

GPL-HRD-001/19 (M)	OUTPUT FOCUS JOB DESCRIPTION		SYSTEM CONTROL AND OPERATIONS DEPARTMENT
Position: SYSTEM CONTROL & OPERATIONS MANAGER	Grade: SM	Incumbent:	Reports To: : Power Generation & Delivery Divisional Director
Manages SNR. SO Engineer; SNR. Systems Analyst Engineer; SNR SCADA & EMS Engineer			

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JOB PURPOSE: To deliver a reliable supply of electricity to customers while minimizing the cost of production and delivery, ensuring that all technical and operating parameters are respected and safeguarding the safety of personnel working on the system.

KEY OUTPUTS:

1. Annual departmental budget.
2. Departmental business plan or work plan
3. Summary and Presentation document for the Divisional Head as per request.
4. Daily reliability and generation availability report.
5. Monthly, Quarterly and Annual report and data analysis of the main performance targets such SAIFI, SAIDI, Operating voltage levels, Generation availability, Fuel consumptions, Fuel Mix, Generator outputs, Force Outages Rates, Heat Rate, etc.
6. Monthly report of least cost commitment and economic dispatch of available generating resources.
7. Monthly reports of the operation of coordinated system protection devices and associated equipment.

KEY RESPONSIBILITY AREAS:

1. Work closely with the Power Generation and Delivery Divisional Director by collecting and analyzing all reports from T&D, Generations, Specialized Equipment & Substation (SE&S) department, PPDI, Call Center and other departments.
2. Manage the SCADA/EMS and Operations Sections and conduct critical analysis of sections' reports to recommend/implement changes to best suit the company's overall accomplishment/development for both short and long term planning.
3. Review operations at various generating plants and implement strategies to reduce operation costs and improve reliability and availability.
4. Ensure a high degree of data availability and quality presentation of SCADA data, secure and resilient computing facilities, control application programs, and local area networks to satisfy business requirements.
5. Oversee the overall operations, maintenance, enhancement of the SCADA system - its applications and databases - to ensure that accurate and timely operational data is provided to the grid operator, real time engineers, and system control staff.
6. Facilitate system design, development, testing, implementation, and support for the SCADA system - its applications and databases - and liaise with the Departments within the Engineering Services Division.
7. Review systems and methodologies for collecting and evaluating vital system data and recommend / implement changes, as necessary.
8. Oversee operational planning, including short term load forecasting, resource commitment and economic dispatch, outage planning, maintenance of operating reserves and contingency planning to ensure the system remains in a secure condition at all times.
9. Assist in the preparation of contingency plans for the events of partial or total loss of Master or Substation SCADA.

10. Manage third party contracts such as the SCADA integrator support from VENDORS and hardware maintenance (servers, consoles, switches, etc.) with local manufactures representative. Control and monitor cyber security of all SCADA and substation monitoring systems.
11. Oversee telecommunication and electronic systems to understand the requirements for upgrades, improvements, new systems, and preventive maintenance and act promptly to resolve issues if any.
12. Coordinate the design, installation, maintenance, and upgrade of GPL's fiber optic system and its supporting facilities.
13. Plan, devise, build, configure and commission telecommunications equipment, networks, and systems, including voice, data, satellite, microwave, digital data systems, etc.
14. Research telecommunication systems to determine the best communication medium based on industrial best practices for remote distribution automated devices. Also, prepare technical requirements and contract documents for telecommunication service providers once GPL decides to use external services.
15. Ensure safety training and meetings are conducted periodically.
16. Track SAIFI and SAIDI values and implement suitable measures to maintain or improve figures.
17. Ensure that voltages on generators, the transmission network, and distribution feeders are maintained within prescribed limits.
18. Apply least cost commitment and dispatch of available generating resources, to satisfy GPL's generator reliability target.
19. Ensure the system and all facilities and equipment are operated within prescribed load limits at all times.
20. Ensure that system operators have access to visual displays, written SOPs, data communications, voice communications and training in their use, so as to execute their responsibilities effectively and safely.
21. Prepare emergency response procedures and ensure that system operators are conversant with the procedures and capable of providing effective responses in emergencies.
22. Orient, mentor, appraise and coach staff to enhance the development of the requisite job skills.
23. Administer the performance management system within the department to evaluate performance and enhance the development of each employee. Conduct continuous assessment and monitoring of staff work performance and take steps to correct poor work performance.
24. Analyze system failures and major disturbances using historical data.
25. Recommend relevant studies as the system develops to ensure stable and safe operation.
26. Investigate occupational health and safety infractions and make recommendations or apply suitable measures to prevent recurrences.
27. Advises the System Planning Department of system trends such as load growth, inadequate cable capacity, voltage regulation issues, inadequate reserve capacity and overload situations so as to facilitate timely planning or other appropriate interventions.
28. Ensures that all necessary SCADA system as-built information, maintenance and operating drawings and manuals are adequate in content, have are clear and fully translated into English Language if necessary and readily available.
29. Identifies operational risks and take steps to mitigate them.
30. Determine the specification for the require spares, equipment and supplies to maintain the delivery and control system and to participate in the evaluation of the bids to determine the best suppliers.
31. Performs any other duties as directed by the Power Generation and Delivery Divisional Director.

Required Competencies

Core/ Leadership	Skill Level & Importance		Description/Behaviours
Adaptability &	3	H	➤ Help others adapt to changing work environment and

Managing Change			<ul style="list-style-type: none"> ➤ to embrace change. ➤ Promotes the benefits of a proposed change. ➤ Takes time to ask question; understand and speak to the underlying needs of stakeholders beyond those initially expressed (do not make assumptions). ➤ Recommends changes to work processes or system to improve business results. ➤ Develops plans and prioritizes resources to effectively implement change. ➤ Remains focused on the desired outcome to help self and others implement change.
Applying Learning	3	H	<ul style="list-style-type: none"> ➤ Recognizes how prior knowledge and skills apply to complex or new circumstances. ➤ Develops innovative ways of applying technical and professional knowledge to handle new challenges. ➤ Demonstrates commitment to continuous learning and growth to develop knowledge and expertise. ➤ Actively participates in learning activities in a way that makes the most of the learning experiences.
Communication	3	H	<ul style="list-style-type: none"> ➤ Tailors the content of speech and written communication to suit the level, cultural background and experience of the audience. ➤ Establishes communication plans and strategies. ➤ Anticipates and prepares for others reactions, adapting tactics to create a specific impact. ➤ Communicates complex issues clearly and credibly with widely varied audiences.
Creative & Innovation	3	H	<ul style="list-style-type: none"> ➤ Sets aside thinking time to come up with more creative ideas, encourages others to challenge traditional approaches and asks through provoking questions to spark others creativity for getting things done. ➤ Looks to other areas and companies for good ideas. ➤ Uses brainstorming techniques to come up with solutions to problems and recognizes and reward creative thinking and innovation.
Customer Service	3	M	<ul style="list-style-type: none"> ➤ Takes time to question and understand the real, underlying needs of customers, beyond those initially expressed. ➤ Monitors customer satisfaction and makes/ recommends changes to work processes or systems to improve results and services. ➤ Always works closely with customers, developing and independent view of their needs and acting in their long-term interest.
Decision Making	3	H	<ul style="list-style-type: none"> ➤ When faced with a decision or problem, gathers as much information as necessary before identifying root cause and possible solutions. ➤ Develops innovative solutions that address the root cause of the problem and prevent recurrence. ➤ Aligns decisions with organizational goals, direction, ethics and values. ➤ Anticipates obstacles and thinks ahead. ➤ Defines, communicates and consistently exemplifies the organization's values and ethics.
Financial Responsibility	2	H	<ul style="list-style-type: none"> ➤ Understands the current costs of work processes and programs. ➤ Balances cost versus benefit in taking action on making cost related decisions. ➤ Prepares accurate cost estimates and schedules. ➤ Monitors the budget, track costs and revenues, where

			<ul style="list-style-type: none"> ➤ appropriate. ➤ Monitors to ensure the efficient and appropriate use of resources. ➤ Takes corrective action as required. ➤ Continuously looks for methods to improve operational efficiencies.
Process Improvement	3	M	<ul style="list-style-type: none"> ➤ Can provide expert advice to team leads on Process Improvement methods and reduce issues arising from applying the methodologies. ➤ Can work across departments applying PI methodology. ➤ Often holds the formal or informal role of a Process Improvement Advisor. ➤ Recognizes when team building is required to move project forward and can deploy basic activities.
Results Oriented	4	H	<ul style="list-style-type: none"> ➤ Committed to setting goals, achieving results and creating a work environment focused on accountability, responsibility and action. ➤ Maintains a consistent and fair approach in the attainment of goals both personally and with employees. ➤ Demonstrates and expects commitment and follow-through of personal. ➤ Creates plans, defines goals and expected outcomes that affect a significant part of the organization.
Safety	4	H	<ul style="list-style-type: none"> ➤ Demonstrates and clearly articulates corporate commitment to safety. ➤ Develops solutions and create new programs and policies to imbed a safety culture in all corporate activities. ➤ Implements strategies to reinforce accountability at all levels for a safe and healthy workplace. ➤ Initiates preventative health wellness measures to reduce work related illnesses and injuries.
Teamwork	3	H	<ul style="list-style-type: none"> ➤ Proactively solicits ideas and opinions and shares information and learning with others. ➤ Addresses conflicts or issues within the team in a positive and open manner. ➤ Provides clear feedback to team members. ➤ Uses understanding of different interests and agendas to achieve positive outcomes. ➤ Engages others in collaborative problem solving, encouraging them to share their ideas and opinions. ➤ Is open, sincere and empathetic in dealing with all individuals and in all circumstances.
Leading & Developing Others	3	H	<ul style="list-style-type: none"> ➤ Sets a strong example through own behavior. ➤ Encourages an environment that foster mutual support. ➤ Gives specific feedback and expresses expectations for future performance. ➤ Encourages and acts upon feedbacks to self. ➤ Provides guidance, counsel, directions and assistance to employees. ➤ Provides challenging assignments and specific opportunities to broaden employees' skills and expectations.
Vision & Strategic Thinking	3	H	<ul style="list-style-type: none"> ➤ Works with teams to set programs, operational goals and plans in keeping with the strategic direction, standards and code of ethics. ➤ Develops an in-depth understanding of the Corporate Strategic Plan and explores the implications with

			<p>staff.</p> <ul style="list-style-type: none"> ➤ Facilitates the development of the location's business plan. ➤ Foresees obstacles and opportunities and acts accordingly. ➤ Involves others in understanding the group's role in realizing the corporate vision and celebrates the group's contribution to the shared vision.
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Technical/ Functional Competencies

Technical/Functional	Skill Level B, W, A,E	1,2,3,4
• Problem Solving and Analytical Skills.	A	3
• Time management – ability to meet deadlines	A	3
• High level of organizational Skills	A	3
• Be conversant with the Occupational Safety and Health, Electricity Sector Reform, the Public Utility and environmental Acts. Also GPL license with includes the Standard Terms and Conditions of Electric Services.	A	3
• Knowledge of integrated Electrical Systems, operations of Generation resources, transmission, sub- Transmission and Distribution networks.	A	3
• Ability to make critical operating decisions.	A	3
• Ability to take charge and direct personnel under extremely high pressure in sensitive situations.	A	3

MINIMUM REQUIRED EDUCATION AND EXPERIENCE

(1) Bachelor's degree in Electrical Engineering with specialization in electric power engineering with at least five years of experience in a large power utility. Experience must include the use of utility simulation and modelling tools.

or

(2) Master's degree in Electrical Engineering, Engineering Management, Project Management, Renewables or related discipline with at least three years' experience in a large power utility. Experience must include the designing of utility scale projects such as diesel generators, renewables and hybrid system.

Legend:

H:	High Requirement. Required performance could not be achieved without demonstration of this competency.
M:	Medium Requirement. Required performance would be difficult to attain without demonstration of this competency.

L:	Low Requirement. Required performance is not dependent on demonstration of this competency.
I,II,III,I V:	The skill level required for effective performance. Skill levels are defined in the Competency Model
*	If a formal leader, all leadership competencies will apply. A formal leader is primarily responsible for the leadership and/or Supervision of others. Duties are generally different than the duties of the others in the group.
B:	Basic – Brief, general familiarity. Understanding of where knowledge can be applied, but limited on-the-job application.
W:	Working – Detailed familiarity and understanding. Proficient in applying the knowledge and skills for regular job requirements.
A:	Advanced – Comprehensive understanding (in-depth familiarity with fine points). Able to handle complex or non-routine applications.
E:	Expert – Comprehensive and conceptual understanding. Expert, “go to” resource, can handle highly complex problems or Situations.

This document is validated as an accurate and true description of the job as signified above.

Employee Sign Date

Supervisor Sign Date

Head of Department/Division Sign Date

Date received in Human Resource Division

Date Created/revised