Large Generator Interconnection Procedures

PLEASE NOTE: These timelines are illustrative only, and should be considered as general guidance from past performance of LGIP studies for a wide variety of projects. Different projects may require studies of very different levels of complexity. Queue activity may require restudies. To the extent possible, BPA follows the timelines for studies set forth in the LGIP, and fulfills its procedural obligations in regard to notifications of any needs to extend those timelines. The site permitting and NEPA processes may add an unpredictable period before an LGIA can be tendered.

LGI Request Submitted to Interconnection Inbox.

Request No. Assigned, Queue date confirmed, request posted.

Feasibility Study (FES) deposit Interconnection \$10,000 Initial Deposit (FES may be skipped by System Impact Study mutual agreement) (ISIS) deposit Required \$50,000 \$10,000

> OPTIONAL: \$10,000 deposit in lieu of Site Control. Lack of Site Control at this point may render Initial and Optional deposits non-refundable.

*These deposit amounts are mandated by the LGIP and allow for no flexibility.

NEPA Compliance

Complexity of BPA review contingent upon BPA action. Varies from Categorical Exclusion to full EIS; many projects covered by Tiered ROD process. Fully funded by Customer; required deposits will be discussed at the Scoping Meeting. Duration largely contingent on Customer's diligent pursuit of site certification and/or permitting. BPA's NEPA-compliant decision document MUST be complete before the LGIA is tendered.

Validation/Cure Process

- Request is acknowledged within 5 business days (OATT 3.4.2).
- Cures, 15 to 25 business days (OATT 3.4.3 & 3.7).
- Scoping meeting is scheduled within 10 business days after receipt of a valid request (3.4.4).

Feasibility (FES) Study

- Preliminary evaluation of the feasibility of the proposed interconnection to the Transmission System; alternatives considered. Powerflow studies primarily test thermal impacts.
- 45 days (may be extended).
- FES may be skipped by mutual agreement. Review meeting.

Interconnection System Impact (ISIS) Study

- Site control is due upon execution of the system impact study agreement, as stated in OATT Section 7.2, and in BPA cover letters.
- Evaluates the impact of the proposed interconnection on the reliability of the Transmission System.
- Single POI. Includes transient and stability analyses.
- Specifies the scope of the necessary interconnection facilities and any upgrades to the transmission system.
- Defines any necessary Remedial Action Schemes and the associated C & C equipment.
- 90 days (may be extended). Review meeting.

Interconnection Facilities (FAS) Study

Facilities Study (FAS) Deposit

\$100,000

- Specifies and estimates the cost of the equipment, engineering, procurement and construction work needed to implement the conclusions of the ISIS in accordance with Good Utility Practice.
- Defines the physical and electrical connection to BPA's FCRTS.
- Customer selects 90-day or 180 day option, either may be extended
- Draft report; Review meeting; Final report 30 days later.

Engineering & Procurement (E & P) Agreement

- Optional pre-funding to permit engineering design and ordering of long-lead items.
- Not offered until completion of FAS, Final PRD, and internal BPA Work plan scheduling processes have been completed. Typical E & P deposit: is +/- (\$2-4M); Subsequent modifications up to +/- \$20 million (e.g costs of Transformer, tower steel, breakers etc etc.).
- No groundbreaking or construction.

Executed

LGIA

Facilities Construction, Back feed. Synchronization Commercial Operation (OR90 Requirements & TO

Checklist)

7 — 14 +/- weeks

13 — 30 +/- weeks

The Customer has 30 calendar days to execute each study agreement. Failure to comply results in a 'last-chance' cure period, 15 business days (OATT 3.7). Prospective customers should read the LGIP and the associated **Business Practice.**

The sooner BPA receives the agreement, the sooner BPA can start work on the study.

The ISIS report provides Typical Estimates (incl. ~40% contingency), based on Preliminary PRD.

First realistic approximation of Customer and BPA commitments for the interconnection.

The Final FAS report provides budget quality estimates based on the Unsigned Final PRD.

2 — 8 +/- weeks

Receipt of the Initial Deposit and either Site Control documentation or additional deposit in lieu, is part of validation (OATT 3.4.1).

The deposits are carried forward to fund the FES, ISIS and FAS.

13 — 50 +/- weeks

These estimates form the basis for BPA work planning and scheduling.