

An aerial photograph of a tropical resort at sunset. The scene features a large, multi-story hotel building on the left, a swimming pool with lounge chairs in the foreground, a sandy beach, and turquoise water. In the background, there are mountains and a city skyline. The sky is a mix of orange, yellow, and blue.

# Integrated Grid Planning

CPWG Meeting

April 16, 2019

# Agenda

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- ◆ Welcome, Ground Rules, CPWG Objectives, Meeting 1 Recap
- ◆ CPWG Composition and Participation
- ◆ IGP Procurement Deep Dive
- ◆ Overview of Current Procurement Process
- ◆ High Level Overview of Examples
- ◆ Issue Discussions
- ◆ Next Steps and Schedule

# WELCOME AND OBJECTIVES



**Hawaiian Electric**  
**Maui Electric**  
**Hawai'i Electric Light**

# Ground Rules

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- ◆ Chatham House Rule will apply – no personal or organizational attribution will be made to any comments/feedback provided during the meeting by any participant nor in written documentation.
- ◆ Working group meetings, and other information exchanges are intended solely to provide an open forum or means for the expression of various points of view in compliance with antitrust laws.
- ◆ Under no circumstances shall engagement activities be used as a means for competing companies to reach any understanding, expressed or implied, which tends to restrict competition, or in any way, to impair the ability of participating organizations to exercise independent business judgment regarding matters affecting competition or regulatory positions.
- ◆ Proprietary information shall not be disclosed by any participant during any industry engagement meeting or information exchange. In addition, no information of a secret or proprietary nature shall be made available to industry engagement participants.
- ◆ All proprietary information which may nonetheless be publicly disclosed by any participant during any industry engagement meeting or information exchange shall be deemed to have been disclosed on a non-confidential basis, without any restrictions on use by anyone, except that no valid copyright or patent right shall be deemed to have been waived by such disclosure.

# IGP – Integrated Grid Planning

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## IGP is a planning process that will:

- ✓ appraise the total needs of the system
- ✓ consider all alternatives from customers, independent providers and the utility
- ✓ integrate market-based solutions
- ✓ determine the best resource and grid options for customers
- ✓ be inclusive through stakeholder review and input
- ✓ synchronize and unify resource, transmission, and distribution planning processes
- ✓ streamline processes that will optimize energy portfolio

# Purpose & Objectives

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## Purpose:

The Competitive Procurement Working Group will establish a fair, efficient, streamlined procurement process that will facilitate the procurement of resources in alignment with Hawaiian Electric's grid plans as identified through the IGP process.

## Objectives:

- Provide strategic input and feedback on competitive procurement process development, activities and results, and aspects for improvement.
- Review current procurement practices in Hawai'i and in other jurisdictions.
- Develop competitive procurement best practices for application in Hawai'i.
- Develop an improved process and accelerated timeframe for procurements that align with broader IGP objectives.
- Foster collegial, balanced discussion to achieve shared understanding of the competitive procurement process, and to build common ground through iterative discussion and feedback.

# CPWG Meeting Topics & Schedule

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## **Meeting 1 – March:**

*Kick-off Meeting, CPWG Composition/Participation & Overview of Current procurement processes, challenges and issues*

## **Meeting 2 – April:**

*CPWG Scope, Deep Dive on Current Procurement Processes, examine examples of other utility competitive procurement processes; identify any “best practices” trends and learning*

## **Meeting 3 – June:**

Examine and discuss relevant feedback and learnings from other Working Groups; Deeper discussion of Competitive Bidding Framework

## **Meeting 4 – August:**

Develop recommendations for Hawai'i competitive procurement best practices; develop first draft of recommendations

## **Meeting 5 – September:**

Review first draft of recommendations, discuss and capture feedback

## **Meeting 6 – November:**

Review second draft of recommendations, finalize

# CPWG COMPOSITION/PARTICIPATION



**Hawaiian Electric**  
**Maui Electric**  
**Hawai'i Electric Light**

# Composition of the CPWG

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- March 14, 2019 PUC Order 32218
- Group Members & Roles
  - Members of The Companies, including, but not limited to: technical planning services, system operations, renewable acquisition, legal
  - Public Utilities Commission Staff
  - Division of Consumer Advocacy
  - Department of Business, Economic Development & Tourism
  - Representative of the IPP Developer Community
  - Representative from each County
  - Hawaii Energy
  - Life of the Land
  - Docket Members, per PUC Order No. 32218 filed March 14, 2019

The Companies or working group participants should not share non-public information as part of the CPWG activities



# Composition of the CPWG

- ◆ New Full Participants of CPWG
  - HSEA
  - Progression Hawaii Offshore Wind
- ◆ Over 10 Observational participants so far

# Options for CPWG Participation

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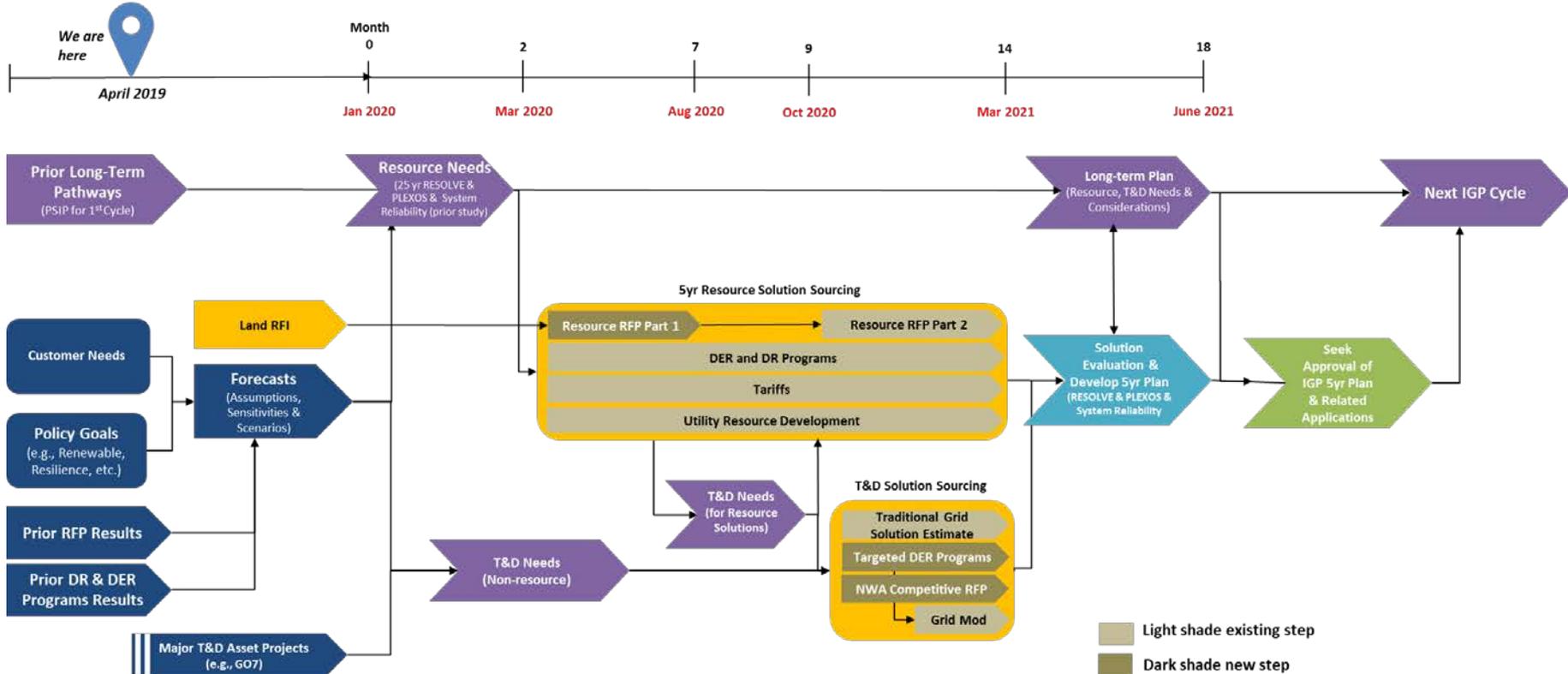
- Any party interested in joining the Competitive Procurement Working Group (CPWG) may do so under two options:
  - An observation role which allows participants to call in and listen to active meetings. Questions and comments of these participants shall be submitted thru the IGP website.
  - A full participant role which allows active participation in meetings and other resource building activities. A full participant is expected to have an interest in the CPWG, knowledge of procurement processes, and the time and resources necessary to attend meetings and complete any assignments.

# IGP PROCUREMENT



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# IGP Process

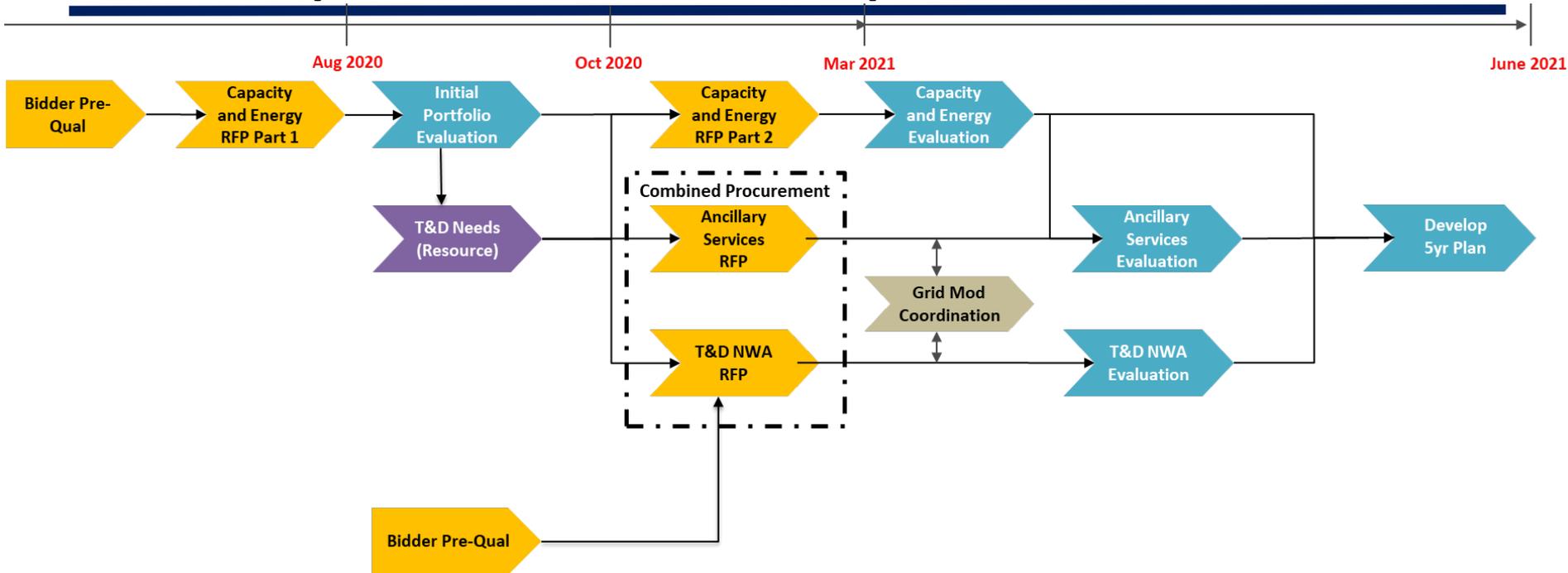


# IGP Process

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- IGP is a brand new process; this is where we want to go
- Procurement's fit in the context of the overall IGP process
  - Resource Needs assessment (SEOWG) and Land RFI feed into procurement stage
- Potentially multiple procurements of different resources
- Aggressive timeframes

# Competitive Process – 2-Step Solicitation Process



# Competitive Process

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- Proposed Procurement process is a little different from current process
- Note the relationship/interaction of the various working groups around this process
  - SEOWG is involved at two key points
- Multiple RFPs
  - Capacity/Energy RFP
    - Figure out what we get from this first
    - Currently Covered under existing CBF
  - Ancillary Services / NWA RFP
    - Use this to procure what else is needed
    - More likely to be open to different resources
    - Concern that this type of procurement doesn't fit well under existing CBF
  - Stage 2 Renewable and Grid Services RFPs under existing Framework
    - 1st time to include Grid Services under existing CBF
  - Propose changes to Framework that works for IGP procurements

# CURRENT PROCUREMENT PROCESS



**Hawaiian Electric**  
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**Hawai'i Electric Light**

# Overview of Stage 1 Procurements

- ◆ Stage 1 RFPs
  - Schedule for Hawaii, Maui, Oahu
  - Six projects approved on 3/27/19

Milestone	Schedule Dates
(1) PUC Opens RFP Docket	October 6, 2017
(2) Draft RFP is filed	October 23, 2017
(3) Technical Conference Webinar	November 3, 2017
(4) Stakeholder Comments submitted to PUC	November 13, 2017
(5) Companies' Response to Stakeholder Comments filed	December 20, 2017
(6) PUC Order Providing Guidance	January 12, 2018
(7) Proposed Final RFPs filed	February 2, 2018
(8) Completion of Commission review period of Proposed Final RFPs	February 20, 2018
(9) Final RFP is issued	February 27, 2018
(10) Proposals due	April 30, 2018
(11) Selection of Short List	May 30, 2018
(12) BAFOs due	June 6, 2018
(13) Selection of Final Award Group <sup>11</sup>	September 17, 2018
(14) Contract Negotiations Start	September 24, 2018

# Overview of Stage 2 Procurements

- ◆ Stage 2  
Renewable RFPs
  - Schedule for  
Hawaii, Maui,  
Oahu

Milestone	Schedule Dates
(1) Draft RFP is filed	April 1, 2019
(2) Proposers Conference Webinar	April 9, 2019
(3) Stakeholder Comments submitted to PUC and Company	April 16, 2019
(4) Companies' Response to Stakeholder Comments and Proposed Final RFP are Filed	May 3, 2019
(5) Completion of Commission review period of Proposed Final RFPs	June 3, 2019
(6) Final RFP is Issued	June 10, 2019
(7) Self-Build Proposal Due Date	August 8, 2019 at 2:00 pm HST
(8) IPP or Affiliate Proposal Due Date	August 9, 2019 at 2:00 pm HST
(9) Selection of Priority List	October 18, 2019
(10) BAFOs Due	October 25, 2019
(11) Selection of Final Award Group	February 12, 2020
(12) Contract Negotiations Start	February 19, 2020



# Overview of Current Procurements

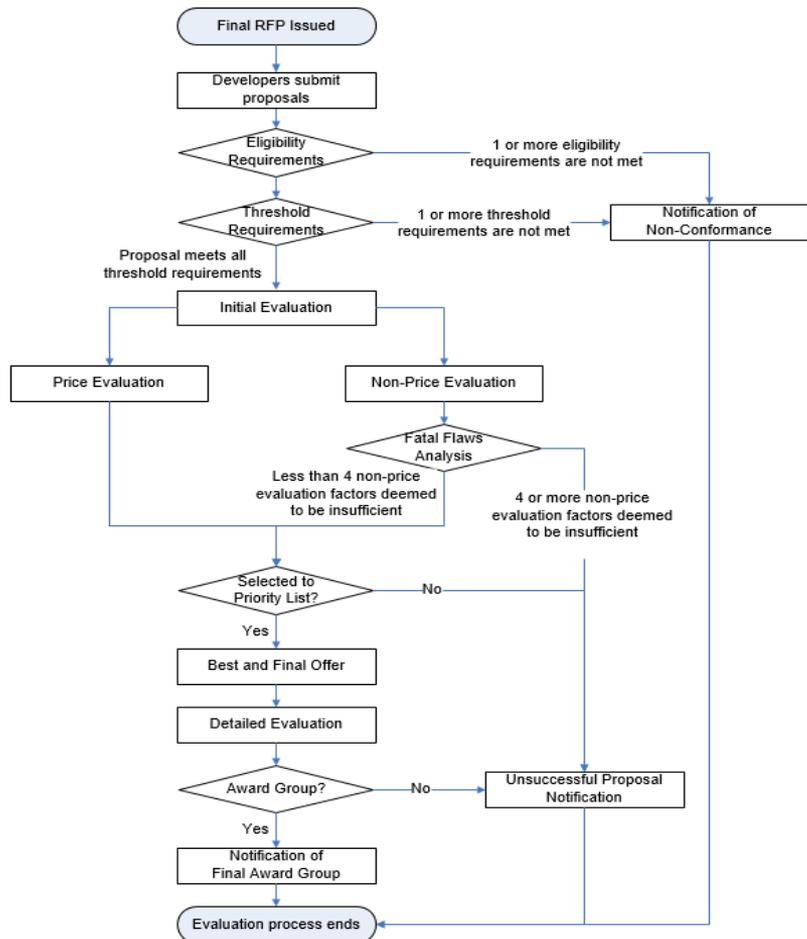
- ◆ Grid Service RFP
  - RFP for Hawaii, Maui, Oahu

Milestone	Schedule Dates
(1) Draft RFP is filed	April 1, 2019
(2) Proposers Conference Webinar	April 9, 2019
(3) Stakeholder Comments submitted to PUC and Company	April 16, 2019
(4) Companies' Response to Stakeholder Comments and Proposed Final RFP are Filed	May 3, 2019
(5) Completion of Commission review period of Proposed Final RFPs	June 3, 2019
(6) Final RFP is Issued	June 10, 2019
(7) Proposals Due	Aggregator or Affiliate: August 9, 2019 at 2:00 pm HST Self-Deliver: August 8, 2019 at 2:00 pm HST
(8) Selection of Short List	September 20, 2019
(9) BAFOs Due	September 27, 2019
(10) Selection of Final Award Group	November 15, 2019
(11) Contract Negotiations Start	November 22, 2019



# Overview of Current Capacity/Energy Procurement Process

- Current RFP Evaluation Workflow
- Compliant with existing CBF



# Overview of the Existing Competitive Bidding Framework

- ◆ **“Competitive bidding, unless the Commission finds it to be unsuitable, is ... the required mechanism for acquiring a future generation resource or a block of generation resources...” (Sec. II.A.3)**
- ◆ Created in 2006
- ◆ Details:
  - “RFP processes shall be flexible, and shall not include unreasonable restrictions on sizes and types of projects considered...” (Sec. II.B.5)
  - “The implementation of competitive bidding cannot be allowed to negatively impact reliability of the electric utility system.” (Sec. IV.A.2.a.)
  - Intended to complement the IRP Framework
  - Sets forth roles of PUC, Utility and IOs
  - IO required if there is a Self-Build allowed
  - Parallel Plan / Contingency Plan
  - Self Build or Affiliate proposal
  - Code of Conduct
  - Multi-Stage evaluation
- ◆ Currently covered by the CBF: Stage 1 RFPs, Stage 2 (Renewable and Grid Services) RFPs
- ◆ As written, CBF doesn’t cover:
  - Non-wire, grid services, storage
  - Generating units sized <1% of a utility’s total firm capacity, or 5 MW or less
  - Projects for which a waiver is granted
- ◆ Objectives for the Working Group
  - Identify pros/cons of current CBF
  - How should/must it change to support IGP procurements?

# Overview of the Existing Competitive Bidding Framework

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## ◆ Process to Issue RFP

- File Draft RFP with the Commission
  - Must include response package and draft PPAs
  - Identify any unique system requirements and provide information regarding the requirements of the utility, important resource attributes, and criteria used for the evaluation
  - Must describe bidding guidelines, bidding requirements, general bid evaluation and selection criteria, risk factors important to utility, and to the extent practicable, the schedule for all steps in the process
  - Must contain information on the relationship between utility and its affiliate and circumstances under which an affiliate may participate
  - Statement that disputes are to be handled under dispute resolution process of framework
- May charge bidders a reasonable fee for participation
- Technical Conference
- Parties Submit Comments on Draft RFP
- Utility determines whether and how to incorporate comments
- Submit final proposed RFP to Commission for review and comment
  - IOs submit comments simultaneously
- Utility can issue RFP if PUC does not direct utility to do otherwise within 30 days after filing of final proposed RFP and IO comments
- Parties should endeavor to have final RFP within 90 days of filing of first draft



# Overview of the Existing Competitive Bidding Framework

- ◆ Issuance of RFP, Development of Proposals, and Evaluation
  - Utility should take steps to provide notice of RFP and encourage participation
  - Bidders may be required to submit a notice of intent to bid
  - Utility may conduct a bidder's conference
  - Utility should provide access to information through a website
  - Proposals must be submitted by deadline specified, self-builds must be submitted one day early
  - Bids that do not meet all RFP requirements may be considered non-conforming; discretion of utility and IOs to allow time to remedy non-conforming bids
  - Utility, monitored by IOs, evaluates bids
  - Bid evaluation process shall include consideration in differences in bids, including:
    - Generating unit and electric system reliability;
    - Appropriate risk allocations;
    - Counter-party creditworthiness; and
    - Bidder qualification
  - Evaluation should be done based on consistent and reasonable set of economic and fuel price assumptions
  - Evaluation criteria should be specified including weights of non-price criterion
  - A detailed system evaluation process using models may be used to evaluate bids

# EXAMPLE SOLICITATIONS



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# High Level Overview of Examples

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- ◆ New York
  - Con Edison
- ◆ California
  - Southern California Edison
- ◆ Colorado
  - PSCo
- ◆ Texas
  - El Paso Electric
  
- ◆ Couldn't find anything on point but...

# Example Solicitations

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- ◆ Con Edison – Water Street/Williamsburg/Plymouth
  - Non-wires solutions using DER (Energy efficiency, demand response, distributed generation, or other resources) that provide load relief for an identified system need and location
  - DER technology agnostic
  - Proposed solutions should decrease peak load demand and increase reliability at the lowest reasonable cost possible
  - Con Edison will build a portfolio of projects that will diversify project execution risks and maximize benefits to customers
  - Con Edison owns all the rights to the capabilities provided from the solutions

# Example Solicitations

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- ◆ SCE – Preferred Resource RFO Pilot
  - Demonstration of ability to meet location specific grid needs with non-wire solutions
  - Specific to Eligible Preferred Resources
    - Demand Response
    - Permanent load shift
    - Renewable DG (BTM and IFM)
    - Energy Storage (IFM grid attached)
    - Solar PV + Storage (BTM and IFM)
  - Purchase of specific products
    - Energy, capacity, Resource Adequacy, Ancillary Services, REC's

# Example Solicitations

- ◆ Xcel/PSCo All-Source Solicitation
  - Series of parallel procurements to meet targeted needs
  - Evaluation
    - Reliable and cost-effective manner
    - Similar outline to CBF
      - Minimum requirements, developer experience, financial background, schedule, land information, technical information (IRS), community engagement, etc.
  - Portfolios of proposals that meet resource needs

RFP Document	Resource Types	Commercial Structure
2017 Company Ownership RFP	<ul style="list-style-type: none"> <li>• New or existing simple cycle gas turbines</li> <li>• New or existing wind or solar</li> </ul>	<ul style="list-style-type: none"> <li>• Build-Own Transfer (BOT)</li> <li>• Existing Resource Sale</li> <li>• Company Self-Build</li> </ul>
2017 Dispatchable Resources RFP	<ul style="list-style-type: none"> <li>• Simple cycle gas turbines</li> <li>• Combined cycle gas turbines</li> <li>• Stand-alone storage projects</li> </ul>	<ul style="list-style-type: none"> <li>• PPA</li> </ul>
2017 Semi-Dispatchable Renewable Capacity Resources RFP	<ul style="list-style-type: none"> <li>• Solar thermal with thermal storage or fuel back-up</li> <li>• Any other intermittent resource with storage or fuel backup</li> </ul>	<ul style="list-style-type: none"> <li>• PPA</li> </ul>
2017 Renewable Resources RFP	<ul style="list-style-type: none"> <li>• Wind</li> <li>• Solar without storage or fuel backup</li> <li>• Hydroelectric</li> <li>• Geothermal</li> <li>• Biomass</li> <li>• Recycled Energy</li> </ul>	<ul style="list-style-type: none"> <li>• PPA</li> </ul>

# Example Solicitations

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- ◆ El Paso Electric All-Source
  - Sought supply-side and/or demand-side resources to meet its capacity need of approximately 50 MW in 2022 and an additional capacity of 320 MW in 2023
  - Considered acquiring the additional capacity through a single resource or combination of supply-side and demand-side resources
  - Preference for Summer peaking: May-Sep; Firm Resource; Minimum generation output guarantee
  - Separate interconnection agreement
  - Similar evaluation process to Framework (Eligibility, Threshold, Price/Non-Price, Detailed Evaluation of Short List)

# CURRENT RFP PROCESS ISSUE DISCUSSION



**Hawaiian Electric**  
**Maui Electric**  
**Hawai'i Electric Light**

# Next Steps and Schedule

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## Next Meeting: Week of June 17

- Examine and discuss relevant feedback and learning from other Working Groups
- Deeper discussion next time on future state CBF that fits IGP process
- 4<sup>th</sup> Meeting: August





# Questions & Feedback



**Hawaiian Electric**  
**Maui Electric**  
**Hawai'i Electric Light**