



Specification
Residential Alternative
Bid

Sec. ORPC SP 003

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Preamble

Under the Electricity Act the Ontario Energy Board has issued the Distribution System Code that allows for the an Alternative Bid Process by developers that are required to provide capital contributions for electrical work related to their developments. This document outlines Ottawa River Power approach and requirements for alternative bid.

1. Design

Ottawa River Power will provide the electrical supply design for the new development. Revisions will be made to coordinate with other utilities. Once the design is complete any additional work required for revision of the design will be chargeable to the developer.

2. Material

Material for the contestable part of the work will be supplied by the developer. Inasmuch as the system will be turned over to ORPC the material will have to meet the requirements of Ontario Regulation 22/04.

The developer will provide certification of material (test reports, parking slips, etc.) providing evidence that all material has been manufactured to an ORPC or ESA acceptable standard.

ORPC will provide standards for major material. ORPC will provide and install transformers that are purchased on total life cost that includes transformer losses.

A material list will be supplied for the project indicating the type and quantity of material. This was prepared as part of the ORPC estimating process and is not warranted to be complete in all respects.

3. Standards

ORPC uses distribution standards developed by USF and ORPC. These standards are to be used for only ORPC work.

4. Contractor Approval

Contractors for alternative bid work have to be approved by ORPC. In order to be approved contractors should be trained and experienced in the type of work to be carried out.

The following information should be submitted to ORPC:

- a. Name of company, address, contact information
- b. Overview of company, expertise, area of work, staff complement, years
- c. WSIB Form 7 information
- d. Qualification of key trades staff for proposed work
- e. Reference projects of similar nature as project and customer references
- f. Proof of liability insurance



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5. Portion of Job Subject to Alternate Bid

The portion of the project that does not involve ORPC's in service plant is subject to alternative bid. Each project can be slightly different and demarcation points for each project will be provided by ORPC.

6. General Construction Notes

- a. Developer will responsible for all locates and coordination with other utilities.
- b. Witness testing of all high voltage equipment with 1000 volt megger is required.
- c. ORPC will supply and install all high voltage connection (elbows and terminators).
- d. ORPC is to be contacted for inspection of all underground civil works prior to backfilling.
- e. Labeling of all equipment is required per ORPC requirements. Service conduction to be labeled in each transformer with "911" address number using a tag and permanent marker. Spare ducts to be labeled in transformer pads indication where they are routed to. Primary cable to be labeled at elbow with system nomenclature as provided by inspector.
- f. As built drawing to be provided at completion of job.

7. Reference Material

The following information will be required for each project:

Specifications

SP001 Underground Civil Installation
MS003 Single Phase Pad Mount Transformer
MS006 Secondary Underground Cable
MS007 Primary Underground Cable

Standard Drawings

SDUG001 Transformer Base Installation
SDUG003 Transformer Base 1 Phase
SDUG004 Duct Bank Installation
SDUG005 Utility Trench Cross Sections
SDUG006 Transformer Base Grounding
SDUG008 Bollard Installation
SDUG010 Typical Service Trench

Other

Project Drawing(s)
Major Material List
Construction Standards (as required)
ON Reg 22/04



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8. Inspection

ORPC will provide an inspector on 24 hours notice during normal working hours to inspect the construction as it proceeds. ORPC should be contacted to attend the preconstruction site meeting.

When the job is complete and ready to be turned over to ORPC a final inspection will be done by ORPC with a representative of the developer. All required documentation for material and testing should have been submitted and reviewed prior to this inspection.

Following final inspection ORPC will lock off transformers in preparation for the energization of the system.

9. Warranty of Work

Developer will warrantee the work completed under alternative bid for a period of one year after the project has been completely energized. Incomplete, failed or defective work will be referred to the developer for correction or if required to restore power work will be completed by ORPC and billed to the developer.

10. Provision of Costing Information

In order to allow reporting of capital plant costs to the Ontario Energy Board the developer will provide cost plant installation cost for the alternative bid work broken down by accounts as set out in the OEB's Uniform System of Accounts (available on OEB web site) (i.e. Primary cable, transformers, secondary, metering, duct/trenching, etc.)

11. Street Lighting

Street lighting is not part of the alternative bid. However, municipal street lighting is provided by the developer to the municipality and is turned over the municipality. Inasmuch as the street lighting system is tied closely to the electrical distribution system the installation needs to be coordinated.

ORPC carries out the operation and maintenance of the street lighting systems for Pembroke, Beachburg and Almonte and as such will be involved in the standards for material and installation on behalf of the municipality to assure compatibility with existing equipment.

Rev	Rev Date	Revision	Approved
0	June 2, 2008	New	D. Fee, P.Eng