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BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Enhance the Role of Demand Response in Meeting the State's Resource Planning Needs and Operational Requirements.	Rulemaking 13-09-011 (Filed September 19, 2013)

ADMINISTRATIVE LAW JUDGE'S RULING GRANTING MOTION TO INCLUDE ADDITIONAL INFORMATION IN FINAL REPORT ON JANUARY 13, 2016 WORKSHOP

Summary

This Ruling grants the motion, filed on August 8, 2016 by the Joint Demand Response Parties,[1] requesting to include as part of the administrative record of this proceeding, all power point presentations made at the January 13, 2016 workshop, all proposal or alternate proposal documents served before or provided during the workshop, and the document entitled, "Rough Cost Estimate for SCE Implementation of CPUC Staff Proposal on BUG Prohibition." As described herein, the request to make these documents part of the administrative record of this proceeding is reasonable, as it creates a

[1] The Joint Demand Response Parties are Comverge, Inc.; CPower; EnerNOC, Inc.; and EnergyHub.

complete record of the workshop and better informs the January 13, 2016 workshop report.

Background

On January 20, 2016, Pacific Gas and Electric Company filed a Draft Report on Back Up Generation Workshop Held on January 13, 2016 (Draft Workshop Report). The purpose of the January 13, 2016 workshop was for the Commission's Energy Division to present its Staff Proposal regarding a prohibition on certain resources used during a demand response event. The Joint Demand Response Parties filed comments to the report on January 25, 2016, requesting to include additional information, in addition to a request for corrections to the report. On July 28, 2016, a Ruling was issued incorporating changes to the Draft Workshop Report requested by parties, as well as revisions from the Administrative Law Judge. The July 28, 2016 Ruling provided parties an additional opportunity to present corrections or comments by August 8, 2016, otherwise the Draft Workshop Report would be considered as final. On August 8, 2016, the Joint Demand Response Parties filed a motion requesting inclusion of information in the final report on the January 13, 2016 Workshop.

Discussion

In its motion, the Joint Demand Response Parties repeated a prior request made in their January 25, 2016 comments to the filing of the draft workshop report. Reiterating their January comments, the Joint Demand Response Parties explain that the Draft Workshop Report referenced, but did not include, alternate proposals that were served in advance of the January 13, 2016 workshop. The Joint Demand Response Parties underscore that the proposals were permitted to be considered by the assigned Administrative Law Judge and were presented

and discussed during the workshop. The January comments also requested the addition of the power points presented by the Commission's Energy Division and an additional document, served by Southern California Edison Company (SCE) following the workshop, which presented supporting information to the SCE proposal.

The Joint Demand Response Parties contend that without these documents, which are referenced throughout the Draft Workshop Report and the Final Workshop Report, neither report is complete. Furthermore, the Joint Demand Response Parties maintain that without these documents, and therefore a complete record on the matter, the Commission may not be able to make an informed decision on whether to adopt any of the proposals, to provide further direction, or modify or adopt a modified proposal.

Both the Draft Workshop Report and the Final workshop Report make several references to the three proposals (Appendices A, B and C), the staff slide presentations (Appendix D) and SCE supporting document (Appendix E). It is reasonable to make these documents part of the administrative record of this proceeding.

IT IS RULED that:

The following attached documents are hereby considered part of the Final January 13, 2016 Workshop Report:

Appendix A: Alternate Proposal from IPKeys Power Partners LLC

Appendix B: Joint PG&E-SDG&E Alternative Proposal

Appendix C: SCE Alternative Proposal

Appendix D: Discussion of the Energy Division Staff Proposal Presented in the September 29, 2015 Ruling

Appendix E: Rough Cost Estimate for SCE Implementation of CPUC Staff Proposal on BUG Prohibition

Dated August 30, 2016, at San Francisco, California.

/s/ KELLY A. HYMES

Kelly A. Hymes
Administrative Law Judge

APPENDIX A

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Alternate Proposal from IPKeys Power Partners LLC for
The Use of Clean Back-Up Generators for Demand Response Programs

Background:

1. There is insufficient evidence in the record to determine whether it is prudent to prohibit all fossil-fueled distributed generation.

2. SB 1414 Section 380.5 (a) (1) states:

> *"In establishing a demand response program, the commission shall do all of the following: (1) Establish rules consistent with state and federal law for how and when back-up generation may be used within the program and establish reporting and data collection requirements to verify compliance with those rules."*

3. The California loading order is as follows: (a) EE & Conservation, (b) Demand Response, (c) Renewable Resources & Distributed Generation, (d) Clean Conventional Generation

Proposal:

1. Clean Back-Up Generation be allowed to participate in the demand response program as long as it meets the state and federal law regarding emissions – through supply sourcing with clean supply (natural gas, bifuel, etc.) and/or with the necessary emissions control after-treatment to be compliant with federal, state and regional air quality regulations and requirements.
2. Diesel fueled Back-Up Generation shall not be allowed to participate or may be allowed only with the necessary emissions control after-treatment to be compliant with state and regional air quality regulations and requirements.
3. These Clean Back-Up Generation resources shall be limited to participation for reliability during CAISO emergency and not for economic energy participation.
4. These Clean Back-Up Generation resources shall be allowed to participate for reliability only up to a maximum threshold of hours consistent with the current and future CAISO DR Program and/or Utility DR Program reliability program rules for hours of participation.
5. Payments shall be factored to address emissions for the hours of operation in the program on an annual basis. These resources will produce fewer emissions than the conventional generation that would be dispatched thereafter in the loading order.
6. These resources are very reliable and will continue to provide an important resource for the CA grid to maintain reliability.
7. Collect Data on the use of Clean Back-Up Generation from participants via the Customer, Utility or Third Party Aggregator to provide the information for analysis to determine the impact and basis of further restrictions on their use, if any.

END OF APPENDIX A

APPENDIX B

Joint PG&E-SDG&E Alternate Proposal – BUGs Technical Workshop

January 13, 2016

- **Defining Prohibition:** Customers with any form of distributed or emergency "behind the meter" (BTM) generation should continue to be eligible to participate in DR programs, under the current local and federal regulations governing the use of such systems. Many large customers participating in DR programs such as hospitals, universities, and industrial facilities possess BTM generation for health, safety and operational needs, and do not operate these systems in violation of the EPA and local rules that prohibit non-emergency situations for financial arrangement. Prohibiting these customers from participating in DR programs and eliminating the associated DR capacity would be beyond the scope of this proceeding.

  If the Commission decides to implement enforcement options as indicated, the prohibition should only apply to "emergency" generators which are used in accordance with non-emergency operations, but not when utility-provided electricity ceases. Baseload units which typically operate around the clock such as CHP and fuel cells should not be subject to enforcement measures as well, as these are not considered "emergency".

  The following DR programs should be excluded from a prohibition:
  - AC cycling or smart thermostat programs: There is little to no opportunity or incentive to bypass the air conditioner controller with a back-up generator; customers can opt out of an event or discontinue participation at any time.
  - Permanent Load Shifting: This program involves using specific technology to shift load to an off-peak period so it is being automatically engaged every day.
  - Optional Binding Mandatory Curtailment: This program is dispatched when the CAISO directs the IOU to drop firm load. Allows the participant to avoid block outages if they commit to a specified (5% or 15%) load drop within 15 minutes; capped at 10.9 MW.
  - Scheduled Load Reduction Program: There are no participants in this program.

- **Residential Customer Enforcement:** Enforcement would only be necessary for residential customers participating in the DRAM. These customers are enrolled by third-party DR providers and are subject to the existing prohibition for DRAM as a condition for participating in the program. No incremental measures would be needed. Future or present residential program tariffs can be modified as necessary to enforce a prohibition so no attestations would be needed. The IOUs see no reason for anything beyond tariff requirements being applied, much like any other conditions of participation in a tariffed rate or program.

- **Non-Residential Customer Enforcement:** Similar to residential customers participating in the DRAM, non-residential customers participating in the DRAM or other programs subject to a prohibition must comply with the tariff or contractual requirements of each program. Future or present non-residential program tariffs can be modified as necessary to enforce a prohibition so no attestations would be needed. The IOUs see no reason for anything beyond tariff requirements being applied, much like any other conditions of participation in a tariffed rate or program.

- **Implementation Plan and Timing:** 2018 to allow time for customers to be notified, tariffs revised and approved, and required infrastructure to be put into place.

END OF APPENDIX B

APPENDIX C

SCE Alternative Proposal for Back--Up Generation (BUG) and Demand Response

SCE has identified this as an *alternative* proposal because SCE maintains its position presented in its comments on the Staff Proposal. SCE supports the policy that DR participants should not use fossil-fueled BUG, outside of existing compliance regulations, for DR events; however, the Staff Proposal requires the IOUs to play a burdensome policing role to address a problem for which the extent is not yet known. It is premature to require policing of all DR customers when there is not data to indicate widespread use of fossil-fueled BUG by DR participants.

SCE has estimated that the Staff Proposal will require approximately $4 million to enforce in the first year of implementation.[1] The following aspects of the Staff Proposal drive its high enforcement cost:

- Updating billing systems for "default adjustment" to change DR incentives for BUG customers.
- Obtaining and tracking attestations from DR customers.
- Site visits to 100% of DR customers, rather than audits of a representative sample of the population.

SCE's alternative proposal strikes a balance between the scope of the BUG issue and the need for enforcement. The first-year cost of SCE's alternative proposal is approximately $566K.

SCE Alternative Proposal Element	Rationale
• Define BUG as incremental BUG usage specifically intended to support economic DR performance.	• Properly accounts for existing non-IOU regulations (e.g., AQMD, EPA), differences between regular and incremental usage, and differences between emergency and non-emergency situations.
• Exclude residential customers from scope	• BUG use by residential customers is likely minimal.
• Remove SDP commercial customers from scope.	• BUG cannot override SDP direct load control device. • Greatly reduces site verification costs.
• Update all DR tariffs and contracts to: o Prohibit customers from using BUG to achieve load reduction during DR events; o Keep records and provide BUG information upon request to SCE. • No additional attestation is required, as tariffs and contracts already impose legally-binding obligations on the customer.	• Attestation is a major cost driver in the Staff Proposal, especially when trying to achieve a 100% response rate; requires multiple channels of communication (other mailings have received a 1% response rate). • May help the problem of the Air Quality Districts not having the type of records the utilities need to audit customers.
• The utilities will conduct a mass mailing to all existing DR customers to notify them of the policy change.	• Customers need to be informed of the policy changes and how it affects them.
• Annual audit of a representative sample of customers.	• Sample size of verifications is significantly less expensive and can incent compliance.
• Customers who violate BUG terms of the tariff or contacts are immediately removed from the program, and their account will be flagged. • The customer may not re-enroll in any DR tariff or contract for a one-year period, after which they must pass an audit.	• Concerns with prorating incentives: o Costly and complex to implement.[2] o Default adjustment assumes customers who have BUG *use* it during DR events. o Metered adjustment costly because of costs for additional metering.
• Provide report to CPUC by March 1 of each year based on audit from the prior calendar year; report must be certified by third-party auditor.	• Provide the CPUC and the public with rigorous and independently-verified data to inform understanding of the scope of the issue, costs and benefits to enforcement methods, and results from enforcement methods.

[1] Details of this estimate are available upon request from SCE.

[2] CBP, AMP and DBP are the only programs that utilize actual load reduction for settlement purposes. The rest of the programs receive incentives based on a peak demand value or tonnage of their A/C.

END OF APPENDIX C

APPENDIX D

R.13-09-011 KHY/vm1

Discussion of the Energy Division Staff Proposal Presented in the September 29, 2015 Ruling

California Public Utilities Commission

Energy Division

January 13, 2016

WORKSHOP PURPOSE AND AGENDA

Workshop Purpose:

To discuss the technical aspects of the September 29, 2015 Energy Division proposal. The IOUs' proposed data collection plan is not part of the scope of this workshop.

Agenda:

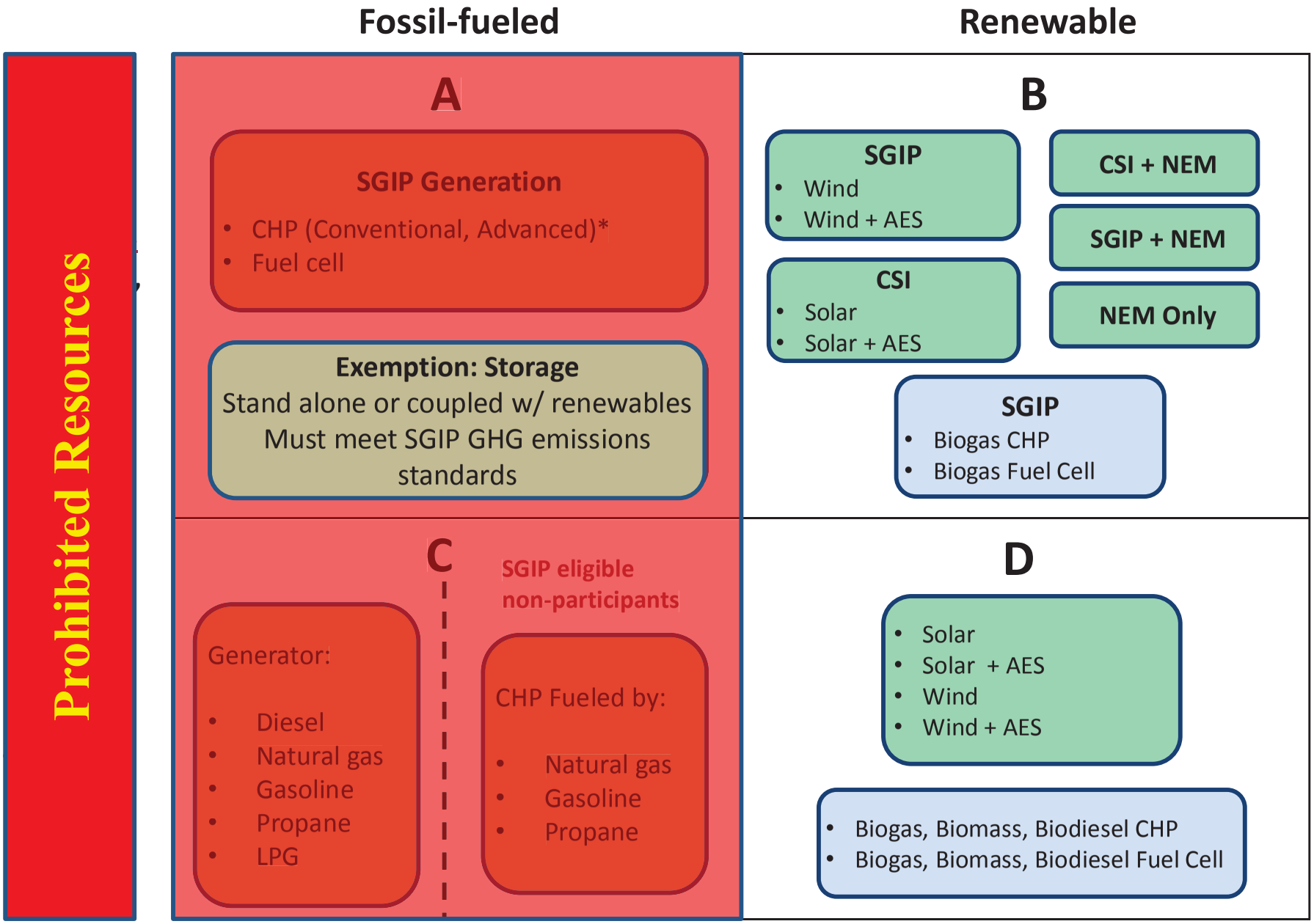
- Defining Prohibition
- Enforcement: Attestation Details
- Enforcement: Proration Details
- Enforcement: Default Adjustment vs. Metered Adjustment
- Verification
- Roles and Responsibilities
- Implementation Plan and Timing
- Wrap Up / Next Steps

DEFINING PROHIBITION: WHAT RESOURCES SHOULD BE PROHIBITED FROM USE IN DR

	Fossil-fueled	Renewable
Receives SGIP, CSI, NEM	**A** **SGIP Generation** • CHP (Conventional, Advanced)* • Fuel cell **SGIP Storage** • Advanced Energy Storage (Stand alone or coupled w other FF-SGIP resources)	**B** **SGIP** • Wind • Wind + AES **CSI** • Solar • Solar + AES **CSI + NEM** **SGIP + NEM** **NEM Only** **SGIP** • Biogas CHP • Biogas Fuel Cell
Does not receive SGIP, CSI, NEM**	**C** Generator: • Diesel • Natural gas • Gasoline • Propane • LPG SGIP eligible non-participants CHP Fueled by: • Natural gas • Gasoline • Propane	**D** • Solar • Solar + AES • Wind • Wind + AES • Biogas, Biomass, Biodiesel CHP • Biogas, Biomass, Biodiesel Fuel Cell

* Conventional CHP (ICE,MT,GT, ST) , Advanced CHP (WTP, PRT)
{**I**nternal **C**ombustion **E**ngine, **M**icro-**T**urbine, **G**as **T**urbine, **S**team **T**urbine, **W**aste **H**eat to **P**ower, **P**ressure **R**eduction **T**urbine}

**Either not eligible or eligible but non-participants (ex. Diesel is not eligible whereas NG, Gasoline, Propane & Renewables are SGIP eligible)



* Conventional CHP (ICE,MT,GT, ST) , Advanced CHP (WTP, PRT)
{**I**nternal **C**ombustion **E**ngine, **M**icro-**T**urbine, **G**as **T**urbine, **S**team **T**urbine, **W**aste **H**eat to **P**ower, **P**ressure **R**eduction **T**urbine}

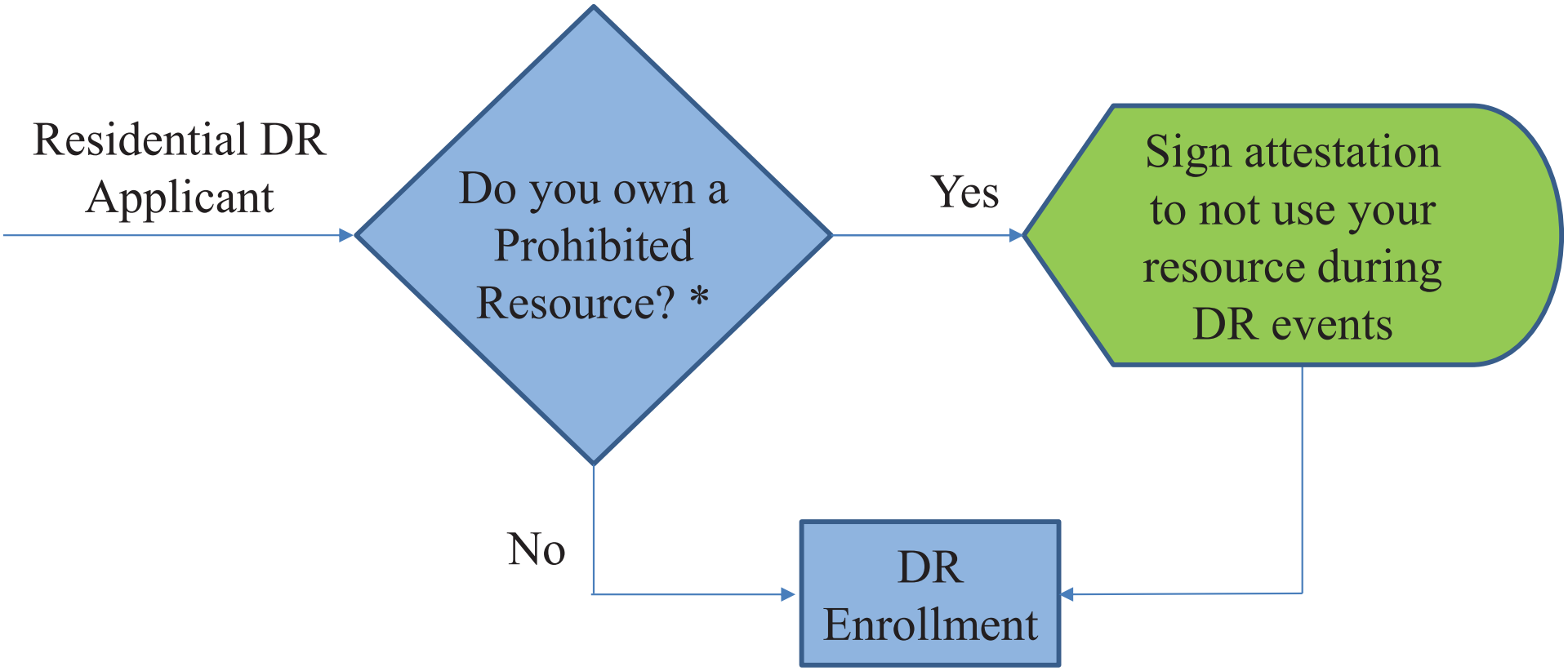
**Either not eligible or eligible but non-participants (ex. Diesel is not eligible whereas NG, Gasoline, Propane & Renewables are SGIP eligible)

PROHIBITION EXEMPTIONS

- Resources
  - Non-Fossil Fueled Resources
  - Storage: must meet GHG emissions factors in SGIP program
    - Stand Alone
    - Coupled with Renewables
- Programs
  - Time-variant Pricing:
    - Time-of-Use
    - Critical Peak Pricing
    - Real Time Pricing
  - Peak Time Rebate

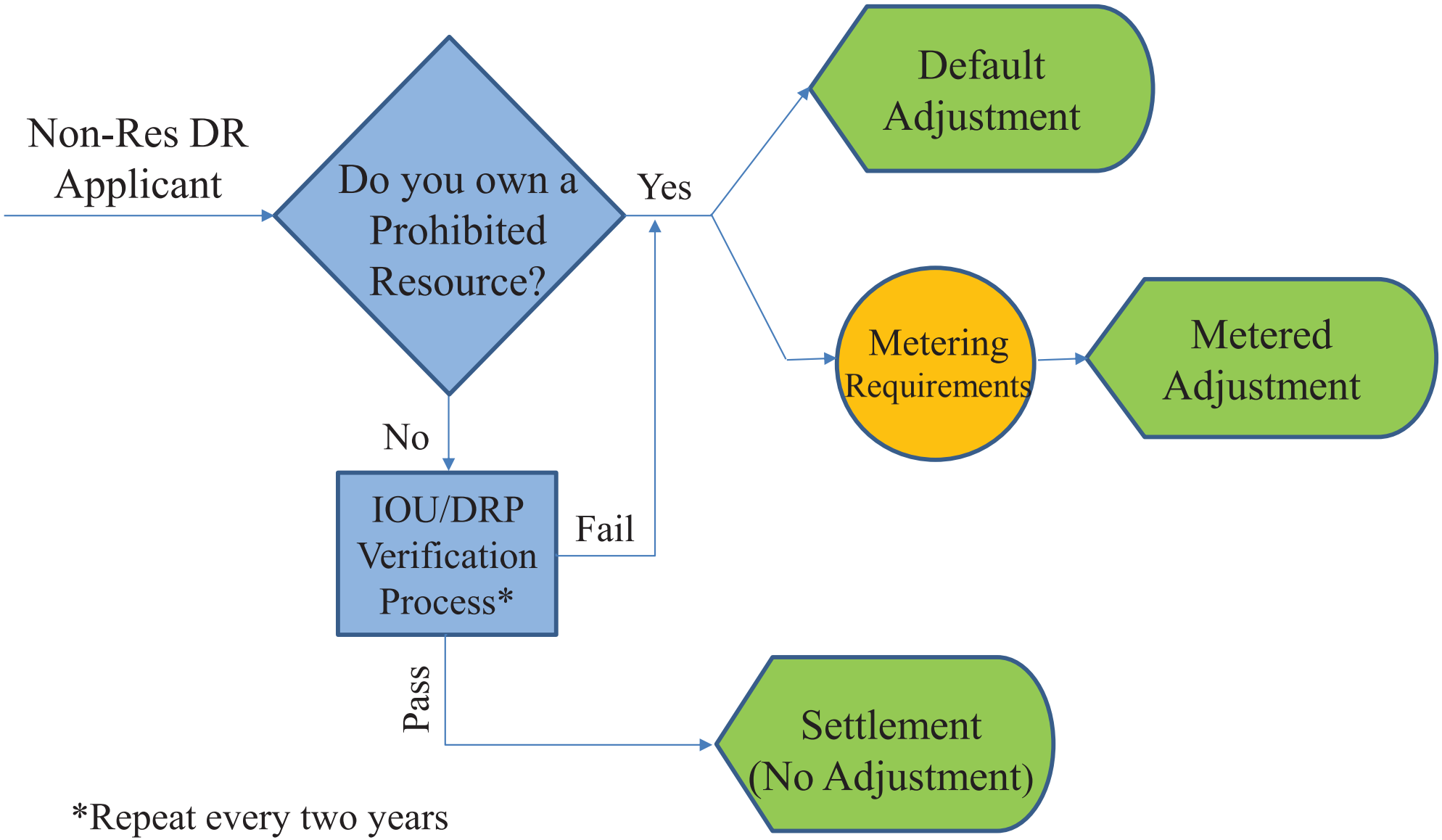
ENFORCEMENT MECHANISMS: ATTESTATION & PRORATION

Attestation: Residential Customers



*ED staff proposal did not specify how often this question needs to be asked for a customer's continuous enrollment in DR.

Proration: Non-Residential Customers



*Repeat every two years

ENFORCEMENT MECHANISMS: DEFAULT VS METERED ADJUSTMENT

- Default Adjustment:

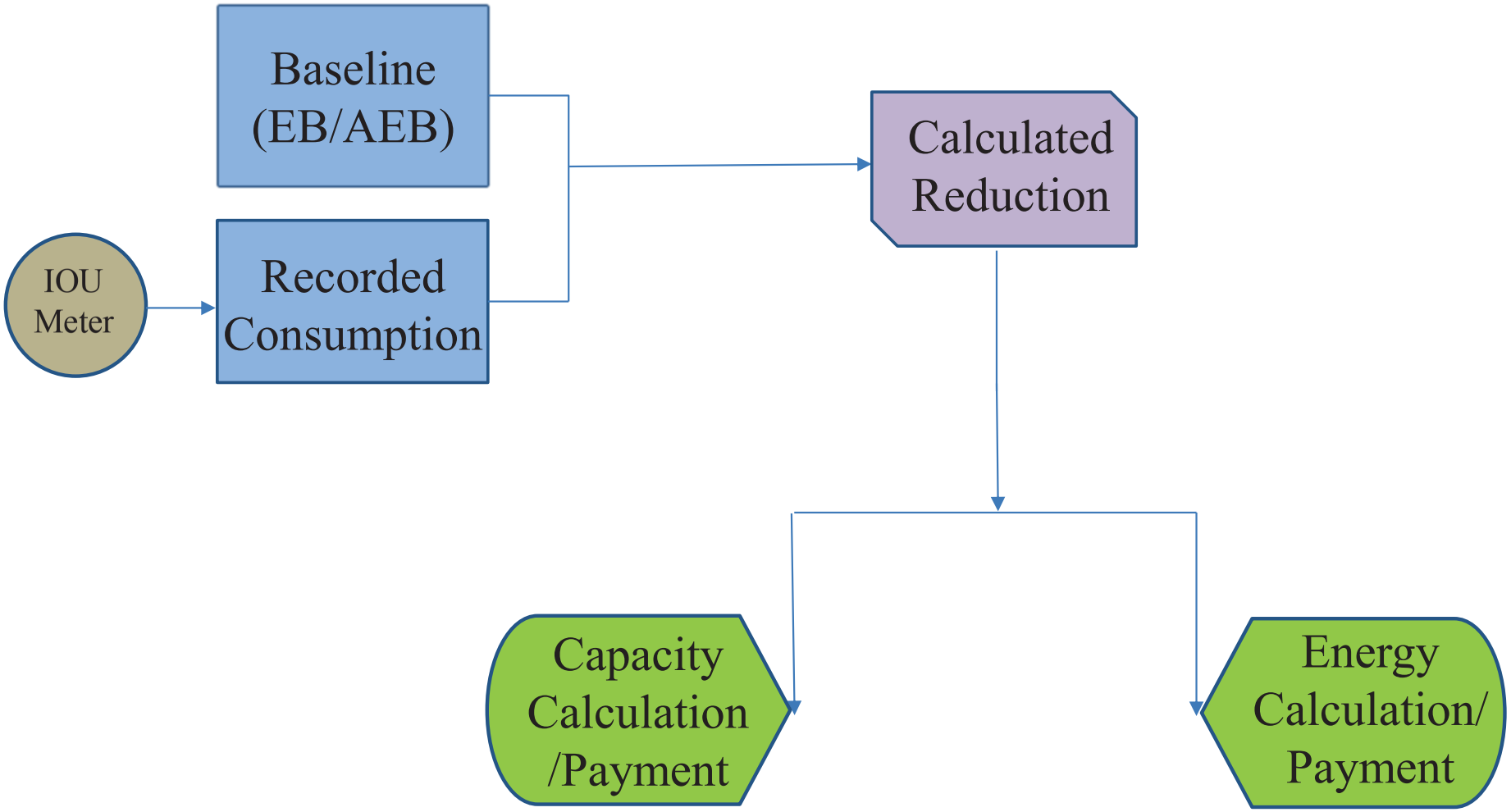
  Prohibited Resource's Nameplate Data is used for energy/capacity adjustments

- Metered Adjustment:

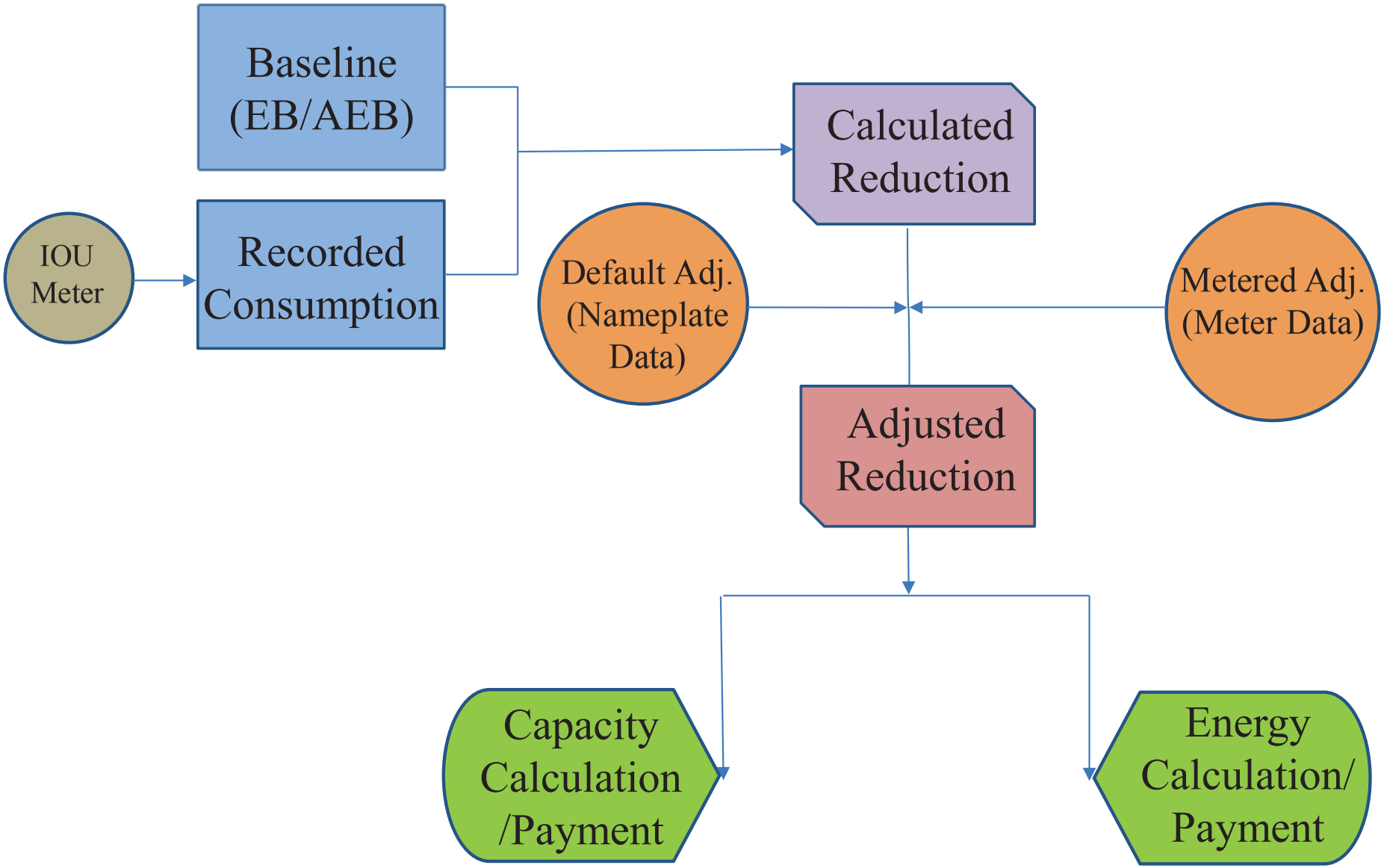
  Prohibited Resource's Meter Data is used for energy/capacity adjustments

  - Default Adjustment does not require metering. Hence less upfront cost.
  - Metered Adjustment is more accurate. Hence potential additional revenue capturing for the customer due to a more precise calculation.
  - Non-Res Customers are given the option to chose between the two methods based on their operational characteristics or business preferences.

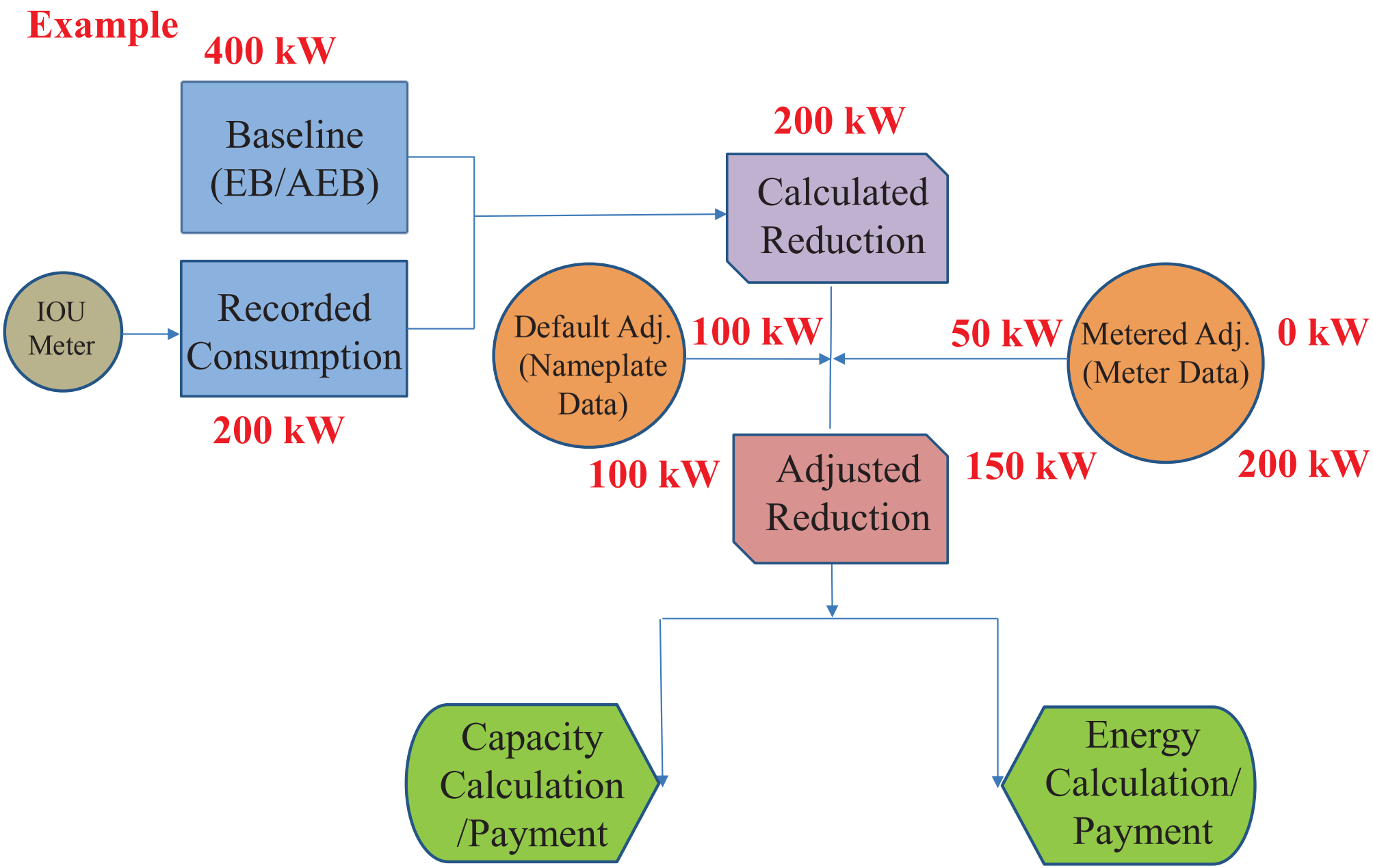
Proration Example (CBP)



Proration Example (CBP)



Proration Example (CBP)



VERIFICATION

- How can the Commission verify a claim that a customer does not have a prohibited resource or that it has an exempt resource?

- How can the Commission verify a customer's compliance if data doesn't exists because of the lack of a meter on the prohibited unit?

- Is this data proprietary?

ROLES AND RESPONSIBILITIES

- **Participants**: bear Metering Cost (if the meter adjustment option is selected)

- **3rd Party DRPs/Aggregators**: administer the prohibition for DR contracts (eg. AMP, DRAM). Administration includes:
  - Site/Resource verification
  - Collection of Resource Nameplate Data
  - Metering system inspection and verification that meets the metering requirements and complies with the proposed prohibition policy
  - Calculation of adjustments to incentives

- **IOUs**: administer the prohibition for IOU-operated DR programs (as detailed above) AND ensure contracted aggregators are administering the prohibition. Record keeping of the prohibited resource inventory is also the IOUs' responsibility.

- **CPUC**: may direct IOUs to provide data/information to demonstrate compliance

IMPLEMENTATION PLAN AND TIMING

WRAP UP/NEXT STEPS

END OF APPENDIX D

APPENDIX E

Rough Cost Estimate for SCE Implementation of CPUC Staff Proposal on BUG Prohibition

All DR customers (except CPP, RTP, PTR) must indicate whether or not they have a BUG.

For non-residential customer, if they do not respond to the attestation requirement, or responds falsely, they will be de-enrolled. Those who attest to not having a BUG will require site verifications bi-annually before March 30th each year. If they attest to owning and operating a BUG, they must provide specifications. Non-residential customers who attest to having a BUG must choose a proration method (see below) or de-enroll from the program.

A. Default Adjustment requires site visit for verification
B. Metered Adjustment requires additional metering, data storage, and monitoring

BUG Proposal Cost Impacts	Cost Type	Applicable Option	Rough Approx. of Costs	Cost Frequency
Project Management	labor (project manager)	A & B	110,700	annual
Program incentive adjustment/proration	system changes	A & B	1,500,000	one-time
BUG data storage	system changes	A & B	unavailable	one-time
attestation processing, follow-up & de-enrollments[1]	labor (cust service rep)	A & B	879,044	one-time (additional costs for ongoing for maintenance is not included)
General policy change communications	Marketing (single mailing)	A & B	130,000	one-time
Attestation customer communications	Marketing (two mailings)	A & B	260,000	one-time (new contracts and agreements will require attestation to be completed prior to enrollment)
CPUC reporting & data request responses	labor (analyst)	A & B	14,475	annual
Physical verifications[2]	labor (field service rep	A & B	1,250,255	annual (additional costs for new enrollments are not included)
Scheduling verifications[3]	labor (cust service rep)	A & B	134,408	annual (additional costs for new enrollments are not included)
BUG meter installation[4]	labor (meter tech)	B	0	not applicable
BUG meter data storage	system changes	B	unavailable	one-time
BUG meter data analyses	labor (analyst)	B	43,425	annual
Total approximate costs for first year of implementation			4,322,307	

[1] Assumes an action needs to be taken for 100% of the applicable DR population and an employee can get through 100 tasks per day.
[2] Assumes 95% of customers will attest to not having a BUG, and an employee can complete 2.5 site verifications per day.
[3] Assumes 95% of customers will require a scheduled site verification, and employee can make 50 appointments per day and have to make 3 attempts to reach a customer.
[4] Meter installation costs to be covered by customer, but we will need to have the appropriate amount of staff.

END OF APPENDIX E