



Navigating IESO LT2

ENERGY TRANSITION

As a leader in engineering energy infrastructure for more than 30 years, Stantec has designed more than 26,000 MW of sustainable power.

Our scope for renewable projects often includes both environmental and engineering services, which allow us to develop an integrated project execution plan, provide efficient quality technical deliverables, and help de-risk your projects. Single sourcing these services means less project and program management from an Owner and Developer perspective, and more effective and coordinated deliverables from one source of responsibility.

Every power project is a community project

Ontario has committed to working towards a sustainable future, with one of the initiatives being to qualify developers from the general market for non-emitting power generation through the Independent Electricity System Operator's (IESO) Long-Term 2 Request for Proposal. The goal of this procurement initiative is to contract 2,000 MW of power to be in operation by May 1st, 2030.

To help developers through this process, Stantec is well equipped to support engineering and environmental services at all stages from project siting through to construction and operation.

Our approach is to work with developers to design and execute projects that meet regulatory requirements and are within the IESO's implementation timelines. We are able to deliver these complex projects based on our well-developed working knowledge of regulatory process in Ontario and across Canada, and our ability to coordinate multi-disciplinary teams towards a common goal.

Our extensive engineering and environmental services knowledge and willingness to solve problems creatively allows our clients to optimize their projects and efficiently address site-specific concerns, from location determination to the electrical interconnection.

Stage 1: Pre-Contract

During Stage 1 of procurement, Developers are currently working to identify potential site locations for projects. Whether you need support in creating a regulatory roadmap, completing environmental constraint analyses, or want to have an interconnection study completed to support permitting and approvals, Stantec can provide all those services in a timely and tailored manner.

Below are the services Stantec can offer to support you through this stage:

Environmental Services

- Critical Issues Analysis/Fatal Flaw Assessments
- Land Suitability Analysis
- GIS Routing, Siting & Comparative Analysis
- Regulatory Planning & Support
- Schedule & Budget Risk Analysis And Mitigation
- Stakeholder Involvement
- Public Meetings, Open Houses & Workshops
- Natural Heritage Assessments (Aquatic, Terrestrial)
- Archaeology & Cultural Heritage Assessments
- Phase I/One Environmental Site Assessments
- Phase II/Two Environmental Site Assessments
- Remediation And Risk Assessment
- Excess Soil Management

Engineering Services

- Powerline Hosting Capacity Analysis
- Interconnection Support Services
- Locating Point of Interconnection
- Power Connection Line Route Planning
- Solar, Wind, & Storage Layout Support
- Solar & Wind Resource Assessments
- Conceptual High-Level Design
- Feasibility Studies
- High Level Capital Costing
- Desktop Geotechnical Review Services
- Topographical or LIDAR Data
- HV/LV Power System Studies
- IESO, HONI, & Distribution Support
- Application for Load or Power Generation Support
- Resource Assessment
- Engineering Services (Layout & Single Line Diagrams)
- Capital & Operating Cost Estimates
- Protection & Control Philosophy
- Support with Funding Applications (ITC)

Community Development Services

- Land Use Due Diligence & Regulatory Review
- Timeline And Fees For Potential Land Use Approvals
- Preliminary Concept Plan Development
- Initial Outreach/Consultation With Municipal Staff
- Obtaining Municipal Support Resolutions



Stage 2: Post-Contract

During Stage 2, Developers will be seeking environmental services to obtain regulatory approvals as well as engineering for detailed design. Stantec has a full suite of services to support and lead developers through this stage.

Below are the services Stantec can offer to support you through this stage:

Environmental Services

- Environmental Assessments (EAs) / Renewable Energy Approvals (REAs)
- Environmental Compliance Approval Applications
- Environmental Sector Activity Registry Registrations
- Public, Stakeholder, & Agency Consultation
- Indigenous Consultation & Engagement
- Noise & Vibration Modelling
- Ground & Surface Water Assessments
- Project Alternatives Analysis
- Impact Mitigation Design
- Administrative Hearing Preparedness
- Expert Testimony/Environmental Review Tribunal Support
- Construction Access Mapping
- Environmental Mitigation & Monitoring Plans
- Construction Inspection & Monitoring

- Environmental Compliance Training & Monitoring
- Excess Soil Management
- Emergency Planning and Spill Response
- Regulatory Agency Coordination
- Habitat Restoration
- Regulatory Compliance Monitoring
- Site Restoration and Monitoring
- Permit Close Out
- Right-of-Way Vegetation Management
- Avian Protection Planning, Training, & Management
- Asset Management Services
- GIS Infrastructure Inventory

Engineering Services

- Owners Detailed Engineering Design
- Utility Connection, Communication, Control & Monitoring Design SCADA, Site Security Services
- Power Production Testing Requirements
- Preparation of Engineering, Procurement, & Construction (EPC) Bid Packages
- Support Selection of EPC Bidders
- Review Selected EPC Bidder Design Packages (3-4) Iterations
- Construction Monitoring & Progress Reporting
- Commissioning Witness Testing
- Factory (FAT) & Site (SAT) Acceptance Testing
- Capital Cost & Operating Costs Refinement

Engineering Services

- Commissioning & Interconnection Support
- Engineer of Record Review Services
- Site Conformance Services
- Performance Guarantee Review Services

Community Development Services

- Pre-Consultation Meeting Request Coordination & Submission
- Planning Act Application Coordination & Submission (i.e., Official Plan Amendment, Zoning By-Law Amendment, Site Plan Approval, Consent/Severance, Minor Variance)
- Planning Justification Reports
- Site Visualization & 3D Renderings
- Site Plan Development
- Landscape Plans & Arborist Reports
- Public Meeting Coordination & Attendance
- Municipal Consultation & General Permitting/ Application Management & Coordination
- Civil/Stormwater Design And Reports (including Functional Servicing Report, Grading/Drainage Plan, Site Servicing Plan, Stormwater Management Plan & Stormwater Management Plan)
- Other Technical Reports/Assessments (including Cultural Heritage Impact Assessments, Traffic Impact Studies, Traffic Control Plans

Contact Us

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