



Request for Proposals Checklist for Solar PV Installations

This checklist provides Alberta municipalities a list of best practice items to include in procurement processes involving a request for proposal (RFP). This checklist is designed for systems compliant with Alberta's [Micro-generation Regulation](#)*.

Information to Provide to Applicants

Project Overview:

- Project description
- Objectives of the project (e.g. maximize available space, most cost-effective given a certain budget, offset all electrical energy consumption, etc.)
- System size, if known, or other characteristics which will determine size (e.g. space available, annual electricity consumption, available budget, etc.)
- Maximum project budget
- Project timeline
- Funding sources and/or grants or rebate programs being pursued for the project
- Contract type required if known and applicable (e.g. stipulated price, time and materials, etc.)
- Contact information for RFP inquiries

Building or Site Description:

- Desired location of PV system (e.g. ground, roof, etc.)
- Description and address of building or site, including images/schematics/building or site drawings, if available
- For rooftop systems include a description of available roof surface, angle (ex: flat or degree of pitch), orientation (e.g. north, south, east, west), roof age, structural integrity (note if a structural assessment has recently been completed), and include information on whether any other existing renewable energy systems or other onsite power generators (e.g. CHP) are present
- Site-specific design constraints (e.g. local design or aesthetics policies or limitations)

* The Alberta Electric Utilities Act Micro-Generation Regulation is available at: http://www.qp.alberta.ca/documents/Regs/2008_027.pdf

Load Profile & System Characteristics:

- Total annual electricity consumption of site from the past 3 years and the amount to be offset
- Information on the monthly electricity consumption (in kWh) of the site (a full year graph of monthly energy use including the past 3 years of data is ideal). This information can be found on the site utility bills.
- For systems with an annual load of 150kW or greater, information on daily or seasonal electrical load variations (e.g. describing the normal operating hours of the building and any unique characteristics about operation)
- Specify that the system must be grid-connected and compliant with the *Alberta Microgeneration Regulation*
- Specify details of any existing onsite electrical distribution system (e.g. 120/240V, 208V, 480V, single phase, three phase, etc.)
- Identify electricity retailer for the building or site
- Include other relevant electrical specifications/requirements

Scope of Work:

- Desired services may include any of the following items. Clearly describe which of the following items should be included in the proposal:
 - Solar PV system design
 - Building structural engineering assessment
 - Installation and commissioning of PV system (e.g. modules, racking, inverters, grid connections, etc.)
 - Completion of all permitting applications (e.g. building, electrical, and development), utility interconnection applications, and inspections, in order to comply with local regulations and codes
 - For ground mount systems, completion of a site survey to locate any underground services
 - Completion of applicable rebate or incentive application forms or documents
 - Inclusion of any data displays or data management and reporting systems
 - Training and/or operation and maintenance manuals
 - Arrangements for ongoing operation or maintenance
 - Any additional equipment warranties (beyond manufacturer warranty)
 - Any financing services to be included
 - Any other potentially necessary surveys or approvals that the project may require (e.g. Environmental assessments, etc.

Site Visit:

- If a voluntary site visit is to be offered to potential proponents, include all relevant details (e.g. date, time, onsite contact information)

Information to Request from Applicants

System Design:

- Description of the proposed PV system, including a preliminary design and drawings/renderings which illustrate the proposed array layout at the site (including array orientation and module tilt) and total area of the system
- Description of racking/installation or tracking options, specifications, and their effect on estimated electricity generation from the solar PV system, including equipment choices and specifications for solar modules and inverters
- Warranty details for the solar modules, inverter, and any other critical equipment
- Total rated capacity (watts DC), overall inverter efficiency (%), and estimated annual energy yield (kWh AC)
- Shading analysis for the proposed system
- Description of any data monitoring, tracking, or display equipment
- Description of operation and maintenance service plan, if applicable, and any associated subscription costs
- Estimated annual energy savings in kWh and \$ from the system as well as estimated simple payback based on projected energy prices and any other relevant economics

Company Details and Experience:

- Name and role of project team members (including any relevant certifications)
- Name of subcontractors and their role in the project
- Relevant experience and references for systems as similar as possible to the desired request (scale, mount type, etc.)
- Company safety certifications (WCB coverage, COR certification, etc.)
- Confirmation of company insurance certificates (general liability, or other insurance that may be required for the company to be working on municipal sites)

Work Plan and Schedule:

- Detailed proposed workplan and schedule for the project including time and duration of any activities that could disrupt regular operation

Project Costs:

- Total cost of the project
- Request a breakdown of the cost estimate based on the desired services; a simplified breakdown may be as follows:
 - Design costs
 - Permitting and engineering costs
 - Solar modules
 - Inverters and other electrical components
 - Racking and other mounting components
 - Monitoring systems
 - Installation labour costs
 - Other costs
- If any services are optional, request their costs be clearly separated from the required services, to enable a fair comparison of costs across proposals

Evaluation Process and Selection Criteria

Evaluation:

- Provide a high-level overview describing how proposals will be evaluated (e.g. number of reviewers, time, etc.)
- RFP evaluation criteria and weighting should be clearly identified and frequently include:
 - Company's relevant experience
 - Proposed system design, specifications and warranties
 - Overall cost and system economics
 - Electrical energy output
 - Quality and conformance of proposal

Submission Information:

- Provide contact information for someone who proponents can reach to have questions about the RFP answered, and provide a deadline for questions to be asked
- Provide clear details on how proponents are to submit their proposal, including:
 - Deadline for accepting submissions
 - Address and addressee for submissions
 - Desired format for submissions (e.g. digital and/or physical)
 - Number of physical copies (if required)

For questions about this checklist, please contact the MCCAC by email at contact@mccac.ca.