

1 Q. **2013 General Rate Application, Intercompany Transaction Costing Guidelines –**  
2 **Exhibit 8**  
3 Page 3, lines 13-20 and page 4, lines 1-2 - Provide the employee job descriptions for  
4 each position within Hydro's IS department in 2013.

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7 A. Table 1 outlines the list of positions employed by Hydro in the IS department in  
8 2013. PUB-NLH-189, Attachment 1 provides a copy of each job description.

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**Table 1**

Position
Administrative Assistant
Architecture Analyst
Business Analyst
Client Support Analyst
Data Centre Facilities Administrator
Information Systems Security Officer
Infrastructure Specialist Energy Systems
Infrastructure Specialist System Support
Manager Technology Planning & Project Delivery
Programmer Analyst
Project Leader
Project Manager
Security Change Control Analyst
Software Specialist
Systems Analyst
Team Lead – Energy Management Systems
Team Lead Business Solutions Support
Team Lead Corporate Systems
Team Lead System Support

## Administrative Assistant

### Location Information

**Company:** Newfoundland & Labrador Hydro  
**Division:** Finance  
**Department:** Information Systems  
**Section:** Administration  
**Subsection:**  
**Location:** Hydro Place

### Organization Reporting

#### Direction Received:

Receives general direction from the Director of IS&T in carrying out day-to-day administrative work; works closely with Manager of Network Services, Manager of Software Applications, Manager of Computer Operations, Labour Manager, Manager of Technology, Planning & Integration, and Manager of Business Solutions & Support. Expected to exercise a significant level of personal initiative and judgment in carrying out assigned tasks and must be able to adapt and work within a challenging and constantly changing environment.

#### Direction Exercised:

N/A

### Job Description

#### Summary of Job Function:

Responsible for performing all administrative support duties, including typing, filing, receptionist duties, etc.; performing other clerical duties such as using spreadsheets, organizing conferences, bookings for travel and rental equipment, etc. Attending meetings and recording minutes, provides support in preparing/coding PO's, invoices, expense forms, etc.; reviews monthly budgets and flags for variances for management. Responsible for use of scanning equipment, preparing presentations with graphic tools/software, researching on the internet and performing other technical tasks to ensure that the IS&T Administrative functions are run in an effective and efficient fashion for IS&T Management.

#### Principal Activities, Duties, and Responsibilities:

1. Types confidential and other general correspondence, letters, inter-office memorandums, reports, papers, etc.; proofreads all completed work, ensuring formats are correct.
2. Prepares routine draft memo's, correspondence on behalf of IS&T Management.
3. Is responsible for all management filing and the maintenance of the filing system.
4. Updates the IS&T Workplan using Microsoft Project '98.
5. Provides assistance to other staff as required.
6. Receives, opens, and sorts all mail for the IS&T Area.

7. Is responsible for maintaining Management Reading Files and the circulation of same, including general correspondence to all IS&T staff.
8. Acts as the Receptionist for IS&T, both internally and externally.
9. Is responsible for the collection and final preparation of the monthly reports and submissions for Management Committee papers.
10. Arranges travel for Management, including all air, car and hotel reservations.
11. Assists with the development of capital and operating budget documentation.
12. Ensures appropriate business unit coding and approvals have been applied to paperwork, including PO's, invoices, expense items, etc.
13. Attends IS&T Management Meetings and records minutes.
14. Prepares presentations/Flow Charts using PowerPoint software.
15. Update IS&T databases and proficient with Lotus Notes.
16. Carries out other duties assigned by the Director and Managers of IS&T.

### **Job Specifications**

#### **Education:**

Graduate from a recognized office administration/secretarial program or an equivalent combination of education, training and experience.

#### **Experience:**

Three years experience in the secretarial field. Direct responsibility for maintaining confidentiality. Experience in office management would be a definite asset.

#### **Special Skills, Job Requirements, Working conditions, Etc.**

Good working knowledge of office practices and procedures, computers and associated equipment, fax machines, photocopiers, dictaphone machines, scanners, internet, word processing, spreadsheet/database software and project management software.

Must be proficient in Excel, Word, PowerPoint, Microsoft Project, integrating text, graphics, and tables between software packages.

Must have working knowledge of JDE, specifically Financial and Work Order tracking menus/reports.

### **Personnel Information**

**Salary Grade:**

Hay 05

**Job Number:**

289-90

## Architecture Analyst

### Location Information

**Company:** Newfoundland & Labrador Hydro  
**Division:** Finance  
**Department:** Information Systems  
**Section:** Technology Planning  
**Subsection:**  
**Location:** Hydro Place

### Organization Reporting

#### Direction Received:

Reports directly to the Manager, Technology, Planning and Integration for overall direction and establishment of objectives. Exercises initiative and judgement in planning and organizing day-to-day work and project assignments.

#### Direction Exercised:

No staff supervisory responsibilities. Provides direction and guidance to staff assigned to assist with the development and deployment of the IT architecture.

### Job Description

#### Summary of Job Function:

Provide insight, direction and vision of technology impact across the corporate infrastructure, as it relates to telecommunications, networks, computer hardware, applications software, and End-User tools. Establish standards on the deployment of the infrastructure plan and ensure adherence and compliance.

#### Principal Activities, Duties, and Responsibilities:

Under the supervision of the Manager, Technology, Planning and Integration, this position is responsible for the development of architecture standards for the infrastructure components needed to support the telecommunications, operational, and business applications required for the corporation. The position performs this function by working with each section to:

- Establish a consistent set of architecture principles, practices, and designs to support the delivery of business value, following corporate goals and objectives.
- Outline the overall direction of Information Technology within the Hydro Group.
- Research, analyse, evaluate and recommend the IT direction & standards for the following areas:
  - Communications infrastructure
  - Network infrastructure
  - Computer hardware platforms
  - Application software
  - Database technology
  - End-User tools
- Analyze new and existing IT systems, and propose architectures which optimize efficiency and fully support the business case.

- Analyze and access IT systems to ensure solutions are fully integrated within the corporation's systems infrastructures.
- Develop and recommend strategies and directions on systems infrastructure.
- Develop and review data architectures to support the IT infrastructure and applications development.
- Participate in the data modelling, technical design, performance criteria, and evaluation of new database services.
- Develop and recommend migration strategies for new technologies and system infrastructures.
- Provide analysis and research to support the IT strategic planning process.
- Advise and consult with IS&T staff on technology and infrastructure issues.
- Review new services and products with technical staff to ensure data integrity and application/infrastructure guidelines are satisfied.
- Act as a liaison between IS&T groups and other corporate areas, on issues affecting IT architecture, infrastructure and standards.
- Assist technical staff with prototype of new services to determine impact, performance, benefits and level of integration.
- Develop measurement indices to quantify the level of performance achieved in each area.
- Provide coordination to manage and maintain the IT architecture and infrastructure's documentation and diagrams.
- Acquire and maintain a high level of knowledge on the trends in the industry and like business through training & conferences.
- Perform other related duties as required or assigned.

### **Job Specifications**

#### **Education:**

A University Degree in a quantitative discipline or an equivalent combination of education, training and experience in system design and implementation of large sized enterprise wide systems and infrastructure replacement.

#### **Experience:**

A minimum of ten years experience in data processing or telecommunications environment, which include experience in several of the following:

- communication systems, networks, applications, computer hardware or database services.

**Special Skills, Job Requirements, Working conditions, Etc.**

Ability to work well with staff and management, and to communicate effectively.

Overall knowledge of IS&T department, from an operational and functional viewpoint.

Must show initiative and innovation. Ability to work on their own, with minimal supervision. Adaptable to a changing work environment.

**Personnel Information**

<b>Salary Grade:</b>	Hay 11
<b>Job Number:</b>	
<b>Status:</b>	Active

## Business Analyst

### Location Information

<b>Company:</b>	Newfoundland & Labrador Hydro
<b>Division:</b>	Finance
<b>Department:</b>	Information Systems
<b>Section:</b>	Business Analysis
<b>Subsection:</b>	
<b>Location:</b>	Hydro Place

### Organization Reporting

#### Direction Received:

Receives general direction from the department head and is expected to exercise personal initiative and judgement in planning and organizing work project assignments. Decisions having departmental/corporate impact are made in consultation with the department head.

#### Direction Exercised:

Provides direction and guidance to all division and departmental staff in the use of integrated systems and to other Hydro Group employees for system training purposes and for ongoing business process activities. As required, acts as Project Leader in development and enhancement of the business system and provides direction to staff who may be assigned. Analyst positions may supervise a small support staff as necessary. Where activities impact data structures, system integration, and desktop infrastructure, direction is set through the standards, guidelines and direction of Information Systems and Telecommunications Department.

### Job Description

#### Summary of Job Function:

The Business Analyst provides expertise in various functional business processes of the organization, to department managers, other business analysts, and line employees. The incumbent facilitates the development of moderate to complex systems and maintenance of existing business systems and procedures including the introduction of new products and services through interaction with internal and external groups. The incumbent ensures the integrity of functional corporate business systems, the identification of impacts on the integrated suite of products, interdepartmental processes, standards and control procedures and would develop, maintain and enhance the corporate business systems. These functions will be performed under the governance of the Information Systems and Telecommunications Department.

#### Principal Activities, Duties, and Responsibilities:

1. Analyses and leads business process resolution of production issues for the corporate module in their assigned area.
2. Coaches the work of departmental staff including the review and direction in the preparation of test plans, testing validation and business requirements identification.
3. Identifies, develops and implements operational enhancements to existing systems and processes to reduce cost and enhance efficiency and improve customer service where these changes do not modify the overall

corporate data structure, module integration and the desktop infrastructure.

4. Ensures that newly implemented system features or enhancements meets user department needs as documented in specifications. Signs off on user requirements and project acceptance prior to implementation to production and completes analysis of project business process issues and implements appropriate resolution.
5. Ensures accuracy of existing production systems data.
6. Develops, executes and documents test plans to ensure quality and accuracy.
7. Participates in the investigation and resolution of production problems.
8. Provide guidance and day to day operating support to departmental and or corporate staff.
9. Prepares effective and timely user system procedures documentation.
10. Develops system training strategies for departmental staff, resulting from changes to business systems practices or processes.
11. Performs other duties as maybe required including line assistance, committee representation, work with interdepartmental teams.
12. Delivers training programs to users.
13. Participates in the development and execution of test scripts for major systems upgrades. Schedules user personnel for testing participation.
14. Prepares functional specifications and requirements definition.
15. Acts as liaison between Information Technology Department and Users and works closely with IS&T analysts.
16. Prepares, presents and co-ordinates systems presentation and demonstrations.
17. Trouble shoots, handles functional issues of the JDE products and associated third party packages.
18. Improves user awareness of new core business processes and activities.
19. Actively involved in the Safety and Health Program.

### **Job Specifications**

#### **Education:**

A University degree in Commerce or Business Administration with major courses in business systems or a certification from a 3 year recognized I.T.T. program and 5 years experience in industry related business processes.

#### **Experience:**

A minimum of 5 years progressively responsible experience in a line function environment including 2-3 years experience participating in the development and enhancement, training and support of on-line systems.

**Special Skills, Job Requirements, Working conditions, Etc.**

Technical aspects of the position require the incumbent to have a comprehensive knowledge of one or more facets of the Information Technology business, use of data processing functionality and a solid understanding of the corporate integrated suite and administrative policies. This position requires interaction with Information Systems and Telecommunications Staff, and external personnel. Interpersonal skills are key in order to be able to present options, facts and justifications, and negotiate direction to act in the role of mediator when resolving conflicts. The ability to react quickly, be decisive and use good judgment are vital traits.

Must have strong written and oral communications skills, team building and problem solving skills. Knowledge of business practices and an orientation towards systems/technical work is desired.

Knowledge of Business Processes in Finance, Human Resources, Customer Service, Maintenance and Materials Management.

**Personnel Information**

<b>Salary Grade:</b>	HAY 10
<b>Job Number:</b>	
<b>Status:</b>	Active

## Client Support Analyst

### Location Information

**Company:** Newfoundland & Labrador Hydro  
**Division:** Finance  
**Department:** Information Systems  
**Section:** System Support  
**Subsection:**  
**Location:** Hydro Place

### Organization Reporting

#### Direction Received:

Receives general direction from Business Solutions Analyst.

#### Direction Exercised:

Provides guidance and support to the business with regards to desktop computing technology. In a team environment works closely with Business Solutions Analysts, other Client Support Analysts, as well as other IS&T sections to support the customer computing infrastructure.

### Job Description

#### Summary of Job Function:

Responds to all end user computing issues, problems and requests for services and ensures complete customer satisfaction. Provide training services on the effective use of technology to support business goals through formal and informal sessions, hands on assistance and support tools. On a rotational basis the Client Support Analyst will be assigned to the Helpdesk.

#### Principal Activities, Duties, and Responsibilities:

1. Responds to and supports end user computing software, hardware, and operating system environments.
2. Installs the end user desktop computing environment, loads software not part of the standard image and ensures all software, hardware and peripheral devices are operating properly.
3. Creates, implements, maintains and administers IS&T technology training programs/workshops/demonstrations and services to support business goals.
4. Create, distribute and implement communications related to end user computing issues, problems and requests for IT services to all staff as required according to standards established.
5. Ensure complete customer satisfaction for computing issues, problems and services by conducting customer services surveys as required.
6. Record, track and monitor all requests for IT services, providing resolution and escalation as required through

established Customer Solutions & Support as well as other appropriate IS&T departmental processes and procedures.

7. Record, track, analyze, implement and escalate as required all service requests.
8. Provide input to the Business Solutions Analyst in the establishment of Service Level Agreements, metrics and reports for the customer support process.
9. Monitor computing hardware, software and operating system environments according to established processes and standards.
10. Co-ordinate and maintain in-house IS&T training facilities ensuring that the computing environments are properly configured for scheduled training programs. This includes the loading of vendor software and staging of hardware platforms for specialized training.
11. Contact external vendors regarding support/servicing.
12. Participates in the development and implementation policies, procedures and standards for workstations and client computing issues, including standards.
13. Create and maintain IS&T customer support documentation (support matrices and procedures etc.) according to standards established.
14. Using the standard toolset, create and maintain end user requested software applications that may be requested.
15. Participates in the development and implementation of deployment plans for software/hardware upgrades to the desktop computing environment.
16. Consulting with and supporting/implementing client service requests.
17. Provides support for the LAN servers, printers and video conferencing equipment as required.
18. Identifies to the Business Solutions Analyst any gaps identified in service delivery by IS&T.
19. Performs other related duties as required or assigned.

### **Job Specifications**

#### **Education:**

A minimum education level of a University Degree or College Diploma or an equivalent combination of education, training and experience.

**Experience:**

A minimum of five years experience in a customer support environment. In-depth experience with desktop hardware and operating systems as well as applications support. Experience in network server hardware, operating systems and the configuration of enterprise-wide applications is desirable. Experience in applications development would be a desirable asset.

**Special Skills, Job Requirements, Working conditions, Etc.**

This is a position in a rapidly changing highly technical field. The incumbent must continually update himself/herself on the latest technological developments in this broad highly technical field.

Proven facilitation skills combined, ability to think conceptually; excellent organizational, interpersonal and communication skills, along with the ability to work independently and in a team environment.

Proven ability to think logically and transpose this thinking into troubleshooting techniques is a must. Knowledge in one of the following specialties is required with the expectation that other specialties in the list will be acquired in time: thorough knowledge of office automation and groupware tools (Microsoft Office Suite, Lotus Notes); good knowledge of workstation hardware with associated operating systems including network protocols, in particular TCP/IP; basic understanding of client/server technology and applications.

Knowledge of the business applications and knowledge of customer support processes including knowledge of problem/resolution tracking tools is an asset. Excellent analytical and problem solving skills. Excellent customer service skills. Good communication skills. The ability to create, provide, administer and maintain technical training programs. Good interpersonal skills with the ability to work well in a team environment.

**Personnel Information**

<b>Salary Grade:</b>	Hay 07
<b>Job Number:</b>	
<b>Status:</b>	Active

## Data Centre Facility Administrator – System Support

### Location Information

**Company:**  
**Division:** Finance  
**Department:** Information Systems  
**Section:** System Support  
**Subsection:**  
**Location:** Hydro Place

### Organization Reporting

#### Direction Received:

Receives general direction from System Support Team Lead.  
Reports to Team Lead for all administrative functions.  
Exercises personal initiative and judgment in planning and organizing work project assignments.

#### Direction Exercised:

Research and prepare recommendations on enhancements and alternatives to improve the efficiency of the Data Centre Operations environment.  
Establish policies and procedures for administering the information on all IT Assets as they progress through their lifecycle.

Assist with the development of the base image for each Workstation and identify opportunities to improve.

Establish policies and procedures for tracking of loaner assets to ensure equipment is available and operational.

Establish policies and procedures for scheduling, configuring and supporting the Video Conference requirements.

### Job Description

#### Summary of Job Function:

Responsible for the day-to-day operation of computer systems. This includes ensuring that they are operated at maximum efficiency in order to execute the scheduled workload and provide interactive users with an acceptable level of service.

Responsible for Workstation setup and Asset Administration, including standard and minor changes to hardware.

Responsible for Offsite Storage of backup tapes and information needed for the Disaster Recovery Plan.

Responsible for Backups/Restores of all data.

Responsible for the scheduling and administration of Loaner equipment and Video Conferencing.

Responsible for Multifunction Devices and Printer Billing Readings.

**Principal Activities, Duties, and Responsibilities:**

1. Uses discretion and judgment to ensure that the iSeries, Tape system, Remote Office access, and Automatic Meter Reading system (Radix) are running efficiency as possible without degradation of service to users. This requires the monitoring of performance on a continual basis.
2. Operation of the iSeries equipment including, monitoring the system console, users requests, performing backup and restore operations, checking the System logs continually on a daily basis to provide optimum efficiency.
3. Investigate and determine if problems are caused by system software, hardware or application programs, and as needed, place service calls to help rectify the problem.
4. Initialize, scratch, rotate tapes and transport them to and from Shipping on a daily basis and the offsite storage facility if needed.
5. Monitor the iSeries backup service using the Tivoli Storage Manager (TSM) and analyze, resolve, record and report problems on a daily basis. Responsible for performing the same duties for various Network Server Backups and communicating with personnel throughout the Corporation to rectify problems.
6. Check weekly and monthly backups every weekend and on statutory holidays.
7. Retrieve and send tapes for the Energy Management System to offsite storage. Complete a physical inventory of EMS tapes during the monthly visit to offsite facility.
8. Create and update policies and procedures related to System Support and other related duties on a continuous basis.
9. Maintain the IS offsite storage facility. Responsible for any changes to the information and tape stored there. This information includes backups, software, electronic data, documentation, and DRP related information.
10. Monthly visits to offsite storage facility in Holyrood to ensure that the contents stored there are accountable and provide direction and training to the staff.
11. Control and monitor the physical inventory, distribution, administration, and disposal of all IS hardware assets. This includes personal computers, peripherals, servers, printers, and multimedia equipment. Standard and minor changes to hardware are recorded in and set up in JD Edwards and a cabinet filing system. Also responsible for any hardware to be donated to charity, Computers for Schools, and Silver Lights auction.
12. Travel to area offices to perform physical verifications of hardware inventory and software profiles of computer related assets.
13. Responsible for all Thin Client devices. These duties include the configuration, installation, installing dialup modems and testing. Assisting users via telephone when they have issues.
14. Install and configure the end user desktop computing environment, user settings, load software not part of the standard image and ensure all software, hardware and peripheral devices are operating properly. Deliver and install at user work area.
15. Perform initial encryption of data on laptops as part of a new install or part of a repair.
16. Install and configure the Smartcard access on laptops as part of the security program to prevent loss of data in the event of a lost or stolen device.

17. Clean information from retired assets and install base operating system prior to going for disposal/auction.
18. Physical installation of RAM, monitors, docking stations, wireless cards, etc . to users.
19. Respond to and supports/implements end users service request for computing software, hardware, and operating system environments.
20. Identify, diagnose, and repair hardware assets that are not covered under maintenance agreements.
21. Provides support for LAN servers and printers.
22. Provides assistance to user personnel in various areas related to computer systems, resources and their operation.
23. Maintain the Room and Resource Loaner Pool in a Lotus Notes Database. This includes adding, changing, deleting, resources and rooms from the database, assisting users throughout the Corporation with reservation requests, installation, and ensuring that the resources are continuously available and working as efficiently as possible.
24. Setup and maintain Video Conference, internal and external, reservations, testing, configuring new equipment, ensuring rooms are configured for equipment, quarterly statistics and user training.
25. Maintain in-house IS training facilities and ensure that the computing hardware is properly configured for scheduled training programs.
26. Responsible for any extended warranty upgrades that were purchased by the Corporation for desktops, laptops, and thin client devices. All hardware warranties must be entered into the JD Edwards Asset Management Database.
27. On a daily basis uploads the Accounts Payable Bank Reconciliation to the AS/400 system and ensure the reports that are produced contain the correct data.
28. Participate in Disaster Recovery Program as needed.
29. On a daily basis upload the Payroll Timesheets to the AS/400 system, checking for duplicate timesheets and executing the Human Resources Enterprise Showcase Reports.
30. Obtain Xerox Meter Readings throughout the Corporation on a monthly basis for billing purposes and sending them to the Xerox Company.
31. Run Showcase queries to report data on IS assets as requested.
32. Assist System Administrators, Helpdesk, and Security staff as requested.
33. Assist Project Manager who is assigned the yearly Evergreen Rollout Project. This includes verification of units to be replaced in each area and ensuring any software required is available for the technicians. Create hardware and software profiles for each user's unit to be replaced.

### **Job Specifications**

**Education:**

A minimum education level of a college diploma in an Information Technology program or equivalent combination of education, training and experience.

**Experience:**

Proven experience in the operation of Enterprise computer systems.  
Experience with Asset Management concepts and asset tracking software.

Hands-on hardware and software troubleshooting experience.

**Special Skills, Job Requirements, Working conditions, Etc.**

Knowledge of iSeries and Microsoft operating systems and related components.  
Knowledge of related peripheral equipment configurations, operation and use.

Ability to operate multiple computer system consoles.

Ability to communicate effectively, both orally and in writing

**Personnel Information**

**Salary Grade:**

**Job Number:**

**Status:**

Active

## IS Security Officer

### Location Information

<b>Company:</b>	Newfoundland & Labrador Hydro
<b>Division:</b>	Finance
<b>Department:</b>	Information Systems
<b>Section:</b>	Technology Planning
<b>Subsection:</b>	
<b>Location:</b>	Hydro Place

### Organization Reporting

#### Direction Received:

Receives general direction from the Director IS&T. Exercises a high level of personal initiative and judgement in planning, organizing and developing the corporate policies and guidelines for IT security.

#### Direction Exercised:

Provides guidance and support to both IS&T staff and the overall Corporation in regards to data/computer/network security. Provides direct supervision to all consultants in support of Corporate security strategy planning.

### Job Description

#### Summary of Job Function:

Responsible for developing and establishing the IS&T security and Corporate IT security strategic direction, architecture plans, and policies and guidelines. The primary focus is to safeguard and ensure the integrity of all corporate IT resources, including but not limited to, data infrastructures, desktop infrastructures, network infrastructures, mainframe/server infrastructures, and internal/external access to corporate technologies. This function is responsible for executing all actions necessary to secure the Corporate data and all software and hardware used to store, protect and deliver data for use throughout the organization.

#### Principal Activities, Duties, and Responsibilities:

1. Develop overall Corporate IT security objectives and goals for the Corporation in support of the organization's overall asset protection; implement a corporate IT security strategy.
2. Develop Corporate IT security practices, techniques, and guidelines that ensure the integrity of the desktop, network, mainframe/server, and data infrastructures.
3. Develop and publish security concepts and methodologies; implement a corporate awareness program on the use and implementation of these concepts and methodologies.
4. Provide direction, advice and support to the corporate business areas on the use and safeguarding of corporate data and applications. Act as the Corporate security focal point for all organizational business units on matters of overall Corporate IT security.
5. Review the Corporate IT asset protection components of strategic and operational plans to ensure security issues have been addressed; conduct security risk assessments.

6. Continually review and evaluate security alternatives to determine best course of action based upon technical implications, corporate asset protection policy and procedures, business objectives, and industry trends.
7. On a regular basis conduct security audits and participate in security evaluations.
8. Ensures corporate data ownership is clearly established; develop methods and procedures for determining and providing appropriate access to corporate data bases and files.
9. Conduct investigation of Corporate IT asset protection related security incidents.
10. Interface and coordinate with legal, insurance and corporate staff handling internal security investigations on a highly confidential basis.
11. Develop, evaluate, and recommend Corporate IT systems when used principally for a security application.
12. Develop methods and techniques to evaluate the effectiveness of security systems; implement performance measures to ensure continual improvement.
13. Ensure that users of Corporate IT services, owners of Corporate IT assets, and providers of Corporate IT services are provided effective education and direction with respect to Corporate IT asset protection, responsibilities, and requirements.
14. Ensure documentation associated with various internal security systems, technologies, and concepts are developed.
15. Develop, recommend, and implement management options in the event of asset loss or misuse.
16. Performs other related duties as required or assigned.

### **Job Specifications**

#### **Education:**

A minimum education level of a University or College Degree/Diploma in a quantitative discipline or an equivalent of seven years experience in security systems and day-to-day operations of developing and/or implementing security administration/policies.

#### **Experience:**

A minimum of fifteen years progressively responsible and extensive experience in all areas of Information Technology with minimum of five (5) years of those in a development capacity. In-depth experience with security systems and infrastructure, including enterprise-wide systems. In-depth experience with data storage and access techniques and methodologies.

#### **Special Skills, Job Requirements, Working conditions, Etc.**

This is a senior position in a rapidly changing highly technical field. The incumbent must continually update himself/herself on the latest technological developments in this broad highly technical field.

Proven facilitation skills combined with sound judgment and negotiation skills; ability to think conceptually; excellent organizational, interpersonal and communication skills, along with the ability to work in a team environment.

Proven ability to think strategically and transpose this thinking into written documents is a must.

Proven track record of implementing security policies and procedures a must.

**Personnel Information**

**Salary Grade:**

**Job Number:**

**Status:**

Active

## Infrastructure Specialist – Energy Systems

### Location Information

**Company:**  
**Division:** Finance  
**Department:** Information Systems  
**Section:** EMS  
**Subsection:**  
**Location:** Hydro Place

### Organization Reporting

#### Direction Received:

Receives general direction from the Energy Systems (ES) Team Lead. Exercises personal initiative and judgment in identifying, planning, implementing, and scheduling assignments.

#### Direction Exercised:

Responsible for coordinating problem resolution and system upgrades with vendors and Nalcor staff. Errors in judgment could cause computer system downtime and result in considerable business disruption.

### Job Description

#### Summary of Job Function:

Infrastructure Specialist professionals are responsible for providing staff with reliable, available and useable computer systems. Ensure a stable operating environment, attain maximum utilization of system facilities, maintain and ensure architectural integrity of the computer environment.

- Responsible for the installation, configuration, and monitoring of operating systems, applications, databases and network infrastructure utilized within various operating divisions of Nalcor; with an emphasis on support for the Nalcor Energy Management System (EMS).

#### Principal Activities, Duties, and Responsibilities:

##### 1. Administration of computer operating systems.

- Investigate and pro-actively rectify any anomalies identified during daily review of system alarm and event logs.
- Evaluate deficiencies addressed by vendor service packs and determine which of these updates should be implemented. Deploy and verify the release of required updates.
- Devise, implement, maintain, and verify system backup and recovery plans.

##### 2. Administration of the Nalcor Hydro Energy Management System.

- PI Data Historian including upgrades to the various components, configuration of database, archive management, and installation and configuration of interface nodes.
- Supervisory Control and Data Acquisition (SCADA) database and associated communications protocols and process controllers.

- Monitor the health of the EMS system including verifying that all processes are executing correctly, failover from primary to backup systems is functioning as designed and pro-actively taking necessary action to rectify any deficiencies identified.
- Configuration, verification, and maintenance of system onelines on the Energy Management System (EMS).
- Install new applications and updates to existing applications; coordinate with System Operations and other customers to configure and commission the application deployments.
- Configuration and verification of scripted calculations in order to automate the execution of device controls.
- Configuration, maintenance and monitoring of the Energy Management System Local Area Network (LAN) infrastructure with an emphasis on the secure configuration of firewalls.

3.Participate in the life cycle management of all systems the ES Team is responsible for including:

- Contributing to the development of policies, standards, procedures, and guidelines for the governance of the Nalcor Computer Systems.
- Participating in system architectural reviews and recommending appropriate reconfigurations to enhance the Confidentiality, Integrity, Availability, and Security of systems.
- Participating in system risk analysis helping identify vulnerabilities in existing systems and appropriate controls to mitigate those vulnerabilities.
- Participating in disaster recovery planning and testing of the DRP. Expected to recommend modifications to the plan to enhance its effectiveness.

4.Provide expert technical advice to Nalcor staff including:

- Recommend best approach for configuring and securing Internet Protocol (IP) services running on various devices on the operational networks.
- Provide advice to Engineering Services on how to leverage existing Information Services (IS) infrastructure in their system designs.
- Provide expert assistance to Nalcor-CF staff on the management of their Monarch SCADA system.
- Provide guidance to TRO staff on the configuration and maintenance of Diesel Plant SCADA systems.
- Provide assistance to Hydro plant staff on the configuration and maintenance of plant SCADA systems.
- Provide assistance to Thermal plant staff on the configuration and maintenance of EtaPro system.

5.Investigate and resolve extremely complex incidents and problems with minimal guidance including:

- Utilizes cyber forensic and vulnerability analysis tools for both security incident investigation and to proactively identify potential security incidents.
- Participates in the ES Team 24/7 on-call program. Expected to evaluate after hours problems with all applications, databases and communications protocols utilized in the Energy Management System and take appropriate action to rectify the problem.
- Document identified problems and coordinate the resolution of the problem with vendor technical support when necessary.

### **Job Specifications**

#### **Education:**

A university degree in Computer Science or a related discipline or equivalent combination of education and experience.

Hold the following industry certifications or demonstrate competency in the associated skills.

- Cisco Certified Network Associate Security (CCNA® Security)
- Microsoft Certified Systems Administrator (MCSA)
- IBM Certified Systems Expert - Enterprise Technical Support for AIX and Linux
- OSI Monarch Advanced Level Courses
- OSISoft PI System Manager

**Experience:**

A minimum of 7 years progressive Information Technology (IT) experience including responsibility for computer server operating systems, database systems, network administration, application configuration, problem analysis, configuration of network protocols and hardware troubleshooting.

**Special Skills, Job Requirements, Working conditions, Etc.**

Experience with a variety of Network, Server, and Workstation operating systems.

- Experience with installation, configuration, management, and troubleshooting of real-time systems.
- Demonstrated knowledge of the unique security requirements for protection of Critical Infrastructure including familiarity with the NERC Critical Infrastructure Protection (CIP) standard, ISA-SP99 Security for Industrial Automation and Control Systems, NIST 800-82 Guide to Supervisory Control and Data Acquisition (SCADA) and Industrial Control System Security, and DHS Cyber Security Procurement Language for Control systems.
- Detailed knowledge of TCP/IP networking.
- Detailed knowledge of application protocols utilized in SCADA systems including DNP3, Modbus and HARRIS 5000.
- Familiarity with the architecture of OSI Monarch System.
- Significant experience with the configuration and maintenance of Human Machine Interface (HMI) systems.
- Understanding of the basic function of devices used in the control of the power system such as relays, meters, fault recorders, breakers, and transformers.
- Familiar with the configuration and operation of Remote Terminal Units (RTU) and Programmable Logic Controllers (PLC).
- Familiarity with ESRI Geographic Information Systems (GIS).

**Personnel Information**

**Salary Grade:**

**Job Number:**

**Status:**

Active

## Infrastructure Specialist – System Support

### Location Information

**Company:**  
**Division:** Finance  
**Department:** Information Systems  
**Section:** System Support  
**Subsection:**  
**Location:** Hydro Place

### Organization Reporting

#### Direction Received:

Receives general direction from the Team Lead, System Support (SS). Exercises personal initiative and judgment in identifying, planning, implementing, and scheduling assignments.

#### Direction Exercised:

Responsible for coordinating problem resolution and system upgrades with vendors and Nalcor staff. Errors in judgment could cause computer system downtime and result in considerable business disruption.

### Job Description

#### Summary of Job Function:

##### Summary of Job Function:

- Infrastructure Specialist professionals are responsible for providing staff with reliable, available and useable computer systems. Ensure a stable operating environment, attain maximum utilization of system facilities, maintain and ensure architectural integrity of the computer environment.
- Responsible for the design, installation, configuration, maintenance, security, monitoring and perform system integration testing of operating systems, hardware/software upgrades, related utilities, network components, and personal computing devices and peripherals.
- Identify, investigate and resolve technically complex system problems. A strong knowledge of the operating systems, architecture standards, data standards and both software and hardware products are required. These products include storage and operational devices, middleware, compilers, network infrastructure, system utilities and computer hardware and software.
- Develop and enforce standards for servers, databases, storage systems, network devices, security devices and services email and calendars (Notes), Remote Access (RSA), Shared Applications (Citrix), Virus and Spam (Symantec), Backups and Disaster Recovery (TSM) and Enterprise Systems (iSeries).

#### Principal Activities, Duties, and Responsibilities:

##### Principal Activities, Duties, and Responsibilities:

1. Administer and maintain workstation and server operating systems (Windows), including configuring, implementing and creating customer profiles and accounts.
2. Coordinate and implement system and security patches for all operating systems and applications.
3. Administer and maintain the Anti-Virus service for attachments and stored files.
4. Manage and administer all messaging and calendaring systems and associated software for e-mail system (Notes).
5. Install, configure and maintain servers and appliances that are used to run e-mail system (Notes). Administer

and maintain e-mail archiving services.

6. Administer and maintain e-mail mobile services (Blackberry) for mobile workforce.
7. Administer and maintain the SPAM filtering service (Mailfoundry) for external email.
8. Install, configure and maintain the centralized servers (Citrix) to support business applications.
9. Review and deploy Citrix patches and software updates according to best practices.
10. Install, configure and maintain services and appliances to provide Remote access, Password Management and System Performance Monitoring Tools.
11. Administer and maintain Unix and iSeries based operating system, including configuration, implementation and creating customer profiles and accounts.
12. Implement and perform iSeries patch management for security and software updates based on best practices.
13. Install, configure and maintain services to provide monitoring of iSeries performance.
14. Design, implement and administer an Active Directory and File structure to support Nalcor's assets, information and security requirements.
15. Design, administer and maintain Secure Access with security tokens, anti-virus, and user authentication.
16. Design, implement, configure and maintain storage systems (SAN) based on capacity, redundancy, backup & recovery, and Disaster Planning.
17. Anticipate, identify and mitigate issues with storage devices and storage access.
18. Perform capacity planning analysis to predict storage needs and create future growth plans.
19. Configure, setup and test backup and restore process to ensure Nalcor's data is effectively protected.
20. Configure, install and administer servers, printers and peripherals.
21. Contributes to the development of policies, standards, procedures and guidelines for the governance of Nalcor's IT systems.
22. Prepare and oversee detailed project plans for system installations and enhancements.
23. Prepare and maintain required documentation on new systems or system modifications.
24. Provide expertise and information on performance and capacity to help develop lifecycle plans for hardware and software services.
25. Investigate and analyze technically complex problems and coordinate problem resolution with other Nalcor groups and external vendors.
26. Identify the risks and benefits of implementing new technologies into the existing Nalcor infrastructure.
27. Provide direction and guidance to other Infrastructure Specialist's and staff for operational and project assignments.
28. Keep current with new IT Technologies, Security, Protocols, and Applicable Regulations.
29. Monitors and manages IT resources, including CPU usage, disk usage, and response times to maintain operating efficiency.
30. Configure and maintain system integrity monitoring applications and investigate and resolve any alerts generated by these systems.
31. Provide monitoring and primary response and intervention for information technology related security incidents and violations.
32. Design, implement and administer System log services to support the Change Control process.
33. Manage and support secure Virtual Private Networks (VPNs).
34. Design, implement and maintain system and application security, event investigations and compliance enforcement using Intrusion Detection, Web Monitoring, System Logs and Firewalls.
35. Configure, implement and utilize Network Traffic tools to ensure optimum network performance and troubleshoot when problems arise.
36. Responsible for administration of firewalls, routers, switches, IDS/IPS and other network devices integrated with application and security services.

### **Job Specifications**

**Education:****Education:**

- A university degree in Computer Science or a related discipline or an equivalent combination of education and experience.
- Certification from one or more Vendor in their related products or services.

**Experience:****Experience:**

A minimum of 7 years progressive IT experience with multiple computer operating systems, database systems, and networking.

**Special Skills, Job Requirements, Working conditions, Etc.****Special Skills, Job Requirements, Working conditions, Etc.**

Knowledge of computer and network operating systems and applications with the ability to carryout assigned tasks with minimal supervision.

Experience with configuration, implementation and administration of Unix based OS or iSeries OS, Directory Services, IPS/IDS, Web Monitoring tools, Anti Virus, SMS, VPN and Firewalls.

Execute technical work of a complex nature with minimal guidance.

Ability to think critically, make decisions and use analysis and logic to resolve complex problems.

Ability to analyze and present findings in clear, concise reports.

**Personnel Information**

**Salary Grade:**

**Job Number:**

**Status:**

Active

## Manager, Technology Planning and Project Delivery

### Location Information

**Company:**  
**Division:** Finance  
**Department:** Information Systems  
**Section:** Administration  
**Subsection:**  
**Location:** Hydro Place

### Organization Reporting

#### Direction Received:

Receives general direction from the manager of Information Systems . Exercises a high level of personal initiative and judgment in planning, organizing and directing the activities of the Planning and Project Delivery Section.

#### Direction Exercised:

Provides direct supervision, coaching and business guidance to Architecture Analysts, project managers, and project leaders

### Job Description

#### Summary of Job Function:

As part of the management team, the primary role is creating the IT vision, fusing the business and IT. Responsible for developing and establishing the Corporation's IT strategic direction, including but not limited to, research and development on new technologies, architectural standards, capacity planning and disaster recovery. Responsible for the delivery of all IT projects (internal and externally sourced) related to the business and the IS department. Also responsible for governance of the sourcing management process.

#### Principal Activities, Duties, and Responsibilities:

1. Ensure that plans for implementing new technologies and manage and coordinate implementation are developed.
2. Ensures that strategies are developed for the migration/conversion for new technologies and systems/networks infrastructures.
3. Ensure the performance management for all aspects of Project Delivery and Technology Planning.
4. Ensures the development and implementation of processes, business strategies, objectives, policies and procedures to support the IS Department and the business.
5. Ensures that IT technology strategic and tactical plans are developed and executed.
6. Ensures that IS standards and guidelines are established.
7. Communicate sourcing strategies throughout the IT strategic planning process, identifying gaps and opportunities in which vendor offerings can be leveraged effectively to meet business needs.
8. Ensures that Department objectives are scheduled and progress monitored and Safety and Health Standards

are implemented and measured.

9. Participates in business case development; provides support in respect to technology, costs, and effort.

10. Manage the transfer of all assets to the applicable asset group as projects are implemented.

11. Prepares the five year Capital Budgets and administers the total Capital budget for IS.

### **Job Specifications**

#### **Education:**

A minimum education level of a University or College Degree/Diploma in a quantitative discipline or an equivalent of ten years experience in information technology and how it is leveraged to both support day-to-day operations of business units and to promote/support business growth.

#### **Experience:**

A minimum of ten years progressively responsible and relevant experience including extensive experience in Project Management, Process Management and Customer Service and Support Management. In-depth experience in the planning, scheduling and coordination of multi-discipline team in a geographical dispersed environment.

#### **Special Skills, Job Requirements, Working conditions, Etc.**

This is a high level managerial position in a rapidly changing highly technical field. The incumbent must continually update himself/herself on the latest technological developments in this broad highly technical field. Proven project management skills combined with sound judgment and decision making skills; ability to think conceptually; excellent organizational, interpersonal and communication skills, along with the ability to work in a team environment.

Strong problem solving skills a must. Must possess a good working knowledge of computers with appropriate awareness of various corporate applications as necessary. These may include, but are not limited to, the Microsoft suite of applications, JD Edwards, Showcase Strategy, computerized inventory, and maintenance programs.

### **Personnel Information**

**Salary Grade:**

**Job Number:**

**Status:**

Active

## Programmer Analyst

### Location Information

**Company:**  
**Division:** Finance  
**Department:** Information Systems  
**Section:** Corporate Systems  
**Subsection:**  
**Location:** St. John's

### Organization Reporting

#### Direction Received:

Reports to Team Leader for all administrative functions and for overall work assignment. Reports to Team Leader or Systems Analyst for detailed work assignment and for smaller assignments will handle on own. Supervision will range from very close to fairly loose depending on type and size of the assignment.

#### Direction Exercised:

No staff reporting administratively but on occasion will have responsibility for work assignment and progress monitoring of programming personnel.

### Job Description

#### Summary of Job Function:

Designs, writes, tests and documents new computer programs and maintains existing programs. Provides technical assistance to user and IS&T personnel. Supervises the work of programmers as required. Works with user management and personnel on the investigation of system enhancement requests and on portions of systems on larger projects. Assists the users in the use and application of software.

#### Principal Activities, Duties, and Responsibilities:

- Design, write, test and document new computer programs and modify existing programs in a manner which ensures the most efficient execution of jobs.
- Evaluate medium sized requests for service from user departments, develop schedule and cost estimates and work closely with user to perform necessary functions required to comply with request in most effective manner.
- On larger requests assist senior staff with these activities, on smaller requests provide guidance to programmers.
- Plan, control and co-ordinate the day-to-day activities of in-house or contract programmers assigned to work on projects P/A has responsibility for.
- Assist Senior staff in design and development of new systems with emphasis on providing suggestions on technical design of system and tools to be used. In later stages with program specs, programming and testing of system.
- Assist with or undertake cost/benefit studies on new projects.
- Assist senior staff in selection of hardware and software products and then in the installation of the chosen products.
- Provide assistance to user personnel in various areas related to computer systems and their operation. Assist user in determining best tools set to meet needs and together with Senior personnel assist them in identifying new requirements.

- Be prepared to resolve problems which hinder operation of production systems. This may require the individual to be called out at night for critical systems.
- Upon instruction from Management conduct periodic reviews of production systems to ensure they are operating at maximum efficiency and make any changes required to improve their operation.
- Keep self up-to-date with changes in technology through reading of manuals and attendance at appropriate seminars.
- Keep self up-to-date on business or technical areas of Hydro's operations to ensure they are familiar with user problems and concerns.

### **Job Specifications**

#### **Education:**

A minimum education level of a University Degree in a quantitative discipline or an equivalent combination of education, training and experience in computer system design, development, implementation, enhancement, training and support of system

#### **Experience:**

A minimum of 3 years experience in the computer system design and implementation of commercial business applications.

#### **Special Skills, Job Requirements, Working conditions, Etc.**

Must have excellent communication skills, solid analytical and organizational skills, ability to meet deadlines and goals, strong commitment to customer service, ability to learn new products quickly, ability to work independently or within a team environment.

Programmer/Analysts should have working knowledge of business systems especially Finance, HR/Payroll and Materials.

### **Personnel Information**

**Salary Grade:**

**Job Number:**

**Status:**

Active

## Project Leader

### Location Information

**Company:** Newfoundland & Labrador Hydro  
**Division:** Finance  
**Department:** Information Systems  
**Section:** Technology Planning  
**Subsection:**  
**Location:** Hydro Place

### Organization Reporting

#### Direction Received:

Receives general direction from Team Lead, Project Delivery.. Exercises personal initiative and judgment in planning, scheduling and controlling all aspects of the major projects assigned.

#### Direction Exercised:

Provides direct supervision, technical guidance and support to both permanent and term staff assigned to the projects. Depending on the major projects assigned, staff may consist of network engineers, technicians, systems analysts, technical specialists, etc. Also provides direction to team leaders and members from IS&T as well as from other functional areas/departments.

### Job Description

#### Summary of Job Function:

To manage all/specific phases of project life cycles including coordination of tasks/activities of multiple medium to large corporate projects simultaneously.

#### Principal Activities, Duties, and Responsibilities:

1. Plans, schedules all work associated with the assigned projects, develops the budgets and administers and tracks all aspects of the project including taking remedial action as required.
2. Directs cross-functional teams and resources including non IS&T divisions.
3. Work with managers and directors to provide feedback, project updates, recommendations and alternatives.
4. Prepare and deliver presentations to staff, managers and directors.
5. Develops and/or directs the Request For Information (RFI's), the Request For Proposal (RFP's) and the contracts associated with the major projects assigned.
6. Negotiate and resolve conflicts between Project Teams including interdepartmental and/or inter-divisional initiatives and/or priorities.

7. Manage the expectations of project deliverables and implementation dates.
8. Assess, identify, and analyze expenditures/project related budgets.
9. Co-ordinates with the Business Solutions Analyst business involvement in the detail design and acceptance phases of the projects.
10. Performs other related duties as required or assigned.

### **Job Specifications**

#### **Education:**

A minimum education level of a University Degree and a demonstrated ability of a progressively responsible nature, in leading a multi-disciplined workforce.

#### **Experience:**

A minimum 10 years experience in the design and implementation of medium to large IS&T infrastructure projects including 5 years in leading and organizing medium to large-scale computer or telecommunications projects and 5 years of which has been in a supervisory capacity.

#### **Special Skills, Job Requirements, Working conditions, Etc.**

Strong ability to direct and supervise staff; excellent communications skills, strong interpersonal skills including the ability to deal effectively with all levels of staff both internal and external, proven project management experience and the ability to work in a team environment is also required.

Must have a high level of technical skills with extensive knowledge of the design and implementation of medium to large computer and/or telecommunications infrastructure projects in a utility environment.

Extensive knowledge of communications and computer integration techniques and testing techniques is required.

Extensive knowledge of voice/data/video communications systems and knowledge of power system protection systems would be an asset.

Must possess a good working knowledge of computers with appropriate awareness of various corporate applications as necessary. These may include, but are not limited to, the Microsoft suite of applications, JD Edwards, Showcase Strategy, computerized inventory, and maintenance programs.

### **Personnel Information**

<b>Salary Grade:</b>	Hay 12
<b>Job Number:</b>	
<b>Status:</b>	Active

## Project Manager

### Location Information

**Company:**  
**Division:** Finance  
**Department:** Information Systems  
**Section:** Technology Planning  
**Subsection:**  
**Location:** Hydro Place

### Organization Reporting

#### Direction Received:

Receives general direction from Team Lead, Technology Planning and Project Delivery. Exercises personal initiative and judgment in initiating, planning, executing, and controlling all aspects of the major projects assigned.

#### Direction Exercised:

Provides direct supervision, technical guidance and support to permanent, term, and contracted staff assigned to projects. Depending on the major project assigned, staff may consist of network engineers, technicians, systems analysts, technical architects, technical specialists, external consultants, etc. Also provides direction to team leaders and members from IS as well as other functional areas/departments.

### Job Description

#### Summary of Job Function:

To manage all knowledge areas in the project life cycle for multiple large corporate projects.

#### Principal Activities, Duties, and Responsibilities:

- § Define project goals and objectives and ensure they are aligned with corporate goals and objectives
- § Define and manage project scope
- § Manage all project change using industry standard change management processes
- § Assist in the development of project budgets
- § Effectively manage project budgets
- § Define resource requirements
- § Procure project resources
- § Develop and/or direct the Request for Information (RFI) or Request for Proposal (RFP) process and the contracts associated with the major projects assigned
- § Develop and manage vendor relationships
- § Clearly communicate project expectations to team members, management team, and stakeholders
- § Manage internal and external stakeholder expectations
- § Plan, schedule, and manage project timelines
- § Determine the frequency and content of project status reports
- § Define and disseminate project success criteria
- § Define, manage, and mitigate risk throughout the project
- § Ensure proper quality management process are followed
- § Ensure communication plan is clearly defined and project information disseminated to the appropriate

stakeholders at the appropriate time

§ Coach, mentor, and motivate project team members and contractors

§ Manage conflict within the project team and between project team and the business/external parties

§ Build and develop business relationships vital to project success

§ Conduct project lessons learned and develop a summary and recommendations report

§ Ensure projects are effectively transitioned to operations

### **Job Specifications**

#### **Education:**

A minimum education level of a University Degree or equivalent College diploma with combined work experience. PMP certification is an asset.

#### **Experience:**

A minimum of 10 years direct work experience in project management, including all aspects of the project life cycle.

#### **Special Skills, Job Requirements, Working conditions, Etc.**

Strong leadership skills

Team Building

Motivation

Communication

Influencing

Decision Making

Political and Cultural Awareness

Negotiation

Trust building

Conflict Management

Coaching

### **Personnel Information**

**Salary Grade:**

**Job Number:**

**Status:**

Active

## Security-Change Control Analyst

### Location Information

<b>Company:</b>	Newfoundland & Labrador Hydro
<b>Division:</b>	Finance
<b>Department:</b>	Information Systems
<b>Section:</b>	System Support
<b>Subsection:</b>	
<b>Location:</b>	Hydro Place

### Organization Reporting

#### Direction Received:

Receives general direction from the Team Leader - Enterprise Applications. Exercises personal initiative and judgement in planning and organizing work project assignments.

#### Direction Exercised:

No personnel report directly to the position.

### Job Description

#### Summary of Job Function:

The Security-Change Control Analyst will implement controls necessary to ensure and protect the integrity and security of all information systems, including prevention of intentional or inadvertent access.

The Security-Change Control Analyst is also responsible for protecting the stability of the software Production Environment by managing software changes and version control.

Also manages Enterprise software licenses and agreements.

#### Principal Activities, Duties, and Responsibilities:

1. Evaluate, analyze and provide response to end-users requests for security assistance. Ensure that requests comply with IS&T data security policies and procedures.
2. Establish sign-on procedures for all software applications.
3. Maintain contact with end-users with regards to sign-on and access problems.
4. Responsible for monitoring access rules and violation reports. Perform follow up with end users in violation of policy and procedures.
5. Perform a variety of administrative tasks associated with the assignment of access privileges as required by security policies, such as reset passwords, add user id/accounts, establish/write rules, monitor systems, change access and implement policies using best practices.
6. Research security issues, provide evaluations and recommendations. Implement technical responses to these issues.
7. Develop and implement a detailed design for securing software and data.

8. Develop procedures to describe how security and software changes are managed.
9. Participate in improvements that can be made in terms of security integration, improved workflow, technology improvements, etc.
10. Participate as the technical resource on security, at meetings. Provide suggestions on how to utilize the software to improve the protection of data.
11. Prepare software operational procedures and guidelines related to the security process and the software management process.
12. Maintain proper security/software management documentation, for review by auditing staff.
13. Administer the security access and software change management function.
14. Develop, analyze and review security and software control reports.
15. Responsible for ensuring the security component of software is working properly. Maintain a relationship with the software vendors to obtain information on new features, potential software fixes, etc. Performs software upgrades and maintenance as required.
16. Develop and implement a software change management process. Communicates this process to all staff and ensures it is being followed and that required documentation is being kept.
17. Provide communication to all staff regarding software upgrades, security management changes, or software management changes.
18. Manage Enterprise software version control and software licenses.
19. Provide technical support and respond to security system problems in a timely efficient manner.
20. Participate in other related duties as required.

### **Job Specifications**

#### **Education:**

A minimum education level of a University Degree in a quantitative discipline or an equivalent combination of education, training and experience in computer system design, development, implementation, enhancement, training and support of systems.

#### **Experience:**

A minimum of 7 years progressive IT experiences, with emphasis on security systems, software management and database systems.

#### **Special Skills, Job Requirements, Working conditions, Etc.**

Must have excellent communication skills, solid analytical and organizational skills, proven ability to meet deadlines and goals, strong commitment to customer service, ability to work independently or within a team environment.

Must have sound knowledge of the various aspects of security systems. Must have experience with the installation, management, and operation of application software.

**Personnel Information**

<b>Salary Grade:</b>	Hay 08
<b>Job Number:</b>	
<b>Status:</b>	Active

**Software Specialist****Location Information**

<b>Company:</b>	Newfoundland & Labrador Hydro
<b>Division:</b>	Finance
<b>Department:</b>	Information Systems
<b>Section:</b>	Corporate Systems
<b>Subsection:</b>	
<b>Location:</b>	Hydro Place

**Organization Reporting****Direction Received:**

Receives general direction from the Team Leader. Exercises personal initiative and judgement in planning and organizing work project assignments.

**Direction Exercised:**

No staff reports directly to the position administratively but Programmer/Analysts and Programmers will be supervised on a project or work assignment basis.

**Job Description****Summary of Job Function:**

Provides expert technical advice and knowledge in the design and maintenance of major, complex software systems. Investigates the most technically complex software problems and co-ordinates problem resolution with software vendors, hardware manufacturers and/or in-house personnel. Develops the most complicated design specifications and provides consultative guidance to software project teams on their execution. Evaluates performance of software system and recommends changes to increase operational effectiveness.

Duties include: complex, detailed systems analysis and design, software development/coding, testing, documentation, installation/rollout, and support/maintenance multiple software applications across various platforms.

**Principal Activities, Duties, and Responsibilities:**

1. Provide expert technical advice and assistance to IS&T staff and user personnel related to software applications.
2. Consult with clients to gather information about program needs, objectives, functions, features, and input and output requirements.
3. Execute technical work of a complex nature with minimal guidance.
4. Analyze, define and document requirements for data, workflow, logical processes, hardware and operating system environment, interfaces with other systems, internal and external checks and controls, and outputs.
5. Analyze and estimate feasibility, costs, time, and compatibility with hardware and other programs.

6. Design and code screen layouts, graphical user interfaces, printed outputs, and interfaces with other systems.
7. Create test transactions and runs tests.
8. Prepare and/or maintain required documentation on new applications or system modifications.
9. Train end-users or IS&T support staff to use programs.
10. Install and test programs at client site and monitor performance of programs after implementation.
11. Maintain expertise in work related areas.
12. Investigate the most technically complex problems and co-ordinate problem resolution.
13. Assist user in determining best software solutions to meet their needs.
14. Participate in other related duties as required.

### **Job Specifications**

#### **Education:**

A minimum education level of a University Degree in a quantitative discipline or an equivalent combination of education, training and experience in computer system design, development, implementation, enhancement, training and support of systems.

#### **Experience:**

A minimum of 7 years progressive IT experience, with emphasis on high complexity multi-language programming and multiple platforms.

#### **Special Skills, Job Requirements, Working conditions, Etc.**

Must have excellent communication skills, solid analytical and organizational skills, proven ability to meet deadlines and goals, strong commitment to customer service, ability to learn new products quickly, ability to work independently or within a team environment.

Must display the ability to use and support new products quickly and thrive in a challenging, yet rewarding environment. Must also be able to quickly evaluate technical issues and respond.

Must have sound knowledge of micro-computer applications, application development tools, database technologies, report generators and data warehouse; Internet and related products including e-mail and browsers, communication concepts, network concepts and Enterprise Resource Planning application.

### **Personnel Information**

<b>Salary Grade:</b>	Hay 11
<b>Job Number:</b>	
<b>Status:</b>	Active

## System Analyst

### Location Information

**Company:** Newfoundland & Labrador Hydro  
**Division:** Finance  
**Department:** Information Systems  
**Section:** Corporate Systems  
**Subsection:**  
**Location:** Hydro Place

### Organization Reporting

#### Direction Received:

Receives general direction from the Team Leader. Exercises personal initiative and judgement in planning and organizing work project assignments.

#### Direction Exercised:

No staff reports directly to the position administratively but Programmer/Analysts and Programmers will be supervised on a project or work assignment basis.

### Job Description

#### Summary of Job Function:

Responsible for the maintenance of existing systems and the development of new systems to meet user needs. Supervises moderate to complex projects for system development and/or system modifications from definition through to implementation. Supervises and co-ordinates the effort involved in resolving operational problems.

Responsibilities include; investigation and analysis of user requests, identify and/or design solutions, identify and prioritize work activities, maintenance and system enhancements, participate in software selection and software purchases, manage operational support, develop system documentation and procedures.

#### Principal Activities, Duties, and Responsibilities:

- 1) Perform detailed analysis of system requirements and propose feasible, cost effective, efficient and dependable solutions.
- 2) Initiate and implement system design of moderate to complex systems.
- 3) Review user requests for enhancements to existing systems and analyse requirements of the more complex requests.
- 4) Supervise Programmers during the development and implementation of maintenance requests.
- 5) Follow an established system methodology for design, development and implementation of new systems.
- 6) Perform interviews and other data gathering activities with end-users.
- 7) Design or assist in the design of systems which meet user requirements in most efficient and effective manner.

- 8) Prepare detailed program specifications.
- 9) Assist user in determining best software solutions to meet their needs.
- 10) Ensure that required level of security and control is built into systems.
- 11) Supervise programmers during development and/or enhancements of system.
- 12) Test or assist in total testing of system.
- 13) Prepare documentation of systems, user and operations in line with existing standards.
- 14) Conduct or assist with conversion from old to new system and required training of user personnel.
- 15) Design or provide input to design of forms and reports.
- 16) Review all users requests and assists in establishing an overall schedule for carrying out these requests.
- 17) Work closely with user and programmer to ensure all requests are costed and scheduled prior to work starting.
- 18) Ensure all documentation is updated after maintenance request is carried out.
- 19) Train end-users if required.
- 20) Investigate problems and co-ordinate problem resolution.
- 21) Maintain expertise in work related areas.
- 22) Perform other related duties as required or assigned.

### **Job Specifications**

#### **Education:**

A minimum education level of a University Degree in a quantitative discipline or an equivalent combination of education, training and experience in computer system design, development, implementation, enhancement, training and support of systems.

#### **Experience:**

A minimum of 7 years experience in the computer system design and implementation of commercial business applications.

In-depth experience with application development life cycle and methodologies, and management of multi-system enhancements/modifications across multiple department boundaries.

#### **Special Skills, Job Requirements, Working conditions, Etc.**

Must have excellent communication skills, solid analytical and organizational skills, proven ability to meet

deadlines and goals, strong commitment to customer service, ability to learn new products quickly, ability to work independently or within a team environment.

Must have a sound knowledge of key business applications - Finance, Human Resources/Payroll, Customer Service, and Materials Management.

In-depth experience with corporate server and Enterprise Resource Planning Applications. Experience with microcomputer applications and client/server principles would be considered assets.

### **Personnel Information**

<b>Salary Grade:</b>	Hay 10
<b>Job Number:</b>	
<b>Status:</b>	Active

**Team Lead, EMS****Location Information**

<b>Company:</b>	Newfoundland & Labrador Hydro
<b>Division:</b>	Finance
<b>Department:</b>	Information Systems
<b>Section:</b>	EMS
<b>Subsection:</b>	
<b>Location:</b>	Hydro Place

**Organization Reporting****Direction Received:**

Receives general direction from the Manager, Infrastructure & Software Support. Exercises personal initiative and judgement in planning and organizing work project assignments.

**Direction Exercised:**

Supervises and provides direction, guidance and leadership to the Power System Application Engineers, Systems Analysts, Software Specialists and Programmer Analysts within the Software Applications section of IS&T. As required, direction and supervision is also provided for work term students/consultants assigned to the team.

**Job Description****Summary of Job Function:**

The Team Leader will be the lead contact for the day-to-day support, maintenance and operation of various mission critical Generation & Transmission systems, including but not limited to, Energy Management System (EMS), Operations Information System (OIS), SCADA Systems and Plant Maintenance System. Responsibilities include; initiate planning of future system requirements, identify and/or design solutions, identify and prioritize work activities, maintenance and system enhancements, participate in software selection and software purchases, develop system procedures, manage operational support, direct technical and systems initiatives, participate in budget preparation, document plans and implementation activities, and prepare written and oral reports on progress and results.

The Team Leader will provide effective technical leadership in a constantly changing environment and work effectively in a team setting; interacting with customers, peers, software vendors and management.

**Principal Activities, Duties, and Responsibilities:**

1. Initiate, develop and maintain procedures relating to the generation of software, databases and reports to ensure that reliability for Generation & Transmission Systems is maintained.
2. Initiate, develop, direct and supervise the software support in the engineering, implementation and on-going operational phases of the Generation & Transmission Systems and other supervisory control facilities.
3. Monitor and evaluate the performance of the EMS and where necessary develops recommendations to ensure system performance and reliability is maintained.
4. Establish co-operative mechanisms with other departments to ensure that the Generation & Transmission Systems meet the operational requirements for the corporation.

5. Work with the Technology Planning and Project Delivery groups to initiate and design software upgrades or enhancements required to support System Operations. Supervise and evaluate the implementation the implementation of upgrades and enhancements.
6. Monitor, evaluate and tune the automatic generation control/economic dispatch function.
7. In consultation with the Technology Planning group, plan and/or conduct training courses/presentations as required to update engineering, operations, and planning personnel on the functional capabilities of the various subsystems or applications implemented.
8. Participate in the performance monitoring and evaluation (where applicable) of other department's equipment which affect EMS performance.
9. Work with the Technology Planning and Project Delivery groups to provide technical direction in the design and implementation of various end-user features in the Generation & Transmission Systems and the corporation's other control facilities.
10. Supervise and ensure that activities are kept on schedule and completed on time and within budget.
11. Diagnose problems and design solutions in order to restore production services with a minimum of interruption of service.
12. Maintain knowledge of all Generation & Transmission Systems. Maintain knowledge of current techniques used in analyzing, designing, developing and implementing systems.
13. Assist the IS&T Managers in establishing short and long-term plans for system applications.
14. Participate in budgetary preparation and administrative functioning, as required.
15. Perform other related duties as required or assigned.
16. Direct, monitor and evaluate the performance of staff.

### **Job Specifications**

#### **Education:**

A minimum education level of a Bachelor of Engineering Degree with a specialization in electrical, computer or software engineering or a University degree in a quantitative discipline.

#### **Experience:**

A minimum of 10 years experience in the computer system design and implementation of electrical utility applications with a progressive level of responsibility in project management and/or supervisory capacity.

In-depth experience in computer system design, specification, evaluation, selection, implementation, training, and problem investigation, evaluation and correction.

Experience in the areas of power system analysis and control, in particular, with respect to automatic generation control, state estimation, load flow analysis, and optimum power flow. Involvement with data acquisition and

processing systems. Working knowledge in the areas of UNIX, TCP/IP, C/C++, Assembler, Fortran, Real-time operating systems, SQL, and Networking.

**Special Skills, Job Requirements, Working conditions, Etc.**

Strong analytical and problem solving skills, solid decision making skills, excellent written and oral communication skills, interpersonal and team building skills are essential, as is the ability to work independently with a minimum of supervision.

Previous work experience with an Energy Management System. Knowledge of power system analysis and modelling techniques. Expertise in the areas of automatic generation control concepts and application state estimation, load flow and optimum power flow applications.

Knowledge of real-time operating system design and configuration. Knowledge of the design concepts relating to real-time data acquisition and control systems. An understanding of both network and client server architectures.

Knowledge of RTUs and communication systems. Knowledge of Plant Maintenance system.

Must possess a good working knowledge of computers with appropriate awareness of various corporate applications as necessary. These may include, but are not limited to, the Microsoft suite of applications, JD Edwards, Showcase Strategy, computerized inventory, and maintenance programs.

**Personnel Information**

<b>Salary Grade:</b>	HAY 14
<b>Job Number:</b>	
<b>Status:</b>	Active

**Team Lead, Business Solutions Support****Location Information**

<b>Company:</b>	Newfoundland & Labrador Hydro
<b>Division:</b>	Finance
<b>Department:</b>	Information Systems
<b>Section:</b>	Business Analysis
<b>Subsection:</b>	
<b>Location:</b>	Hydro Place

**Organization Reporting****Direction Received:**

Receives general direction from the Manager, Information Systems. Exercises a high level of personal initiative and judgment in planning, organizing and directing the activities of the Business Analysts group.

**Direction Exercised:**

Provides direct supervision to the Business Analysts group. The Business Analysts group is responsible for ensuring that business requirements are accurately captured in order to start implementation of a solution. The Business Analysts group works with our business units, captures functional requirements, and provides guidance and advice for process best practices.

**Job Description****Summary of Job Function:**

Responsible for the day-to-day management of all Business Analysts activities, including but not limited to, business analysis, budgeting, performance management, development and implementation of workload/resource schedules. Manage the business analysts set of tasks and techniques required to identify business needs and determine solutions to business problems. Translate high-level business requirements into functional specifications for application evaluation, information workflow or process improvement. Work closely with IS leaders and all areas of business to ensure business needs are addressed in a timely and efficient manner.

**Principal Activities, Duties, and Responsibilities:**

1. Work closely with all areas of the business to ensure that business needs are clearly identified, documented and understood. Develop effective relationships with the business.
2. Ensure delivery of high-quality functional requirements, as they form the foundation for subsequent development and acquisition. Errors in judgment could result in significant rework in major system implementations, schedule delays, and implementations that do not meet the needs of the business.
3. Develop financial and cost-benefit analysis reports.
4. Work with Project Management to define project scope and project statements. Ensure that solutions are developed appropriately according to requirements and delivered on time and within budget.

5. Communicate business needs through the IS Strategic Planning process, identifying gaps and opportunities in which technology can be leveraged effectively to meet business needs.
6. Work with the IS Technology Planning Group to build & support the Enterprise Architecture. Continue to develop an overall knowledge of IS infrastructure.
7. Analyze and re-design processes, workflows and roles in support of changing business requirements. Translate process and workflow requirements into specifications.
8. Provide guidance and advice for process best practices.
9. Review, prioritize and approve all work orders for Business Analysts group.
10. Develop and implement workload/resource schedules.
11. Prepare the Operating and Capital Budgets and administer and control the budgets.
12. Demonstrate the ability to control expenditures, while still meeting critical business objectives.
13. Ensure that Departmental objectives are scheduled, progress monitored and results achieved.
14. Ensure standards are implemented and measured.
15. Facilitate and participate in the RFI, RFP, Quote processes for IT to select preferred vendors/services.
16. Participate in determining requirements, scope, and objectives for vendor selections.
17. Maintain a close working relationship with external IT professional leaders and vendor organizations.
18. Participate in hiring, promotion, transfer and performance appraisals.
19. Define & improve IS processes using the industry standard framework, ITIL – Information Technology, Infrastructure Library. Ensure ITIL processes are maintained & executed.
20. Design or re-design core processes as a way of reducing latency or streamlining information flows
21. Maintain up-to-date knowledge of Industry Best Practices, Industry Standards, Corporate Policy and Procedures, and the Corporate Safety Procedures.
22. Comply with the Corporation's Health and Safety Policy as it applies to the Business Analysts.
23. Maintain good employee moral throughout the department.
24. Maintain close co-operations with all divisions within the corporation.
25. Perform other related duties as required or assigned.

### **Job Specifications**

#### **Education:**

A University Degree in Computer Science or Commerce, or equivalent combination of education and experience.

**Experience:**

A minimum of ten years progressively responsible and relevant experience including extensive experience in Information Systems, Requirements Definition, Process Improvement and Customer Service, with minimum of three years of those in a supervisory capacity. Must have an in-depth knowledge of trends & developments in Information Systems, tools & techniques to assess client needs, and application of multi-systems across multiple departmental boundaries. Must have strong business expertise and understanding of how technologies can enable business opportunities and redesign.

Must have strong knowledge of business processes.

**Special Skills, Job Requirements, Working conditions, Etc.**

This is a leadership position in a rapidly changing highly technical field. The incumbent must continually update himself/herself on the latest technological developments in this broad highly technical field.

Proven project management skills combined with sound judgment and decision-making skills; ability to think conceptually; excellent organizational and interpersonal skills, along with the ability to work in a team environment. Must understand the business climate, be fluent in modeling business processes and understand how and when systems and applications impede or enhance business function.

Strong analytical/problem solving skills a must. Proven track record of delivering business solutions on schedule and within budget a must.

Must communicate orally and in writing with clarity, completeness, with an ability to present complex technical concepts in non-technical terms.

**Personnel Information**

<b>Salary Grade:</b>	HAY 12
<b>Job Number:</b>	
<b>Status:</b>	Active

**Team Lead, Corporate Systems****Location Information**

<b>Company:</b>	Newfoundland & Labrador Hydro
<b>Division:</b>	Finance
<b>Department:</b>	Information Systems
<b>Section:</b>	Corporate Systems
<b>Subsection:</b>	
<b>Location:</b>	Hydro Place

**Organization Reporting****Direction Received:**

Receives general direction from the Manager, Information Systems. Exercises a high level of personal initiative and judgment in planning, organizing and directing the activities of the Corporate Systems group.

**Direction Exercised:**

Provides direct supervision to the Corporate Systems group, including Programmers/Analysts, Software Specialists, Database Analysts and Systems Analysts. Provides direct supervision to all consultants in support of Corporate Systems software application assets.

**Job Description****Summary of Job Function:**

Responsible for the day-to-day maintenance and operations of all Corporate Systems and activities, including but not limited to, Asset Management, Vendor Management, Budgeting, Performance Management, Incident Management, Change Management, Problem Management, Database Management and Software Configuration Management. Develop and implement workload/resource schedules. Works closely with IS Team Leaders and all areas of business to ensure business needs are addressed in a timely and efficient manner.

**Principal Activities, Duties, and Responsibilities:**

1. Provide maintenance support for Corporate Systems' Applications including JDEdwards, Showcase Strategy, Lotus Notes and other Business Applications.
2. Provide customer service and front line business support for Corporate Applications.
3. Work closely with managers/team leads and all areas of business to ensure business needs are addressed in a timely and efficient manner.
4. Identify & advise management of opportunities for the enhancement of business activities through the use of information systems.
5. Ensure adequate performance and reliability of systems. Achieve system availability targets for critical business applications.
6. Review requirements (short and long term) and ensure business community is kept up-to-date on progress and/or changes to schedules.

7. Review, prioritize and approve all work orders for Corporate Systems group.
8. Develop and implement workload/resource schedules.
9. Develop production and maintenance schedules, incorporate unscheduled activities, and review problem impacts.
10. Prepare the Operating and Capital Budgets and administer and control the budgets.
11. Demonstrate the ability to control expenditures, while still meeting critical business objectives.
12. Project owner and approver for all Corporate System Application projects.
13. Ensure that Departmental objectives are scheduled, progress monitored and results achieved.
14. Ensure standards are implemented and measured.
15. Facilitate and participate in the RFI, RFP, Quote processes for IT to select preferred vendors/services. Participate in determining requirements, scope, and objectives for vendor selections.
16. Manage major contracts and service agreements for corporate application software.
17. Maintain a close working relationship with external IT professional leaders and vendor organizations.
18. Participate in hiring, promotion, transfer and performance appraisals.
19. Ensure Corporate Systems procedures and service levels remain current with the needs of the business.
20. Define & improve IS processes using the industry standard framework, ITIL – Information Technology Infrastructure Library. Ensure ITIL processes are maintained & executed.
21. Participate in the development and on-going testing of the IS Disaster Recovery Plan.
22. Perform audits of software user licenses to ensure adequate licensing.
23. Maintain up-to-date knowledge of Industry Best Practices, Industry Standards, Corporate Policy and Procedures, and the Corporate Safety Procedures.
24. Comply with the Corporation's Health and Safety Policy as it applies to the design, purchasing, operations and maintenance of Corporate Systems.
25. Maintain good employee moral throughout the department.
26. Maintain close co-operations with all divisions within the corporation.
27. Perform other related duties as required or assigned.

### **Job Specifications**

#### **Education:**

A University Degree in Computer Science or Commerce, or equivalent combination of education and experience.

**Experience:**

A minimum of ten years progressively responsible and relevant experience including extensive experience in Corporate Applications, Software and Databases, with minimum of three years of those in a supervisory capacity. In-depth experience with application development life cycle and methodologies, In-depth knowledge of application architectures, application monitoring tools & techniques. In-depth experience of database design and concepts. In-depth experience of software change/configuration management principles and management of multi-system enhancements/modifications across multiple departmental boundaries.

**Special Skills, Job Requirements, Working conditions, Etc.**

This is a leadership position in a rapidly changing highly technical field. The incumbent must continually update himself/herself on the latest technological developments in this broad highly technical field.

Proven project management skills combined with sound judgment and decision making skills; ability to think conceptually; excellent organizational, interpersonal and communication skills, along with the ability to work in a team environment.

Strong analytical/problem solving skills a must. Proven track record of delivering business solutions on schedule and within budget a must.

**Personnel Information**

<b>Salary Grade:</b>	HAY 12
<b>Job Number:</b>	
<b>Status:</b>	Active

**Team Lead - Systems Support****Location Information**

**Company:**  
**Division:** Finance  
**Department:** Information Systems  
**Section:** System Support  
**Subsection:**  
**Location:** Hydro Place

**Organization Reporting****Direction Received:**

Receives general direction from the Manager, Information systems . Exercises personal initiative and judgment in planning, organizing and directing the activities of the Systems Support Group.

**Direction Exercised:**

Provides direct supervision to Infrastructure Specialists, Computer Operator. Provides direct supervision to all consultants in support of computer systems assets.

**Job Description****Summary of Job Function:**

Responsibilities include; identify and prioritize work activities, maintenance and system enhancements, participate in Hardware and Software selection and software purchases, develop system procedures, manage operational support, direct technical and systems initiatives, participate in budget preparation, document plans and implementation activities, and prepare written and oral reports on progress and results. The Team Lead will provide effective technical leadership in a constantly changing environment and work effectively in a team setting; interacting with customers, peers, software vendors and management.

**Principal Activities, Duties, and Responsibilities:**

1. Initiate, develop, direct and supervise the software and hardware support in the design, implementation and on-going operational phases of the Corporate Systems
3. Monitor and evaluate the performance of the Corporate Systems and where necessary develop recommendations to ensure system performance and reliability is maintained.
4. Establish co-operative mechanisms with other departments to ensure that the Corporate Systems meet the operational requirements for the corporation.
5. Work with the Technology Planning and Project Delivery groups to initiate and design software upgrades or enhancements required to support Corporate Systems. Supervise and evaluate the implementation of upgrades and enhancements.
6. In consultation with the Technology Planning group, plan and/or conduct training courses/presentations as required to update personnel on the functional capabilities of the various systems or applications implemented.
7. Participate in the performance monitoring and evaluation (where applicable) of other department's equipment which affect Corporate System performance.

8. Work with the Technology Planning and Project Delivery groups to provide technical direction in the design and implementation of Corporate systems.
9. Supervise and ensure that activities are kept on schedule and completed on time and within budget.
10. Diagnose problems and design solutions in order to restore production services with a minimum of interruption of service.
11. Maintain knowledge of all Corporate Systems. Maintain knowledge of current techniques used in analyzing, designing, developing and implementing systems.
12. Assist the IS Team Leads in establishing short and long-term plans for system applications.
13. Participate in budgetary preparation and administrative functioning, as required.
14. Perform other related duties as required or assigned.
15. Direct, monitor and evaluate the performance of staff.

### **Job Specifications**

#### **Education:**

A minimum education level of a University Degree in a quantitative discipline or an equivalent of fifteen years experience in computer system design and implementation of large-scale computer applications and enterprise wide systems.

#### **Experience:**

A minimum of fifteen years progressively responsible and relevant experience including extensive experience in Computer Operation Systems and Desktop Configurations with minimum of five (5) years of those in a supervisory capacity. In-depth experience with Mainframe and Maintenance Programs and Vendor Service/Warranty Agreements. In-depth experience with distributed computing infrastructures and Corporate integration at an architectural level.

#### **Special Skills, Job Requirements, Working conditions, Etc.**

This is a high level managerial position in a rapidly changing highly technical field. The incumbent must continually update himself/herself on the latest technological developments in this broad highly technical field. Proven project management skills combined with sound judgment and decision making skills; ability to think conceptually; excellent organizational, interpersonal and communication skills, along with the ability to work in a team environment.

Proven track record of maintaining and operating corporate level hardware/systems a must.

### **Personnel Information**

**Salary Grade:**

**Job Number:**

**Status:**

Active