
Addendum to Appendix A – WDT433




Addendum to Final Phase I Study Report

January 18, 2011

This study has been completed in coordination with Southern California Edison Cluster Large Generator Interconnection Procedures (CLGIP) for Interconnection Requests in a Queue Cluster Window

1. Executive Summary

[REDACTED], an Interconnection Customer (IC), received a Queue Cluster 2 Phase I (QC2) Study report dated November 12, 2010 for their Interconnection Request (IR) pursuant to the Cluster Large Generator Interconnection Procedures ("CLGIP") under the SCE Wholesale Distribution Access Tariff ("WDAT") for their proposed Tulare Solar Power Project (Project).

Subsequent to the release of that report, the IC has requested that the report be revised to reflect the IC's intent to build the required 66 kV SCE Substation and the entire length of the 66 kV Gen Tie line from the substation to the IC's site.

As requested by [REDACTED], SCE has issued this Addendum to the WDT433 QC2 report. This Addendum documents the changes to the scope and costs associated with the removal of the required SCE Substation and Gen Tie construction, including applicable portions of the EH&S and Real Properties scopes. It also includes additional costs for design review, construction inspection, and substation acceptance testing that will be required for oversight of the IC's design and construction of the SCE substation.

Summary of changes:

Remove from the Interconnection Facilities scope and cost the dead-end structures, conductors, insulators, and hardware assemblies between the last generator-owned structure and the Substation dead-end rack at the 66 kV SCE Substation that are required to bring the 66 kV Gen Tie into the substation;

Remove from the Interconnection Facilities scope and cost the dead-end structures, disconnect switches, surge arrestors, voltage transformers, relays, and ancillary equipment required to terminate the 66 kV Gen Tie at a dedicated double breaker position at the 66 kV SCE Substation;

Remove from the Interconnection Facilities scope and cost the EH&S cost elements associated with the Gen Tie.

Remove from the Distribution Upgrades scope and cost all major and ancillary equipment and structures associated with the 66 kV SCE Substation;

Remove from the Distribution Upgrades scope and cost the EH&S and Real Properties cost elements associated with the 66 kV SCE Substation;

Add to the Distribution Upgrades scope and cost the oversight functions of engineering review of design, inspection during construction, and substation acceptance testing.

As a result of these changes, the Interconnection Facilities cost estimate for the WDT433 project dropped from \$1,892,000 to \$115,000. The Distribution Upgrades dropped from \$19,306,000 to \$12,960,000.

The non-binding SCE cost estimate of Interconnection Facilities¹ to interconnect the Project is approximately **\$115,000**, including ITCC². The maximum cost responsibility for the SCE Network Upgrades³ to interconnect the Project is **\$434,000**, and the cost of the Distribution Upgrades⁴ is **\$12,960,000**, including ITCC.

The cost estimate and maximum cost responsibility for the PG&E Network Upgrades⁵ to interconnect the Project is **\$922,000**.

Table 1-1 below shows the revised costs. The estimated time to construct is also noted.

¹ The transmission facilities necessary to physically and electrically interconnect the Project to the CAISO Controlled Grid at the point of interconnection. These costs are not reimbursable.

² Income Tax Component of Contribution.

³ The additions, modifications, and upgrades to the CAISO Controlled Grid required at or beyond the Point of Interconnection to accommodate the interconnection of the Generating Facility to the CAISO Controlled Grid. Network Upgrades shall consist of Delivery Network Upgrades and Reliability Network Upgrades.

⁴ These upgrades are not part of the CAISO tariff and are not reimbursable

⁵ The PG&E transmission facilities, other than Interconnection Facilities, beyond the point of interconnection necessary to physically and electrically interconnect the Project safely and reliably to the CAISO Controlled Grid

Table 12.1: Upgrades, Estimated Costs, and Estimated Time to Construct Summary

Type of Upgrade	Upgrade (May include the following)	Description	Estimated Cost x 1000	Estimated Time to Construct (Note 3)
PTO's Interconnection Facilities (Note 1)	Transmission, Substations, Metering Services Organization, Power System Control, Telecommunications, Real Properties, Transmission Projects Licensing, and Environmental Health and Safety	Non-network facilities needed to enable interconnection	\$115	12 Months
Plan of Service Reliability Network Upgrades	None	Direct Assigned Network Upgrades needed to enable interconnection.	N/A	N/A
Reliability Network Upgrades	Transmission, Substations	Allocated Network Upgrades needed to maintain system Reliability	\$434	48 Months
Delivery Network Upgrades	None	Network Upgrades needed to support Full Delivery, if requested	N/A	N/A
Distribution Upgrades (Note 2)	Transmission, Substations, Power System Control, Telecommunications, Real Properties, Transmission Projects Licensing, and Environmental Health and Safety	Non-CAISO SCE Distribution Facilities	\$12,960	24 Months
Total SCE Allocated Cost			\$13,509	48 Months
PG&E Reliability Network Upgrades	Transmission, Substations	Allocated PG&E Network upgrades needed to maintain system Reliability	\$922	36 Months
Total PG&E Allocated Cost			\$922	36 Months

Note 1: The Interconnection Customer is obligated to fund these upgrades and will not be reimbursed.

Note 2: These upgrades are not identified in the ISO tariff, and are not reimbursable. Allocated costs may change if all projects responsible for these upgrades do not execute LGIAs.

Note 3: The estimated time to construct (ETC) is for a typical project; schedules duration may change due to number of projects approved and release dates. Stacked projects impact resources, system outage availability, and environmental windows of construction. Assumption is SCE will need to obtain CPUC licensing and regulatory approvals prior to design, procurement and construction of the proposed facilities required to serve the interconnection customer and prerequisite facilities are in service.

The remainder of the report is unchanged.