



**Pacific Gas and Electric Company**

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**Distribution Group Study Process Workshop**

**June 6, 2012**

## **Distribution Group Study Process- Topics for Today's Discussion**

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- **Two Group Studies Annually**
- **Steps and Timelines are generally Consistent With The Revised Rule 21 Independent Study Process**
- **Joining a group study**
- **Grouping Interconnection Requests (IR) to form a Group**
- **Interaction between Group Studies and Independent Study Applicants**
- **Cost Allocation Among Grouped IR**
- **Interaction between electrically dependent Rule 21 and WDT projects**

# Distribution Group Study Process- Two Studies Annually

2013												2014											
M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D		

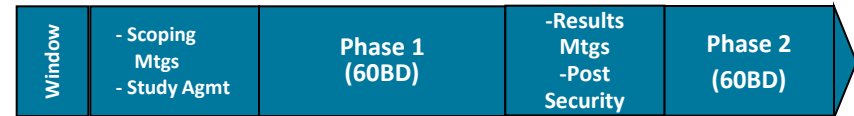


March 1-31



September 1- 30

March 1-31



- Group Study Process timelines and steps are generally consistent with the Revised Rule 21 Independent Study Process (See slide 19 for details).
- If the volume of Applicants exceeds a maximum number, additional time will be required to complete the necessary studies and interconnection agreements. Additionally, there may be a limit on the number of applicants that can be studied in a DSG.
- The times shown here are the maximum allowed by the tariff. Actual times may be shorter due to 1) less time than allowed by the tariff, and/or 2) the applicant(s) waive the Facility Study.

# Group Study Landscape- Distribution and Transmission- Short Term

2013												2014												2015											
M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	

C5WD: Phase 2      Execute GIA

C6- WD Phase 1      Phase 2      Execute GIA

C6-RD1      Phase 1      Phase 2

C6-RD2      Phase 1      Phase 2

C7- WD Phase 1      Phase 2      Execute GIA

C7-RD1      Phase 1      Phase 2

C7-RD2      Phase 1      Phase 2

## Notes

Planned Transmission and WDT Cluster

Proposed Rule 21 Distribution Group

# Group Study Landscape- Distribution and Transmission- Long Term

PG&E proposes to seek approval from FERC to conform its WDT process with the Rule 21 DGSP so that electrically dependent Rule 21 and WDT distribution IRs may be studied together.

2013												2014												2015											
M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	

C5WD: Phase 2      Execute GIA

C6- WD Phase 1      Phase 2      Execute GIA

C6-RD1      Phase 1      Phase 2

R21/WDT      Phase 1      Phase 2

C7- WD Transmission Only Phase 1      Phase 2      Execute GIA

R21/WDT      Phase 1      Phase 2

R21/WDT      Phase 1      Phase 2

## Notes

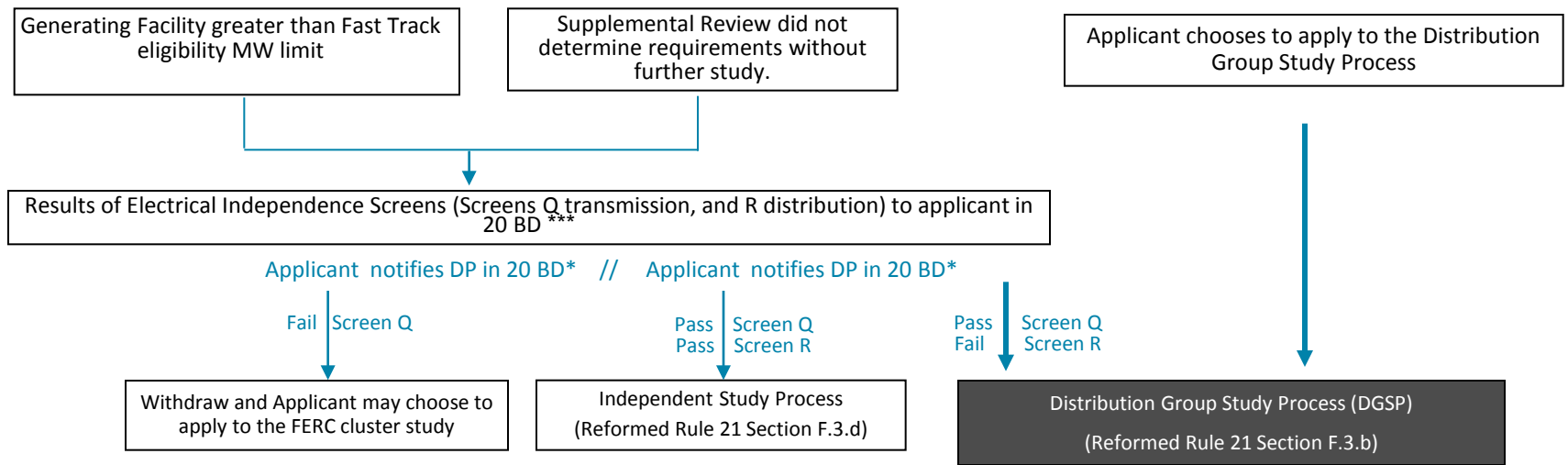
Planned Transmission and WDT Cluster

Proposed Combined Rule 21 Distribution Group

# Distribution Group Study – Joining A Group Study

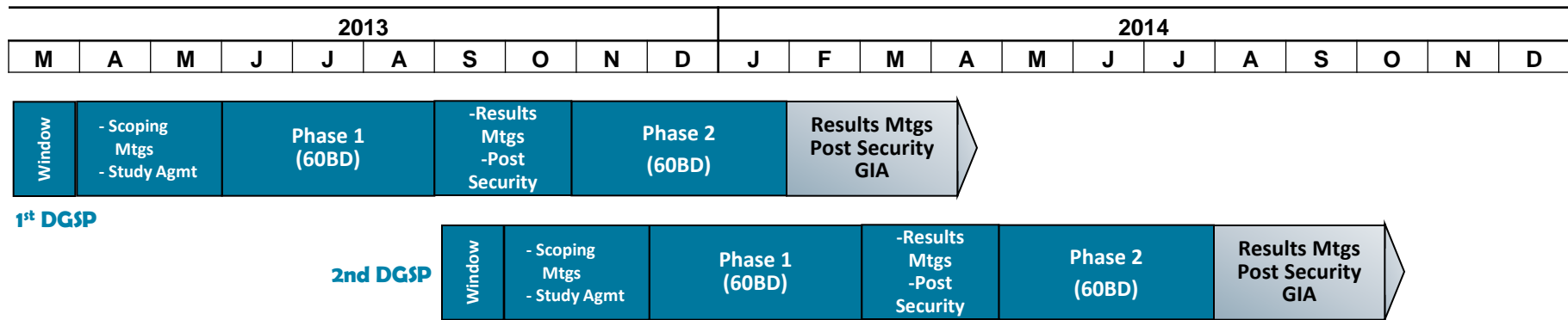
**1. Existing Applicants failing Fast Track- Passing Screen Q, but failing Screen R may choose to continue moving forward though the interconnection process in a DGSP**

**2. New Applicants Applying to a Window- Two defined periods during which Applicants may apply to a DGSP.**



Screen Q- Transmission Electrical Independence Screen  
 Screen R- Distribution Electrical Independence Screen

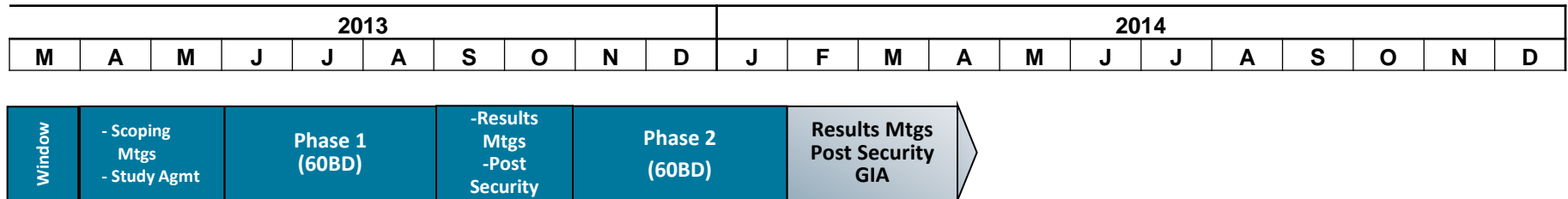
# Distribution Group Study Process- Joining a Group Study



## Existing Interconnection Requests

- Applicants passing Screen Q, but failing Screen R may choose to continue moving forward though the interconnection process as part of a group study.
- Applicants notifying the DP by March 31<sup>st</sup> of their choice to continue will be eligible to participate in the first DGSP.
- Applicants notifying the Distribution Provider after March 31<sup>st</sup> and by September 30<sup>th</sup> of their choice to continue will be eligible to participate in the second DGSP.

# Distribution Group Study Process- Joining a Group Study



## New Interconnection Requests

### **Joining the 1st Group Study: Window closes March 31<sup>st</sup>**

- Applicants are encouraged to begin the process earlier than the close of a window since the Interconnection Request (IR) validation process allows up to 55 business days for an IR to be validated, depending on the time it takes an Applicant to provide required information.
- Applicants must submit all information necessary for a complete/valid IR no later than 20 BDs after the close of the DGSP Window or 10 BD after the DP first provides notice that the IR was not deemed complete, whichever is later.
- In addition, Valid IR by March 31<sup>st</sup> that has completed scoping meeting and executed a study agreement by June 1 will be eligible for the 1<sup>st</sup> DGSP.
- Valid IR by March 31<sup>st</sup>, that has completed scoping meeting and executed a study agreement after June 1 will be eligible for the 2<sup>nd</sup> DGSP.



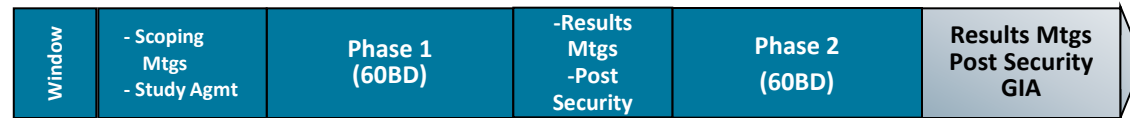
# Distribution Group Study Process- Joining a Group Study

2013										2014											
M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D



**1<sup>st</sup> DGSP**

**2<sup>nd</sup> DGSP**



## New Interconnection Requests

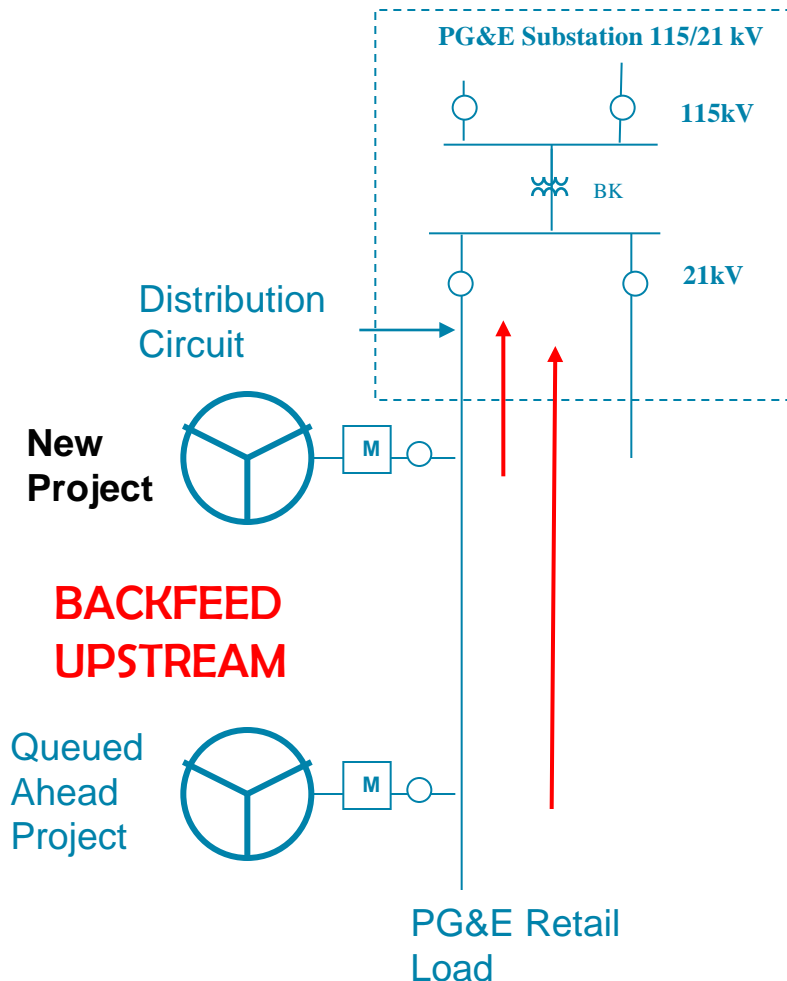
### **Joining the 2<sup>nd</sup> Group Study: Window closes September 30th**

- Applicants are encouraged to begin the process earlier than the close of a window since the Interconnection Request (IR) validation process allows up to 55 business days for an IR to be validated, depending on the time it takes an Applicant to provide required information.
- Applicants must submit all information necessary to for a complete/valid IR no later than 20 BDs after the close of the applicable DGSP or 10 BD after the DP first provided notice that the IR was not deemed complete, whichever is later.
- In addition, a Valid IR by Sept 30<sup>th</sup> that has completed scoping meeting and executed a study agreement by December 1 will be eligible for the 1<sup>st</sup> DGSP.
- Valid IR by Sept 30<sup>th</sup> that has completed scoping meeting and executed a study agreement after December 1 will be eligible for the 1<sup>st</sup> DGSP of the following year.

## Distribution Group Study Process- Grouping IRs to Form a Group

- For each Interconnection Request (IR) received during the same group application Window, the Distribution Provider may develop one or more Study Groups.
- A Study Group will include IRs electrically dependent on one another. The Distribution Provider may Study an IR individually (i.e. a Study Group of one).
- IRs will be grouped based on the electrical area of the point of interconnection.
- An electrical area will in some cases be the circuit and in other cases be the substation, but in any event, will be determined by engineering judgment.

## EIT Example –1 feeder

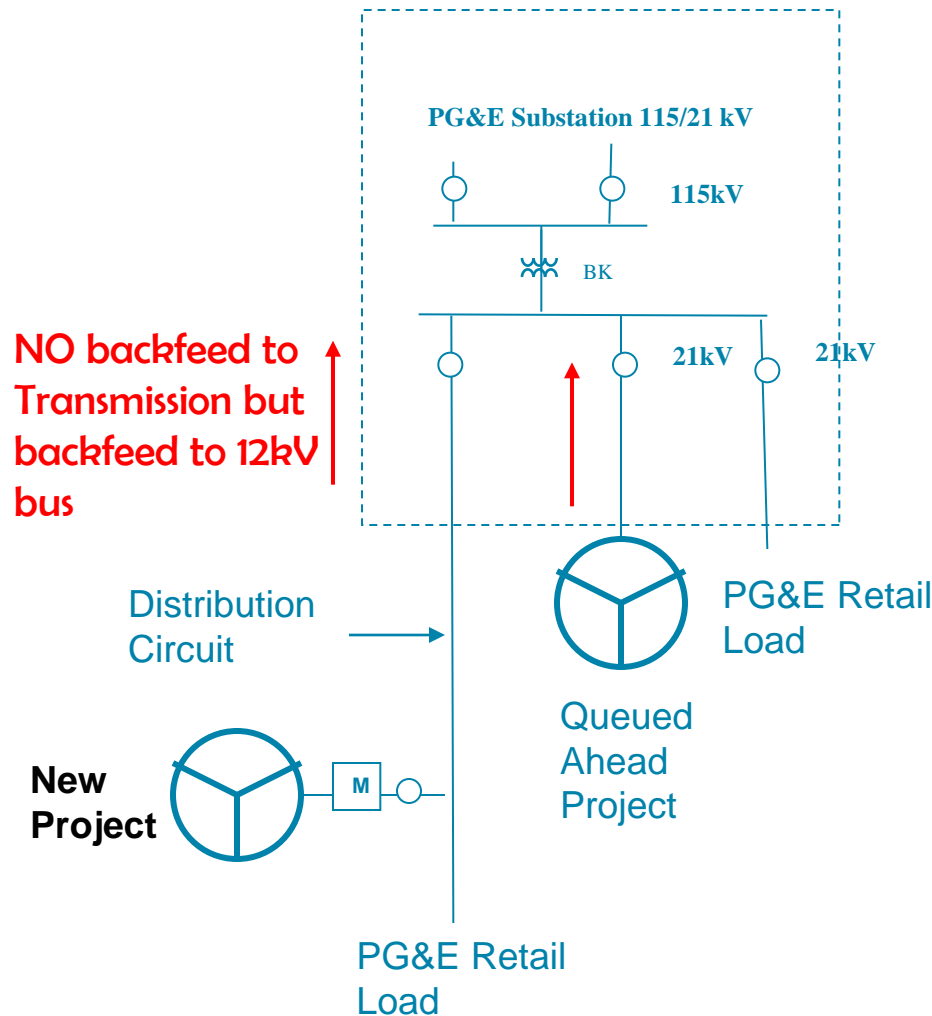


- New Project is undergoing EIT.
- Screen Q project is electrically independent of Transmission System.
- Screen R project is electrically dependent on queued ahead project.
- If the location of the **New Project** allows its electrical output to combine with the electrical output of the queued ahead interconnection request, then it fails Screen R of EIT.
- New Project does not qualify for ISP (Independent Study Process).
- New Project may join next DGSP (Distribution Group Study Process). Group would include new project and any subsequent projects on the feeder that also pass screen Q and fail screen R until the close of the group study window

# Distribution Group Study Process-

# Electrical Independence Test (EIT) and Group Formation

## EIT Example –1 Substation Bank



-New Project is undergoing EIT.

-Screen Q project is electrically independent of Transmission System.

-Screen R project is electrically dependent on queued ahead project.

-If the location of the New Project allows its electrical output to combine with the electrical output of the queued ahead interconnection request, then it fails Screen R of EIT.

-New Project does not qualify for ISP (Independent Study Process).

-New Project may join next DGSP (Distribution Group Study Process). Group would include new project and any subsequent projects on the bank that also pass screen Q and fail Screen R until the close of the group study window.

# Group Study Landscape- Interaction Among Electrically Dependent ISPs and Distribution Group Study Applicants

2013												2014											
J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D



- If no DGSP is in progress, a complete/valid IR may proceed with an ISP prior to a DGSP Window. Subsequent IRs will be evaluated and either studied as an ISP or part of the next regularly scheduled DGSP.
- All IRs received during a window- March 1-31 and September 1-30 will need to wait until the window closes to be either studied as an ISP (only one IR) or part of the DGSP (at least two IRs).
- Once a DGSP begins, subsequent IRs will be studied as part of the next DGSP.

## Example 1:

- No DGSP is in progress.
- First IR is complete/valid **prior** to March 1. IR may proceed as an ISP. Subsequent complete/valid IRs between March 1 through March 31<sup>st</sup> will proceed as part of the 1st DGSP (D1). If only 1 IR is received, it will proceed as an ISP or group study of one.
- All IRs received during a window- March 1-31 and September 1-30 will need to wait until the window closes to be either studied as an ISP (only one IR) or part of the DGSP (at least two IRs).

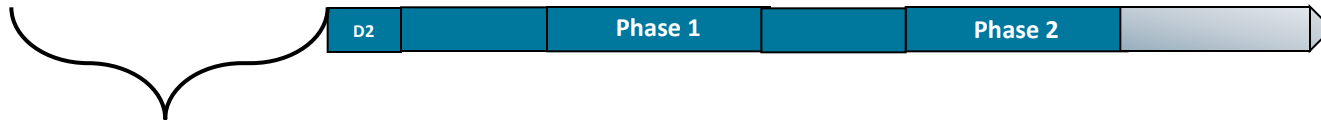
Notes:

ISP

Proposed Distribution Group Studies = D

# Group Study Landscape- Interaction Among Electrically Dependent ISPs and Distribution Group Study Applicants

2013												2014											
J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D



## Example 2:

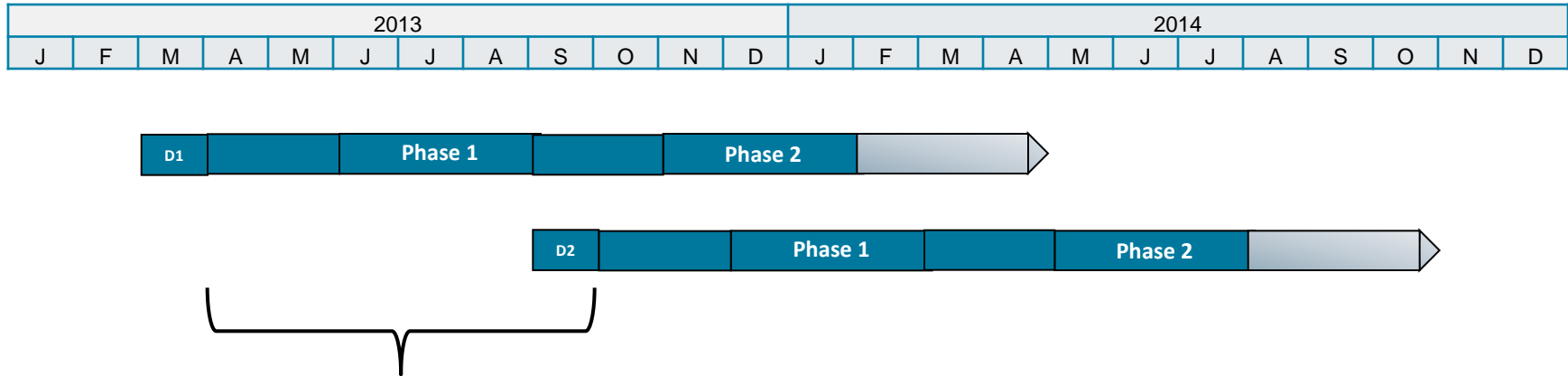
- No DGSP is in progress for D1.
- First complete/valid IR is received after March 31, IR may proceed as ISP.
- Subsequent IRs through August 31 will be evaluated and either studied as part of the next regularly scheduled DGSP (D2) or as an ISP, if only one IR is received.

Notes:

ISP

Proposed Distribution Group Studies = D

# Group Study Landscape- Interaction Among Electrically Dependent ISPs and Distribution Group Study Applicants



### Example 3:

- DGSP (D1) is in progress.
- Complete/valid IRs after March 31<sup>st</sup> through September 30<sup>th</sup> will proceed as part of the next DGSP (D2).

#### Notes:

Proposed Distribution Group Studies = D

## **Group Study Landscape- Interaction Among Electrically Dependent ISPs and Distribution Group Study Applicants**

### **Key Take Aways:**

- Predictable schedule for studying multiple, electrically dependent IRs.
- Two DGSP per year-
  - If no DGSP is in progress, any IR eligible for ISP may proceed as long as it is complete/valid before the start of the next DGSP Window. Any subsequent electrically dependent IRs will be studied as part of the next regularly scheduled DGSP.
  - Once a DGSP begins, any subsequent IRs will be studied as part of the next DGSP. This means there will be no ISPs between active DGSP's.
- ISP may proceed upon complete/valid IR except during DGSP Windows. During these periods the IR must wait to see if other electrically depend IR are received.



## **Distribution Group Study Process- Cost Allocation Among Grouped IRs**

### **Network and Distribution Upgrades**

- Cost will be allocated among group study participants similar to the current WDT.
- Upgrade costs will be allocated on a per MW basis to all generators triggering each specific upgrade. Upgrade costs triggered by a single generator will be allocated 100% to that generator.
- Short circuit related upgrades will be allocated based on the short circuit duty contribution of each generating facility.
- When any generator in the group drops out, the costs will be allocated to the remaining generators.

Restudies will be done (at Applicant's cost) any time there is a change in circumstances that may result in a change to the upgrades required to interconnect a generator (e.g. generators from the distribution group drop out, an earlier-queued generator drops out, a planned upgrade is cancelled or delayed).

## Distribution Group Study Process- Interaction with FERC WDT Projects

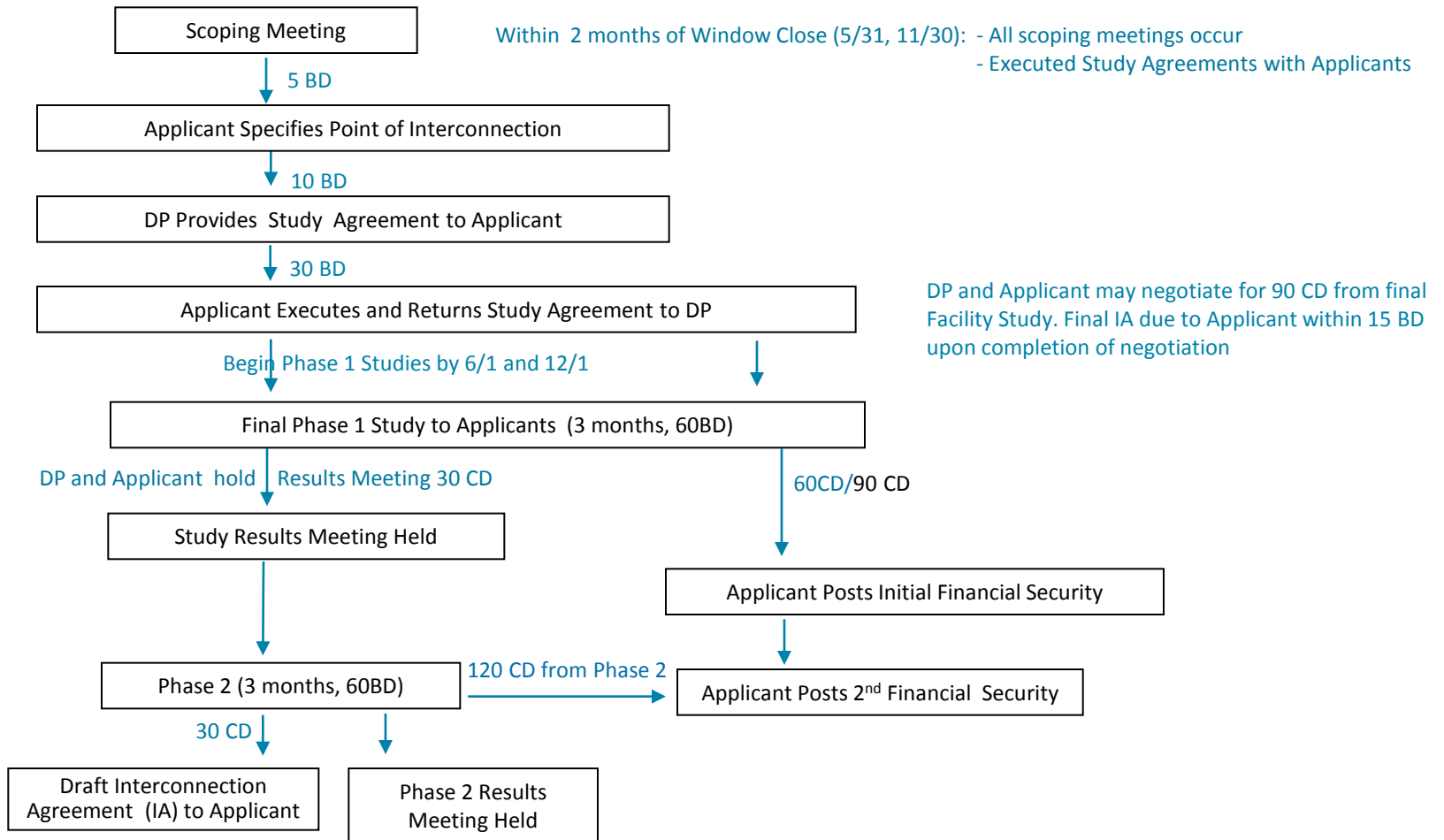
- PG&E proposes to seek approval from FERC to conform its WDT process with the Rule 21 DGSP so that electrically dependent Rule 21 and WDT distribution IRs may be studied together and costs allocated among the group consistently.
- Allowing Rule 21 and WDT IRs to be studied together is important. Otherwise, disparity between electrically dependent Rule 21 and WDT IR's eligible to participate in the same distribution group study could arise.

# Distribution Group Study Process Timelines and Steps

Group Study Windows Close 3/31 and 9/30

5 BD- DP contacts Applicant to establish meeting date.

Applicants must submit all information necessary for a complete/valid IR no later than 20 BDs after the close of a Window or 10 BD after DP first provided notice of incomplete IR, whichever is later



**Questions?**

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