



## **Specification No. 1159**

### **Tamworth 330kV Substation Civil and Electrical Works - Two 330kV Shunt Reactors and Associated 330kV Switchbays**

#### **Summary of Specification**

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The following summary indicates the general nature of the work for which TransGrid desires tenders to be submitted. It is issued to enable an assessment to be made whether the Specification documents should be obtained from TransGrid for tendering purposes. It does not form part of the Specification and must not be included as part of your offer.

The Specification documents are available for a non-refundable fee of \$220.00. The Specification documents can be downloaded, or if requested a CD will be issued to an intending Tenderer.

#### **Extent of Work**

The Works cover the civil and electrical work required at Tamworth 330kV Substation to install the HV equipment in two new 330kV Switchbays to connect two new 330kV 50MVAR Shunt Reactors to the HV system.

The Works shall include the project management, supply and installation of all materials, plant, tools and labour to complete the activities shown below.

The main work activities covered by the Specification are:

- a) Provision of all site facilities required by the Contractor to complete the works and their satisfactory removal and restorations upon completion of the Works,
- b) Fence the work area to provide an area of "disconnected apparatus" in accordance with the Principal's High Voltage Safety Rules
- c) Construction of No.1 and No.2 330kv Reactor runway slabs and compounds
- d) Construction of spill oil drainage systems associated with No.1 and No.2 330kV Reactor compounds
- e) Construction of footings and conduits for all No.1 and No.2 330kV Reactor switchbay equipment to the Principal's design.
- f) Erection of 330kV plant and associated steel structures and post insulators not installed by others including HV and LV connections and earthing for all erected structures and plant.
- g) Supply and installation of new earth grid, including earth mats and earthing points in two new Reactor bays.

- h) Supply of steelwork for the Reactor compound access stairs, Surge Diverters supports, Post Insulator supports, ac/dc distribution box supports.
- i) Coordinate with the installation Contractors for the 330kV Shunt Reactors, 330kV Circuit Breakers and 330kV Disconnectors who will be completing their works in parallel with the works for Contract 1159.
- j) Install control and protection panels within the control room with Principal supplied panels and install all panels, relays and secondary wiring between panels and switchgear to Principal designs.
- k) Connect the 330kV Shunt Reactors to the HV Network (330kV Busbars).
- l) Installation of Principal supplied cables between the control room and the No.1 and No.2 330kV Shunt Reactors and associated switchbays
- m) The Contractor shall perform all pre-commissioning work, provide all checksheets and coordinate with the Principal's staff during final commissioning works.
- n) Relocate switchyard lighting as per Principal's design
- o) Supply and install lightning protection pole to Principal's design.
- p) Demolish existing (old) No.1 Reactor and associated Switch bay which is connected to 84 Liddell 330kV Transmission Line and dispose of old HV equipment including reactor and oil. Disconnection and disposal of all HV conductors and fittings, cabling and associated electrical equipment in the bay and back to and including the control room.

### **Contract Period**

The work is programmed to be carried out over a twelve (12) week period during February - May 2008. The Contractor shall be prepared to implement additional work program arrangements to ensure the completion of work within the allotted period.

### **Site Inspection**

A mandatory Site Inspection for Contract 1159 will be conducted at 10am on Tuesday 15th January 2008 at Tamworth 330kV Substation located at Burgmanns Lane (off New England Highway), Tamworth, NSW .

### **Contract Closure**

Tenders shall be lodged by utilising TransGrid's eTendering website at [www.transgrid.com.au](http://www.transgrid.com.au), or by hand-copy, in a sealed cover with Specification number and title clearly endorsed thereon, including a duly signed and dated paper of the Form of Tender and **all** completed Schedules in TransGrid's Tender Receptacle located on Level 12, 201 Elizabeth Street, (Cnr Park and Elizabeth Streets), Sydney, NSW 2000 before 2.00pm (Sydney Time) on Tuesday 29th January 2008.

### **Further Information**

Further technical information may be obtained from Peter Hamilton on telephone (02) 8204 6373.

Tendering and commercial information may be obtained from Karen Mackinnon on telephone (02) 9284 3280.