

CIVIL SERVICE OF JAMAICA

JOB DESCRIPTION AND SPECIFICATION

JOB TITLE:	Director, Electrical Engineer		
JOB GRADE:	SOG/ST 7 (PU)		
POST NUMBER:			
DIVISION/BRANCH:	Project Planning and Maintenance Division		
SECTION/UNIT:	Electrical Mechanical Section		
REPORTS TO:	Director, Project, Planning and Maintenance		
MANAGES:	Senior Electro-Mechanical Technician Electro-Mechanical Technician		
classification of positions	·	specifically will enable the formance of the post incumbent. cription of the job as signified below:	
Employee		Date	
Manager/Supervisor		Date	
Head of Department/Division	on	Date	

1. JOB PURPOSE (Reason for Existence)

Under the general direction of the Director, Project Planning and Maintenance, the Director, Electrical Engineer is responsible for providing specialist assistance to the regions in reviewing the design and development of electrical equipment and supervising the installation of equipment and correct flaws or malfunction, preventative and corrective maintenance of electrical generating and distribution systems and equipment, planning of electrical systems for growth and expansion of the health sector.

In addition, to develop standards and procedures for the maintenance of electrical systems and equipment in the public health sector to ensure safety, reliability and cost effectiveness.

2. KEY OUTPUTS (Results, Deliverables)

- Design and development of electrical equipment reviewed;
- Effectiveness of designs evaluated;
- Electrical packages throughout the project followed-up and monitored;
- Quality of work by contractors checked;
- Standards and procedures for the maintenance of electrical systems and equipment developed;
- Complex diagnosis of electrical equipment performed;
- Pre-acceptance inspections of electrical equipment conducted;
- Electrical equipment being considered for purchase evaluated and recommended;
- Audits of Regional Maintenance Systems conducted;
- Technical advice provided;
- Reports prepared and submitted.

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3. KEY RESPONSIBILITIES (Activities, Tasks)

A.) Management/Administrative Responsibilities

- Participates in the development of the Operational Plan for the Division;
- Prepares individual work plan;
- Participates in the formulation of maintenance policies and plans for the Ministry of Health and the Regional Health Authorities;
- Participate in the establishment of operating guidelines for the Regional Maintenance Units;
- Prepares monthly management report on activities undertaken.

B.) Technical/Professional Responsibilities;

- Plans, schedules, conduct and coordinates programmes of assigned engineer work and projects;
- Reviews the design and development of electrical equipment;
- Evaluates the effectiveness of designs done by contractors and change if necessary;
- Uses computers extensively to analyze designs;
- Estimates cost, reliability and safety factors;
- Monitors the lighting and wiring of buildings, communication systems, power generation used by contractors in the implementation of project;
- Tests equipment and isolate defects;
- Monitors the rate of power supply;
- Follow-up on electrical packages throughout the project including-the design, verification, installation and commissioning:
- Checks the testing and commissioning procedure;
- Monitors the testing and commissioning progress until final acceptance;

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- Reviews the designs production in particular the compliance with codes, standards, regulations, laws etc;
- Proposes value engineering to reduce cost and/or planning;
- Obtains and verifies system studies (noise, harmonics distortions, corrosion protection etc;
- Leads interface reviews with Civil Works Engineer, Electro-Medical Technician and contractors;
- Ensures that the functional requirements are correctly implemented in the software specifications;
- Checks that the power needs are correctly assessed in schedule (ventilation fans, lighting, pumps etc);
- Verifies proposed cables and breaker sizes;
- Reviews the execution of designs by contractors;
- Checks quality of work by contractors and verifies good practices;
- Develops standards and procedures for the maintenance of electrical systems and equipment in the public health sector to ensure safety, reliability and cost effectiveness.
- Collaborates with the Director, Project Planning and Maintenance to ensure that electrical systems, equipment/machines used in the government health sector are standardized to facilitate cost effective maintenance;
- Monitors the reported preventive and corrective maintenance data for power systems and equipment as entered by the Regional Maintenance Units on the Maximo Maintenance Management System and make assessments as to condition, performance and the application of accepted maintenance standards;
- Performs complex diagnosis of electrical equipment failures and system problems in response to requests from the Regional Health Authorities. Solicit assistance locally or overseas as necessary;
- Plans electrical systems to meet the projected demand based on expansion of the health service;
- Evaluates and make recommendations regarding electrical equipment being

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considered for purchase giving consideration to each model's performance ranges, the operational capabilities of the users involved and the frequency of use;

- Performs pre-acceptance inspections of electrical equipment and develop preventive maintenance procedures on newly acquired equipment;
- Conducts audits of Regional Maintenance Systems to determine if maintenance procedures relating to electrical systems and equipment are being adhered to and standards met. Take action to avert problems that are indicated and monitor outcome;
- Provides technical advice, codes and standards for electrical generating and distribution systems and equipment used in health care facilities in the public sector;
- Provides expert advice to Senior Management on all matters pertaining to electrical systems and equipment;
- Maintain contact with major manufacturers and agents of electrical equipment;
- Develops innovations to keep the maintenance costs for electrical systems and equipment to a minimum while ensuring safety and reliability;
- Collaborates with the Bio-Medical and Civil Works Engineers in the establishment of a library of manufacturer's resource material, current manuals and periodicals on electrical equipment/machines for training and reference purposes;
- Maintains professional growth and development through professional affiliations, conferences, manufacturers' seminars, internet correspondence to keep abreast of the current information, norms, standards, practices and development in the field of electrical engineering;
- Participates on committees, attends meetings relating to the maintenance of buildings and facilities.

C.) Human Resource Responsibilities

- Provides leadership to staff supervised through effective goal setting, delegation and communication;
- Manages the welfare and development of staff supervised through the preparation of Performance Evaluation and recommends training and other programmes;

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- Provides guidance to staff supervised through coaching, mentoring and support as necessary;
- Monitors the operations of the Section and oversees and/or participates in the review and evaluation of the work of assigned staff;
- Promotes the building of institutional knowledge for the Section by ensuring that established systems and procedures are documented and disseminated;
- Ensures that staff adheres to the policies and procedures of the Division;
- Participates in the recruitment and selection of staff and recommends movement when appropriate;
- Recommends vacation leave and approves sick and departmental leave for staff in the Section and participates in the administration of staff benefits in keeping with established human resource policies;
- Recommends/administers disciplinary action in keeping with established Human resource policies;
- Ensures that staff is provided with adequate and appropriate physical resources to enable them to undertake their duties efficiently and effectively;
- Conducts monthly and ad hoc staff meetings.

D.) Other Responsibilities:

• Performs any other related duties, as assigned by the Director, Project, Planning and Maintenance.

4. PERFORMANCE STANDARDS (How Success Will Be Measured)

- Design and development of electrical equipment reviewed in keeping with established guidelines;
- Effectiveness of designs evaluated in a timely manner;
- Electrical packages throughout the project monitored and followed-up to ensure safety and completion of project with projected timeframe;

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- Quality of work by contractors checked to ensure adherence to standards codes regulations and that work meets international standards;
- Maintenance standards and procedures for electrical systems and equipment developed in accordance with established guidelines;
- Complex diagnosis of electrical equipment performed in keeping with established standards;
- Pre-acceptance inspections of electrical equipment conducted in keeping with established guidelines and standards;
- Electrical equipment being considered for purchase evaluated and recommendations made within a specified time;
- Audits of Regional Maintenance Systems conducted within a specified timeframe;
- Technical advice provided are technically sound and timely;
- Reports submitted are accurate, comprehensive and prepared in a timely manner.

. INTERNAL AND EXTERNAL CONTACTS

i) Internal

Contact (Title)	Purpose of Communication
Director, Project, Planning and	Obtain advice, receive directives and
Maintenance	guidance, work assignments information
	regarding portfolio and provide feedback
Senior Engineers in the Division	Collaborate on the progress of project
Director, Standards and Regulations	Matters relating to the establishment of
	maintenance standards
Regional Health Authorities – Regional	Matters relating to project and the
Directors, Directors, Operation and	monitoring and maintenance of electrical
Maintenance	systems and equipment

) External	

ii) External Contact	
Contact	Purpose of Communication
Bureau of Standards	Matters relating to establishment of
	standards for electrical systems and
	equipment/machines
Suppliers/distributors	Electrical and Bio-Medical supplies
Contractors	Matters relating to project design and

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	implementation
Professional Association	Keep abreast of current standards in the field

6. REQUIRED COMPETENCIES

Core

- Ability to communicate effectively orally and in writing;
- Good interpersonal skills and people management;
- Good decision-making and critical thinking skills;
- Good leadership skills;
- Strong analytical and problem solving skills;
- Good planning, organizing and time management skills;
- Ability to exercise sound judgment and conviction of purpose in unfavourable/unpopular situations;
- Ability to motivate, persuade and influence others;
- Ability to prioritise among conflicting demands;
- Good customer relations skills.
- Excellent skills in teamwork and cooperation;
- Ability to work harmoniously with a diverse group of people at various levels externally and internally;
- Ability to exercise tact and diplomacy in dealing sensitive and confidential employee situations;
- Strong goal/result orientation;
- Keen listener;
- Managing external relationships
- Excellent integrity/ethics exercised in the performance of duties.

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• Maintains a high level of productivity and self-direction;

Technical

- In-depth knowledge of electrical distribution and generating systems;
- In-depth knowledge of Jamaica's Electrical Codes and Regulations;
- Knowledge of Jamaican Buildings Codes;
- Broad based knowledge of international standards/requirements for electrical equipment;
- Expertise in Maintenance Management;
- In-depth knowledge of management principles and practices;
- Working knowledge of Maximo Maintenance Management System or other Maintenance Management software application;

7. MINIMUM REQUIRED EDUCATION AND EXPERIENCE

- Bachelor's Degree in Electrical Engineering;
- A minimum of five (5) years in electrical systems designs and three (3) years experience at the level of a Head of an Electrical Engineering Department;

Experience in design review processes;

- Familiar with the relevant electrical systems;
- Any equivalent combination of qualification and experience.

8. SPECIAL CONDITIONS ASSOCIATED WITH JOB

- Required to work beyond normal working hours as the need arises;
- Required to travel locally.

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• Occasionally lift and/or move up to 50 lbs.

9. AUTHORITY TO:

- Review designs;
- Monitor progress of project;
- Check quality of work by contractors;
- Conduct audit inspections of electrical systems and equipment in the regions;
- Recommend the purchase of new electrical equipment;
- Recommend the continued use/retirement of electrical equipment based on information from the Maximo System or other sources.

10. WORKING CONDITIONS

• Normal office conditions;

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