

Job Title: Director, Energy & Utilities

Department: Plant Operations

Reports To: Executive Director, Facilities

Jobs Reporting: Energy Manager

Associate Director, Utilities Chief Operating Engineer

Salary Grade: USG 16

Effective Date: December 2020

Primary Purpose

Reporting to the Executive Director, Facilities, the Director of Energy & Utilities is accountable for providing strategic leadership to a large multidisciplinary team within the Energy and Utilities portfolio, to ensure safe & reliable day-to-day operations, energy conservation, and long-term resilience of all mechanical and electrical infrastructure supporting all UW campuses.

University of Waterloo infrastructure comprises of over eight million square feet of space powered by a large 1st Class Central Power plant feeding a sophisticated district energy system connecting over eighty major academic buildings.

Responsibilities will align with the Plant Operations goal of contributing towards providing a safe and accessible, invitingly clean and comfortable, functionally-enriched and well-maintained campus environment through service excellence.

Key Accountabilities

Strategic Planning

- Provides a critical voice in the development of the Campus Master Plan, ensuring that the
 infrastructure needs of tomorrow are incorporated into the plans for the future of UW, focusing on
 environmental sustainability, deferred maintenance management and technology integration.
- Provides advice and leadership in the development of construction standards to ensure that design vision, operational needs of Plant Operations, and long-term vision of the campus are seamlessly coordinated and clearly captured.
- Provides technical leadership in various UW sustainability initiatives establishing ambitious targets and implementation strategies to significantly reduce the carbon footprint of our University.
- Develops multi-year financial master plan for the Energy & Utilities division ensuring efficient utilization of allocated budget while addressing all operational requirements and minimizing deferred maintenance.

Operation & Utilities

- Efficiently manages an assigned operating budget including salaries for over 120 employees, utility bills (nearly \$25M), and a wide range of ongoing maintenance expenses.
- Ensures optimized operation of assigned energy and utilities portfolio including human, fiscal and physical resources.
- Accountable for reliable operation of a large University wide system supporting services such as
 potable water, drainage, chilled water, heating, gas, and steam to all campus buildings.



- Oversees compliance of the assigned portfolio with all applicable regulations including environmental protection, fire code, electrical code, safety regulation, boiler & pressure vessel code, and WSIB.
- Acts as a liaison with federal, provincial and municipal agencies, consultants and contractors in technical matters affecting University mechanical and electrical infrastructure.
- Provides leadership and direction to the utilities and energy portfolio in all natural and man-made disasters.
- Provides oversight to a multidisciplinary team providing restoration services and emergency repairs during incidents causing damage to teaching, research, and campus infrastructure.
- Accountable for safe and reliable operation of the 1st Class Power Plant supporting critical services
 to all three University campuses without which University buildings & campuses would be forced to
 shut down.
- Supports the Executive Director in the development of the annual priority capital renewal and deferred maintenance project lists to ensure maximum efficiency with allocation and spending of University resources, provincial funding, and grants.
- Supports the Executive Director in preparation of busines cases, funding requests, and strategic budget requests taking into account deferred maintenance, regulatory requirements, energy reduction initiatives, technological opportunities, and overall system resiliency requirements.

Energy Management & Sustainability

- Provides leadership to the energy management team in evaluation of existing systems, identification
 of energy efficiency improvements, and preparation of proposals for government submissions
 required for sustainability initiatives related to consumption of natural gas, electricity, water, etc.
- Ensures technical and operational support to the Sustainability Office and related University wide initiatives.
- Accountable for negotiation of purchase contracts, service management, and sales of electrical power and natural gas.
- Accountable for oversight of reporting of greenhouse gas emissions, CO2 consumptions, etc. to various levels of government, managing related incentives, grant applications, and penalties.
- Works closely with faculty, staff, and students on implementation of various energy reduction initiatives ensuring that through joint collaboration, innovation, and foresight, UW minimizes the potential negative impact of conservation measures on the University's core academic mission

Project Management & Procurement

- Oversees the implementation of various renovation and retrofit projects within the energy and utilities portfolio ensuring timely completion, budget adherence and quality.
- Ensures that all utilities renewal projects are developed, designed, and implemented in coordination with Design & Construction ensuring seamless integration with existing systems, code compliance, and University resiliency goals.
- Ensures that all work of the assigned energy & utilities portfolio with external entities, such as contractors and consultants, is completed with compliance to BPSD and UW internal policies.

Staff Management

- Provides leadership, support, high level of Human Resources and Labour Relations guidance, and professional development of a large multi-disciplinary team of professional, technical, and unionized staff.
- Conducts Annual Performance Appraisals with direct reports and ensures adherence to annual performance planning and review process within the department.
- Fosters responsiveness, collegiality, continuous improvement, and a high level of customer service throughout the entire Facilities/Plant Operations group.



- Represents the department in all aspects of formal and informal communication with CUPE 793
 ranging from training, to union management meetings, grievance resolution, and Collective
 Agreement bargaining.
- Ensures that all talent acquisition is carefully planned, includes foresight of departmental needs, is responsive to technological changes affecting the assigned portfolio, and follows University processes and policies.

*All employees of the University are expected to follow University and departmental health and safety policy, procedures and work practices at all times. Employees are also responsible for the completion of all health and safety training, as assigned. Employees with staff supervision and/or management responsibilities will ensure that assigned staff abide by the above, and actively identify, assess and correct health and safety hazards, as required.

Required Qualifications

Education

- Undergraduate in Engineering with P.Eng. license (mechanical or electrical preferred)
- Advance degree in engineering or business administration is strongly desired
- Operating Engineer Certification is an asset
- Certified Energy Manager or Certified Sustainable Development Professional is an asset

Experience

- Minimum of 12 years of technical experience with progressively increasing level of managerial responsibilities preferably in institutional or healthcare setting.
- Demonstrated experience in the construction, facilities management, and physical plant administration with clear understanding of the role of administrative services in supporting the academic function of a University.

Knowledge/Skills/Abilities

- Excellent human relations skills with an emphasis on civility and collaborative teamwork with all
 direct reports, other departmental staff members, customers, University senior leadership, and
 community members to develop and maintain positive and inclusive working relationships and high
 morale.
- Strong leadership qualities to effectively achieve the mission of the department and the University, and ensure work is done promptly, within standards, and to customer satisfaction.
- Considerable Knowledge in establishing budgets and controlling/monitoring expenditures.
- Knowledge of and ability to establish, enforce, and follow all safety and environmental rules and regulations, and take appropriate precautions to prevent injury and illness in the workforce.
- Ability to exercise prudent judgement, make decisions, and maintain high level of confidentiality.
- Significant business acumen, including knowledge and experience in contract administration and contract management.
- Demonstrated experience leading multidisciplinary teams in a complex institutional environment comprising unionized staff and professional staff.
- Understanding of Building Code, Fire Code, TSSA regulations.
- Demonstrated understanding of design, operation, and maintenance of complex mechanical & electrical district energy systems.
- Familiar with a computerized maintenance management system (CMMS) for billing, trends and customer response surveys.
- Demonstrated understanding of energy conservation, sustainability regulations and and project management skills



Nature and Scope

- **Contacts:** Demonstrated track record of effective leadership and collaboration with various constituents at all levels and ranges of expertise.
- Level of Responsibility: Manages department-wide functions and processes that are highly specialized, have high level of financial impact, and are highly regulated by various levels of government.
- **Decision-Making Authority:** Makes decisions on timelines, budget allocation, and staffing resources to meet strategic objectives.
- **Physical and Sensory Demands**: Minimal demands typical of a senior position operating within an office environment.
- **Working Environment:** Regular working hours, some evening/weekend work required. Exposed to stress and pressure associated with senior level responsibilities, significant financial oversight and confidential human resource leadership.