



President and Chief Executive Officer

DEPARTMENT: Administration

REPORTS TO: Board of Directors

POSITION SCOPE:

Working independently, under the policy guidance of the board of directors, plans, directs and controls all aspects of company activities. S/he is ultimately responsible for the accomplishment of the company mission.

SPECIFIC RESPONSIBILITIES:

1. Consults, advises and directs the leadership team on the management of company activities.
2. Develops strategic plans, policies and budgets in consultation with the leadership team, board of directors and other relevant parties.
3. Build relationships; establishes credibility and professionalism with internal and external stakeholders
4. Informs, advises with and participates as a member of the company board of directors.
5. Maintains effective communication and coordinates policies and activities with the Vermont distribution utilities.
6. Oversees Vermont participation in NEPOOL activities.
7. Develops or supervises the development of and promulgates operating and personnel policies for the company.
8. Influences the VELCO leadership team to maintain or improve current status of NERC & FERC requirements
9. Drives results to manage the safe, reliable delivery of electric energy through VT's transmission system
10. Delivers sound financial performance
11. Builds and maintains a high-performing team
12. Guides the VELCO leadership team to incorporate controls through the utilization of enables (tools, technology and process) to enhance performance, monitor workflows and

ensure completion

EDUCATION and EXPERIENCE REQUIREMENTS:

A Bachelors degree in Engineering is desired along with at least 15 years of demonstrated experience.



Vice President of External Affairs

DEPARTMENT: Administration

REPORTS TO: President and CEO

POSITION SCOPE:

The Vice President of External Affairs is a dynamic senior leader and strategist who will significantly grow VELCO's External Affairs function. The Vice President is charged with developing and leading an External Affairs strategy that builds credibility with key external stakeholders, maximizes positive community impact, advances corporate objectives, and expands the Company's ability to influence community and government decisions that impact the electric utility industry. The Vice President will work closely and regularly with the VELCO leadership team - including the President and CEO, and the Board of Directors to play a highly visible role externally to advance the Company's objectives.

SPECIFIC RESPONSIBILITIES:

1. Serve as the primary strategic communications advisor and chief spokesperson to the President and Chief Executive Officer, also providing support to the VELCO leadership team.
2. Research, analyze and assess the impact of emerging electric utility industry issues on the company.
3. Proactively position the company on key issues to meet public affairs objectives and ensure consistency of communication through all corporate message platforms.
4. Develop and implement the following Public Outreach programs:
 - o Public Safety Grant Program
 - o Field Outreach Communications Program
 - o Educational Grant Program
 - o Community Involvement Program
5. Advocate on behalf of the company in federal, state and local legislative and regulatory forums. Maintain and enhance strong relationships with key members of Congress, federal agency and state leaders to continue to build alliances and create win/win solutions with groups of diverse stakeholders.

6. Develop and maintain relations with the media. Oversee writing, editing and production of existing and new communication vehicles for print and broadcast media and internal audiences.
7. Act as a liaison with government offices, community leaders, owner utilities and internal departments
8. Participate as an active member of VELCO's strategic planning process; including but not limited to the Associate Excellence and Customer Loyalty Competency Teams
9. Perform other duties as assigned by the President and Chief Executive Officer

EDUCATION and EXPERIENCE REQUIREMENTS:

Bachelor's degree required; an advanced degree or equivalent experience in business, law or related field is preferred. Five to seven years of significant senior level, progressive experience in public affairs, government relations, corporate responsibility or a related function.

SKILLS, ABILITIES AND KNOWLEDGE REQUIREMENTS:

- The Vice President must be a dynamic leader with an exceptionally strong network of relationships across public and private sectors based on an earned reputation for honesty and integrity.
- He/she will be well respected for their critical thinking skills and innovation, and have a track record of influencing senior internal and external contacts.
- The Vice President will have a thorough understanding of the issues facing the electric utility business and its operations as well as the ability to analyze and frame key public policy challenges for the company.
- Excellent oral and written communication skills are essential. Exceptional ability to compile information and present it effectively to a wide range of audiences is critical.

OTHER REQUIREMENTS:

- Possession of a valid driver's license and willingness to travel as needed.
- The eagerness to respond timely to after-hour inquiries from government offices, community leaders, owner utilities, as well as internal departments is essential.



VP, Chief Financial Officer and Treasurer

DEPARTMENT: Administration

REPORTS TO: President and CEO

POSITION SCOPE:

The responsibility of the VP, Chief Financial Officer and Treasurer is to monitor and evolve corporate financial policies, internal financial controls and annual audit. This position oversees all corporate financial, information technology and planning functions. These functions include but are not limited to the following: accounting, budgeting, forecasting, capital structure management, regulatory financial reporting receivables/payables, insurance, tax, payroll, power accounting, computing infrastructure, radio, phone and fiber technology as well as short and long term transmission planning.

SPECIFIC RESPONSIBILITIES:

1. Assures timely and accurate accounting and reporting.
2. Directs the preparation of comparative and consolidated financial reports.
3. Effectively communicates financial data; identifying benefits and risks to Senior Leadership Team and Board of Directors.
4. Oversees annual budget process; including development of an operating plan and manpower Requirements.
5. Develops annual planning requirements and collaborates with Process Owners on Planning Timelines.
6. Directs proper cash management policies and procedures; cash controls, consolidation and investments.
7. Manages the annual external audit process.
8. Establishes policies and procedures that are designed to safeguard company assets.
9. Ensures overall company compliance with internal and external operating controls.
10. Continually seeks to develop new processes in an effort to achieve maximum efficiency and effectiveness.
11. Partners with all Process Owners; especially Finance, Business Support Services and Transmission Planning to assure detailed short and long term plans are developed and fulfilled

12. Understands technology impacts as communicated by the Business Support Services Process Owner.
13. Keeps abreast of local and national economic, financial, political, and legislative developments that may impact the company's financial stability, its plans and general operations.

The description above reflects the most specific duties performed but does not exclude the occasional work assignments not mentioned.

EDUCATION and EXPERIENCE REQUIREMENTS:

A Bachelors Degree is required along with at least 10 to 12 years of experience serving in an Officer role for a utility or similar setting. A CPA and/or MBA is preferred along with proficient computer skills in word processing and spreadsheet software. The disciplined, analytical and organized individual who fulfills this challenging role will understand effective financial processes, systems and controls. He or she will represent VELCO as the primary spokesperson in the financial community.

SKILLS, ABILITIES AND KNOWLEDGE REQUIREMENTS:

- This person will have proven success in capturing, analyzing, interpreting and effectively communicating the results and impacts of financial data.
- Additionally, he or she will be outgoing, communicative and share a passion for excellence in an environment focused upon teamwork and collaboration.



VP, General Counsel and Corporate Secretary

DEPARTMENT: Administration

REPORTS TO: President and CEO

POSITION SCOPE:

Subject to the direction of the President/CEO and in coordination with other staff where necessary, is responsible for protecting the Company's legal interest and for maintaining corporate records. The VP, General Counsel and Corporate Secretary may function as the President in his absence. S/he will focus on strategic planning issues, policy analysis and external relations.

SPECIFIC RESPONSIBILITIES:

1. Serve as in-house legal counsel to the Company; prepare legal research, provide legal advice on and assistance in the development of proposed or pending administrative actions, decisions, or policies.
2. Represent the Company in administrative, judicial and legislative proceedings before various regulatory agencies and courts.
3. Research and prepare written and oral advice and counsel to the President/CEO, the VELCO leadership team, and the Board of Directors.
4. Maintain a comprehensive understanding of the legal and policy issues affecting the electric utility industry and keep abreast of regulatory law.
5. Serve as the Corporate Secretary by maintaining records of the Company, recording the votes and proceedings of the Shareholders and the Directors, maintaining custody of corporate records and corporate seal, recording the names and residences of the Shareholders and of their holdings and transfer of shares, and procuring and filing certified copies of the papers required by law to be filed with the Secretary of State.
6. Negotiate, draft and/or review contracts and other legal documents.
7. Interface with the Human Resources department with respect to personnel-related issues.
8. Engage, guide and supervise outside counsel retained by the Company.
9. Serve as a liaison with legal officers and other senior executives of owner utilities, the Department of Public Service, the Public Service Board and other federal, state and local agencies.

10. Actively participate as a member of VELCO's strategic planning process, including the Legal, Regulatory, Policy Compliance and Legislative Relations Competency Team.
11. Represent the Company at the NEPOOL Participants Committee and other NEPOOL committees.
12. Assist in the development and maintenance of VELCO policies and practices.
13. Perform other duties as assigned by President/CEO.

EDUCATION and EXPERIENCE REQUIREMENTS:

A Juris Doctorate from an accredited law school and a license to practice law in the State of Vermont, or the ability to obtain such within one year of hire. Minimum of Bachelors degree, preferable a Masters degree. Five to seven years experience in the utility industry is an asset.

SKILLS, ABILITIES AND KNOWLEDGE REQUIREMENTS:

- The VP, General Counsel and Corporate Secretary must be able to understand and interpret applicable federal and state laws, prepare and present effective written and oral reports, pleadings, etc., develop and maintain constructive, effective relationships with owner utilities, regulatory bodies and other stakeholders with the objective, at all times, of advancing the interests of the Company and its owners, in a manner consistent with the Company's responsibilities as a public utility.
- The leader who fulfills this position must work well under pressure while remaining flexible, proactive and resourceful. Superior written and verbal communication skills in addition to proficiency with Microsoft Office products and Word Perfect are essential.



Director of Capital Construction

DEPARTMENT: Construction

REPORTS TO: President and CEO

POSITION SCOPE:

Manage capital projects through all phases of “project” planning, estimation, regulatory and permit approvals, engineering, design, equipment and services procurement, construction, installation, cutover and commissioning, post commissioning engineering and financial audits, and final closeout. Provide direction and oversight to staff members and contractors to ensure that project tasks are carried out with a high degree of awareness, vigilance and compliance for: safety, regulatory matters and permitting, system reliability, business policies and practices. Be responsible and accountable for project scope, schedule, cost, and resource management.

SPECIFIC RESPONSIBILITIES:

1. Successfully manage assigned capital projects by effectively working with all internal disciplines and with outside engineering, construction, equipment/material suppliers, Vermont and area utilities, and with regulatory agencies.
2. Develop and implement the necessary project controls and metrics to successfully manage project scope, quality, schedule and costs within defined timelines and budgets. Ensure that quality control processes are implemented and maintained for all phases of engineering, design, construction, and installation
3. Work with internal engineering and technical disciplines to define the project’s scope, schedule and cost objectives.
4. Form project teams and direct the necessary internal and external resources to carry out the planning, execution, and final completion of the projects.
5. Work with department leads and develop agreed upon resource plans and schedules for all phases of projects.
6. Provide technical and engineering support to all contracted Architect Engineering firms, assigned Owner’s Engineer, construction contractors, and internal staff.
7. Work on site as needed and to support the construction efforts. Provide supervision of internal and external resources as assigned.

8. Provide ongoing project status updates to team members, department leads, and others throughout all phases of the projects.
9. Develop presentation materials and be responsible for coordinating and presenting project information to staff members, the VELCO Board of Directors, Vermont regulatory agencies, Vermont and New England utilities, and various organizations and/or task forces at the Pool and regional levels.
10. Be cognizant of the project post “Certificate of Public Good” CPG regulatory compliance matters and stipulations, any imposed engineering and construction plans, and ensure that all project team members and contracted services comply with these requirements.
11. Ensure that all aspects of the projects are carried out, documented, and completed in accordance with corporate policies, regulations, and law.
12. Provide general or direct oversight of the commissioning for new and upgraded power systems and their subsystems to ensure that systems have been installed and commissioned per the “engineered” design. Ensure that pre-commissioning “readiness” reviews with assigned field personnel and contractors are performed. To ensure completeness and accuracy, see that post-commissioning audits of test data and as-built drawings are performed.

EDUCATION and EXPERIENCE REQUIREMENTS:

Bachelor's degree in electrical engineering (major in power systems desirable) or equivalent experience. Project management and construction related experience is highly desirable. In addition, a minimum of ten years of experience in the area of Transmission and Distribution design is desirable along with knowledge of power system operation.

SKILLS, ABILITIES AND KNOWLEDGE REQUIREMENTS:

- Must have strong interpersonal skills, be energetic, organized, self-motivated, and willing to work overtime and invest the time necessary to meet project objectives.
- Ability to handle multiple tasks and priorities.
- Must be computer literate with knowledge of MS applications (word processing, spreadsheets, project management, presentation and database management tools), and demonstrable knowledge of project management tools such as MS-Project and Primavera.

OTHER REQUIREMENTS:

- Carry out all duties in line with the VELCO mission and values through demonstrated support of the core competencies.
- Perform other engineering functions as required.
- Must maintain an awareness of and comply with all company and VOSHA safety requirements.
- Must have and maintain a valid Vermont driver's license and live in the proximity of Rutland, Vermont. Duties will require periodic overtime and overnight travel. Required to carry a pager and respond to off-duty calls.



Process Owner of Energy Management Systems (EMS)

DEPARTMENT: Administration

REPORTS TO: President and CEO

POSITION SCOPE:

Accountable for the VELCO EMS system reliability, operation, compliance and success in achieving VELCO EMS needs. Accountable for the performance of EMS work required for ISO-NE, distribution companies and area transmission companies. As a member of the VELCO leadership team, promote and drive VELCO initiatives in support of improvements at VELCO.

SPECIFIC RESPONSIBILITIES:

1. Supervise 4 EMS Engineers and contractors. Approve EMS upgrades and changes initiated by VELCO Engineering, VELCO Operations or internal to EMS.
2. Plan for and Manage major EMS upgrades with consultation with Vendors, VELCO Operations and Design as well as Vermont Distribution and New England Transmission utilities, ISO-NE and NYPA.
3. Coordinate and set priorities for pending EMS work with consultation with stakeholders. Attend VELCO Operations and ISO-NE DCTF meetings and ISO-NE modelers working group meetings to promote the consultation, improved processes and information flow.
4. Accountable and jointly responsible with EMS Engineers to maintain compliance with NERC Cyber Security standards through EMS policies, procedures and practices. Inform and Coordinate other VELCO management when NERC EMS Cyber Security requirements impact other groups. Ensure network security and integrity through continuous development and implementation of a VELCO EMS security policy to meet NERC and other standard requirements. Perform duties as VELCO's NERC CIP Lead.
5. Perform and direct diagnostic, maintenance and disaster recovery procedures on the SCADA/EMS. Carry a pager and be on-call to maintain the VELCO EMS.
6. Develop and coordinate EMS work schedules and submit weekly OP-2 Computer System and data-link outage requests to ISO-NE.
7. Assure routine preventative maintenance is conducted for the SCADA/EMS.
8. Establish measures and tracking to increase EMS efficiency and productivity.
9. Determine, justify and budget EMS resource requirements.

10. Develop EMS Engineers including personal development and technical training and succession planning.

Note: The VELCO EMS system is used to view, analyze and control Vermont's Transmission system. The VELCO EMS system also provides critical Vermont Transmission and Generation data to ISO-NE for the operation of the market systems used to operate the New England bulk electric power system. With automated security analysis tools being increasingly relied at VELCO and in New England as Transmission capacity factors increase the reliability of data links with other utilities is increasingly important.

EDUCATION and EXPERIENCE REQUIREMENTS:

A Bachelors Degree in the Engineerig discipline is required and a minimumo of 5 years of demonstrated experience.



Process Owner of Planning, Engineering, Design and Operations

DEPARTMENT: Administration

REPORTS TO: President and CEO

POSITION SCOPE:

Manages all system planning activities associated with the development of VELCO's bulk transmission system. Coordinate system planning activities within Vermont and with ISO-NE. Represent VELCO in system planning/reliability forums. Manage analytical activities in support of the design, operation and maintenance of the VELCO system. Act as lead system architect/designer/analyst and represent VELCO in all appropriate technical and regulatory forums.

Manages the Engineering Field Services staff with regard to performing installation and maintenance of systems/equipment used to monitor, protect and control the VELCO system. Serves as the focal point for responding to system incidents and/or troubles involving protection and control equipment. Responsible for overall coordination of information to Operations for required scheduled and unscheduled outages.

Working under Operations Department procedures and Company policies, provides the direction, staffing and resources for the VELCO power system operation functions. Provides contact at the management level with the ISO, all of the New England LCC's, out-of-state interconnected utilities and Vermont distribution utilities for power system operation matters. Is the first line of defense to instill and support VELCO's reliability of the transmission system.

SPECIFIC RESPONSIBILITIES:

1. Manage all transmission system planning and analysis functions, including load flow analyses, stability studies, load forecasting, reactive power evaluations, transient analyses, probabilistic assessments and associated economic analyses that are normally performed with the planning and analysis of bulk transmission and subtransmission systems.
2. Provide appropriate VELCO representation at in various system planning/reliability forums, including those held by ISO-NE, NPCC, NERC, state regulatory bodies and others. Provide input to and feedback from these forums to VELCO as a whole and specifically to the CEO, CFO, and VELCO's Process Owners. Serve as primary VELCO interface for technical or ISO matters. Establish contacts within external organizations (ISO-NE, New England / Vermont utilities, the DPS, etc.) that allow VELCO's perspectives and needs to be heard and understood in a timely manner. Lead VELCO's efforts for approval to construct, and when appropriate seek regional cost treatment for, additions to the VELCO system before ISO-NE and all relevant committees.

3. Develop and maintain appropriate staff and analytical resources to perform and support these functions with excellence for both VELCO and our customers. Analytical tools should reflect the state-of-the-art and provide credible results to ISO-NE, NPCC, Vermont distribution utilities, Department of Public Service, Public Service Board and other regulatory entities. When appropriate, retain and manage the services of outside consultants as an extension of VELCO's analytical team.
4. Act as lead transmission system architect/designer/analyst and lead a staff that demonstrates expertise in all aspects of system studies (including steady state, dynamic and transient analyses and the application of probabilistic techniques and modern power system control and protection concepts), modern power system equipment and concepts, and on EMF and related issues.
5. Initiate, plan and manage transmission system planning and analysis projects/studies from concept through completion, with focus on providing cost effective enhancements of network reliability, power quality, flexibility, and maintainability. Coordinate activities closely with other VELCO Process Owners (construction, and business support), Vermont's distribution companies, neighboring transmission companies and ISO-NE to ensure VELCO's efforts conform to in-state and regional needs. Delegate and oversee project management to planning staff members. Ensure that the resulting reports/documents demonstrate clarity and technical excellence.
6. Oversee the Planning Group's development and maintenance of a comprehensive 20-Year transmission system plan with updates at three year intervals (or as required to accommodate changing system conditions / regulatory requests), in compliance with Vermont Act 61 and NERC/NPCC/ISO-NE standards.
7. Coordinate with Operations' staff to ensure that resources are placed appropriately in the Operations and/or System Planning areas to cover this need in an efficient and timely fashion. Ensure that system models are accurately defined / calibrated to track and predict system performance to allow System Planning to provide analytical support for VELCO's Operations staff.
8. Allocate System Planning, Engineering, and Operations' resources to support VELCO's Construction staff as needed during the construction process of any VELCO upgrade/addition. These efforts include review of design specification documents and RFPs, providing technical support when meeting with vendors, consultants or regulatory officials, and consultation when planning construction outages and/or project element sequencing.
9. Work closely with the Department of Public Service to develop system improvements to enhance reliability and power quality for Vermont's residential, commercial and industrial customers. Coordinate VELCO's plans with those of the Department and provide for / facilitate other information exchanges to ultimately benefit electrical service in the state.
10. Oversee the preparation of supporting testimony for Section 248 submittals by System Planning as required for upgrades/additions to the VELCO transmission system in concert with VELCO's general counsel and the project manager. Ensure that the System Planning provides its traditional system planning input with regard to need for and impact of the proposed upgrades/additions while reviewing as necessary other 248 testimony and supporting the 248 application process.
11. Responsible for overall coordination of equipment outages as needed for installation and maintenance of equipment used to monitor, protect and control the VELCO system. Coordinate with contractors and neighboring utilities as needed.

12. Responsible for developing and maintaining all system level operating procedures and standards for protection and control of the VELCO system. Responsible to ensure that procedures are followed for all testing where possible and authorize special deviations where required by extenuating system conditions.
13. Responsible for providing leadership in the area of safety for the Planning, Engineering & Design and Operations staff. Working in concert with VELCO's Safety Process Owner, assures that staff observes all applicable safety practices and procedures while working on or around energized equipment. Assures that staff observes general safety practices while working on or in all VELCO facilities.
14. Regularly and systematically review and assess the operation of the VELCO transmission system, and take appropriate corrective action where needed to improve operations performance and reliability, assuring that any and all requirements for current and future successful operation of the system are provided by supporting organizations, in a timely manner.
15. Prepare and monitor the Planning, Engineering & Design and Operations staff strategic plan and annual budget.
16. Assure continuous monitoring of any, and all, information necessary to measure the ongoing performance of the system.
17. Investigate and resolve technical issues involving the interconnected Vermont utilities by facilitating the development of appropriate policies and critical operating procedures, and by taking other measures necessary to ensure reliable operation of the VELCO system, and the interconnections to the sub-transmission and distribution systems.
18. Manage and support various projects to upgrade the VELCO bulk transmission system and to increase delivery capacity to the local sub-transmission and distribution networks.
19. Assure that comprehensive training and procedural updating practices are in place for the Operations Department.
20. Investigates and analyzes system incidents and prepares written reports. Initiates the resolution of incorrect or undesirable equipment operations in the form of action items and trouble reports.
21. Develop and administer a comprehensive switching and tagging test program and ensures that field personnel meet the appropriate qualifications to switch at VELCO facilities.
22. Perform other duties as assigned by the President and CEO.

EDUCATION and EXPERIENCE REQUIREMENTS:

Bachelors degree in Electrical engineering. A Masters degree in administration is beneficial. Also, knowledge of the transmission operations is required to oversee the daily operations of the Control center.



IT LEAD

DEPARTMENT: Information Technologies

REPORTS TO: VP, CFO and Treasurer

POSITION SCOPE:

The candidate will manage a diverse work group of technically savvy Associates by providing technical leadership to the organization; being conversant with the future direction of enterprise systems, how that direction will impact the organization, and how future and current systems can be leveraged for the benefit of the organization. The ideal candidate will exhibit outstanding customer service and business analysis skills, a results-oriented approach towards technological advances and exceptional organizational, time management and decision making skills.

SPECIFIC RESPONSIBILITIES:

1. Manage the support processes and strategic planning of the Information Technology area.
2. Direct and manage plans for disaster recovery, continuity planning, and strategic alignment of technology and company goals.
3. Oversee technical product specification, testing and procurement.
4. Develop vendor and customer relationships.
5. Development of strategic technology initiatives in alignment with company goals.
6. Deployment of tactical directives and monitoring.
7. Disaster recovery and continuity planning.
8. Management of third party communication services and agreements
9. Work with staff in the development and maintenance of the corporate technology strategy. Support various projects (including construction) in order to recommend solutions and methodologies as they relate to a specific project.
10. Plan, direct, and coordinate critical projects to ensure the objectives of each project are accomplished within a prescribed time frame and budget.
11. Participate in the analysis of new technologies and methodologies; Provide technical support to other departments/process areas.

12. Communicate with process areas to ensure that business objectives and service needs are being addressed as they relate to the Information Technologies area.
13. Work with staff in the development of processes and documentation of systems and performance for continual improvement.
14. Technical skills with data networks, IP Addressing, firewalling and security techniques.

EDUCATION and EXPERIENCE REQUIREMENTS:

A Bachelor's degree in Information Technologies or related degree is required. A minimum of 7-10 years' relevant experience (or equivalent combination of experience and education) is desired. The candidate will be exposed to emerging technologies such as: Sharepoint, Vmware, composite applications and Windows .net.

SKILLS, ABILITIES AND KNOWLEDGE REQUIREMENTS:

- Superior written and verbal communication skills in addition to proficiency with Microsoft Office products are essential.
- The leader who fulfills this position must work well under pressure while remaining flexible, proactive and resourceful



Metering and Settlement Team Lead

DEPARTMENT: Finance

REPORTS TO: VP, CFO and Treasurer

POSITION SCOPE:

Manage the execution of the daily Metering, Market Settlements and Monthly Power Billings. Identify and coordinate process improvements in the Power Accounting area and ensure completion. Identify and coordinate process improvements in the metering and settlements area and ensure completion. Perform VELCO and VPPSA Markets billings, VELCO OATT billings, and Hydro Quebec billings.

SPECIFIC RESPONSIBILITIES:

METERING, BILLING AND SETTLEMENTS RESPONSIBILITIES:

1. Manage the execution of the daily Metering, Market Settlements and Monthly Power billings as indicated:
2. Responsible for the accurate, comprehensive, and timely completion of daily/ monthly settlement in wholesale markets. Analyze, recommend, design, and implement protocols for processing settlement within available and developing systems. Recommend, design, and implement protocols for quality assurance in settlement processing. Identify, recommend, and implement necessary short term shifts in application of department resources to facilitate timely completion of daily/monthly settlement.
3. Responsible for the completion of the billing/invoicing and maintenance of the processes to audit billing data and perform calculations/allocations required for the disaggregation of Vermont participants billing data for the following:
 - a. ISO Wholesale Markets (Settlement & Resettlement)
 - b. NEPOOL Open Access Transmission
 - c. Vermont Transmission Tariff (Settlement & Resettlement)
 - d. VPPSA NEPOOL Open Access Transmission
4. Responsible for the accurate and timely completion of the daily metering submittal to ISO-NE.
5. Responsible for the coordination/submission of the monthly ICAP contracts for all shared contracts.
6. Responsible for the accurate, comprehensive, and timely completion of the VPPSA monthly settlement including the accurate maintenance of disaggregation of their settlement.

DEVELOPMENT RESPONSIBILITIES:

1. Direct in the development of Market related business/production systems;
2. Identify and exploit efficiency/automation opportunities through system enhancements.
3. Responsible for keeping current on all NEPOOL/ISO-NE Wholesale Markets and Settlement/Billing rules and procedures.
4. Responsible for ensuring that the development of the team is adequate to make certain all have the skills to excel in their position.

CUSTOMER SUPPORT RESPONSIBILITIES:

1. Respond to specific utility data and analysis requests.
2. Coordinate the development of reporting/analysis to service special customer information requirements and requests.
3. Communicate effectively with ISO staff, NEPOOL and Vermont Distribution Utility personnel to respond to inquiries, responsibly resolve problems pertaining to market settlement issues, and analyze/gather information in support of complex research efforts.
4. Provide market expertise and technical support to VELCO customers with emphasis on Market Settlements/Billings areas.
5. Supervision/Training Responsibility:
6. Responsible for keeping current with all ISO-NE metering, settlement and billing requirements.
7. Responsible for keeping current on all NEPOOL/ISO-NE Wholesale Markets and Settlement rules and procedures.
8. Responsible for ensuring that the development of the team is adequate to make certain all have the skills to excel in their position.
9. Responsible for staying proficient in current and developing systems.

EDUCATION and EXPERIENCE REQUIREMENTS:

A minimum high school education required. Associates Degree in Accounting and/or at least five years experience in related field.

SKILLS, ABILITIES AND KNOWLEDGE REQUIREMENTS:

- Windows based computer skills and internet experience with an emphasis on Oracle SQL.
- Must be a flexible, people-oriented team player.

- Clear, organized thinker, able to handle large amounts of information and synthesize decisions/recommendations to balance cost with risk management.
- Self-starter with good multi-task and troubleshooting skills.
- Superior written and verbal communication skills.



Team Lead of Operations

DEPARTMENT: Operations Department

REPORTS TO: Process Owner of Planning, Engineering & Design and Operations

POSITION SCOPE:

Working under Operations Department practices and Company policies, provides the direction, staffing and resources for the VELCO power system operation functions. Provides contact at the supervisor's level with ISO-NE and out-of-state interconnected utilities and Vermont distribution utilities for power system operation matters. Is the first line of defense to instill and support VELCO's goal of zero defects on the transmission system.

SPECIFIC RESPONSIBILITIES:

1. Supervises Operations staff in various activities involved with the 24 hour-a-day operation of the VELCO power system.
2. Responsible for maintaining a staff adequate to perform the system operations including the selection, training, scheduling and evaluation of the System Operators.
3. Provides contact at the supervisor's level with ISO-NE, out-of-state interconnected utilities and Vermont distribution utilities for power system operation matters. Represents VELCO on the ISO MLCC Committee and the ISO-NE System Restoration Working Group.
4. Develops, maintains and supervises required reports, records, logs, notes and files.
5. Develops and implements standards, operating instructions, switching guides, procedures and performs operation studies.
6. Investigates and analyzes system incidents and prepares written reports. Initiates the resolution of incorrect or undesirable equipment operations in the form of action items and trouble reports. Develops a written monthly report to the Vermont Department of Public Service of customer outage caused by interruptions to the VELCO power system. May initiate other notices to regulatory agencies of customer outages.
7. Coordinates activity between the Operations Department and other VELCO departments regarding planned maintenance, new transmission facilities and system planning.
8. Works closely with the Director of Engineering, Operations and Planning in various Operations Department functions and the development of the department budget, goals and objectives.
9. Participates in various VELCO committees and studies.

10. Develop and administer a comprehensive switching and tagging test program and ensures that field personnel meet the appropriate qualifications to switch at VELCO facilities.
11. May perform other tasks as assigned by the Process Owner of Engineering, Operations, and Planning, and VELCO officers.

The description above reflects the most specific duties performed but does not exclude the occasional work assignments not mentioned.

EDUCATION and EXPERIENCE REQUIREMENTS:

A Bachelor's Degree in Electrical Engineering or other related technical field is required. Five to seven years experience in electrical system operations along with demonstrated leadership ability is desired.

SKILLS, ABILITIES AND KNOWLEDGE REQUIREMENTS:

- NERC TO-level certification strongly recommended.



Senior Metering Settlement Analyst

DEPARTMENT: Finance

REPORTS TO: VP, CFO and Treasurer

POSITION SCOPE:

Manage the execution of the daily Metering functions. Also includes the development of any changes to metering code as needed. Collect and submit monthly meter resettlements, Network Load and Load Response to ISO-NE. Perform VELCO ISO Tariff, VPPSA ISO Tariff billings, VPPSA OATT allocation, and PSNH/NHEC Transmission billings.

SPECIFIC RESPONSIBILITIES:

METERING RESPONSIBILITIES:

1. Responsible for the development and operation of all Metering functions.
2. Act to ensure accurate and timely completion of daily metering submittals.
3. Analyze, recommend, design, and implement protocols for processing metering within the available and developing systems. Recommend, design, and implement protocols for quality assurance in metering processing. Identify, recommend, and implement necessary short term shifts in application of department resources to facilitate timely completion of daily metering submittal.
4. Direct the Metering Analyst in non-routine situations with the calculation and validation of Vermont Loads
5. Maintain expert familiarity with all metering requirements, including participation in ISO-NE Meter Reader Working Group
6. Interact with ISO staff and Vermont Participants to resolve any problems pertaining to metering issues. Analyze, gather, and coordinate information in support of research efforts.
7. Responsible for Meter Resettlement; validation and submittal of revised VT metering data and VT Loads
8. Responsible for collection and submittal of Load Response data to ISO-NE

BILLING/INVOICING RESPONSIBILITIES:

1. Responsible for the completion of the billing/invoicing and maintenance of the processes to audit billing data and perform calculations/allocations required for the disaggregation of Vermont participants billing data for the following:
 - a. VELCO ISO Tariff
 - b. VPPSA ISO Tariff
 - c. VPPSA OATT
 - d. PSNH Transmission
 - e. NHEC Transmission

COVERAGE RESPONSIBILITIES:

1. Provide back-up for processing, validating, submittal and confirmation of Internal and External Contracts between ISO-NE, VT Distribution Utilities, and external contracting third parties. Requires familiarity with ISO-NE wholesale energy market interface (SMS, EES) and market rules related to imports and internal bilateral transactions.
2. Provide support to Metering & Settlements Team Lead for calculating and validating Internal Bilateral Market Transactions.
3. Process daily settlement as required and research issues as necessary.
4. Provide Team Lead support in the absence of the Metering & Settlements Team Lead

CUSTOMER SUPPORT RESPONSIBILITIES:

1. Respond timely to specific utility data and analysis requests.
2. Communicate effectively with ISO staff, NEPOOL and Vermont Distribution Utility personnel to respond to inquiries, responsibly resolve problems pertaining to market operations issues, and analyze/gather information in support of complex research efforts.

SUPERVISION/TRAINING RESPONSIBILITIES:

1. Responsible for keeping current with all ISO-NE metering requirements, including participation in the Meter-Reader Working Group
2. Responsible for keeping current on all market rules and procedures.
3. Responsible for staying proficient in current and developing systems and developing systems

EDUCATION and EXPERIENCE REQUIREMENTS:

A minimum high school education required. Associates Degree in Accounting or equivalent preferred.

SKILLS, ABILITIES AND KNOWLEDGE REQUIREMENTS:

- Strong knowledge of NEPOOL/ISO-New England Wholesale Markets and Settlement rules.

- Windows based computer skills and internet experience with an emphasis on Oracle SQL
- Flexible, people oriented team player
- Clear, organized thinker, able to handle large amounts of information and synthesize decisions/recommendations to balance cost with risk management
- Development and troubleshooting skills
- Superior written and verbal communication skills



Market Settlement Analyst

DEPARTMENT: Finance

REPORTS TO: VP, CFO and Treasurer

POSITION SCOPE:

Perform settlement and related functions, which include, but are not limited to, Vermont Yankee Power Billing, Wholesale Markets billing, VTA billings, customer related services, and Power Accounting file and database maintenance,

SPECIFIC RESPONSIBILITIES:

SETTLEMENT RESPONSIBILITIES

1. Perform settlement and related functions in the following areas:
 - a. Responsible for performing the Vermont Yankee Power Billing and invoicing.
 - b. Perform ISO Wholesale Markets (Resettlement) Billing and invoicing. Involves maintaining the processes to audit billing data and performing the calculations/allocations required for the disaggregation of the Vermont participants billing data.
 - c. Perform ISO Tariff (Resettlement) Billing and invoicing. Involves maintaining the processes to audit billing data and performing the calculations/allocations required for the disaggregation of the Vermont participants billing data.
 - d. Perform Vermont Transmission Billing and invoicing. Involves maintaining the processes to audit billing data and performing the calculations/allocations required for the disaggregation of the Vermont participants billing data.
 - e. Perform various settlement related analysis in response to customer requests.
 - f. Maintain Daily ICAP Tags for submission to ISO-NE.
2. Interact with ISO-NE staff and NEPOOL personnel to resolve problems pertaining to market resettlement issues; analyze/gather/coordinate information in support of complex research efforts.
3. Act to ensure accuracy of the ISO Seasonal Claimed Capability Report and incorporate changes into various spreadsheets.
4. Coordinate the ordering of all Office supplies.
5. Perform and monitor Power Accounting database table maintenance.

DEVELOPMENT RESPONSIBILITIES:

1. Assist in the development of Market related business/production systems;
2. Identify and exploit efficiency/automation opportunities through system enhancements.
3. Maintain familiarity with changing Market Rules and settlement process requirements

CUSTOMER SUPPORT RESPONSIBILITIES:

1. Respond to specific utility data and analysis requests.
2. Communicate effectively with ISO staff, NEPOOL and Vermont Distribution Utility personnel to respond to inquiries, responsibly resolve problems pertaining to market settlement issues, and analyze/gather information in support of complex research efforts.
3. Provide market expertise and technical support to VELCO customers with emphasis on Market Settlements areas.

EDUCATION and EXPERIENCE REQUIREMENTS:

A minimum high school education required. Associates Degree in Accounting or equivalent preferred.

SKILLS, ABILITIES AND KNOWLEDGE REQUIREMENTS:

- Responsible for keeping current on all NEPOOL/ISO-NE Wholesale Markets and Settlement rules and procedures.
- Responsible for staying proficient in current and developing systems.
- Must be a flexible, people-oriented team player.
- Good organizational skills and ability to prioritize and make decisions under time constraints.
- Self-starter with good multi-task and troubleshooting skills.



Market Settlement Support Analyst

DEPARTMENT: Finance

REPORTS TO: VP, CFO and Treasurer

POSITION SCOPE:

Perform all functions relating to the processing, validation, and submittal of all internal and external contracts within the VELCO and ISO-NE market systems. Responsible for the accurate and timely processing of all daily Market settlements. Assist all team members as needed.

SPECIFIC RESPONSIBILITIES:

CONTRACT RESPONSIBILITIES:

1. Administer Market Operations functions in the Contract Import and Internal Bilateral Transaction areas:
 - a. Responsible for processing, validating, submittal and confirmation of Internal and External Contracts between ISO-NE, VT Distribution Utilities, and external contracting third parties (Hydro Quebec and New York Power Authority). Requires direct communication (primarily phone) with all parties. Requires familiarity with ISO-NE wholesale energy market interface (SMS, EES) and market rules related to imports and internal bilateral transactions.
 - b. Provide support to Senior Metering & Settlements Analyst for calculating and validating Internal Bilateral Market Transactions.
 - c. Provide support to Metering & Settlements Team Lead for processing contract settlement support schedules related to imports and Internal Bilateral Transactions.
 - d. Recommend, design, and implement protocols for quality assurance in contract processing.

MARKET SETTLEMENT RESPONSIBILITIES:

1. Process daily settlement as required and research issues as necessary.
2. Specific Market Settlement responsibilities:
 - a. Responsible for the daily collection, validation and submittal of Supply Offers to ISO-NE.
 - b. Responsible for reviewing, validating and distributing the Weekly Markets Invoice.
 - c. Provide support to Senior Metering & Settlements Analyst for validation and calculation of the VELCO Financial Markets Settlement.
 - d. Process daily settlements as required and research issues as necessary.

- e. Maintain all contract allocation tables to ensure the accurate disaggregation of all shared contracts.

DEVELOPMENT RESPONSIBILITIES:

1. Assist in the development of Market related business/production systems;
2. Maintain familiarity with changing Market Rules and system process requirements
3. Identify and exploit efficiency/automation opportunities through system enhancements.

CUSTOMER SUPPORT RESPONSIBILITIES:

1. Respond to specific utility data and analysis requests.
2. Communicate effectively with ISO staff, NEPOOL and Vermont Distribution Utility personnel to respond to inquiries, responsibly resolve problems pertaining to market operations issues, and analyze/gather information in support of research efforts.

EDUCATION and EXPERIENCE REQUIREMENTS:

A minimum high school education required. Associates Degree in Accounting or equivalent preferred.

SKILLS, ABILITIES AND KNOWLEDGE REQUIREMENTS:

- Responsible for keeping current on all market rules and procedures.
- Responsible for staying proficient in current and developing systems.
- Must be a flexible, people-oriented team player.
- Good organizational skills and ability to prioritize and make decisions under time constraints.
- Self-starter with good multi-task and troubleshooting skills.



Metering Analyst

DEPARTMENT: Finance

REPORTS TO: VP, CFO and Treasurer

POSITION SCOPE:

Perform all metering functions, which include the daily collection, calculation, and validation and submittal of Vermont metering and load data. Also includes the accurate creation and distribution of all Information Shares to other New England Assigned Meter Readers. Assemble and classify all monthly VJO Deficiencies and create reports for distribution to the VJO Participants.

SPECIFIC RESPONSIBILITIES:

METERING RESPONSIBILITIES:

Daily Production Metering area:

1. Responsible for the daily collection, calculation, validation and submittal of Vermont metering data as required by VELCO's role as the Assigned Meter Reader for Vermont under current market rules. Requires frequent direct interaction with the Vermont Distribution Utilities, ISO-New England, and several other New England Assigned Meter Readers (NGRID, PSNH, NIMO and other Distribution Utilities).
2. Calculate and validate Vermont Loads in routine situations; provide support to Senior Metering & Settlements Analyst for validating and calculating Vermont Loads in non-routine situations.
3. Create and distribute Information Shares to the Vermont Distribution Utilities, ISO-New England and other New England Assigned Meter readers.

SETTLEMENT RESPONSIBILITIES:

1. Identify, validate, and create monthly VJO Deficiency Reports for distribution to the VJO participants.
2. Create and distribute the Chelsea/Coventry Generation report.
3. Record and distribute VELCO's monthly Station Service.
4. Create and distribute customer Market reports.
5. Provide support to Metering & Settlements Team Lead for the Hydro Quebec Billings.

DEVELOPMENT RESPONSIBILITIES:

1. Assist in development of customer interface/data acquisition & distribution systems
2. Maintain familiarity with changing Market Rules and system process requirements

CUSTOMER SUPPORT RESPONSIBILITIES:

1. Respond to specific utility data and analysis requests.
2. Communicate effectively with ISO staff, NEPOOL and Vermont Distribution Utility personnel to respond to inquiries, responsibly resolve problems pertaining to metering issues, and analyze/gather information in support of research efforts.

EDUCATION and EXPERIENCE REQUIREMENTS:

A minimum high school education required. Associates Degree in Accounting or equivalent preferred.

SKILLS, ABILITIES AND KNOWLEDGE REQUIREMENTS:

- Responsible for keeping current on all market rules and procedures.
- Responsible for staying proficient in current and developing systems.
- Must be a flexible, people-oriented team player.
- Good organizational skills and ability to prioritize and make decisions under time constraints.
- Self-starter with good multi-task and troubleshooting skills.



Operations Engineer

DEPARTMENT: Operations Department

REPORTS TO: Team Lead of Operations/Process Owner of Planning, Engineering & Design and Operations

POSITION SCOPE:

Work under limited supervision to administer VELCO's NERC compliance program, develop and maintain operating procedures, guidelines, standards and instructions for the safe and reliable operation of the VELCO transmission system. Perform and coordinate impact analysis and operational studies in the support of the day to day operation of the VELCO control center.

SPECIFIC RESPONSIBILITIES:

1. Maintain an awareness of NERC requirements and ongoing changes. Coordinate all VELCO NERC compliance activity and file compliance documentation with the governing bodies, e.g. NERC, NPCC, and ISO-NE. Ensure imposed deadlines are met and coordinate efforts for achieving and maintaining audit readiness.
2. Obtain and maintain NERC certification in accordance with applicable NERC requirements. Ensure that VELCO. Operating procedures and practices are in compliance with all applicable NERC standards.
3. Coordinate system changes and modifications with the VT Distribution Utilities, VELCO Planning, Engineering, EMS and Field Services.
4. Develop and maintain detailed control center operating procedures and guidelines, to include substation and transmission line procedures, and ensure that the Operations department is apprised, or trained if applicable, on all new and revised ISO-NE procedures and guidelines that are pertinent to VELCO operation.
5. Work closely with the Operations Trainer on the development of training programs and the assessment of training needs for the VELCO system operators and support staff. Assist in the training of the VELCO system operators and support staff on new or modified systems.
6. Provide operations engineering support and analytical guidance for the VELCO system operators, operations trainer, system planners, field technical personnel, and the Vermont distribution utilities.
7. Review switching plans, maintenance requests and commissioning guides with VELCO Outage Coordinators.

8. Support the VELCO Outage Coordinators by performing or coordinating contingency/impact analysis (load flows) for planned system outages in assessing, understanding and managing risk. Coordinate or perform the necessary studies for operating the transmission system in an efficient, safe and reliable manner.
9. Update and maintain the VELCO system and one-line diagrams. Ensure that the Control Center's and Backup Control Center's operating documentation is updated with the latest information.
10. Provide guidance and support for the VELCO switching and tagging program to ensure that safe practices are observed and utilized in the performance of switching and tagging.
11. Support VELCO EMS staff in updating, testing, validating and trouble shooting the SCADA Networks Application model.
12. Represent VELCO on various working groups and committees within Vermont and ISO-NE.
13. Provide functional backup for the Process Lead of Operations.
14. Provide on-call support in the event of system emergencies, prolonged equipment or customer outages. Required to carry a cell phone and pager for responding to after-hour call-outs.
15. Manage assigned projects and perform other duties as assigned by the Team Lead of Operations.

The description above reflects the most specific duties performed but does not exclude the occasional work assignments not mentioned

EDUCATION and EXPERIENCE REQUIREMENTS:

A Bachelors degree in Electrical Engineering with a Power Concentration is strongly desired though will consider applicants with relevant work experience and/or other similar educational disciplines.

SKILLS, ABILITIES AND KNOWLEDGE REQUIREMENTS:

- A strong computer aptitude is a must.
- Superior written and verbal communication skills in addition to proficiency with tools utilized to aid in the simulation of system conditions; load flow and security analysis skills are essential.
- The individual who fulfills this position must possess the ability to work independently as well as a member of a team.



Operations Training Coordinator

DEPARTMENT: Operations

REPORTS TO: Team Lead of Operations/Process Owner of Planning, Engineering & Design and Operations

POSITION SCOPE:

Works under limited supervision, following procedures, guides, standards and instructions, to develop, design, implement and evaluate the VELCO Operations personnel training. Ensures that associates have the required tools, knowledge and skills to ensure conformance with electrical utility reliability standards and other federal and state agencies standards. Works with all management and supervisory staff to address changes in the work environment and develop a learning culture. Monitors the effectiveness of training.

SPECIFIC RESPONSIBILITIES:

1. Provide leadership and guidance for personnel involved in the analysis, development, design, implementation, and evaluation of Operations personnel training.
2. Create and maintain the training program for all VELCO operating positions.
3. Coordinate and assist in the scheduling of Operations training programs.
4. Develop (or assist in the development of) training programs to be presented at VELCO, ISO-NE, and other utility sites, as required.
5. Administer Operations personnel training records to track NERC certification Continuing Education Hours (CEH).
6. Organize and archive training programs, references, and resources.
7. Develop annual training budget and coordinate purchase of all approved training programs and materials.
8. Perform periodic 3Way Communications Audits of VELCO Main Control Center communications.
9. NERC TO-level certification strongly recommended.
10. Perform detailed job/task analysis for the System Operator position.
11. Perform other assignments as requested by the Team Lead of Operations, and/or Process Owner of Engineering, Operations, and Planning.

The description above reflects the most specific duties performed but does not exclude the occasional work assignments not mentioned.

EDUCATION and EXPERIENCE REQUIREMENTS:

An Associate's Degree in Electrical Engineering or other related technical field is required. Five to seven years experience in electrical system operations along with demonstrated leadership ability is desired.

SKILLS, ABILITIES AND KNOWLEDGE REQUIREMENTS:

- Superior verbal and written communication skills.
- Attention to detail and effective instruction skills are essential.
- Proficiency with the Microsoft office suite is expected.

OTHER REQUIREMENTS:

- Must maintain an awareness of and comply with, all company and VOSHA safety requirements.
- Duties will require periodic overtime and overnight travel. Carrying a pager and responding to off-duty call will be required.



Controller

DEPARTMENT: Finance

REPORTS TO: VP, CFO and Treasurer

POSITION SCOPE:

The Controller will provide leadership and coordination of the company's financial activities while ensuring accounting compliance.

SPECIFIC RESPONSIBILITIES:

1. Coordinate and direct business planning; regulatory financial reporting and budgeting activities
2. Develop internal control policies, guidelines, and procedures for the financial activities
3. Prepare or direct preparation of financial statements, reports and budgets for three utility businesses
4. Advise the leadership team of short-term and long-term financial objectives, policies and actions
5. Analyze the financial details of past, present and expected operations in order to identify opportunities and areas for improvement
6. Lead associates performing financial reporting, accounting, payables, receivables, payroll and budgeting duties
7. Identify and offer training to staff to further individual knowledge and increase corporate depth
8. Maintain current knowledge of organizational policies and procedures, federal and state policies and directives, and current accounting standards

EDUCATION and EXPERIENCE REQUIREMENTS:

A Bachelor's degree in Accounting or related field is required. Utility industry familiarity and demonstrated experience with Great Plains software is highly desired. Additionally, a CPA or equivalent designation is preferred.

SKILLS, ABILITIES AND KNOWLEDGE REQUIREMENTS:

- Sound leadership skills and strong analytical ability
- Ability to assign and oversee work activities and meet deadlines
- Familiarity with all aspects of general accounting, financial reporting, planning, budgeting and managerial accounting, tax accounting, and fixed asset accounting

- Strong communication skills; oral and written
- Ability to foster teamwork in others and work as a member of a team
- Demonstrated ability to handle several concurrent assignments
- Ability to perform comprehensive organizational analysis for three utility companies
- Experience in the creation and optimization of work flow processes
- Positive service orientation
- Ability to work in a flexible team environment and independently with minimal supervision
- Strong interpersonal skills; demonstrating a commitment and ability to work with diverse work groups and individuals



Outage Coordinator

DEPARTMENT: Operations

REPORTS TO: Team Lead of Operations/Process Owner of Planning,
Engineering & Design and Operations

POSITION SCOPE:

Works under limited supervision, following procedures, guides, standards and instructions to coordinate the planned outages of VELCO transmission lines, substation apparatus, SCADA and communication equipment. Coordinates the outages of transmission facilities of other utilities which impact the VELCO or Vermont distribution utilities systems. Assists in the minute-to-minute operation of the VELCO transmission system.

SPECIFIC RESPONSIBILITIES:

1. Coordinate applications for planned transmission facility outages which will include the following: receiving outage requests from within VELCO, making outage requests to ISO-NE and interconnected out-of-state utilities, coordinating outage plans with the Vermont distribution utilities, making arrangements for switchmen and making notifications.
2. Develop written detailed plans for switching, tagging and working clearance necessary for each planned outage of VELCO lines or substation apparatus.
3. Provide the System Operator and Operations Process Owner with a listing on a daily basis of all known planned outages of VELCO transmission facilities and transmission facilities of other utilities that impact VELCO.
4. Assist with switching, tagging, issuing of work clearance and general system operation as necessary.
5. Prepare a weekly transmission facility outage plan and trouble reports for general distribution within VELCO each Friday morning.
6. Operates and monitors the VELCO Energy Management System (EMS) for the purpose of studying the security impact of scheduled outages on transmission system.
7. Provide VELCO's Operations Process Owner and Planning Department with information and assistance required to perform load flow studies for certain outages.
8. Provide ISO-NE with outage plans which meet criteria requiring them to be listed on the ISO-NE Annual Outage Schedule.

9. Coordinate the planned outage of SCADA and communication equipment.
10. Achieve and maintain NERC TO Level Certification.
11. The Outage Coordinator is directly responsible for compliance with all applicable NERC Reliability Standards.
12. The Outage Coordinator is responsible for all other duties as defined in VELCO Operating Procedure 1.
13. Perform other assignments as requested by the Operations Process Owner.

The description above reflects the most specific duties performed but does not exclude the occasional work assignments not mentioned.

SHIFT DUTIES/TASKS LISTS:

1. The Outage Coordinator has the responsibility and authority to implement real-time actions that ensure the stable and reliable operation of the Bulk Electric System, up to and including the shedding of load.
2. The Transmission System Outage Coordinator is directly responsible for complying with all applicable NERC Reliability Standards. ⁱ
3. The Outage Coordinator will shall achieve and maintain NERC TO Level Certification in accordance with applicable NERC policy.
4. The Outage Coordinator shall assist the System Operator in:
 - a. Assessing and responding to real-time system conditions to ensure reliable operation of the transmission system.
 - b. Responding to various system alarms as they arise.
 - c. Operating the Highgate Converter station, phase shifting transformers, transformer tap changers and voltage regulating devices to maintain appropriate voltages and power flows on the transmission system.
 - d. Reviewing and acknowledging all transmission system alarms, power system alarms and control system alarms.
 - e. Switching, tagging, issuing of work clearance and general system operation as necessary.
5. Coordinate applications for planned transmission facility outages which will include the following:
 - a. Receiving outage requests from within VELCO and the Vt. Distribution Utilities
 - b. Making outage requests to ISO-NE and interconnected out-of-state utilities
 - c. Coordinating outage plans with the Vermont distribution utilities
 - d. Making arrangements for switchmen
 - e. Making notifications.
6. Develop written detailed plans for switching, tagging and working clearance necessary for each planned outage of VELCO lines or substation apparatus.
7. Perform duties pertaining to scheduling outages as set forth in VELCO OP 3.

8. Provide the System Operator and Process Owner of Operations and Planning with a listing on a daily basis of all known planned outages of VELCO transmission facilities and transmission facilities of other utilities that impact VELCO.
9. Prepare a weekly transmission facility outage plan and trouble reports for general distribution within VELCO each Friday morning.ⁱⁱ
10. Conduct EMS security analysis studies for planned outages.
11. Operate and monitor the VELCO Energy Management System (EMS) for the purpose of studying the security impact of scheduled outages on transmission system.
12. Provide VELCO's Planning Department with information and assistance required to perform load flow studies for certain outages.
13. Provide ISO-NE with outage plans which meet criteria requiring them to be listed on the ISO-NE Annual Outage Schedule.
14. Coordinate the planned outage of SCADA and communication equipment.
15. Review previous days notes, daily summary and shift summaries.
16. Review E-mails.
17. Complete Foxpro Outage applications and switching plans.
18. Submit outage applications to ISO via outage scheduler.
19. Participate in the daily 9:30 LCC conference call.ⁱⁱⁱ
20. Prepare accurate and up to date Foxpro shift notes.
21. Keep System Operator "TRAINING" record EXCEL file updated.
22. Perform other tasks as assigned by the Process owner of Operations and Planning and the Operations Engineer.

EDUCATION and EXPERIENCE REQUIREMENTS:

An Associate's degree in Electrical Engineering or other related technical field is required in addition to NERC Operator Certification. Seven to ten years of experience as a System Operator or equivalent is preferred.

SKILLS, ABILITIES AND KNOWLEDGE REQUIREMENTS:

- Superior written and verbal communication skills in addition to proficiency with tools utilized to aid in the simulation of system conditions; load flow and security analysis skills are essential.
- The individual who fulfills this position must possess the ability to work independently as well as a member of a team.

OTHER REQUIREMENTS:

Must live within 30 minutes of the operating headquarters.

ⁱ NERC Reliability Standard PER-001-0 Measure 1.3

ⁱⁱ NERC Reliability Standard TOP-003-0 Requirement R2, R3 & R4

ⁱⁱⁱ NERC Reliability Standard TOP-003-0 Requirement R1.2 & R1.3



SCADA/EMS ENGINEER

DEPARTMENT: Energy Management Systems

REPORTS TO: Process Owner of Energy Management System

POSITION SCOPE:

Support and maintain VELCO's Supervisory Control And Data Acquisition, and Energy Management System (SCADA/EMS). Assist with the reliable operation of the VELCO electric transmission grid by supporting VELCO and distribution company applications. Provide multi-vendor, solution oriented support for hardware and software for the SCADA/EMS and Operations systems.

SPECIFIC RESPONSIBILITIES:

1. Maintain reliable and efficient operations for VELCO's SCADA/EMS. Perform programming to implement, configure, maintain and expand SCADA/EMS databases, displays and applications. Solve problems affecting the system and user operations.
2. Perform hardware/software diagnostics, maintenance and backup/archival/restoration procedures for the SCADA/EMS. Work with VELCO and external staff including vendors, electric distribution companies and NEPOOL participants to troubleshoot SCADA/EMS, Remote Terminal Units, communications problems and equipment malfunctions. Assist in the maintenance and inventory of spare parts.
3. Create, maintain and coordinate database modifications, drawings and displays, and documentation for the SCADA/EMS. Use standard practices to electronically maintain documentation and procedures.
4. Assist in the development and maintenance of the VELCO transmission model for the Energy Management System.
5. Responsible for responding to off-duty call-outs and required to carry a pager. Position will require overtime as deemed by the Process Owner of NS & EMS.
6. Assist in the development and maintenance of the SCADA historian and other special database applications. Develop reports and queries of historical operations data.
7. Direct problems affecting system integrity and security to the Process Owner of Energy Management Systems. Comply with all security requirements.
8. Perform other duties as assigned by the Process Owner of Energy Management Systems.

The description above reflects the most specific duties performed but does not exclude the occasional work assignments not mentioned.

EDUCATION and EXPERIENCE REQUIREMENTS:

A Bachelors degree in Electrical Engineering or Computing/Information Science is required though a Masters degree is preferred. Candidates must have 2 years relevant experience.

SKILLS, ABILITIES AND KNOWLEDGE REQUIREMENTS:

- Familiarity with computer operating systems (Unix and Microsoft), computer networking (TCP/IP), AutoCad and CAD principles are favorable.
- Superior written and verbal communication skills in addition to proficiency with tools utilized to aid in load flow analysis are essential.
- Development and troubleshooting skills in real-time data acquisition and network modeling security analysis are crucial.
- Critical thinking and efficient programming skills in such relevant languages (C, C++, FORTAN, Kornshell, Perl, Oracle, MS-FoxPro and SQL) are also of significant value.
- Keen troubleshooting skills are also desired to provide solutions to complex computer, telecommunication, and/or electronic equipment issues.
- The individual who fulfills this position must possess the ability to work independently as well as a member of a team. Respond to after-hour call-outs as required.



System Operator

DEPARTMENT: Operations

REPORTS TO: Team Lead of Operations/Process Owner of Planning, Engineering & Design and Operations

POSITION SCOPE:

Works under limited supervision, following procedures, guides, standards and instructions, to monitor and regulate the operation of the VELCO transmission system. Provides the communication links from the ISO-NE Control Center and the control centers of interconnected out-of-state utilities to and among the Vermont distribution utilities for system operation purposes.

SPECIFIC RESPONSIBILITIES:

1. Manages the on line operation of the VELCO transmission system taking corrective action in the form of switching capacitors, adjusting load tap changers, dispatching local generation and the Highgate Converter, and adjusting the Sandbar PST as necessary to maintain voltage and power flow levels within limits established in VELCO reliability guidelines. These efforts shall result in excellence in VELCO system reliability and power quality which are essential in providing service to the Vermont distribution utilities.
2. Operates and monitors the VELCO Energy Management System (EMS) for the purpose of performing real-time security analysis as well as studying the security impact of scheduled outages on transmission system.
3. Provides the communication links from ISO-NE and out-of-state utilities to and among the Vermont distribution utilities for the purposes of generation and transmission dispatch, power schedule changes, implementation of various operating procedures, and the exchange of information and data. Provides night and weekend coverage for the VELCO switchboard.
4. Manages transmission system disturbances and unplanned outages including locating the source of the disturbance, taking corrective action as necessary, collecting data concerning the disturbance, writing incident reports, and making notifications to VELCO supervisory and management personnel.
5. Participates in planned transmission facility outages including making outage requests to ISO-NE and interconnected out-of-state utilities, coordinating plans with the Vermont distribution utilities, writing switching guides, operating switches by SCADA, issuing switching orders and issuing working clearances.

6. Operates the Highgate Converter Station by SCADA including starting, stopping, adjusting loading to schedules, responding to alarms, keeping records and making notifications pertinent to converter operation.
7. Prepare and maintain various records, reports, and files including but not limited to System Operators notes, generating unit and power contract availability records, limitation and constraints record, reliability forecasts, call-out report, substation history files and OCB counter records.
8. Reviews and provides input to VELCO substation and transmission line operating instructions.
9. Provides around the clock security and surveillance provided by video monitoring systems at Coolidge, Essex Sand Bar, Highgate Converter, West Rutland and Pinnacle Ridge. Responsible for responding to SCADA entry alarms at all VELCO substations, Pinnacle Ridge and Wenlock facilities, IFD system alarms associated with the Highgate Converter and Essex Statcom and corporate and substation fire alarm system alarms as set forth in various instructions.
10. The System Operator shall have the responsibility and authority to implement real-time actions that ensure the stable and reliable operation of the Bulk Electric System, up to and including the shedding of load.
11. The System Operator shall achieve and maintain NERC TO Level Certification in accordance with applicable NERC policy.
12. The System Operator is directly responsible for compliance with all applicable NERC Reliability Standards.
13. The System Operator is responsible for all other duties as defined in VELCO Operating Procedure 1.
14. Perform other assignments as requested by the Operations Process Owner.

The description above reflects the most specific duties performed but does not exclude the occasional work assignments not mentioned.

7AM-7PM SHIFT DUTIES and TASKS (DAY SHIFT)

1. The System Operator has the responsibility and authority to implement real-time actions that ensure the stable and reliable operation of the Bulk Electric System, up to and including the shedding of load.
2. The System Operator is directly responsible for complying with all applicable NERC Reliability Standards.ⁱ
3. The System Operator shall:
 - a. Achieve and maintain NERC TO Level Certification in accordance with applicable NERC policy.
 - b. Assess and respond to real-time system conditions to ensure reliable operation of the transmission system.
 - c. Respond to various system alarms as they arise.

- d. Operate the Highgate Converter station, phase shifting transformers, transformer tap changers and voltage regulating devices to maintain appropriate voltages and power flows on the transmission system.
 - e. Review and acknowledge all transmission system alarms, power system alarms and control system alarms.
4. REVIEW:
- a. Transmission system conditions by SCADA and resolve any issues.
 - i. Are voltages in acceptable ranges?
 - ii. Are Vermont Yankee, Coolidge, W. Rutland and Granite meeting their voltage schedule as shown in OP 12 Appendix A.
 - iii. Are any transformers nearing their limits?
 - iv. What is the Highgate Converter set at?
 - v. What are the flows on the PV20 K7, F206 and 340 lines?
 - vi. What is the STATCOM RCO set at?
 - b. Jobs that are currently in progress as well as those scheduled to be performed that day.
 - c. Location of all crews that are presently working. (tree crews, substation crews, line crews, etc)
 - d. Limitations and Constraints records for ICU availability and update when necessary. (Which units are on-line, which units are not available)
 - e. EMS ensuring that the current state load and interchange has been updated and that all segments are operating correctly. Also review Diverged and Full AC cases and take appropriate actions when necessary.
 - f. Weather conditions on the lightning detection network.
 - g. Abnormal summary (indication and measurand) and resolve any unexplained alarms.
 - h. ISO/REMVEC summary page, if any data appears magenta this would indicate a failed ICCP link.
 - i. Previous days notes, daily summary and shift summaries.
 - j. E-mails.
 - k. Trouble reports.
 - l. Outage applications note book and switching plans for future jobs.ⁱⁱ
 - m. Review ISO RIG box for generation update / status change requests.
 - n. Information left in the System Operator mail box/must reads.
5. CHECK:
- a. All printers/FAX are working and that there is sufficient paper in each.
 - b. Data collection program each hour to ensure SCADA data is being collected.
 - c. SCADA server page, is one server on line and one server on standby? Are LAN-A and LAN-B available?
 - d. Converter Computer A and B statuses. (One active, One stand-by)
 - e. RTU/RTG page, are all RTUs in service? Are there any switch faulty flags?
 - f. Telephone voice recorder to be working properly.
 - g. LTRAX Lightning detection system is working properly.
- 6. Perform required switching and tagging operations.
 - 7. Perform EMS security analysis for scheduled jobs.
 - 8. Perform SCRA runs as required.
 - 9. Make an EMS save case for the peak load hour.
 - 10. Update the substation histories for any completed switching.
 - 11. Complete necessary LOAD forecasts.
 - 12. Prepare accurate and up to date Foxpro shift notes.
 - 13. Submit SMRs when necessary.
 - 14. Work on System Incident Reports.
 - 15. Provide coverage for other shifts as required.
 - 16. Provide security surveillance for facilities with security cameras installed.

17. Maintain an updated System Operator "TRAINING" record EXCEL file.
18. Provide information to other departments when requested.
19. Provide the Designated Entity function between ISO-NE and Vermont generating stations
 - a. Report generation re-declarations to ISO-NE when they are received.
 - b. Report generation dispatch orders from ISO-NE to the generator operators.
20. Provide weekend and after-hours coverage for the VELCO switchboard.
21. Perform other tasks as assigned by the Process owner of Operations and Planning and the Operations Engineer.

7PM-7AM DUTIES and TASKS (OVERNIGHT SHIFT)

1. The System Operator has the responsibility and authority to implement real-time actions that ensure the stable and reliable operation of the Bulk Electric System, up to and including the shedding of load.
2. The System Operator is directly responsible for complying with all applicable NERC Reliability Standards. ⁱⁱⁱ
3. The System Operator shall:
 - a. Achieve and maintain NERC TO Level Certification in accordance with applicable NERC policy.
 - b. Assess and respond to real-time system conditions to ensure reliable operation of the transmission system.
 - c. Respond to various system alarms as they arise.
 - d. Operate the Highgate Converter station, phase shifting transformers, transformer tap changers and voltage regulating devices to maintain appropriate voltages and power flows on the transmission system.
 - e. Review and acknowledge all transmission system alarms, power system alarms and control system alarms.
4. REVIEW:
 - a. Transmission system conditions by SCADA and resolve any issues.
 - i. Are voltages in acceptable ranges?
 - ii. Are Vermont Yankee, Coolidge, W. Rutland and Granite meeting their voltage schedule as shown in OP 12 Appendix A.
 - iii. Are any transformers nearing their limits?
 - iv. What is the Highgate Converter set at?
 - v. What are the flows on the PV20 K7, F206 and 340 lines?
 - vi. What is the STATCOM RCO set at?
 - b. Jobs that are currently in progress as well as those scheduled to be performed that day.
 - c. Location of all crews that are presently working. (tree crews, substation crews, line crews, etc)
 - d. Limitations and Constraints records for ICU availability and update when necessary. (Which units are on-line, which units are not available)^{iv}
 - e. EMS ensuring that the current state load and interchange has been updated and that all segments are operating correctly. Also review Diverged and Full AC cases and take appropriate actions when necessary.
 - f. Weather conditions on the lightning detection network.
 - g. Abnormal summary (indication and measurand) and resolve any unexplained alarms.
 - h. ISO/REMVEC summary page, if any data appears magenta this would indicate a failed ICCP link.
 - i. Previous days notes, daily summary and shift summaries.
 - j. E-mails.
 - k. Trouble reports
 - l. Outage applications note book and switching plans for future jobs.^v
 - m. Review ISO RIG box for generation update / status change requests.
 - n. Information left in the System Operator mail box/must reads.

5. CHECK:
 - a. All printers/FAX are working and that there is sufficient paper in each.
 - b. Data collection program each hour to ensure SCADA data is being collected.
 - c. SCADA server page, is one server on line and one server on standby? Are LAN-A and LAN-B available?
 - d. Converter Computer A and B statuses. (One active, One stand-by)
 - e. RTU/RTG page, are all RTUs in service? Are there any switch faulty flags?
 - f. Telephone voice recorder appears to be working properly.
 - g. LTRAX Lightning detection system is working properly.
6. Perform required switching and tagging operations.
7. Perform EMS security analysis for scheduled jobs.
8. Perform SCRA runs as required.
9. Update the substation histories for any completed switching.
10. Complete necessary LOAD forecasts.
11. Prepare accurate and up to date Foxpro shift notes.
12. Submit SMRs when necessary.
13. Work on System Incident Reports.
14. Provide coverage for other shifts as required.
15. Provide security surveillance for facilities with security cameras installed.
16. Maintain an updated System Operator "TRAINING" record EXCEL file.
17. Provide information to other departments when requested.
18. Provide the Designated Entity function between ISO-NE and Vermont generating stations
 - a. Report generation re-declarations to ISO-NE when they are received.
 - b. Report generation dispatch orders from ISO-NE to the generator operators.=
19. Provide weekend and after-hours coverage for the VELCO switchboard.
20. Prepare and maintain other various records, reports and files as required.
21. Review previous 24 hours of P/A data and create the P/A file for that day.
22. Participate in the ISO-NE 3 am call to review scheduled jobs for the day. ^{vi}
23. Close out and print System Operator notes at the end of each day.
24. Perform other tasks as assigned by the Process owner of Operations and Planning and the Operations Engineer.

EDUCATION and EXPERIENCE REQUIREMENTS:

An Associates degree in Electrical Engineering or equivalent experience is required. A minimum of 5-7 years in the electrical industry is desired.

SKILLS, ABILITIES AND KNOWLEDGE REQUIREMENTS:

- Superior verbal and written communication skills are essential.
- Must have the ability to perform the System Operator's role as both a team member and independently.
- Must be willing, and able, to work 12-hour rotating shifts.
- Working knowledge of computer spread sheet, word processing, and database desirable.
- The System Operator trainee will be required to perform outside studying during the training period. At the end of the training period, and upon passing the NERC certification exam, the Trainee will be assigned to regular rotating shift work as a System Operator.

OTHER REQUIREMENTS:

Must live within 30 minutes of the operating headquarters.

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- ⁱ NERC Reliability Standard PER-001-0 Measure 1.3
 - ² NERC Reliability Standard TOP-003-0 Requirement R1.2
 - ⁱⁱⁱ NERC Reliability Standard PER-001-0 Measure 1.3
 - ^{iv} NERC Reliability Standard TOP-003-0 Requirement R1.2
 - ^v NERC Reliability Standard TOP-003-0 Requirement R1.2
 - ^{vi} NERC Reliability Standard TOP-003-0 Requirement R1.2 & R1.3