

Job Description



Job Title:	Senior Director, Energy & Infrastructure
Department:	Plant Operations
Reports To:	Executive Director, Facilities
Jobs Reporting:	Energy Manager Associate Director, Utilities Associate Director, Infrastructure Development Chief Operating Engineer
Salary Grade:	USG 17
Effective Date:	October 2022

Primary Purpose

Reporting to the Executive Director (ED), Facilities, the Director of Energy & Infrastructure is accountable for providing strategic leadership to a large multidisciplinary team to ensure safe & reliable day-to-day operation, proactive energy conservation to support UW Shift: Neutral goals, and strategic management of deferred maintenance and resiliency of all UW campuses.

University of Waterloo infrastructure comprises of over eight million square feet, eighty major academic buildings, and three campuses supporting state of the art teaching and ground-breaking research.

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

- Leads the development of Campus Infrastructure Master Plan balancing available funding and risk of deferred infrastructure renewal on critical campus operations.
- Recommends updates and course corrections of Campus Infrastructure Master Plan on annual basis.
- Directs the development of key performance indicators and various analysis supporting optimization of the Waterloo Budget Model incorporating operating costs, energy consumption data, deferred maintenance risks, and evolving technology.

Energy Management

- Leads the University of Waterloo Energy Management initiatives.
- Ensures that assigned division provides technical expertise to the Sustainability Office supporting UW Shift: Neutral targets.
- Provides technical advice to the ED, Facilities in all matters of energy consumption, supply, management, sustainability, and strategic opportunities supporting current and future needs of the University.
- Oversee the development of multi-year utility forecasts ensuring that consumption, changes to government regulations, and incentives are accounted for.
- Oversee the work on the Energy portfolio in the evaluation of existing systems, in identification of energy efficiency improvements, and in preparation of proposals/business cases/government

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submissions required for sustainability initiatives related to central consumption of natural gas, electricity, water, etc.

- Liaises with faculty, staff, and students on implementation of various energy reduction initiatives ensuring that through joint collaboration, innovation, and foresight negative impact of conservation measures on UW core academic mission is minimized
- Provides oversight to the Energy Manager when negotiating new and renewal of existing utility contracts for the University.
- Provides technical leadership in pioneering new technologies and approaches to energy use reduction.

Operation

- Provides strong leadership and support to a diverse group of operating staff, highly trained technical staff, as well as administrative support staff.
- Provides direction to Associate Director, Utilities ensuring that supply of all utilities (heating, cooling, ventilation, soft water, processed water, normal electrical power, backup power) is operating efficiently ensuring reliable support to all teaching and research initiatives
- Provides oversight to Associate Director, Utilities ensuring that all safety precautions are taken to protect employees as well as faculty, students, and staff.
- Ensures that in case of technical emergencies and severe breakdowns, multidisciplinary team providing restoration services and emergency repairs is ready to engage.
- Provides leadership and support to the AD, Utilities, and the Chief Stationary Engineer achieving efficient work environment and nimble response to changing operational needs while maintaining positive staff-union relationship.
- Oversee the implementation and utilization of a centralized asset management system to support effective management of preventative maintenance of the assigned portfolio.
- Provides oversight and advice to the AD, Utilities, and the Chief Stationary Engineer to ensure that all regulatory and safety requirements of the assigned divisions are addressed, reports submitted, and inspections documented.
- Ensures that the assigned portfolio operates in full compliance with the Environmental Protection Act, Fire Protection & Prevention Act, Green Energy Act, and Ontario Water Resources Act.

Infrastructure Renewal

- Directs preparation of business cases, funding requests, and strategic 5-year budget requests taking into account deferred maintenance, regulatory requirements, energy reduction initiatives, and technological opportunities, and overall system resiliency.
- Oversee analysis of risks related to infrastructure failures and their impact on teaching and research.
- Coordinates the work of AD, Utilities, AD, Infrastructure Development, and Energy manager to ensure that all infrastructure needs are critically evaluated, prioritized, and submitted for funding.
- Works closely with the Sr. Director, Design and Construction to ensure that all renovation projects are coordinated and opportunities for improvements maximized.
- Works closely with Director, Sustainability to ensure that all infrastructure retrofits and energy performance projects are coordinated and opportunities for improvements maximized.
- Collaborates with the Sr. Director, Design and Construction on the development of UW Construction Standards to ensure high quality of construction, efficient operation, sound long term investments, and compliance with environmental goals for the campus.

Project Management & Procurement

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- Provides leadership and oversight to assigned staff managing infrastructure projects value up to \$5M including construction and consulting.
- Ensures that all portfolio projects follow UW Procurement Policy, BPSD, and best industry practices.
- Ensures that all assigned projects follow safety protocols as mandated by UW Safety Office, Ontario Labour Laws, and the Construction Act.

Finance

- Directs AD, Infrastructure Development to ensure that project charters are accurate and estimates appropriate for UW capital construction projects.
- Reports on various UW governance committees Deferred Maintenance spending and risk management.
- Ensures that processes are in place to facilitate accurate tracking and account coding for all project related documentation.
- Develops and administers departmental budget to ensure efficient operation within allocated resources.
- Recommends to the Executive Director changes to staffing levels required to support changing campus needs.

Human Resources

- Provides leadership, support, high level of HR/LR guidance, and professional development to over 120 professional, technical, and unionized staff.
- Conducts Annual Performance Evaluations with direct reports and ensures adherence to Annual Performance Planning and Review process within the department.
- Fosters responsiveness, collegiality, continuous improvement, and high level of customer service throughout the entire Facilities/Plant Operations group.
- Develops and monitors metrics to ensure the organization is operating efficiently and effectively, servicing client needs within budget.
- Represents the department in all aspects of formal and informal communication with CUPE 793 ranging from training to U/M meetings, grievance resolutions, and Collective Agreement bargaining.
- Ensures that all talent acquisition is carefully planned, includes foresight of departmental needs, response to technological changes affecting the assigned portfolio, and follows UW Processes and Policies.
- Ensures that departmental organization and staffing levels can efficiently support University goals, and vision.

**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 degree in Engineering or Architecture.
- Master's degree in Management, Business, Finance, Engineering, Architecture, Construction, or an equivalent combination of education and experience considered an asset.
- Professional Engineer license preferred.

Experience

- Minimum of 10 years of technical experience with progressively increasing level of managerial responsibilities preferably in post-secondary educational or healthcare environment.

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- Proven experience managing 24/7 operation of substantial size and complexity.
- Evidence of strategic planning and process improvement
- Evidence of \$5M+ budget management and resource alignment

Knowledge/Skills/Abilities

- Strong leadership skills, innovation and independent thinking is critical
- Exemplary organizational skills, attention to detail is essential
- Strong analytical and problem solving skills is essential
- Proven ability to effectively manage multiple priorities is essential
- Excellent communication skills with a deep commitment to customer service is essential
- Excellent interpersonal skills and ability to build relationships at all levels of the organization, including issue resolution and consensus development among groups of diverse stakeholders
- Ability to exercise prudent judgement and high level of confidentiality is essential
- Ability to gain and maintain confidence of and work with all levels of management in the organization
- Significant business acumen, including knowledge and experience in contract administration and contract management
- Demonstrated experience in dealing with emergency preparedness and response.
- Demonstrated experience working with unionized staff
- Understanding of Building Code, Fire Code, TSSA regulations
- Demonstrated knowledge of design, operation, and maintenance of complex district energy systems
- Demonstrated understanding of energy conservation, sustainability regulations and project management

Nature and Scope

- **Contacts:** Communicates with senior leadership, colleagues, and CUPE employees within the Plant Operations to influence, motivate and promote the vision of the department and UW as a whole. Provides operational leadership, strategic advice, and counsel to senior leadership committees. Externally, the Senior Director communicates regularly with faculty & staff as well as industry partners to advance the aspirations of the University, to support daily operation, and to address critical communication in case of facilities related emergencies.
- **Level of Responsibility:** Responsible and accountable for all aspects of the role as outlined above with particular emphasis on operations, risk management, infrastructure, and strategic initiatives.
- **Decision-Making Authority:** Makes decisions on timelines, budget allocation, and staffing resources to ensure that UW physical infrastructure operates safely. Responsible for the management of risk & impact of assigned infrastructure on the entire campus operation (failure of critical infrastructure components would significantly impact campus operation, student experience, and research success).
- **Physical and Sensory Demands:** Demands typical of a senior position operating within an office environment with occasional site visits to trade shops, construction areas, mechanical rooms, and the Central Plant.
- **Working Environment:** Position has ongoing deadline pressure with rapidly evolving priorities that may compete with each other; an unpredictable workload; continuous interruptions by others on an ongoing basis; and exposure to emotionally charged situations.