

Continuous Optimization Program

Refresh Your Building—service provider scope of work

FROM THE C.OP “REFRESH YOUR BUILDING” AGREEMENT:

4. Service Provider Scope of Work

This Scope of Work sets forth the professional services and technical assistance the Service Provider will supply for the BC Hydro Continuous Optimization Program.

If the Applicant has entered into a prior Program Services Funding for Commercial Buildings Agreement with

BC Hydro (the “First Agreement”), any historical continuous optimization project documentation from activities undertaken under that First Agreement will be used to guide activities under this Agreement. The Applicant acknowledges and agrees that ascertaining the condition of, and re-establishing the successful operation of previously installed measures under the First Agreement (the “Round 1 Measures”) is the focus of matters undertaken under this Agreement.

Round 1 measures consist of three different types: 1) measures which were implemented in Round 1 and continue to persist; 2) measures which were implemented in Round 1 but which are no longer active and providing savings; and 3) measures which were discovered in Round 1 but which were not implemented, e.g. due to cost effectiveness issues.

The Applicant will report to BC Hydro on all Round 1 Measures in its reporting under this Agreement. If Round 1 Measures are no longer operational, the cost of re-establishing the Round 1 Measures may be included as part of the Bundle of Measures contemplated under this Agreement.

4.1 Investigation Phase

The Service Provider will begin by reviewing and becoming familiar with the C.Op program documentation and implemented measures for the building from Round 1.

The Service Provider will then review Round 1 Measures as follows:

- (a) determine which measures implemented in Round 1 are still active. Collect evidence that the measures are still active (see the Round 1 Investigation Report under “Evidence of Proper Implementation” for what evidence may be useful).
- (b) determine which measures implemented in Round 1 are no longer active. Determine the cause of failure, as well as the scope and cost to return them to active status.
- (c) determine if any of the measures which were not implemented in Round 1 can now be implemented, and the scope and cost of implementation.
- (d) record and track investigation findings using the Findings Workbook provided by the Program and the historical Round 1 Findings Workbook as a guideline. From the Findings Workbook, produce a Master List of Findings, including potential measures for implementation, energy savings (calculated in Round 1), estimated implementation costs, and initial payback calculations.
- (e) submit Master List of Findings to the BC Hydro Program Representative. Support each finding with data that clearly indicates the deficiency or problem, including engineering calculations, trend or portable logger data plots and files, functional test results, site visit reports, and photographs, as appropriate. These should be generated during the investigation process.

- (f) meet with the Applicant and the BC Hydro Program Representative to present the Master List of Findings, and if required, assist the Applicant in selecting measures for implementation.
- (g) using the Program's template, produce the RCx Investigation Report, further detailing the results of the Round 1 review. If required, the RCx Investigation Report should provide information to assist the Applicant with implementation, including: recommendations for how to implement the selected measures, budget estimates or bid costs from contractor(s) for the selected measures, proposed Service Provider assistance (if chosen by Applicant), and the appropriate methods for verifying measures are operating as intended (refer to Documentation Guidelines).

The Service Provider is encouraged to find additional measures during the course of the Investigation phase which may lead to additional energy or cost savings opportunities for the Applicant.

4.2 Implementation Phase

Note: Program funding is not available for activities undertaken during the Implementation Phase.

If the Service Provider is a qualified recommissioning consultant:

- (a) the Service Provider shall develop an Implementation Plan, to establish the level of additional Service Provider assistance desired or warranted for each potential measure. Additional implementation assistance may include: preparing detailed scopes of work, writing detailed control sequences and schematics, working with in-house staff to implement and optimize measures, or providing full turn-key implementation services. As appropriate, total estimated costs should detail out Applicant contractor costs and Service Provider implementation assistance costs. It is encouraged that the basis for cost calculations be documented.
- (b) prior to work starting, review the contractor bids ensuring that the contractor scope of work adequately reflects the intent of the original recommendations developed by the Applicant and Service Provider, and include verification of performance sufficient to meet the Applicant's requirements for proof of improvement. If needed, answer questions that arise during implementation and provide clarification or advice on measures being implemented.
- (c) provide field review for all implemented conservation measures.

4.3 Completion Phase

The Completion Phase is only required if some measures need to be implemented. If no new measures were found, the Completion Phase is not needed. The tasks for the Completion Phase include, without limitation:

- (a) verify completion of each measure and update Findings Workbook with final implemented measures including final savings, costs, and payback calculations. To support the Implementation Summary Table (included in the Findings Workbook), selected measures with significant savings potential should have verification data demonstrating that the measures are operating as intended along with updated savings calculations. When feasible, verification data should include trends or functional test results, though other methods, such as copies of invoices, site visit reports, and before/after photos, may be acceptable.
- (b) conduct an in-house training presentation for the Applicant and the appropriate building operations personnel covering the new documentation, measures that were implemented, and requirements for ongoing maintenance and monitoring. Document the attendance of the building operations staff.
- (c) submit the Completion Report to document the implemented measures, including, but not limited to: date of completion of each measure, new or improved sequences of operation, the energy savings impact of the measures, the requirements for ongoing maintenance and monitoring of the measures, and contact information for the Service Provider, in-house staff, and contractors responsible for implementation.