechanical equipment. Fossil power generation units use coal, oil or natural gas. Coal is burned to produce steam, which flows into a turbine and spins a generator. Oil and natural gas are ignited to power combustion turbine generators. Inside the generator, coils of wire spin in a magnetic field and electricity is produced.

Applicable Career Bands

M : Supervisory Managements

Pathofassionali

Till Committee Charles

Discipline

EGF000 Fossil Power Generation Generalist/Multidiscipline

- Meets system load requirements of the plant and maintains power plant electrical and mechanical equipment
- Takes responsibility for the operation of generator units and associated equipment, operation of fossil fuel
 handling and waste disposal equipment, and maintenance activities, including maintenance engineering

EGF020 Fossil Power Maintenance Planning

- Takes responsibility for short- and long-range maintenance planning, coordination and scheduling of routine and emergency plant outages
- Coordinates contracted and organization maintenance staff resources; monitors spare parts inventory and system load requirements to minimize overall time and cost of maintenance activities
- Creates, reviews and evaluates overhaul and outage reports and incorporates improvement techniques in future procedures and plans
- Does not have line responsibilities for plant maintenance

EGF030 Fossil Power Maintenance

- Maintains power plant electrical and/or mechanical equipment in safe, efficient and economical working condition, including the direction of maintenance engineering
- Oversees the replacement, installation and removal of mechanical and/or electrical equipment and associated structures

EGF040 Fossil Power Operations

- Meets system load requirements of the plant engaged in operation of boiler-turbine generator units and associated equipment, operation of fuel handling and waste disposal equipment
- Maintains plant operating records and performance reports

EGF060 Fossil Power Outage Management

- Directs fossil plant outage-related activities consistent with the organization's policy and regulatory requirements
- Provides planning and scheduling support, coordinates cost estimates and procurement, and designs support plans prior to and during the outage
- Monitors progress of the outage, identifies problems, revises schedules and budgets, and prepares reports and other documentation on the status of the outage to management
- Coordinates operations, maintenance and construction activities during the outage
- Assesses the adequacy of outage planning and systems

Functions and Disciplines Definitions (continued)

Code

Function

EGF

Fossil Power Generation (continued)

Discipline

EGF090

Fossil Power Quality Control/Inspection

- Develops, implements and maintains in-service inspection (ISI), testing and maintenance programs
- Supports and conducts nondestructive examination (NDE), quality engineering (QE), and quality control (QC) inspections
- · Researches, interprets and explains inspection results
- Recommends changes to maintain compliance with regulatory requirements
- Maintains documentation to meet licensing obligations and ensure proper test methodologies are in place

EGF999

Fossil Power Generation - No Applicable Discipline

 Responsibilities are within the Fossil Power Generation Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

<u>Code</u>

Function

EGH

Hydroelectric Power Generation

Operates and maintains hydroelectric generator units and associated equipment in a continuous, efficient and economical manner to meet system load requirements of the plant.

Applicable Career Bands

M (Supervisory Allanagement)

Papardessanda

Talk back sugers

Discipline

EGH000

Hydroelectric Power Generation Generalist/Multidiscipline

- Operates hydroelectric generator units and associated equipment as a generalist or in a combination of Disciplines in the Hydroelectric Power Generation Function
- Takes responsibility for maintenance activities, including maintenance engineering to meet system load requirements of the plant and maintaining hydroelectric power plant electrical and mechanical equipment

EGH010

Hydroelectric Maintenance Planning

- Performs short- and long-range maintenance planning; coordinates and schedules routine and emergency hydroelectric plant outages
- Coordinates contracted and organization maintenance staff resources; monitors spare parts inventory and system load requirements to minimize overall time and cost of maintenance activities
- Creates, reviews and evaluates overhaul and outage reports and incorporates improvement techniques in future procedures and plans
- Does not have line responsibilities for plant maintenance

EGH020

Hydroelectric Operations and/or Maintenance

- Operates, controls and maintains hydroelectric generating equipment and related mechanical and hydraulic equipment, including manual controls for water wheels at the hydroelectric generating station
- Analyzes defective operation and adjusts equipment to minimize interruptions of power demands
- Inspects operating equipment, identifies equipment malfunctions and initiates maintenance repair orders
- Replaces generator brushes, cleaning insulators, lubricating machines, and removing marine life and debris from water-intake screens or racks
- Notifies watershed tender (waterworks) when subnormal speed of generating units requires adjustment of reservoir floodgates to increase pressure of water, which rotates water wheels
- Distributes power output among generating units according to power demands
- · Records control-board meter and gauge readings
- Operates feeder switchboard to control distribution of electric power over feeder circuits between generating station and substations

EGH030

Hydroelectric Outage Management

- Directs hydroelectric plant outage-related activities consistent with the organization's policy and regulatory requirements
- Provides planning and scheduling support, coordinates cost estimates and procurement, and designs support plans prior to and during the outage
- Monitors progress of the outage, identifies problems, revises schedules and budgets, and prepares reports and other documentation on the status of the outage to management
- Coordinates operations, maintenance and construction activities during the outage
- · Assesses the adequacy of outage planning and systems

EGH999

Hydroelectric Power Generation - No Applicable Discipline

 Responsibilities are within the Hydroelectric Power Generation Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

Code Function

EGR Renewable/Alternative Power Generation

Operates and maintains renewable/alternative power generation facilities and associated equipment. Includes maintenance activities such as maintenance engineering to meet system load requirements and maintaining power generation equipment. Renewable/alternative power generation units use wind, geothermal, biomass or other renewable resources.

Applicable Career Bands

M (Supervisory Worsensens)

P (Protessional)

Edisobac & Sloperti

Discipline

EGR000 Renewable/Alternative Power Generation Generalist/Multidiscipline

- Maximizes the power generated by the renewable/alternative generation plant/facility and maintains electrical and mechanical equipment
- Takes responsibility for the operation of generation units and associated equipment and maintenance activities, including maintenance engineering

EGR020 Renewable/Alternative Power Generation Maintenance Planning

- Plans, coordinates and schedules short- and long-range maintenance and routine outages
- Coordinates contracted and internal maintenance staff resources; monitors spare parts inventory and system load requirements to minimize overall time and cost of maintenance activities
- Creates, reviews and evaluates overhaul and outage reports and incorporates improvement techniques in future procedures and plans
- Does not have line responsibilities for maintenance of renewable/alternative generation facilities

EGR030 Renewable/Alternative Power Generation Maintenance

- Maintains renewable/alternative power generation facilities and mechanical equipment in safe, efficient and economical working condition, including the direction of maintenance engineering
- Oversees the replacement, installation and removal of mechanical and/or electrical equipment and associated structures

EGR040 Renewable/Alternative Power Generation Operations

- Maximizes the power generated by the renewable/alternative generation plant/facility and maintains electrical and mechanical equipment
- Maintains renewable/alternative facility operating records and performance reports

EGR060 Renewable/Alternative Power Generation Outage Management

- Directs renewable/alternative facility outage-related activities consistent with the organization's policy and regulatory requirements
- Provides planning and scheduling support, coordinates cost estimates and procurement, and designs support plans prior to and during the outage
- Monitors progress of the outage, identifies problems, revises schedules and budgets, and prepares reports and other documentation on the status of the outage to management
- Coordinates operations, maintenance and construction activities during the outage
- Assesses the adequacy of outage planning and systems

EGR999 Renewable/Alternative Power Generation - No Applicable Discipline

 Responsibilities are within the Renewable/Alternative Energy Power Generation Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

<u>Code</u>

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ENP

New Power Plant Development Project Management

Directs, manages and oversees the planning, design, licensing, construction and start-up of new power plants. Responsibilities may include contracts, supply chain, quality assurance, government relations, public relations, etc. Identifies, evaluates and hires outside contractors as needed throughout all phases of development, and coordinates with internal technical functions.

Applicable Career Bands

dremegraph Macagement

P. Parkyasania

Discipline

ENP000

New Power Plant Development Project Management Generalist/Multidiscipline

- Directs, manages and oversees the planning, design, licensing, construction and start-up of new power plants
- Identifies, evaluates and hires outside contractors as needed throughout all phases of development
- Coordinates with internal technical functions
- Takes responsibility for functions including contracts, supply chain, quality assurance, government and public relations, etc.

ENP030

New Renewable/Alternative Energy Development Project Management

- Directs, manages and oversees the planning, design, licensing, construction and start-up of new renewable/alternative energy power projects
- Identifies, prepares and obtains regulatory approval for the construction and operation of new renewable/alternative energy power projects
- Takes responsibility for various phases of a new renewable/alternative energy development project, including staffing, contract negotiations, supply chain, quality assurance, and government and public relations

ENP999

New Power Plant Development Project Management - No Applicable Discipline

 Responsibilities are within the New Power Plant Development Project Management Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

<u>Code</u>

Function

EOP

Natural Resources Exploitation/Operation/Production

Responsible for the organization's planning and/or production operations, including development and implementation of strategies relating to finding as well as recovering oil and gas resources. Constructs the processing facilities to separate the mixture of hydrocarbons and other substances. Coordinates the movement of the product through pipeline systems. Directs and operates power/electricity generation, transmission and distribution systems. Exploits and develops producing fields by proving up reserves, assessing the deliverability of reserves and conducting economic evaluations and land analyses. Coordinates activities with exploration group and reservoir engineering to determine most effective recovery methods.

Applicable Career Bands

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Topic small Supposed.
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Discipline

EOP000

Natural Resources Exploitation/Operation/Production Generalist/Multidiscipline

- Provides petroleum engineering supervision during operations relevant to departments, e.g., well testing, perforating, logging and stimulations
- Assures the acquisition and validation of data and subsequent analysis as well as report from sources such as well testing, stimulation, logging, etc. Analyzes data to obtain well and reservoir parameters and so predict short-term well performance and the potential for improving such by stimulation or other methods
- Allocates the well's daily production. Records any discrepancies vs. the wells' production performance
 predictions and initiates the appropriate analysis to define the type and size of any problems. Proposes
 actions to maximize economic liquid and/or gas production
- Keeps abreast of developments of techniques and materials for well service operations and supports improvements in company procedures and specifications
- Monitors production operations, coordinates with on-site contractors and ensures safe, cost-effective field operations

EOP010

Natural Resources Production Operations

- Performs or supervises operations associated with oil and gas production
- Monitors production operations, coordinates with on-site contractors, and ensures safe, cost-effective field operations
- · Takes responsibility for environmental and safety programs

EOP510

Construction/Design

- · Responsible for the design and construction of all capital projects
- Establishes construction strategy for project
- · Oversees infrastructure and monitors critical path schedules and deliverables

EOP511

Field Operations

- Oversees all company-operated oil and gas field operations to bring the well fluids to the surface and prepare them for movement to a refinery or processing plant
- May include well maintenance operations (servicing) and more extensive repairs (well workovers)

EOP512

Heavy Oil Operations

· Oversees all company-operated heavy oil operations

EOP513

Mining Operations

Oversees company-operated bitumen/oil sands mining operations

EOP514

Machine Operations

 Operates heady-duty production machinery and equipment, including dozers, diggers and heavy hauler trucks

Functions and Disciplines Definitions (continued)

Code Function

EOP Natural Resources Exploitation/Operation/Production (continued)

Discipline

EOP515 Development/Exploitation

- Exploits and develops producing fields by proving up reserves, assessing the deliverability of reserves and conducting economic evaluations and land analyses
- Coordinates activities with exploration group and reservoir engineers to determine most effective recovery methods

EOP516 Exploration and Production

- Manages an oil and gas exploration, development and production program to identify and establish new, profitable reserves of oil, gas, NGL and sulphur
- Develops and implements strategies of development and production to find and recover oil and gas resources and to manage the processing facilities and pipeline systems

EOP999 Natural Resources Exploitation/Operation/Production - No Applicable Discipline

 Responsibilities are within the Natural Resources Exploitation/Operation/Production Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

Code

Function

EOT Transportation and Pipeline

Responsible for the management and implementation of pipeline activities and business over a national to wide multi-country territory. Manages and coordinates technical expertise to guide scheduling, budgeting, inventory management and quality control. Requires a thorough understanding of all pipeline operations and may cultivate and maintain relationships with local organizations/bodies. Organizes, directs and coordinates all pipeline engineering evacuation studies, including pipeline route selection, pipeline sizing, wall thickness selection, hydraulic single and multiple flow calculation for steady state and costing required for feasibility studies. Plans, conducts and directs pipeline engineering projects of major significance, which are highly difficult and complex in nature, requiring the expert application of advanced engineering and associated scientific knowledge. Must have related experience in design, installation, operation and maintenance of offshore and onshore oil and gas pipelines.

Applicable Career Bands

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Discipline

EOT000

Transportation and Pipeline Generalist/Multidiscipline

- Monitors pipeline integrity procedures and associated systems
- Maintains the cathodic protection programs and undertakes minor maintenance and upkeep associated with the pipeline cathodic protections systems
- Undertakes pipeline maintenance and pigging operations, coordinates pipeline service and in-line inspection and ensures documentation and records are maintained
- May be responsible for cathodic protection system programs, water crossing inspections and slope stability monitoring readings
- Coordinates services and inspection crews for in-line inspection runs and line/facility suspension and abandonment projects. Also coordinates and supervises pipeline repair and replacement projects
- · Assembles cost estimates for required resources and budgetary input

EOT010 Pipeline/Routing Design

- Develops initial criterion for pipeline routing, lateral and compression facilities in accordance with environmental studies and obtains regulatory approvals
- Receives design drawings and supervises construction
- · May also supervise pigging operations and troubleshooting

EOT020

Control Center Operation

- · Operates the company's 24-hour pipeline system surveillance and flow control
- Oversees pipeline operations planning function that includes outage coordination, capacity determination, volume planning and input into operating strategies
- Operates the control room to ensure optimal use of the company's transmission system

EOT030

Tank Farm Operations

- Measures, schedules and witnesses meter proves, accurate completion of custody transfer documentation, sampling and testing for quality determinations and specifications and gauging product levels in storage tanks
- Makes sure petroleum products are well stored and treated (homogenizing, heating and blending) at specific temperatures, checks density, performs measurements on tanks and saves or report information
- Takes care of and operates the field equipment necessary for the pipeline/tank movement of petroleum products
- Conducts general inspection and maintenance on pipeline equipment in tank farms such as pumps, valves, motors and instrumentation at pumping and value locations
- · Completes and maintains appropriate records and documents of inspections and maintenance
- Is fully aware of all documentation related to ship/truck loading/unloading, tank measurements and custom documentation. May be required to support 24-hour on-call rotations

Functions and Disciplines Definitions (continued)

<u>Code</u>

Function

EOT

Transportation and Pipeline (continued)

Discipline

EOT500

Scheduling and Logistics

- Serves as the first contact with shippers, dealing with issues related to the pipeline and in compliance with regulatory requirements and company policy
- Oversees daily and monthly shipper imbalances and administers daily provisions of transportation contracts
- Develops and sustains relationships/rapport with shippers and other pipeline companies

EOT999

Transportation and Pipeline - No Applicable Discipline

 Responsibilities are within the Transportation and Pipeline Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

Code

Function

EOW

Well Operations

Responsible for all company-operated oil and gas field operations to bring the well fluids to the surface and prepare them for movement to a refinery or processing plant. Also includes well maintenance operations (servicing) and more extensive repairs (well workovers).

Applicable Career Bands

M (Supervisors Management)

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Discipline

EOW000

Well Operations Generalist/Multidiscipline

• Carries out various operations on the Oil & Gas well during or at the end of its productive life that alters the state of the well and/or well geometry. Provides well diagnostics or manages the production of the well. Oversees well services operations at well sites and takes responsibility for all well services personnel on-site operating by teams to cover both day and night shifts. This focused mandate allows the Well Operations Engineering to develop a close relationship with the staff in his/her assigned asset and to become familiar with the issues around the wells and the well site at large. Applies expertise, performing different operations in the relevant field such as well completion, pumping, cementing, wellhead and Christmas tree maintenance, snubbing, well killing, frac-acid intervention, water/gas injection, etc

EOW010

Drilling

- Supervises the operation of an offshore or onshore drilling rig engaged in well drilling and associated activities such as producing, drilling water supply, gas injection and all workover activities
- Monitors contractor's performance in accordance with contract terms, approves contractor's daily tour report and maintains liaison between contractor and the operating/exploration company
- Performs daily rig checks and monthly rig inspections
- Supervises all liner and casing running, cementing, drill stem testing, stimulating, fishing, abnormal well
 killing and critical pressure testing. Drilling operations include many technical problems concerning drilling,
 well control, work schedules, contract compliance, long-range logistical problems and lesser problems
 concerning quarters, food, recreation and transportation for both company and contractor personnel

EOW020

Drilling Fluids

- Oversees the appropriate use of drilling fluids all along the drilling process
- · Has knowledge of drilling fluids operations and relationships to drilling fluids hydraulics and properties
- Has full understanding of down-hole tools and functional relationship to fluid properties and products.
 Has knowledge of solids control equipment, screens and fluid relationships to Drilling Waste
 Management processes
- Operates in a global environment on an "as needed" basis with functional computer skills and knowledge
 of cost and inventory accounting and logistics management
- Has knowledge of virtual hydraulics and the ability to interpret results without support from office based staff. Has the ability to design fluid displacements or other fluid-related procedures

EOW030

Bit and Coring

- Uses drilling experience and thorough product knowledge to maximize bit and/or coring performance while drilling
- Evaluates operating parameters and recommends possible changes to improve performance.
 Evaluates and analyzes wear of the bit when bit is pulled up out of hole at rig site

EOW040

Wireline and Coil Tubing

- Runs any wireline and/or coil tubing service at the well site
- Assists in rigging up wireline units on rig sites and the assembly of tools in shop and at rig
- May supervise rig floor personnel to rig up and rig down
- May work in conjunction with other service specialty (e.g., logging, perforating) for performing their services through the tubing
- · Maintains tools and repairs as needed or required

Functions and Disciplines Definitions (continued)

<u>Code</u>

Function

EOW

Well Operations (continued)

Discipline

EOW050

Fishing

- Runs tools in and out of the hole and performs related procedures associated with retrieval of tools, drill string and equipment in the well bore
- May supervise drill or fishing crew and actually rig-up assemblies to run a fishing tool operation
- Is engaged in tool preparation activities and operation of all fishing equipment and solicits fishing and rental work
- Requires comprehensive understanding of down-hole environment in open-hole and cased-hole situations.
 Works with operations when not on jobs to keep up with new procedures, paperwork, equipment and price books
- May provide technical support to other departments to share experience and subject matter knowledge base, training and development, research and engineering

EOW060

Well Completion

- Ensures competent and timely aspects of completion in terms of design, planning, program delivery, tender operations, evaluations, innovation, scheduling, reporting, etc. Also ensures appropriate management systems are in place in all operational aspects
- Manages the various types of wells and the operations that may have been performed
- Discusses requirements for well completions with the customer, owner or operator of the well and participates in the design of well completion
- Manages the day-to-day drilling and completion reports for the well files
- Processes and audits operational data and distributes drilling and completion operational data to the appropriate partners and/or government agencies. Submits historical data to appropriate agents

EOW070

Reclamations/Construction

- Is involved in the operations to prepare a drill site for drilling or, in the case of a dry well, to convert a drilled well to a condition that can be left indefinitely and without further attention
- · Restores a well site to its original state

EOW999

Well Operations - No Applicable Discipline

 Responsibilities are within the Well Operations Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

Code

Function

ETG

Gas Transmission

Coordinates gas transmission system operations, construction and/or maintenance of facilities, pipelines and compressors, and measurement. Calculates and controls the flow of natural gas through the system to maintain volume and pressure for an adequate supply.

Applicable Career Bands

Milderegene Managementi

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TO COMMENT SHOPING

Discipline

ETG000

Gas Transmission Generalist/Multidiscipline

- Coordinates gas transmission system operations, construction and/or maintenance of facilities, pipelines and compressors as a generalist or in a combination of Disciplines in the Gas Transmission Function
- Calculates and controls the flow of natural gas through the system to maintain volume and pressure for an adequate supply
- Ensures receipt and delivery of gas from one point to another within the system and from outside systems
- Monitors telemetric instruments to determine gas pressure, volume and consumption
- Reviews supply-and-demand data such as gas quality, pressure, weather conditions and time of day to forecast load adjustment
- Ensures operational compliance with all gas transmission regulations

ETG010

Pipeline

- Operates and maintains transmission pipelines typically within a geographic area
- Coordinates inspection of pipelines, corrosion control, coordination of construction and/or maintenance, and project documentation
- Ensures that all policies and procedures for safe operations are maintained and trains personnel on all procedures

ETG020

Gas Supply

- Plans and secures adequate supplies of natural gas to meet the organization's needs
- Develops long-term supply, which may include transportation and storage arrangements
- Negotiates gas purchase contracts with suppliers and, as required, with transportation organizations and storage operators
- Develops forecasts of needed supply, transportation requirements, and available storage
- Manages relationships with suppliers
- Administers and monitors existing purchase and sale contracts within prescribed legal policies and procedures and works closely with other groups to determine pricing and terms of new contracts
- Identifies new long-term supply opportunities, and, working with the energy marketing and trading group, assists in determining prices and contract terms for profitable transactions

ETG030

Gas Scheduling

- Schedules and nominates gas purchases and sales on the transporting pipeline system
- Negotiates operating balance agreements (OBA) and reconciles OBA imbalances
- Implements curtailments as necessary to maintain system integrity
- Records all relevant data and transactions on the monitoring system to ensure proper tracking for the generation of reports

ETG040

Compressor Station

- Operates and maintains compressor stations
- Takes responsibility for inspection of pipelines, corrosion control, coordination of construction and/or maintenance, and project documentation
- Ensures that all policies and procedures for safe operations are maintained and trains personnel on all procedures

ETG999

Gas Transmission - No Applicable Discipline

 Responsibilities are within the Gas Transmission Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

<u>Code</u>

Function

ETM

Electric Transmission Construction and/or Maintenance

Constructs, installs, maintains and repairs facilities, devices and equipment used in high-voltage (typically above 34.5 KV) electric transmission in accordance with government regulations and the organization's policies, procedures and standards.

Applicable Career Bands

M (Supervisian Management)

Partioness mode

Tillechnical Support)
W. Fraduction Michael Enboy

Discipline

ETM000

Electric Transmission Construction and/or Maintenance Generalist/Multidiscipline

- Constructs, removes and maintains electric transmission facilities and equipment, including cables, transformers, towers and other associated devices within transmission guidelines established by the transmission planning function to meet system requirements as a generalist or in a combination of Disciplines in the Electric Transmission Construction and/or Maintenance Function
- Ensures reliable performance of all transmission lines by effective design and selection of transmission line
 equipment based on life cycle costs, reliability and guidelines established by transmission planning to meet
 system requirements
- Dispatches field crews, troubleshooters and testers engaged in the construction, maintenance and emergency restoration of electric transmission facilities; secures transmission line construction and/or modification documentation; coordinates with surrounding transmission organizations to integrate activities into the overall power grid
- May coordinate loading, unloading, transporting and relocating large power equipment and scheduling and/or procuring rental and shared equipment (e.g., cranes, trucks, track equipment, oil processing trailers, mobile power equipment)

ETM002

Electric Transmission Construction

- Constructs new electric transmission facilities and equipment, including cable, transformers, towers and
 other associated devices using effective design and transmission line equipment selection based on life
 cycle costs, reliability and guidelines established by transmission planning
- Dispatches field crews and testers engaged in the construction of electric transmission facilities, secures transmission line construction documentation and coordinates with surrounding transmission organizations to integrate activities into the overall power grid
- May coordinate loading, unloading, transporting and relocating large power equipment and scheduling and/or procuring rental and shared equipment (e.g., cranes, trucks, track equipment, oil processing trailers, mobile power equipment)

ETM004

Electric Transmission Maintenance

- Maintains electric transmission facilities and equipment, including cable, transformers, towers and other
 associated devices within guidelines established by transmission planning to meet system requirements
- Dispatches field crews, troubleshooters and testers engaged in the maintenance and emergency restoration of electric transmission facilities, secures transmission line modification documentation and coordinates with surrounding transmission organizations to integrate activities into the overall power grid
- May coordinate loading, unloading, transporting and relocating large power equipment and scheduling and/or procuring rental and shared equipment (e.g., cranes, trucks, track equipment, oil processing trailers, mobile power equipment)

ETM010

Electric Transmission Equipment Testing

- Plans, schedules, coordinates and supervises transmission systems equipment testing, including
 construction testing, maintenance testing, and protective and control scheme testing to ensure that
 equipment systems meet organization and regulatory standards
- Tests reclosures, sectionalizers, transformers and other major electric transmission and distribution (T&D)
 equipment systems
- Maintains knowledge of current test equipment and procedures

Functions and Disciplines Definitions (continued)

Code

Function 4 6 1

ETM

Electric Transmission Construction and/or Maintenance (continued)

Discipline

ETM020

Electric Transmission Equipment Repair

- Plans, schedules, coordinates and supervises transmission systems equipment repairs to ensure that
 equipment systems meet organization and regulatory standards
- Repairs reclosures, sectionalizers, transformers and other major transmission and distribution equipment systems

ETM999

Electric Transmission Construction and/or Maintenance - No Applicable Discipline

 Responsibilities are within the Electric Transmission Construction and/or Maintenance Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

Code Function

ETO Electric Transmission Operations

Operates safe, reliable, stable and economic round-the-clock electric transmission system. Ensures that the system meets demand by executing switching orders, continuous monitoring and balancing of power flow, and responding to system disturbances.

Applicable Career Bands

M (Supervisor) Management

P : Professional)

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Discipline

ETO000

Electric Transmission Operations Generalist/Multidiscipline

- Operates a safe, reliable, stable and economic electric transmission system round-the-clock operation as a generalist or in a combination of Disciplines in the Electric Transmission Operations Function
- Ensures the electric transmission system meets demand while maintaining system parameters such as frequency, line flows and transmission-level voltage within prescribed limits
- Acts promptly to return the system to a stable state when voltage and/or frequency excursions occur
- Maintains real-time compliance with reliability standards set by regulatory authorities

ETO005

Electric Transmission System Operations - Reliability

- Monitors and controls the bulk power transmission system parameters, including system load, frequency, voltage, line flows, transformer flows, tap positions and direction of energy flow, and maintains acceptable voltage profiles in accordance with established reliability standards
- Analyzes SCADA (supervisory control and data acquisition) inputs of system voltage, line loading and system alarms, and takes appropriate action
- Takes direct and timely real-time actions (without obtaining higher level approval), including directing shedding of firm load to prevent or alleviate system operating limit (SOL) and interconnection reliability operating limit (IROL) violations, dispatching generation and initiating transmission switching to maintain transmission-level voltages
- Integrates resource plans "ahead of time," maintains load/interchange/generation balance within the metered boundary and supports system frequency in real time
- Ensures real-time security-constrained (security refers to system parameters and not a physical threat) economic generation dispatch throughout the balancing authority area
- Maintains real-time compliance with reliability standards set by regulatory authorities
- Determines trouble location and analyzes cause, routes trouble report to appropriate unit for corrective action and advises all those affected of corrective actions
- Evaluates, coordinates and directs all switching operations to take transmission facilities out of service for maintenance and return those facilities to service

ETO014

Electric Transmission System Operations - Interchange Scheduling/Load Balancing

- Accommodates requests for power flow between adjacent electronic systems in real time
- Monitors published system limits regarding ramp limitations
- Curtails or otherwise modifies existing scheduled interchanges as required by regulations and as directed by reliability coordinators and transmission operators
- Verifies scheduled interchanges with neighboring transmission systems
- Implements emergency schedules as required by reserve-sharing arrangements

ETO016

Electric Transmission System Operations - Generation Operations

- Operates the real-time bulk power system by directing the output of generating units to maintain system control performance within established criteria at the lowest possible cost
- Coordinates load estimating, determination of generation requirements, and generating unit scheduling and dispatching for all generation under the operational control of the organization
- Communicates with balancing authorities and generating plants regarding the status of generation units
- Maintains a balance between electric generation and total customer electricity demand and maintains
 operating reserves to provide for the reliable operation of the electronic transmission system for actual or
 potential situations

Functions and Disciplines Definitions (continued)

Code

Function

ETO

Electric Transmission Operations (continued)

Discipline

ETO020

Reliability Coordination

- Ensures the reliability of the bulk power transmission system within a reliability authority area (i.e., transmission operations reliability in a geographic area defined by the North American Electric Reliability Corporation [NERC])
- Acts and directs immediate actions by transmission operators, transmission owners, balancing authorities, generator operators, load-serving entities, distribution operators and purchasing-selling entities within the reliability coordinator area to preserve the integrity and reliability of the bulk electric system
- Coordinates reliability processes and emergency response actions with operating entities within the
 reliability authority area and with neighboring areas to ensure the reliability of the interconnected grid
- Establishes and implements policies and related practices in accordance with industry and NERC standards
- Operates within an organization responsible for the reliability of multiple transmission systems across a specific region, including Independent System Operators (ISOs), regional transmission organizations (RTOs) and other NERC reliability coordinators
- Administers the Open Access Same-Time Information System (OASIS)

ETO030

Electric Transmission Tariff Administration

- Develops, maintains and provides real-time and short-term operational administration of the Open Access Transmission Tariff (OATT) to provide reliable transmission service across the electric transmission grid, ensure tariff compliance and support market participant satisfaction
- Evaluates and processes transmission service requests using the Open Access Same-Time Information System (OASIS) and tools in a timely manner to ensure optimal reliability of the bulk electric system; intervenes manually in the automated processes as necessary
- Calculates Available Transmission Capability (ATC), evaluates and acts on transmission service requests in a manner consistent with regulatory requirements and reliability criteria
- Ensures automated processes perform as necessary to facilitate the tariff administration Function
- Collaborates with reliability coordinators and is aware of the status of the transmission system and the
 implications of selling new service, both in "real-time" and for the near-term future

ETO040

Transmission Operations Compliance

- Develops, implements and maintains a reliability standards compliance framework
- Monitors transmission operations to ensure compliance with national, regional and local regulations
- Evaluates operating events, disturbances and performance
- Provides support in responding to regulatory data requests, investigations, compliance and regulatory audits and customer inquiries
- Ensures that all documentation is complete, accurate and in compliance with applicable regulatory standards

ETO999

Electric Transmission Operations - No Applicable Discipline

 Responsibilities are within the Electric Transmission Operations Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

<u>Code</u> <u>Function</u>

EVM Vegetation Management and Forestry

Manages vegetation and/or forestry and electrical line clearance in service areas to prevent power outages. Develops and evaluates new methods for line clearance and vegetation management in compliance with regulations and standards and prepares and administers bids and contracts.

Applicable Career Bands

M (Supervisory Management)

Pi(Professional)

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Discipline

EVM000

Vegetation Management and Forestry Generalist/Multidiscipline

- · Manages the line clearance crews in service areas
- Clears vegetation around electric power lines in conformance with specifications to prevent power outages as a generalist or in a combination of Disciplines in the Vegetation Management and Forestry Function
- Develops and evaluates new methods for line clearance and vegetation management in compliance with regulations and standards
- Evaluates and resolves customer-related problems, questions and complaints involving vegetation management practices
- · Acts as the organization's spokesperson on external vegetation management
- · May prepare and administer bids and contracts
- · May be responsible for groundskeeping

EVM999

Vegetation Management and Forestry - No Applicable Discipline

 Responsibilities are within the Vegetation Management and Forestry Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

Code

Function

NPM

Nuclear Plant Maintenance

Maintains nuclear power plant systems, equipment and structures in accordance with NRC (Nuclear Regulatory Commission) regulations. Ensures that equipment performs reliably and at an optimum level through effective implementation of corrective, preventive and predictive programs and procedures.

Applicable Career Bands

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Discipline

NPM000

Nuclear Plant Maintenance Generalist/Multidiscipline

- Analyzes equipment breakdowns, determines the proper corrective action and directs repairs as a generalist or in a combination of Disciplines in the Nuclear Plant Maintenance Function
- · Evaluates recurring maintenance problems and devises procedures for solution
- Reviews and revises maintenance procedures

NPM020

Nuclear Plant Maintenance Planning

- Designs planned work and design change packages
- Defines procedures, drawings, equipment and materials required to perform planned work packages
- Develops work standards to support work packages
- Conducts field walk downs to identify and analyze corrective and preventive maintenance, modification and surveillance activities
- · Acts as a liaison with engineering department and/or vendors to coordinate activities

NPM050

Nuclear Plant Maintenance Outage Management

- Directs nuclear plant outage-related activities, including operations, maintenance and construction consistent with the organization's policy and regulatory requirements
- May be partly or fully responsible for scheduling
- Provides planning and scheduling support, coordinates cost estimates and procurement, and designs support plans prior to and during the outage
- Monitors progress of outages, identifies problems, revises schedules and budgets, and reports on the status of the outage to management
- Implements ALARA (as low as is reasonably achievable) programs, prepares outage-related documentation and assesses the adequacy of planning documents and systems

NPM060

Nuclear Plant Maintenance Instrument and Control

- Maintains installed instrumentation, process control systems and electrical protective devices
- Conducts preventive and corrective maintenance in the nuclear core detection system and associated instrumentation, reactor control and protective system, control rod system, protective relaying and other plant instrumentation
- Reviews calibration and test data results with NRC and state compliance inspectors
- Determines instrumentation and control irregularities for equipment associated with the reactors, turbines, generators and other associated equipment

NPM070

Nuclear Plant Maintenance Mechanical and/or Electrical

- Inspects, repairs and rebuilds mechanical and/or electrical equipment and associated structures
- Ensures compliance with industrial and radiation safety requirements
- Analyzes equipment breakdowns, determines the proper corrective action and directs repairs
- · Plans work schedules to accomplish required maintenance and, when required, assigns priorities
- May establish welding guidelines and standards based on metallurgic and failure analyses

Functions and Disciplines Definitions (continued)

<u>Code</u>

Function

NPM

Nuclear Plant Maintenance (continued)

Discipline

NPM080

Nuclear Plant Maintenance In-Service Inspection and Testing

- Develops, implements and maintains in-service inspection (ISI), testing and maintenance programs
- Supports and conducts nondestructive examination (NDE), quality engineering (QE), and quality control (QC) inspections
- · Researches, interprets and explains inspection results
- · Recommends changes to maintain compliance with regulatory requirements
- Maintains documentation to meet licensing obligations and ensure proper test methodologies are in place

NPM081

Nuclear Plant Maintenance Non-Destructive Examination Specialty

- Develops, implements and maintains Non-Destructive Examination (NDE) requirements, testing and maintenance programs
- Designs, installs, evaluates and updates NDE process systems, procedures and improvement techniques
- · Coordinates NDE training and certification programs
- Develops, reviews and approves NDE reports and responds to regulator questions on NDE applications
- Ensures proper communication and interpretation of NDE test results and prompt repair of components

NPM999

Nuclear Plant Maintenance - No Applicable Discipline

 Responsibilities are within the Nuclear Plant Maintenance Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

<u>Code</u>

Function

NPO

Nuclear Plant Operations

Coordinates the operation of all nuclear power-generating equipment, including the nuclear reactor(s), reactor plant support systems (e.g., fuel handling, radioactive waste disposal), secondary plant systems and pumps, electrical breaker connections to the systems, main turbines, generators and associated auxiliary equipment.

Applicable Career Bands

M (Supervisory Management)

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Discipline

NPO000

Nuclear Plant Operations Generalist/Multidiscipline

- Operates nuclear reactor(s), turbine generator units and auxiliary equipment, and related computer controls and interfaces with transmission facilities
- Performs routine tests of the reactor safeguard equipment and radiation protection systems
- · Conducts shutdown and start-up activities
- Removes units from service in the event of an emergency and implements established emergency procedures
- Maintains, reviews and evaluates all operating records to preserve documentation of all operations, activities and responses to any unusual conditions in accordance with NRC (Nuclear Regulatory Commission) specifications

NPO010

Nuclear Plant Operations - RO License

- Operates nuclear reactor(s), turbine generator units and auxiliary equipment, and related computer controls and interfaces with transmission facilities
- Performs routine tests of the reactor safeguard equipment and radiation protection systems
- · Conducts shutdown and start-up activities
- Removes units from service in the event of an emergency and implements established emergency procedures
- Maintains, reviews and evaluates all operating records to preserve documentation of all operations, activities and responses to any unusual conditions in accordance with Nuclear Regulatory Commission (NRC) specifications
- Maintains a Reactor Operator (RO) license which usually requires three years of power plant experience
 with at least one year of experience at the nuclear power plant, completion of the nuclear power plant's RO
 training program and passing an NRC RO exam

NPO999

Nuclear Plant Operations - No Applicable Discipline

 Responsibilities are within the Nuclear Plant Operations Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

<u>Code</u>

Function

NQA

Nuclear Quality Assurance

Performs independent assessments of departments involved in nuclear safety such as construction, design engineering, production and distribution, and selected other functions.

Applicable Career Bands

MicRubentieury, Management)

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Tabunion Support

Discipline

NQA000

Nuclear Quality Assurance Generalist/Multidiscipline

- Prepares plans and schedules for conducting independent assessments and surveillance
- Reviews documents, prepares checklists and agendas for assessments, performs independent
 assessments, conducts pre- and post-assessment interviews, and prepares final assessment report
- Ensures and documents that corrective actions are taken based on report findings
- Reviews organization's quality assurance manual and implementation procedures to verify compliance with American Society of Mechanical Engineers (ASME), American National Standards Institute (ANSI) and Nuclear Regulatory Commission (NRC) regulations
- Maintains up-to-date knowledge and understanding of NRC revisions to regulations and industry codes and standards
- Develops and implements nuclear quality assurance procedures to be followed in one or more of the following areas: design, procurement, construction and operation of nuclear generating stations
- Reviews quality assurance specifications; test reports and other documentation to ensure that nuclear safety and quality assurance requirements are met
- Inspects and reviews contractors' and vendors' work for compliance with quality assurance standards
- May conduct assessments of vendor/contractor quality assurance/quality control programs to ensure compliance

NQA999

Nuclear Quality Assurance - No Applicable Discipline

 Responsibilities are within the Nuclear Quality Assurance Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

Code

Function

NRS

Nuclear Plant Radiation Safety

Directs radiation safety units in implementing decontamination, instrumentation, planning and scheduling, procedure, training, radiation control and radwaste programs in support of operation and maintenance activities at the plant.

Applicable Career Bands

M (Supervisory Alarmaement)

P (Protessional)

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Discipline

NRS000

Nuclear Plant Radiation Safety Generalist/Multidiscipline

- Ensures compliance with applicable regulatory requirements regarding radiation safety procedures
- · Approves radiation work permits
- Certifies radioactive waste shipping manifests and administers the radiation safety training program
- Interfaces with management and regulators on matters related to implementation of radiation safety programs

NRS010

Nuclear Plant Health Physics

- Participates in the maintenance of ongoing plant radiation monitoring programs
- Conducts investigations, inspections, surveys and tests to ensure compliance with government regulations
 and organization guidelines on personal radiation exposure, radioactive effluent releases and radioactive
 concentrations in plant systems and in the environment
- Interprets test results and performs exposure investigations
- Typically requires certification by the American Board of Health Physicists and a B.S. degree

NRS020

Radiochemical Control

- Conducts chemical and radiochemical sampling and analyses
- Manages water treatment for the reactor and auxiliary systems to ensure that operations are within prescribed limits
- Operates and maintains the make-up water, chemical and waste treatment systems

NRS030

Nuclear Plant Emergency Preparedness

- Develops, maintains and evaluates radiological emergency plans in compliance with government nuclear regulatory requirements
- · Schedules and coordinates on-site and off-site nuclear plant emergency drills and exercises
- Ensures public health and safety regarding possible exposure to radiation by developing emergency evacuation plans and negotiating emergency support agreements with appropriate governmental agencies
- Develops public information scenarios for drills and exercises and maintains an effective E-plan public information program
- May also be responsible for nuclear plant security

NRS999

Nuclear Plant Radiation Safety - No Applicable Discipline

 Responsibilities are within the Nuclear Plant Radiation Safety Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

<u>Code</u>

Function

NSA

Nuclear Plant Administrative Support Services

Develops, coordinates, implements and administers nontechnical nuclear plant support activities such as fitness for duty (FFD) program, document control and facilities management.

Applicable Career Bands

MigRup arresposition because quick

P(Fickessional)

T (Technical Support)
U (Duamoss Support)

Discipline

NSA000

Nuclear Plant Administrative Support Services Generalist/Multidiscipline

 Develops, coordinates, implements and administers two or more nontechnical nuclear plant support activities such as fitness for duty (FFD) program, document control and facilities management

NSA999

Nuclear Plant Administrative Support Services - No Applicable Discipline

 Responsibilities are within the Nuclear Plant Administrative Support Services Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

<u>Code</u>

Function

NST

Nuclear Plant Technical Support Services

Develops, coordinates, implements and administers technical nuclear plant support activities and programs such as plant licensing, operations procedure writing, performance assessment, corrective action and employee concerns.

Applicable Career Bands

M (Supervisors Management)

P (Protosskienal)

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Discipline

NST000

Nuclear Plant Technical Support Services Generalist/Multidiscipline

- Develops, coordinates, implements and administers two or more technical nuclear plant support activities
 or programs as a generalist or in a combination of Disciplines in the Nuclear Plant Technical Support
 Services Function such as plant licensing, operations procedure writing, performance assessment,
 corrective action and employee concerns
- Most nuclear plant technical support services roles typically require a four-year college degree with knowledge of reactor systems design and function, technical specifications and regulations

NST010

Nuclear Plant Licensing

- Obtains and maintains the operating permits and licenses required by the NRC (Nuclear Regulatory Commission) and state or local governments for nuclear facilities
- Provides licensing direction to the organization, vendor and consultant personnel to ensure that regulatory requirements relating to the design, construction and modification of existing facilities are met
- Provides necessary interface with outside organizations and serves as the on-site liaison for NRC resident inspectors and corresponds with the NRC regarding nuclear plant licensing issues
- Works to identify, prioritize and facilitate necessary station support and response to regulatory issues or required licensing initiatives
- Implements commitment-tracking activities associated with site-generated regulatory correspondence
- Prepares licensing documents and reports, operation evaluations and regulatory interpretations
- Prepares nuclear safety and environment reports
- Takes responsibility for generic and/or plant-specific licensing issues, including preparation, review and updates to the FSAR (final safety analysis report)

NST020

Nuclear Plant Operations Procedure Writing

- · Creates, revises and reviews nuclear power plant operations procedures
- Reviews design and license changes for procedures impacting on the performance of NRC regulatory requirements
- · Gathers documentation to prepare an analysis of recommended design and licensing changes
- Reviews documentation to ensure procedures are up-to-date and accurate
- Validates the technical basis of written procedures by reviewing the relevant technical, regulatory and licensing issues and interfacing with all applicable departments

Functions and Disciplines Definitions (continued)

Code

Function

NST

Nuclear Plant Technical Support Services (continued)

Discipline

NST040

Nuclear Plant Performance Improvement

- Develops and implements nuclear power plant performance monitoring processes and procedures to ensure safe and efficient operation
- Recommends improvements in solving human performance issues and performance improvement processes
- Develops sustainable, repeatable and quantifiable human performance improvements
- Works with plant management to provide performance improvement services and ensure they are knowledgeable of improvement opportunities
- · Works with corrective action personnel to provide assessment and investigation services
- Works with operations training personnel to ensure lessons learned are included in operations training
- Directs the development of reports as needed to ensure upper management is aware of plant performance conditions and improvement opportunities
- Tracks cost savings associated with performance successes and failures

NST999

Nuclear Plant Technical Support Services - No Applicable Discipline

 Responsibilities are within the Nuclear Plant Technical Support Services Function but are not described in other Discipline summaries

Functions and Disciplines Definitions (continued)

<u>Code</u>

Function

NTR

Nuclear Plant Training

Develops and implements nuclear and simulator, technical and nuclear-operator training, retraining and licensing programs, including radiological safety.

Applicable Career Bands

MillSchemison; Management)

P (Protessional)

Discipline

NTR000

Nuclear Plant Training Generalist/Multidiscipline

- Conducts training courses for nuclear power plant employees
- Develops and maintains training programs
- · Maintains training records and documentation for station personnel
- · Conducts needs/job task analyses

NTR010

Nuclear Operations Training - Reactor Operator License

- Conducts training programs for licensed operators and shift technical advisers in reactor operations covering replacement, requalification, upgrade, etc., consistent with Nuclear Regulatory Commission (NRC) requirements
- · Develops and maintains operations training programs
- · Administers training programs to ensure the availability of qualified and licensed personnel
- Maintains a Reactor Operator (RO) license which usually requires three years of power plant experience
 with at least one year of experience at the nuclear power plant, completion of the nuclear power plant's RO
 training program and passing an NRC RO exam

NTR999

Nuclear Plant Training - No Applicable Discipline

 Responsibilities are within the Nuclear Plant Training Function but are not described in other Discipline summaries

Executive Benchmarks Listing

AAA	Top Executive						
	AAA000-EX	Chief Executive Officer					
	AAA010-EX	Executive Chairman of the Board (not CEO)					
	AAA020-EX	Chief Operating Officer					
	AAA999-EX	No Applicable Executive Benchmark					
AAB	Business Unit Management						
	AAB001-EX	Segment Head					
	AAB003-EX	Division Head					
	AAB005-EX	Chief Operating Officer - Segment/Division					
	AAB012-EX	Region Head					
	AAB020-EX	General/Country Manager					
	AAB515-EX	Top Energy Operations Executive					
ACA	Corporate Affairs/Communications						
	ACA000-EX	Top Corporate Affairs Executive					
	ACA005-EX	Top Public Relations and Internal Communications Executive					
	ACA010-EX	Top Public Relations Executive					
	ACA015-EX	Top Internal Communications Executive					
	ACA020-EX	Top Community Relations Executive					
	ACA050-EX	Top Regulatory Affairs and Compliance Executive					
	ACA060-EX	Top Environmental Affairs and Compliance Executive					
	ACA063-EX	Chief Privacy Officer					
	ACA065-EX	Top Sustainability Executive					
	ACA070-EX	Top Government Relations Executive					
	ACA090-EX	Top Investor Relations Executive					
ACD	Strategic Planning/Corporate Development						
	ACD000-EX	Top Strategic Planning and Development Executive					
	ACD010-EX	Top Strategic Planning Executive					
	ACD016-EX	Top Digital Strategy Executive					
	ACD020-EX	Top Business/Corporate Development Executive					
	ACD050-EX	Top Mergers and Acquisitions Executive					
	ACD060-EX	Top Strategic Alliance Executive					
	ACD500-EX	Top Merchant Generation Business Development Executive					
AEM	Data Analytics/Business Intelligence and Data Science						
	AEM000-EX	Chief Data Officer					
	AEM010-EX	Top Economist					

Chief Analytics Officer

AEM050-EX

Executive Benchmarks Listing (continued)

AFA Finance

AFA000-EX CFO/Top Financial Officer

AFA001-EX Finance Executive (Second Level)

AFB Accounting

AFB000-EX Financial Controller

AFB010-EX Top General Accounting Executive AFB020-EX Top Financial Reporting Executive

AFC Credit and Collections

AFC000-EX Top Credit and Collections Executive

AFT Financial Analysis and Tax

AFT030-EX Treasurer

AFT036-EX Top Investment Portfolio Management Executive
AFT040-EX Top Corporate/Financial Planning Executive

AFT050-EX Top Tax Executive

AFU Audit and Financial/Business Controls

AFU010-EX Top Internal Audit Executive

AFY Risk Management

AFY000-EX Top Risk Management Executive

AFY500-EX Top Risk Management/Derivatives Trading Executive

AGA General Management and Administration

AGA000-EX Chief of Staff to CEO/President

AGA020-EX Top Administration Executive (Major Functions)

AGA040-EX Top Shared Services Executive

AHR Human Resources

AHR000-EX Top Human Resources Executive

AHR010-EX Top Compensation and Benefits Executive
AHR090-EX Top Employee/Labor Relations Executive

AHR125-EX Top Talent Management Executive

AHS Environmental Health and Safety

AHS000-EX Top Environmental Health and Safety Executive

AHS050-EX Top Safety Executive

Executive Benchmarks Listing (continued)

AIC Information Technology

AIC000-EX Chief Information Officer
AIC001-EX Chief Technology Officer

AIC002-EX Top Information Technology Executive
AIC020-EX Information Technology Function Head

AID IT Development

AID010-EX Top Applications Development Executive

AID040-EX Top Systems Software Executive

AID100-EX Top Enterprise Resource Planning Executive

AIT IT Administration

AIT035-EX Top Telecommunications Executive

ALG Legal

ALG000-EX Top Legal Executive

ALG003-EX Associate General Counsel
ALG005-EX Corporate/Company Secretary

AMJ Sales, Marketing and Business Development

AMJ000-EX Top Sales and Marketing Executive

AMK Marketing

AMK000-EX Top Marketing Executive

AMK020-EX Top Marketing Communication Executive

AMK025-EX Top Advertising and Sales Promotion Executive

AMK110-EX Top Digital Marketing Executive

AMS Customer Support/Operations

AMS000-EX Top Customer Service/Operations Executive
AMS020-EX Top Customer Contact/Call Center Executive

AOM Manufacturing/Operations

AOM000-EX Top Manufacturing Executive

APM Project/Program Management

APM005-EX Top Program Management Executive

APM020-EX Top Facilities Construction Project Management Executive

AQY Quality Assurance Methods

AQY000-EX Top Total Quality Executive

Executive Benchmarks Listing (continued)

ARE Real Estate and Facilities

ARE000-EX Top Property Management Executive

ARO Research and Development

ARO000-EX Top Research and Development Executive

ARO002-EX Research and Development Executive (Second Level)

ASC Supply Chain and Logistics

ASC000-EX Top Supply Chain Executive

ASC060-EX Top Procurement/Purchasing Executive

ASC510-EX Top Materials Management/Purchasing Executive

AZA Engineering and Construction

AZA500-EX Top Power Engineering and Construction Executive AZA520-EX Top Renewable/Alternative Power Engineering and

Construction Executive

AZC Construction

AZC500-EX Top Power Construction Executive

AZC510-EX Top Renewable/Alternative Power Construction Executive

AZE Engineering

AZE000-EX Top Engineering Executive

AZE501-EX Top Power Engineering Executive

AZE557-EX Top Renewable/Alternative Power Engineering Executive

AZE559-EX Top Nuclear Engineering Executive
AZE569-EX Top Gas Engineering Executive

CSA Sales

CSA001-EX Top Sales Executive

ECG Gas Operations

ECG000-EX Top Gas Operations Executive

EDC Energy Delivery/Distribution and Customer Service

EDC000-EX Top Distribution and Customer Service Executive

EDD Energy Delivery/Distribution

EDD010-EX Top Power Distribution Systems Executive

EFS Energy Supply

EFS005-EX Top Fossil Fuel Supply Executive EFS020-EX Top Natural Gas Supply Executive

Executive Benchmarks Listing (continued)

EGD Power Generation and Delivery

EGD000-EX Top Power Generation and Delivery Executive

EGE Power Generation

EGE000-EX Top Power Resources Executive

EGF Fossil Power Generation

EGF000-EX Top Fossil Power Generation Operations Executive

EGF007-EX Fossil Power Plant Manager (1500 MW+)

EGR Renewable/Alternative Power Generation

EGR000-EX Top Renewable/Alternative Energy Executive

EGR040-EX Top Renewable/Alternative Power Generation Operations Executive

EOP Natural Resources Exploitation/Operation/Production

EOP005-EX Top Exploration and Production Executive

EOP006-EX Top Exploration Executive

EOP020-EX Top Land Management Executive

EOT Transportation and Pipeline

EOT010-EX Top Pipeline Executive

EOW Well Operations

EOW010-EX Top Drilling Operations Executive

ETN Transmission and Distribution Systems

ETN000-EX Top Transmission and Distribution Systems Executive

(Combined Function)

ETO Electric Transmission Operations

ETO000-EX Top Transmission Systems Executive

ETO001-EX Top Power Supply Executive

ETS Electric Power Market and System/Grid Operations

ETS010-EX Top Electric System/Grid Operations Executive (ISO/RTO)

NPA Nuclear Top Executive

NPA000-EX Top Nuclear Executive

NPA020-EX Top Nuclear Plant Site Executive

NPA050-EX Nuclear Power Single Unit Plant Manager

Executive Benchmark Definitions

Code Function

AAA Top Executive

AAA000-EX Chief Executive Officer

• Manages the profitability and growth of the organization

• Accountable to the Board of Directors for all activities of the organization

• Directs the organization in establishing long-range plans, strategy and policy

AAA010-EX Executive Chairman of the Board (not CEO)

• Directs the activities and meetings of the Board of Directors

· Works closely with the executive team; oversees and coordinates the strategic direction of the organization

AAA020-EX Chief Operating Officer

 Under the direction of the Chief Executive Officer, typically has primary responsibility for the profitability of the organization's line operations

Corporate staff functions (e.g., legal, employee relations, finance) may report to this position

AAA999-EX No Applicable Executive Benchmark

 Responsibilities are within any Executive Function but are not described in other Executive Benchmark summaries

Executive Benchmark Definitions (continued)

<u>Code</u>

Function

AAB

Business Unit Management

AAB001-EX

Segment Head

- Has primary responsibility for a major segment of the organization's operations, which may consist of multiple divisions and typically represents a significant portion (15% or more) of corporate revenues
- · Sets the overall strategic direction for the segment
- Typically reports to the CEO or COO
- Corporate/Noncorporate must be "N" (Noncorporate)

AAB003-EX

Division Head

- Has primary responsibility for the profitability and growth of a division, which typically represents a small to moderate portion of corporate revenues
- Sets the overall strategic direction for the division that may include a range of activities (e.g., sales, marketing, operations, staff functions)
- Typically reports to the head of a segment or head of a larger division
- Corporate/Noncorporate must be "N" (Noncorporate)

AAB005-EX

Chief Operating Officer - Segment/Division

- Has primary responsibility for the profitability of line operations within a segment or division. Staff functions (e.g., legal, employee relations, finance) may report to this position
- Typically reports to the head of the segment/division as the second highest-ranking executive
- Corporate/Noncorporate must be "N" (Noncorporate)

AAB012-EX

Region Head

- Has primary responsibility for one of the organization's main geographic regions (e.g. Asia Pacific, Europe, Latin America), which typically represents a significant portion (15% or more) of corporate revenues
- Sets the overall strategic direction for the geographic region
- Typically reports to the CEO or COO
- Corporate/Noncorporate must be "N" (Noncorporate)

AAB020-EX

General/Country Manager

- Has primary responsibility for the organization's operations in a single country or group of countries outside
 of the home country
- Sets the overall strategic direction for the country or group of countries and represents the organization for legal, tax and regulation purposes
- Corporate/Noncorporate must be "N" (Noncorporate)

Executive Benchmark Definitions (continued)

<u>Code</u>

Function

ACA

Corporate Affairs/Communications

AAB515-EX

Top Energy Operations Executive

- Manages, directs and coordinates all or a major segment of the organization's operations such as oil and gas development and production; refinery production/processing operations; utility generation, transmission and/or distribution operations
- Is involved in setting operational strategies and policies for the unit and is accountable for identifying and meeting key performance targets
- Plans, develops and manages the fulfillment and technical services functions in order to increase profitability
- May formulate policies, forecast requirements for manpower, technology and facilities and develop quality standards

ACA000-EX

Top Corporate Affairs Executive

- Has primary responsibility for designing, developing and implementing policies and programs to enhance
 the public reputation of the organization, direct the development and management of an integrated
 communications function (internally and externally), and represent the organization in legislative and
 regulatory matters
- · May be responsible for community relations

ACA005-EX

Top Public Relations and Internal Communications Executive

- Has primary responsibility for designing, developing and implementing policies and programs to enhance the public reputation of the organization and for directing the development and management of an integrated Communications Function
- Responsibilities include both external and internal communications

ACA010-EX

Top Public Relations Executive

- Has primary responsibility for designing, developing and implementing policies and programs to enhance the public reputation of the organization
- Initiates programs that ensure the public's understanding of the organization's goals and achievements
- This position is not responsible for representing the organization in legislative or regulatory matters

ACA015-EX

Top Internal Communications Executive

- Has primary responsibility for developing a program to communicate to all employees the organization's
 policies and programs
- Typically includes the communication of business strategy, key events, management changes, benefits and compensation programs, and developing communication channels to ensure all employees are well informed

ACA020-EX

Top Community Relations Executive

Has primary responsibility for developing and implementing policies and programs to enhance the
organization's standing in the communities where plants, offices and other facilities are located

ACA050-EX

Top Regulatory Affairs and Compliance Executive

- Has primary responsibility for managing the relationship with regulatory commissions/authorities and ensuring that the policies and procedures of the organization comply with all applicable laws and regulations
- Oversees the review and interpretation of new pending laws and regulations, which potentially affect the
 organization's business practices, and coordinates the development or revision of policies, procedures,
 contracts and agreements to ensure compliance

ACA060-EX

Top Environmental Affairs and Compliance Executive

- Has primary responsibility for developing the organization's positions on environmental policy issues regarding the impact of the organization's operations on water, air and land quality
- Responsible for establishing organization-wide policies and programs that comply with regulations and ensure overall compliance at all sites

Executive Benchmark Definitions (continued)

<u>Code</u>

Function

ACA

Corporate Affairs/Communications (continued)

ACA063-EX

Chief Privacy Officer

- Has primary responsibility for the development, implementation, administration of and adherence to the
 organization's policies and procedures covering the privacy of and access to personal data in compliance
 with organization and regulatory requirements
- Collaborates with Legal and IT leadership to identify personal data risks and to establish procedures to mitigate these risks
- Monitors and reviews progress of business units and trading partners to develop and implement data privacy strategies, goals, monitoring and reporting

ACA065-EX

Top Sustainability Executive

- Has primary responsibility for ensuring that the organization's vision of sustainability is communicated, implemented and maintained in order to produce places, products and services that reduce the use of nonrenewable resources and minimize environmental impact
- Provides visibility and transparency for the vision internally and externally
- Monitors and reviews progress of business units, procurement and staff groups to develop and implement sustainability strategies, goals, measurements and reporting

ACA070-EX

Top Government Relations Executive

 Has primary responsibility for representing the organization in legislative and regulatory matters with national, regional and local governments and quasi-government agencies by providing policy direction, coordinating operating unit government affairs initiatives and lobbying for the organization's interests

ACA090-EX

Top Investor Relations Executive

- Has primary responsibility for developing, maintaining and enhancing close working relationships with
 institutions in the financial community that hold, or may hold, the organization's stock or debt
- Maintains and improves relations and communications between the organization and the investing public, shareholders and financial professionals to enhance the standing of the organization's stock
- Monitors and assesses changes and trends in investment markets and determines appropriate strategy

Executive Benchmark Definitions (continued)

Code

Function

ACD

Strategic Planning/Corporate Development

ACD000-EX

Top Strategic Planning and Development Executive

- Has primary responsibility for developing and securing approval for the organization's strategic plan
- Coordinates and expedites the organization's growth program through merger and acquisition activities, formation of strategic business alliances and licensing agreements

ACD010-EX

Top Strategic Planning Executive

 Has primary responsibility for developing and securing approval for the organization's strategic plan, typically including environmental scans, analyses of organizational positioning and other studies to ensure the continued successful growth of the organization

ACD016-EX

Top Digital Strategy Executive

- Has primary responsibility for the organization's digital strategy, integrating digital into all aspects of the business (e.g., channels, processes, and operating models)
- Assesses and identifies emerging developments in technology, ebusiness platforms, digital and mobile products/services, customer behavior, and partnerships in line with the organization's digital strategy

ACD020-EX

Top Business/Corporate Development Executive

- Has primary responsibility for identifying, investigating and evaluating business investment opportunities, including acquisitions/divestitures, licensing opportunities and strategic business alliances that are in line with the organization's long-range goals
- · May be involved in negotiating terms of agreements

ACD050-EX

Top Mergers and Acquisitions Executive

- Has primary responsibility for coordinating and expediting the organization's growth program through merger and acquisition activities
- Identifies and analyzes possible mergers, acquisitions and divestitures and makes recommendations as to their impact on the organization's profitability; participates in the actual negotiations and supervises the mergers and acquisitions staff

ACD060-EX

Top Strategic Alliance Executive

- Has primary responsibility for establishing critical new partnerships with partners that offer the organization new business or segment opportunities incrementally
- Serves as the key interface for the organization's alliances
- Formulates an organization-wide business plan, defines the organizational structure of alliances, negotiates alliance agreements, supports the execution of the business plan and manages ongoing alliance relationships on behalf of the organization
- · Manages the business scope changes and future growth of alliances and potential offshoot businesses

ACD500-EX

Top Merchant Generation Business Development Executive

- Has primary responsibility to identify, evaluate and structure investment opportunities involving the
 construction of new Independent Power Producer plants and other infrastructure, or the operation of
 existing facilities
- This position is actively involved in negotiating terms of agreements and in developing power projects

Executive Benchmark Definitions (continued)

<u>Code</u>

Function

AEM

Data Analytics/Business Intelligence and Data Science

AEM000-EX

Chief Data Officer

- Has primary responsibility for data governance, data management, data processing and data quality standards across the organization
- . Maintains primary ownership of internal data warehouse and structure of enterprise architecture
- Establishes data policies across the organization

AEM010-EX

Top Economist

- Has responsibility for analyzing economic data on economic conditions that affect the organization's industry (e.g., inflation, national debt) for use in studies and reports to management
- Prepares reports discussing economic forecasts and their impact on the industry and the organization
- Provides advice on a variety of economic issues

AEM050-EX

Chief Analytics Officer

- Responsible for setting analytics strategy for organization
- Principal analytics champion within organization; identifies and rolls out new data tools and technology to support business goals
- Makes business recommendations to senior leadership based on results/trends identified in data analysis

Code AFA

Function Finance

AFA000-EX

CFO/Top Financial Officer

- Establishes, implements, and maintains the financial plans and policies of the organization, including fiscal controls, preparation and interpretation of financial reports, and safeguarding of the organization's assets
- Develops and maintains overall accounting policies and controls
- Establishes and maintains good corporate relations with the investment and banking communities
- Assists in long-range planning and advises management on financial affairs
- May manage one or more significant staff functions, but primary focus is the management of the organization's finances

AFA001-EX

Finance Executive (Second Level)

- Under the direction of the CFO, has primary responsibility for executing the financial strategy, plans, policies and procedures for the organization
- Monitors fiscal/monetary affairs, including financial policies and plans, accounting practices and relationships with the financial community
- May have responsibility for both treasury and controlling operations
- Exercises appropriate financial control over organizational segments by establishing policy supported by periodic operating and budget reports

Executive Benchmark Definitions (continued)

Code

Function

AFB

Accounting

AFB000-EX

Financial Controller

- Has primary responsibility for management of the organization's accounting function
- Maintains all accounting records (general, property, cost, etc.), designs and implements budgetary and other systems for internal control, and prepares financial reports for management and shareholders

AFB010-EX

Top General Accounting Executive

- · Has primary responsibility for development and day-to-day maintenance of the accounting system, including monthly financial report preparation, cost and general accounting, payroll, and accounts payable and accounts receivable statements
- Directs the consolidation of monthly financial and operating statements

AFB020-EX

Top Financial Reporting Executive

- Has primary responsibility for preparing and distributing periodic financial statements for users in the financial community, including the investing public, shareholders and financial professionals
- Ensures that all reports and disclosures comply with applicable governmental regulations, professional standards and organizational policies

Code

Function

AFC

Credit and Collections

AFC000-EX

Top Credit and Collections Executive

Has primary responsibility for formulating and implementing policies and procedures governing the organization's credit and collection operations, including investigating new customers and the collection of overdue accounts

<u>Code</u>

Function

AFT

Financial Analysis and Tax

AFT030-EX

Treasurer

- Has primary responsibility for managing the treasury and banking activities of the organization
- Responsible for the care and custody of the organization's cash and other financial assets and for banking operations and relationships
- Determines the amount and sources of funds required to meet outstanding and planned commitments
- May have responsibility for insurance/risk management activities

AFT036-EX

Top Investment Portfolio Management Executive

- Has primary responsibility for developing strategies, policies, and programs for the investment management of the organization's assets
- May manage benefit plan assets as well as the organization's assets
- Recommends strategies that will maximize return within acceptable risk parameters

AFT040-EX

Top Corporate/Financial Planning Executive

 Has primary responsibility for developing the organization's short- and long-term financial plans and identifying financial opportunities to improve the organization's profitability

AFT050-EX

Top Tax Executive

- Has primary responsibility for setting the organization's tax policy and compliance with all federal, state/region/province, local and applicable foreign tax laws and regulations
- Directs the preparation and filing of tax returns
- Conducts tax research programs to ascertain the optimal tax minimization strategy for the organization

Executive Benchmark Definitions (continued)

Code

Function

AFU

Audit and Financial/Business Controls

AFU010-EX

Top Internal Audit Executive

 Has primary responsibility for designing, developing and implementing the organization's audit program for accounting and financial control systems

<u>Code</u>

Function

AFY

Risk Management

AFY000-EX

Top Risk Management Executive

- Has primary responsibility for developing, recommending and administering the risk management strategy to minimize adverse effects
- Reviews and analyzes data and devises risk minimization programs
- Develops and implements controls and cost-effective approaches to minimize the organization's risk

AFY500-EX

Top Risk Management/Derivatives Trading Executive

- Has primary responsibility for overseeing market (electricity and/or natural gas) and operations risk
- Ensures that the risks are fully assessed, valuation of products is appropriate and transactions are priced to compensate for risks incurred
- Ensures adherence to risk management policies and procedures
- Establishes procedures to provide for accurate and timely monitoring and reporting of daily risk exposure and capital at risk using appropriate quantification and valuation methodologies
- Approves structured and complex transactions and designs customized hedges using derivative securities (i.e., swaps, futures, options)

Code AGA **Function**

General Management and Administration

AGA000-EX

Chief of Staff to CEO/President

- Has primary responsibility for completion of high level activities directly for the Chief Executive Officer on key programs or strategic initiatives for the organization's CEO, President and/or leadership team
- Nature of the job varies based on organization/leadership needs, but responsibilities may include planning leadership events, coordinating annual financial planning process, and preparing the CEO for public events, speaking engagements or similar affairs

AGA020-EX

Top Administration Executive (Major Functions)

- Has primary responsibility for two or more major staff functions such as Government Relations, Public Relations, Legal, Human Resources, Finance or Information Technology
- May be responsible for other staff functions
- Executives who are primarily responsible for finance with one of the above major functions reporting to him/her should be matched as the CFO/Top Financial Executive

AGA040-EX

Top Shared Services Executive

- Has primary responsibility for two or more functions (e.g., Human Resources, Information Technology) that provide centralized services to multiple business units in a shared services environment
- Sets operational strategy for the functions and is responsible for policy interpretation and administration

Executive Benchmark Definitions (continued)

Code

Function

AHR

Human Resources

AHR000-EX

Top Human Resources Executive

- Has primary responsibility for designing, developing and implementing all human resource policies and programs, including labor relations, if applicable
- For noncorporate positions, this position is typically responsible for the execution and administration of policies within a segment of the organization
- In highly-decentralized organizations, responsibilities could also include policy design at the segment level

AHR010-EX

Top Compensation and Benefits Executive

- Has primary responsibility for designing, developing and implementing the organization's benefit and compensation programs (executive compensation, salary, hourly, sales incentives, etc.)
- At the corporate level, this position has design/development emphasis; for noncorporate, the emphasis is on administration unless the organization is highly decentralized

AHR090-EX

Top Employee/Labor Relations Executive

- Has primary responsibility for establishing and maintaining satisfactory employee and labor management relations
- Responsibilities include labor contract negotiations and establishment and coordination of management's
 policies regarding labor/union affairs

AHR125-EX

Top Talent Management Executive

- Has primary responsibility for the organization's workforce planning
- Defines the organization's talent needs based upon current and future business objectives
- Assesses talent supply (internally and externally), defines critical gaps and develops integrated talent strategies to close the gaps
- May be responsible for performance management, employee development and succession planning

Code

Function

AHS

Environmental Health and Safety

AHS000-EX

Top Environmental Health and Safety Executive

- Has primary responsibility for designing, developing and implementing programs and policies that provide and maintain healthful and safe working conditions in compliance with environmental health and safety guidelines/regulations and other legal enactments and standards established by senior management
- Develops and implements programs in order to abate, control or eliminate environmental health and safety risks

AHS050-EX

Top Safety Executive

Has primary responsibility for establishing programs and policies that provide and maintain safe working
conditions on the organization's premises in compliance with applicable guidelines/regulations
(e.g., Occupational Safety and Health Association [OSHA] in the United States) and other legal
enactments as well as standards established by senior management

Executive Benchmark Definitions (continued)

<u>Code</u>

Function

AIC

Information Technology

AIC000-EX

Chief Information Officer

- Establishes the strategic direction of the organization's information technology resources
- Identifies changes in computer and systems technology and communicates these changes to senior management
- Provides support to information users and determines information needs throughout the organization
- Identifies systems software and hardware necessary for the successful integration of information systems
- Coordinates through subordinate staff the operations of the technology functions on a day-to-day basis

AIC001-EX

Chief Technology Officer

- Has primary responsibility for developing the technology strategy to support business objectives through research and setting policy
- · Often considered a technology visionary both internally and externally

AIC002-EX

Top Information Technology Executive

- Directs the information technology functions on a day-to-day basis
- Provides direction and control of activities such as systems design and analysis, applications and systems programming, database management, network systems, telecommunications and data processing operations
- Establishes computer operations control policies and procedures and designates priorities for computer operations and applications development work

AIC020-EX

Information Technology Function Head

- Has primary responsibility for planning, coordinating, developing and implementing information technology/systems to support multi-functions or a major function such as Finance, Human Resources or Supply Chain Management
- · Prepares and maintains long-range information systems plans
- · Serves as a liaison with core information systems
- Consults, counsels and reviews hardware and software needs of the functional unit to ensure systematic, uniform development of information systems activities

Executive Benchmark Definitions (continued)

<u>Code</u>

Function

AID

IT Development

AID010-EX

Top Applications Development Executive

- Has primary responsibility for the organization's applications programming and systems analysis activities
- Oversees analysis and preparation of systems feasibility studies, design of new computer systems and programs, and revision of existing computer systems and programs
- Directs coding, testing, installation and maintenance of all business and scientific applications programs
- Develops systems design standards and quality control standards for programmers

AID040-EX

Top Systems Software Executive

- Has overall responsibility for installing and maintaining all systems software, including computer operating systems
- Determines appropriate data processing equipment allocations
- Provides technical guidance to the applications development group on systems software and hardware capability
- Responsible for fine-tuning the operations of the computer hardware and software

AID100-EX

Top Enterprise Resource Planning Executive

- Has primary responsibility for directing and coordinating all enterprise resource planning (ERP) business management systems to integrate all facets of the business, including planning, manufacturing, sales and marketing
- Reviews and evaluates project feasibility studies based on management's requirements and priorities and implements the installation and operation of ERP systems
- Typically manages the implementation of more widely accepted software applications such as SAP and Oracle

<u>Code</u>

Function

AIT

IT Administration

AIT035-EX

Top Telecommunications Executive

- Has primary responsibility for designing, implementing and maintaining the organization's voice and data communications networks
- Ensures that the installed systems are operating effectively and that proposed systems will meet the
 organization's needs in the future
- Collaborates with systems software programmers and may provide some direction in the installation and maintenance of the telecommunications network software

Executive Benchmark Definitions (continued)

<u>Code</u>

<u>Function</u>

ALG

Legal

ALG000-EX

Top Legal Executive

- Serves as chief legal adviser and counsels management on the legal implications of all organization activities and problems
- · Provides legal services as required in legal proceedings
- Keeps abreast of legislative and administrative regulatory developments
- Obtains the services of outside counsel as required to complement available internal legal resources

ALG003-EX

Associate General Counsel

- Serves as a senior legal adviser that is assigned responsibility for a major area of the legal department or a geographic or functional area
- · Counsels management on the legal implications of the area's activities and problems
- Ensures the legal activities of the area meet the current and future needs of the organization
- Typically manages a group of attorneys

ALG005-EX

Corporate/Company Secretary

- Has primary responsibility for preparing and maintaining official corporate notices, records and actions of the Board of Directors and ensuring compliance with statutory reporting requirements
- Arranges Board of Directors meetings, provides minutes of these meetings and communicates with stockholders with regard to general corporate policy and annual meetings
- May be responsible for monitoring and developing procedures set in place by the Board of Directors/executive team regarding corporate governance, following developments affecting corporate governance and making recommendations to the Board on development of best practices

Code

Function

AMJ

Sales, Marketing and Business Development

AMJ000-EX

Top Sales and Marketing Executive

- Has primary responsibility for the design, development and implementation of marketing and sales programs for the organization's products and services
- Plans, directs and coordinates the efforts of marketing and sales towards the accomplishment of objectives
- Maintains and constantly improves the organization's competitive position
- Ensures maximum sales volume at minimum cost

Executive Benchmark Definitions (continued)

Code Function

AMK Marketing

AMK000-EX Top Marketing Executive

- Has primary responsibility for plans designing, developing and implementing policies related to the organization's marketing activities
- · Develops market objectives and strategies and monitors performance against goals
- Typically directs activities such as market research, brand/product management, advertising and promotion, and new product development

AMK020-EX Top Marketing Communication Executive

- Has primary responsibility for designing, developing and implementing marketing communication programs to promote the organization's products or services
- May involve use of sponsorship, events and sales promotions
- · Uses media (e.g., print, broadcast, digital) where appropriate
- May have responsibility for development of advertising strategy

AMK025-EX Top Advertising and Sales Promotion Executive

- Has primary responsibility for designing, developing and implementing the organization's advertising campaigns using internal resources and/or advertising agencies
- Develops and implements promotion policies and programs

AMK110-EX Top Digital Marketing Executive

- Develops marketing, merchandising and creative strategies to promote the organization's products and services through the Internet or other digital channels
- Establishes, maintains and updates the digital experience from the viewpoint of the customer
- Develops affiliated programs designed to increase exposure to and business from the target audience
- Establishes and manages the relationships with search engines and portal sites that are strategically aligned with digital marketing goals
- Manages the implementation of digital marketing programs and analyzes their effectiveness
- May be responsible for social media marketing

Code Function

AMS Customer Support/Operations

AMS000-EX Top Customer Service/Operations Executive

- Has primary responsibility for designing, developing and implementing the customer relations programs of the organization in order to maintain high levels of customer service and satisfaction
- Oversees and directs customer service operations to ensure that customer claims, inquires and complaints are handled fairly and effectively
- Establishes customer service policies and procedures, in accordance with any relevant regulations
- Typically has responsibility for all aspects of post-sales service and support, including contact/call center management

AMS020-EX Top Customer Contact/Call Center Executive

- · Has primary responsibility for managing the operation of the organization's contact/call centers
- Ensures that responses to customer inquiries are completed on a timely basis to achieve service and quality standards

Executive Benchmark Definitions (continued)

<u>Code</u>

Function

AOM

Manufacturing/Operations

AOM000-EX

Top Manufacturing Executive

- Has primary responsibility for the effective operation of the manufacturing function
- Formulates manufacturing policies; forecasts manpower and facilities requirements; maintains inventory
 controls; develops production time and quality standards as well as construction, manufacturing
 technology, safety and environmental aspects of the Manufacturing Function

Code

Function

APM

Project/Program Management

APM005-EX

Top Program Management Executive

- Has primary responsibility for the inception and delivery of a strategic program representing a major company initiative in order to deliver long-term improvements to the organization's performance
- Typically manages multiple, inter-linked projects, each with its own project manager
- · Makes strategic and tactical decisions on the need for individual projects within the program
- Coordinates, deploys and prioritizes resources across the projects in order to manage coordination costs and risks

APM020-EX

Top Facilities Construction Project Management Executive

- Has primary responsibility for directing the development of plans and designs for major construction or modernization projects
- Oversees architects, project managers, and external contractors to ensure compliance with design specifications, schedules and contractual commitments
- · Directs and plans for the effective use of construction resources and project operating budget
- Represents the organization in matters associated with land development, planning commissions, city and county governing bodies, and miscellaneous associations

Code AQY **Function**

Quality Assurance Methods

AQY000-EX

Top Total Quality Executive

- Has primary responsibility for developing and implementing Total Quality programs that support the organization's strategic mission
- Develops programs and processes that promote continuous improvements to productivity, quality and customer satisfaction
- Evaluates effectiveness of quality programs and recommends methods to increase quality standards
- Communicates and provides training on quality concepts and programs

Code ARE **Function**

Real Estate and Facilities

ARE000-EX

Top Property Management Executive

- · Has primary responsibility for planning and forecasting the organization's property portfolio
- Responsibilities include the selection, acquisition, lease, exchange or disposition of real estate to meet the organization's operating needs
- May be responsible for facilities management

Executive Benchmark Definitions (continued)

<u>Code</u>

Function

ARO Research and Development

ARO000-EX

Top Research and Development Executive

- Has primary responsibility for basic theoretical and experimental scientific and technological investigation directed toward the acquisition of new knowledge
- Plans and directs the identification, evaluation and development of new scientific concepts and/or technologies to provide solutions to identified problems
- Plans and directs the identification, collection and evaluation of new product ideas or strategic product
 extensions to determine their potential to address customer needs and to achieve goals in revenue growth
 and market share
- Oversees the translation of research discoveries into usable and marketable products

ARO002-EX

Research and Development Executive (Second Level)

- Under the direction of the Top Research and Development Executive, has primary responsibility for directing a major segment or specialized function of the basic and/or applied research function
- Applied research responsibilities include the formulation, recommendation and direction of the research
 programs to meet the organization's needs for the introduction of new products and processes and
 improvement and cost reduction of existing products and processes
- Basic research responsibilities include the design of fundamental, theoretical ("blue sky") investigations
 that expand knowledge but do not specifically result in new products, processes or business areas

<u>Code</u>

Function

ASC

Supply Chain and Logistics

ASC000-EX

Top Supply Chain Executive

- · Has primary responsibility for developing and executing supply chain strategies and capabilities
- Establishes and manages cross-functional, cross-regional and cross-business unit teams to design and implement end-to-end supply chain capabilities and strategies based on business plans and objectives, new product introduction or business opportunities
- Coordinates supply, manufacturing and delivery systems to ensure the optimization of customer service, low inventories, low cost, superior quality, reduced cycle times and order delivery

ASC060-EX

Top Procurement/Purchasing Executive

- Has primary responsibility for designing and implementing the policies that control the organization's procurement/purchase of raw materials, supplies, equipment and services
- Manages relationships/partnerships with key suppliers

ASC510-EX

Top Materials Management/Purchasing Executive

- Is responsible for the development of policies and procedures for the procurement and control of materials
- Recommends improvements in the overall purchasing program and maintains required purchasing records
- May be responsible for the procurement and control of fuel

Executive Benchmark Definitions (continued)

Code

Function

AZA

Engineering and Construction

AZA500-EX

Top Power Engineering and Construction Executive

- Has primary responsibility for the engineering and technical requirements of the power production and/or energy delivery systems for both electric and gas operations
- Typical responsibilities include design engineering and related construction of new and major retrofit
 projects of electric power plants, transmission lines, bulk substations, electric distribution systems,
 and gas pipeline and distribution systems
- · May be responsible for environmental affairs

AZA520-EX

Top Renewable/Alternative Power Engineering and Construction Executive

- Has primary responsibility for renewable/alternative energy projects from financial close to commercial operation
- Oversees the company's renewable/alternative energy technical services (e.g., technical/engineering and contracting)
- Responsible for formulating and recommending engineering policies and technical work for renewable/alternative energy projects
- Oversees the delivery of engineering and contracting for renewable/alternative energy throughout the company, supporting necessary negotiations, and the selection and management of external advisers
- May also oversee construction activities
- Typically reports to the Top Renewable/Alternative Energy Executive, the Top Engineering and Construction Executive at corporate or the Chief Executive Officer in a freestanding renewable/alternative energy company

Code

<u>Function</u>

AZC

Construction

AZC500-EX

Top Power Construction Executive

- Has primary responsibility for the construction activities associated with new and existing electric-generating transmission substation and distribution systems and/or gas pipeline and distribution systems
- Develops schedules and budgets and monitors construction agreements to ensure that work is completed according to specifications

AZC510-EX

Top Renewable/Alternative Power Construction Executive

- Has primary responsibility for the construction activities associated with new and existing electricgenerating facilities/assets and interconnection with electrical systems
- Develops schedules and budgets and monitors construction agreements to ensure that work is completed according to specifications

Executive Benchmark Definitions (continued)

<u>Code</u> <u>Function</u> **AZE** <u>Engineering</u>

AZE000-EX Top Engineering Executive

- · Has primary responsibility for the engineering aspects of the organization's operations
- Responsibilities typically include facilities planning, process engineering, maintenance and application of automation and advanced technology, and engineering work relating to new product development

AZE501-EX Top Power Engineering Executive

- Has primary responsibility for the engineering and technical requirements of the power production and/or delivery systems for electric operations
- Typical responsibilities include system expansion planning, design engineering, and related construction of new and major retrofit projects for power plants and for electrical systems, including transmission lines, bulk substations, system protection and relaying
- · May be responsible for environmental affairs

AZE557-EX Top Renewable/Alternative Power Engineering Executive

- Has primary responsibility for the engineering and technical requirements of the power production and/or delivery systems for renewable/alternative power
- Typical responsibilities include system expansion planning, design engineering and related construction of new and major retrofit projects for power generation facilities/assets and interconnection with electrical systems
- · May be responsible for environmental affairs

AZE559-EX Top Nuclear Engineering Executive

- Has primary responsibility for the engineering and technical requirements of nuclear power production
- Typical responsibilities include design engineering and related construction of new and major retrofit projects of nuclear power plants
- Responsibilities might also include plant support, conducting engineering studies and analysis, component licensing and inspection, and interaction with the NRC

AZE569-EX Top Gas Engineering Executive

- Has primary responsibility for the engineering and technical requirements of gas transmission (pipelines) and distribution systems
- Typical responsibilities include design engineering and related construction of new and major overhaul projects
- · May be responsible for environmental affairs

Code Function
CSA Sales

CSA001-EX Top Sales Executive

- Has primary responsibility for developing and implementing sales programs and directing the sales force to achieve volume objectives for the organization's products
- · Tracks sales performance against objectives and informs management of results
- May manage relationships with major clients

Code Function

ECG Gas Operations

ECG000-EX Top Gas Operations Executive

- Is responsible for planning and directing all activities related to natural gas
- Responsibilities include gas supply, storage, transmission, distribution, engineering, construction, maintenance, utilization and other general operating services such as meter shop and transportation

Executive Benchmark Definitions (continued)

<u>Code</u>

Function

EDC

Energy Delivery/Distribution and Customer Service

EDC000-EX

Top Distribution and Customer Service Executive

- Is responsible for planning and directing all company activities related to customer service (e.g., billing, customer inquiries, customer accounting, meter reading, credit and collections), energy utilization/marketing (e.g., industrial, commercial, and residential energy services, area development, load management) and division operations (e.g., field customer service, field marketing/energy services, line construction and maintenance, community relations)
- May be the head of a separate distribution business unit and responsible for overall planning, operation and control of distribution systems

Code

Function

EDD

Energy Delivery/Distribution

EDD010-EX

Top Power Distribution Systems Executive

- Is responsible for overall planning, operations and control of electric distribution systems
- · Directs the maintenance, protection and improvement of all distribution lines and facilities
- Voltage levels in the operations managed by this position are typically 34.5 KV and below

<u>Code</u>

Function

EFS

Energy Supply

EFS005-EX

Top Fossil Fuel Supply Executive

- Is responsible for ensuring that the company's power plants always have an adequate and reliable fuel supply consistent with unit generating requirements, environmental regulations and the organization's fuel procurement strategy
- Responsibilities typically include development and implementation of short- and long-term renegotiation
 policies and procedures, direction of the fuel procurement planning function, and implementing policies
 and procedures to ensure compliance with legal and regulatory requirements
- · May be responsible for transportation of fuel
- Do not report managers who are only responsible for nuclear fuel supply

EFS020-EX

Top Natural Gas Supply Executive

- Has primary responsibility for planning and securing adequate supplies of natural gas to meet corporate goals
- Responsibilities typically include development and implementation of short- and long-term policies, strategies for the acquisition and transportation of natural gas supplies and implementation of procedures to ensure compliance with legal and regulatory requirements

Code EGD **Function**

Power Generation and Delivery

EGD000-EX

Top Power Generation and Delivery Executive

- Is the highest-level operations executive responsible for generation, transmission and substations
- Responsible for all engineering, construction or construction project management, maintenance and operations, and all levels of electrical system planning
- · May also be responsible for environmental science/affairs and fuel procurement
- This position is not responsible for division/district operations. In companies that have both fossil and nuclear power plants, this position is responsible for both

Executive Benchmark Definitions (continued)

Code

Function

EGE

Power Generation

EGE000-EX

Top Power Resources Executive

- Is responsible for planning, organizing, directing and controlling the long-term operations, maintenance, protection and improvement of power production facilities
- Typical responsibilities include generation engineering covering both standards and design, engineering operations and maintenance, power plant construction project management, and power plant maintenance and operations
- May be the head of a separate power production or generation business unit with profit-and-loss responsibility

Code

Function

EGF

Fossil Power Generation

EGF000-EX

Top Fossil Power Generation Operations Executive

- Is responsible for planning and directing the operation, maintenance and general administration of the organization's fossil-fueled power plants to achieve efficient and reliable generation of electricity
- · Recommends major additions, modifications and retirement of power generation facilities
- · This position is not responsible for nuclear facilities

EGF007-EX

Fossil Power Plant Manager (1500 MW+)

Is the highest position within an individual fossil power plant; responsible to a higher level outside the
power plant for directing and coordinating the operation, maintenance and general administration of the
power plant and its personnel

<u>Code</u>

Function

EGR

Renewable/Alternative Power Generation

EGR000-EX

Top Renewable/Alternative Energy Executive

- Has primary responsibility for the profitability and growth of a business unit involved in renewable energy
- This business might be engaged in developing wind, water, solar, biofuels and geothermal projects
- Executives who are responsible for a freestanding renewable/alternative energy company should be matched to Chief Executive Officer

EGR040-EX

Top Renewable/Alternative Power Generation Operations Executive

- Has primary responsibility for planning and directing the operation, maintenance and general
 administration of the organization's renewable/alternative power generation units to achieve efficient and
 reliable generation of electricity
- Recommends major additions, modifications and retirement of renewable/alternative power generation facilities

Executive Benchmark Definitions (continued)

<u>Code</u>

Function

EOP

Natural Resources Exploitation/Operation/Production

EOP005-EX

Top Exploration and Production Executive

- Has a primary responsibility for planning, directing and coordinating the development and implementation
 of the organization's exploration and production activities
- Directs the geological, geophysical, land, production, drilling and engineering activities of the organization

EOP006-EX

Top Exploration Executive

- Has primary responsibility for planning, directing and coordinating exploration and land activities for the organization
- May be responsible for mineral exploration and/or international exploration and exploitation

EOP020-EX

Top Land Management Executive

- Has primary responsibility for managing the land activities of the organization, including acquisitions, lease administration, acreage reports, placement of bids at Crown sales and negotiation of farm-in and farm-out agreements and surface rights
- · Typically has direct responsibility for district landmen

Code

Function

EOT

Transportation and Pipeline

EOT010-EX

Top Pipeline Executive

- · Has primary responsibility for the natural gas and/or crude oil pipeline operations of the organization
- Ensures compliance with established standards and regulations
- · Responsible for the strategic development of pipeline routes and operations

Code EOW **Function**

Well Operations

EOW010-EX

Top Drilling Operations Executive

- · Has primary responsibility for the overall drilling operations of the organization
- Ensures compliance with established standards and regulations
- Plans, coordinates and manages policies, practices and programs to ensure efficient offshore and onshore operations

Code

Function

ETN

Transmission and Distribution Systems

ETN000-EX

Top Transmission and Distribution Systems Executive (Combined Function)

- Is responsible for the overall planning, operation and control of the transmission and distribution systems
- Directs the maintenance, protection and improvement of all transmission and distribution lines and facilities
- Typically responsible for the construction of transmission lines and substations

Executive Benchmark Definitions (continued)

<u>Code</u>

Function

ETO

Electric Transmission Operations

ETO000-EX

Top Transmission Systems Executive

- · Is responsible for overall planning, operations and control of transmission systems
- Directs maintenance, protection and improvement of all transmission lines and facilities
- Responsible for construction of transmission lines and substations
- Voltage levels in the operations managed by this position are typically above 34.5 KV
- May be responsible for interconnection with other utilities
- · May be the head of a separate transmission business unit with profit-and-loss responsibility

ETO001-EX

Top Power Supply Executive

- Is the highest position within the electric supply/power dispatch function, responsible for electric interconnected transmission systems and interchange operations
- Has responsibilities for the electric load dispatch, load analysis and estimation, and power flow and interchange accounting
- Provides general direction for personnel in the power supply function and coordinates activities with those
 of power generation departments

Code

Function

ETS

Electric Power Market and System/Grid Operations

ETS010-EX

Top Electric System/Grid Operations Executive (ISO/RTO)

- Has primary responsibility for maintaining the efficient and reliable operation of the bulk power system
- Responsibilities include load estimating, generating unit scheduling, administration of power interchange transactions, and monitoring and control of the transmission system in accordance with reliability standards
- May be responsible for transmission outage scheduling

Executive Benchmark Definitions (continued)

<u>Code</u>

Function

NPA

Nuclear Top Executive

NPA000-EX

Top Nuclear Executive

- Responsible for planning and directing all organizational activities related to nuclear power
- Typical responsibilities include nuclear plant operations (e.g., power plant operation and maintenance) and nuclear support services (e.g., engineering, quality assurance, environmental affairs, nuclear fuel procurement)
- This position is the highest-level executive with responsibility for the organization's nuclear facilities

NPA020-EX

Top Nuclear Plant Site Executive

- Responsible for operations, maintenance, engineering, systems, planning, work control, design engineering and administrative activities at a nuclear power plant site
- Administers policy, develops procedures and maintains standards of performance that ensure the safe and economical operations of the site
- Has primary responsibility for coordinating with the Nuclear Regulatory Commission (NRC) to determine
 whether site operations are in compliance with the requirements stated in the operating license
- Typically this position is not located within the restricted area
- This position must have Nuclear Power Plant Manager(s) reporting to it

NPA050-EX

Nuclear Power Single Unit Plant Manager

- Responsible for day-to-day operations, maintenance, systems, planning, work control and administrative activities at a single unit nuclear-powered electric generating plant
- Administers policy, develops procedures and maintains standards of performance to ensure safe and economical operation of the plant
- Conducts, coordinates or participates in meetings with inspectors from the Nuclear Regulatory Commission (NRC) to determine whether the plant's operations are in compliance with the requirements stated in the operating license

2017 Energy Services MMPS Compensation Survey - Canada **Position Summary Table TOTAL SAMPLE** August 2017

Function: AAS - Administrative Services

Level: M1 - Supervisor (M1)

	Cos	Cases	Average	10th	25th	50th	75th	90th
ACTUAL COMPENSATION								
Base Salary	28	110	104.7	78.2	87.5	103.4	114.9	131.1
Actual Bonus Amount	23	82	18.0	7.6	9.3	17.9	22.1	31.6
Actual Bonus as % of Base	23	82	17	8	10	17	25	30
Hourly Rate	2							
Actual Cash Compensation	28	110	119.5	83.8	102.5	117.1	137.7	155.7
Actual Total Direct Compensation (Incl LTI)	28	110	129.7	83.8	104.3	124.6	148.1	170.3
Actual Retention Bonus	1							
Total Variable Payments - Excl Actual Bonus	9	13	10.0		1.9	3.5	20.6	
Total Actual Cash Compensation (Incl Other Variable Payments & Retention Bonus)	28	110	121.4	83.8	102.5	117.2	140.7	156.2
Total Direct Compensation (Incl LTI & Other Variable Payments)	28	110	131.6	83.8	104.3	125.1	148.9	172.4
Total Compensation (Incl Perqs)	28	110	132.8	83.8	104.8	127.7	151.3	172.8
TARGET COMPENSATION								
Target Bonus Amount	22	76	16.4	8.2	12.8	16.3	19.1	25.7
Target Bonus as % of Base	22	76	16	10	12	16	20	21
Target Cash Compensation	27	104	118.7	83.6	102.5	114.0	131.8	154.3
Target Total Direct Compensation (Incl LTI)	27	104	128.8	83.6	106.8	122.9	142.3	168.2
Target Total Compensation (Incl Perqs)	27	104	129.9	83.6	106.8	124.6	144.6	168.6
LONG-TERM INCENTIVES AND PERQS								
LTI Expected Value Amount	14	38	22.6	4.8	13.1	19.6	22.4	62.0
LTI as % of Base	14	38	19	4	12	17	24	44
Total Perquisite Amount	16	33	3.6	0.4	8.0	1.6	4.9	11.4
SCOPE VARIABLES								
Company Revenue (millions)	28	110	6.271.1	604.4	2.357.6	3.976.4	10.507.6	16,422.9

	Bonus Eligibility		LTI Eligibility		Hourly Rate Eligibility
82%	Eligible	53%	No	96%	No
0%	Eligible but payment not received for poor performance reasons	47%	Yes	4%	Yes
0%	Eligible but payment not received due to insufficient time on the job				

All values in Canadian Dollar Effective date April 01, 2017 Company weighted statistics

18% Not eligible