

General Non-FERC Interconnection Process for Wholesale Generating Facilities (12 kV or Higher)

This document is intended to provide an overview of the major steps involved with applying to and receiving permission from APS to interconnect a new wholesale generating facility to APS's electric transmission or distribution system through APS's Non-FERC interconnection process.

The Non-FERC interconnection process should only be used by generators who want to sell their power only to the host utility (APS). Projects that wish to interconnect to APS's electric system and maintain a right to wheel and sell power to other entities as well as APS must use the FERC interconnection process. APS's FERC interconnection process is included within APS's tariff posted on APS's OASIS site at: http://www.oatioasis.com/azps/index.html.

Please read this document carefully as it summarizes the process, relevant documentation, major steps, and legal agreements that are necessary for Non-FERC interconnection.

- 1. Recommended (Step 1 is not required):
 - Customer reviews the overall process for interconnecting a new Generating Facility (GF) to APS's electric system via this general process document.
 - Customer reviews the Interconnection Requirements posted on the Wholesale Non-FERC Interconnections section of the www.aps.com/dg website
- 2. Customer selects the initial phase of study (Feasibility, System Impact, or Facilities) and submits a completed Non-FERC Interconnection Study Agreement to APS along with the study deposit under the agreement. The Non-FERC Study Agreement is available on the Wholesale Non-FERC Interconnections section of the www.aps.com/dg website.
- 3. Customer proceeds through the entire interconnection study process and completes a Facilities Study with APS.
- 4. Customer and APS enter into a **Construction Agreement** which provides for the payment for and installation of new APS-owned electric facilities to accommodate the interconnection of the Customer's GF. Customer shall make any necessary up-front payments to APS under the Construction Agreement.
- 5. Customer and APS enter into a **Trenching Agreement** that: 1) identifies the underground facilities that will be installed by the Customer to facilitate the

- interconnection, which will turned over for APS ownership, and 2) sets forth the technical specifications for such underground facilities.
- 6. Customer starts construction and installation of the Generating Facility with respect to Customer-installed facilities.
- 7. Similarly, APS initiates its activities with respect to its scope of work under the Construction Agreement.
- 8. (During Construction Period) Customer and APS (via the APS Project Manager) prepare the Non-FERC **Interconnection Agreement** (IA) that sets forth all of the legal terms and conditions that govern the interconnection of the project to APS's electric system over the life of the interconnection. APS's standard Non-FERC Interconnection Agreement is posted on the Wholesale Non-FERC Interconnections section of the www.aps.com/dg website.
 - The IA must be executed prior to commercial operation of the project.
 - The IA will also include the terms and conditions, and annual payment for, APS operations and maintenance services of new APS-owned facilities built to accommodate the interconnection of the Customer's GF.
- 9. (During Construction Period) Customer and APS (via the APS Project Manager) prepare an **Operating Agreement** that specifies the operating protocol for establishing safe electrical clearance of the project when it is in operation. Such an agreement is necessary to document the steps that the Customer must take to safely isolate his system electrically from APS's system, and vice-versa. The Operation Agreement is not typically provided on APS's website and must be provided by the APS project manager. This agreement must be in place prior to energizing the new APS-owned facilities built to accommodate the interconnection of the Customer's GF.
- 10. (During Construction Period) Customer and APS enter into an **Electric Supply Agreement** (ESA) that specifies the terms and conditions for providing APS-delivered station power to Customer's GF. The ESA is intended to address Customer's purchase of power from APS for when the GF is not providing that power directly. The ESA is not typically provided on APS's website and must be provided by the APS Customer Account Manager, who is a different person than the APS Project Manager managing the overall interconnection process. Prior to executing the ESA, Customer must identify which applicable APS rate schedule it wants to purchase station power under. The ESA must be in place prior to provision of any station power to the project.
- 11. (During Construction Period) Customer submits documentation to FERC necessary to register the GF as a **Qualifying Facility**, if appropriate. For more information, refer to the relevant provisions under Interconnection Agreement that govern QF certification and documentation.
- 12. Final, ready to be executed drafts of the Operating and Interconnection Agreements are completed and set aside for execution just prior to initiation of

- commissioning testing of major equipment (e.g. inverters) and delivery of test energy to the grid.
- 13. Customer substantially completes the construction of key facilities associated with the GF. In particular, Customer completes the construction and installation of the communication shelter, commissions required relays, switchgear, transformers, and other equipment required for energization of the switchgear that will in turn allow for step-by-step project commissioning.
- 14. Approximately 5 to 6 weeks prior to the planned interconnection date of the GF, Customer requests a "courtesy electrical inspection" from APS. The courtesy inspection is intended to identify any deficiencies in the constructed project from the APS-reviewed drawings and/or APS's Interconnection Requirements.
- 15. APS provides the courtesy inspection and provides a written punch list of items to be remedied to the Customer.
- 16. Customer remedies punch list items and requests a formal final inspection from the AHJ.
- 17. Customer receives successful inspection from the Authority Having Jurisdiction (AHJ) for the facilities in Step 13 and provides the Green Tag for such facilities to APS.
- 18. Customer requests and receives successful formal (i.e., not a courtesy) inspection from APS for the facilities listed in Step 13.
- 19. Customer receives successful inspection from the Authority Having Jurisdiction (AHJ) for all remaining facilities associated with the GF and provides the Green Tag for such facilities to APS. (This step may be accomplished via the same AHJ inspection as above.)
- 20. Customer receives successful inspection from APS for the remaining facilities associated with the GF. (This step may be accomplished via the same APS inspection as above.)
- 21. APS and Customer execute the **Operating Agreement** and the **Interconnection Agreement**.
- 22. APS installs and tests the remote terminal unit (RTU) that allows for APS remote disconnect of the GF.
- 23. Customer signs a Notice of Energized Equipment form and APS sets the main billing meter and energizes the switchgear.
- 24. <u>Project Commissioning Tests</u>: APS performs successful commissioning tests for the following:
 - Transfer Trip, Relays, Breakers, Remote Disconnect, and Inverter Shutdown Tests (if applicable)
 - Test energy is typically delivered to the APS electric system during commissioning testing.

- 25. Customer provides appropriate documentation to APS **demonstrating QF status** as required under the Interconnection Agreement.
- 26. APS provides either a Conditional Permission to Parallel or a Final Permission to Parallel via a signed letter. Such permission will only be granted if <u>ALL</u> of the following milestones have been met:
 - Green Tag or Letter in Lieu delivered to APS
 - Interconnection and Operating Agreements executed
 - QF documentation delivered to APS as required under the Interconnection Agreement
 - All punch list items from the final inspection report have been remedied
- 27. Once permission to parallel is granted, Customer may electrically energize the GF and initiate commercial operation.
- 28. APS and Customer complete any financial true-ups that are appropriate under the Construction Agreement. This process takes 3-6 months after interconnection.