DOI BIA Utility Scale Solar Energy Development Workshop February 20 – 22, 2013

#### **APS Interconnection Process**

Linda Henrickson Section Leader, Interconnections Development



#### **APS Interconnection Process**

- Large Generator Interconnection Process (LGIP) – 21 MW and above
- Small Generator Interconnection Process (SGIP) – Up to 20 MW
- Frequently asked questions about APS SGIP/LGIP
- Interconnection to Joint Participation Projects



# LGIA Valid Application

- Initial Deposit
  - 160K up to 75MW
  - 250K for 76MW and above
- Completed Interconnection Request
- Demonstration of Site Control or;
- Additional Deposit in Lieu of Site control
  - 160K up to 75MW
  - 250K for 76MW and above



# **LGIA Scoping Meeting**

- Scoping Meeting held within 30 calendar days of receiving a Valid Application
- Customer to determine interconnection point to be studied w/in 5 business days of Scoping Meeting
- System Impact Study Agreement is sent to customer w/in 5 business days of receipt of interconnection point designation
- Customer has 30 calendar days to execute System Impact Study Agreement



# System Impact Study

- Begins after the close of Cluster Window
- All applications received during the Cluster Window and in electrical proximity of each other will be studied together
- Identifies impacts to APS's transmission system
- Identifies costs of interconnection facilities and Network Upgrades required to facilitate interconnection
- Study time is 90 calendar days unless there is a backlog



### **Affected Systems**

- Other electric systems that may be affected by the proposed interconnection
- Affected Systems have the opportunity to review the study plan and results and request additional study work be performed to determine potential impacts
- Affected Systems may elect to participate in Scoping Meeting and study results meetings



## System Impact Study Results

- SIS Results meeting is held approximately 10 business days after the customer receives the report
- APS meets with customer to review technical aspects of the report and discuss next steps
- Customer has 30 calendar days to determine if they want to proceed to Facilities Study and execute study agreement



## **Facilities Study**

- Begins after execution of study agreement
- Further defines the cost of interconnection facilities and network upgrades
- Further defines milestone dates
- Study time is 90 calendar days unless there is a backlog
- Customer has 30 calendar days after study results meeting to provide comments to study results



## LGIA

- Draft LGIA is sent to customer after Facilities study is finalized
- Customer has 30 calendar days to sign LGIA
- Customer can request to negotiate for up to 60 calendar days
- Security for LGIA must be posted 30 calendar days prior to start of engineering, procurement and construction



## **SGIA Valid Application**

- Initial Deposit \$1,000 Additional deposits will be required for studies
- Completed Interconnection Request
- Demonstration of Site Control Additional Deposit in Lieu of Site Control is not acceptable



# **Study Process**

- Scoping Meeting
- Feasibility Study Optional
- System Impact Study
- Facilities Study
- Study process is similar to LGIP however, some timeframes may be slightly different



### SGIA

- Draft SGIA is sent to customer after Facilities Study is finalized
- Customer has 30 business days to sign SGIA
- Security for SGIA must be posted 20 business days prior to start of engineering, procurement or construction



# Frequently asked questions about the APS SGIP/LGIP



#### **Cluster Windows**

As of 4/1/13 Cluster Windows for both SGIA and LGIA are:

- April 1<sup>st</sup> through September 30<sup>th</sup>
- October 1<sup>st</sup> through March 31<sup>st</sup>



## Site Control

- Private Land
  - An Easement or option for easement
- Federal Land
  - A final, non-appealable permit or license
  - A Right of Way Grant
  - Finding of no Significant Impact (FONSI)
- State Land
  - A final, non-appealable permit or license
  - Letter in Support of Site Control

Must have sufficient Detail to confirm that (a) the land rights conveyed are for the purpose of installing and operating the Generating Facility and (b) sufficient acreage is provided for the installation



## **Reduction of Project Size**

- Customer can reduce project size by
  - 60% prior to start of System Impact Study
  - 15% prior to start of Facilities Study
- All other requests for reductions will be reviewed to determine whether or not it constitutes a Material Modification



## **Study Costs**

- Customer pays actual cost of study work
- True-up occurs after each study for SGIP and after final study for LGIP
- Customer is eligible for a refund if the deposit amount is higher than actual costs
- For LGIA there may be a portion of the deposit that is non-refundable if the customer withdraws after the start of the System Impact Study Agreement



## **Network Upgrades**

- APS provides Transmission Credits for repayment of facilities identified as Network Upgrades to customers that are taking Transmission Service from APS
- Any amount not used in Transmission Credits will receive a cash repayment at the end of 20 years



#### Suspension

- LGIA
  - Customer can suspend activities for up to three years
  - However, project must be able to meet Commercial Operation within seven years of application date
- SGIA
  - No Suspension Rights



## **Joint Participation Projects**

- Multiple Owners combination of FERC Jurisdictional and Non-Jurisdictional Entities
- Usually applies to 500kV lines
- Application submitted to Operating Agent
- All owners participate in study process
- All owners negotiate and sign IA
- Interconnector can sell to any owner at Point of Interconnection



#### **Contact Information**

#### Linda.Henrickson@aps.com 602-371-5735

#### www.oatioasis.com/azps/index.html



## **Questions?**

