**PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA**

**Item 7 (Rev.1)**
**AGENDA ID #15599**
**ENERGY DIVISION** **RESOLUTION E-4825**
**April 27, 2017**

# R E S O L U T I O N

Resolution E-4825. Revisions to Pacific Gas and Electric's (PG&E) Electric Schedule E-BIP (Base Interruptible Program) pursuant to Guidance Ruling for 2017 Demand Response Programs and Activities (R.13-09-011).

PROPOSED OUTCOME:

- Approves, with modification, proposed tariff conditions required to bid the Base Interruptible Program (BIP) into the California Independent System Operator (CAISO) energy market and other proposed clarifications.

SAFETY CONSIDERATIONS:

- No known safety impacts associated with this tariff revision.

ESTIMATED COST:

- Bidding of BIP into the CAISO market may result in ratepayer savings of unknown magnitude, at this time.

By Pacific Gas and Electric (PG&E) Advice Letter (AL) 4956-E Filed on November 17, 2016 and Supplemental AL 4956-E-A filed on December 21, 2016.

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## SUMMARY

This Resolution approves, with minor modification, PG&E's proposed revision of Schedule E-BIP (Base Interruptible Program), a demand response program, to enable it to bid the associated load as a Reliability Demand Response Resource (RDRR) in the CAISO energy market.

## BACKGROUND

Decision (D.) 01-04-006 approved the BIP in April 2001 in response to the California Energy Crisis of 2000. In November 2006, D.06-11-049 modified existing Demand Response (DR) Programs, including a new provision to allow DR aggregators to participate in BIP, as well as customers directly enrolled by the utility.

In June 2010, D.10-06-034 established a megawatt cap on the amount of emergency DR (including BIP) that each IOU could implement. This statewide cap is currently equivalent to 2% of the historical CAISO system peak of 50,270 MW (or 1,005 MW), with PG&E's share being 32.8% of the statewide cap (or 330 MW). D.10-06-034 allows the IOUs to reduce the amount of megawatts counted towards the cap, if the BIP customer is also participating in an economic program such as the Demand Bidding Program (DBP). This dual participation counting rule has kept the amount of BIP megawatts counted against the cap lower than would otherwise be the case, because some BIP customers participate in multiple programs.

In April 2012, D.12-04-045 approved further implementation of the megawatt (MW) enrollment cap for BIP, as well as procedures for a pre-enrollment qualification and for retesting customers' load drop in the event of a failed test. The MW cap limits the amount of reliability-triggered programs that count toward PG&E's resource adequacy (RA) requirements.

In D.16-06-029, the Commission approved discontinuance of PG&E's DBP and Aggregator Managed Portfolio (AMP) programs. PG&E expects the number of BIP megawatts counted against the reliability DR cap to increase due to the closure of these programs in 2017. In addition, PG&E expects that DR aggregators who had been participating in the AMP may choose to move some of their customers into the BIP, especially those DR aggregators that have not been awarded a contract in the 2017 Demand Response Auction Mechanism (DRAM).

On September 15, 2015 a Joint Assigned Commissioner and Administrative Law Judge's Ruling was issued in R.13-09-011 providing guidance for 2017 DR programs and activities (Guidance Ruling). The Guidance Ruling directed PG&E to integrate its BIP into the CAISO market as an RDRR product no later than

May 1, 2017. In order to do so, PG&E must revise the Schedule E-BIP to incorporate provisions necessary to comport with the CAISO requirements.

With the instant AL, PG&E proposes the following **Tariff Revisions** to comply with the Guidance Ruling:

1. Eligibility:
   a. Customers participating in a DR program for which PG&E is not the DR provider are not eligible for Schedule E-BIP.
   b. To qualify for Schedule E-BIP, a customer's Load Serving Entity (LSE) must approve their registration in the CAISO Demand Response Registration System (DRRS), wherein the RDRR is registered. If a customer's LSE does not approve their CAISO DRRS registration, PG&E can unenroll that customer from the BIP.
2. Program Triggers:

   The BIP is triggered when the CAISO issues a market award or dispatch instruction pursuant to CAISO Operating Procedure 4420.
3. Aggregator's Portfolios:

   PG&E will only add a new customer to an aggregator's portfolio after all necessary equipment is installed and all requirements have been met. Metering equipment (including telephone line, cellular, or radio control communication device) must be in operation for at least 45 days prior to participating in the BIP.
4. Program Details:

   PG&E will register each customer at the CAISO for the purpose of bidding into its market as a Reliability Demand Response Resource (RDRR) product.

Furthermore, PG&E proposes the following **Tariff Clarifying Revisions**:

1. Applicability:

   Pursuant to D.10-06-034, which placed a Megawatt (MW) cap on emergency DR programs, the BIP may at any time be subject to a cap for new participants.

2. Eligibility:

   a. Each customer, both directly enrolled and those enrolled in an aggregator's portfolio, must take service under the provisions of a demand time-of-use rate schedule to participate in the BIP and have at least 100 kilowatt (kW) or higher maximum demand during the summer on-peak or winter partial-peak for at least one month over the previous 12 months.

   b. Eligible customers include those receiving partial standby service or services pursuant to one or more of the Net Energy Metering Service schedules, except Schedule NEMCCSF.

   c. Customers receiving power from third parties other than through Direct Access (DA) or Community Choice Aggregation (CCA) and customers billed by full standby service are not eligible for Schedule E-BIP.

   d. During the enrollment process, customers must demonstrate their ability to meet the designated Firm Service Level (FSL) by participating in a curtailment test. The curtailment test will last up to the maximum event duration and will take place prior to enrollment being completed.

   e. As part of its application, each new applicant is required to submit an Event Action Plan detailing specific actions taken to reduce its load down to or below the applicant's proposed FSL within the 30-minute response time and for the duration of four (4) hours.

   f. An applicant's effective start date shall be determined by PG&E. The effective start date shall be set after PG&E has determined the application has met the eligibility rules, the load reduction demonstration was successful and approved the applicant's load reduction plan.

3. Enrollment:

   Customers participating directly with PG&E must enroll using PG&E's demand response enrollment website. Aggregators must enroll customers by submitting a fully executed "Notice to Add or Delete Customers Participating in the Base Interruptible Program" (Form 79-1080). Aggregators submit their notification contact(s) with their Form 79-1080 form and maintain them through InterAct.

4. Program Details:

   PG&E will assign each customer, whether directly-enrolled or aggregator-enrolled, to a CAISO sub-Load Aggregation Point (sub-LAP).

5. Program Testing:

   PG&E may conduct a monthly notification test. The monthly notification test will not count toward the BIP event limits. No actual load curtailment is required.

6. Incentive Payments:

   The customer's interval data is available through PG&E's InterAct system. This data may not match billing quality data. All incentive payment calculations use billing quality data.

7. Program Retest:

   a. If the customer fails to reduce its load down to or below its FSL during the retest, the customer has the option to either: a) de-enroll from the program, b) be retested at the current FSL, or c) modify its FSL to an achievable level that meets Program requirements. PG&E may require the customer be retested at the new FSL.

   b. For aggregators who fail to comply with a curtailment event, the methodology specified above will be applied at the DR aggregator's CAISO sub-LAP portfolio. If a Service Agreement (SA) within the DR aggregator's CAISO sub-LAP portfolio fails to comply with the test curtailment event, all SAs in the entire DR aggregator's CAISO sub-LAP portfolio will be required to re-test.

8. Program Triggers:

   PG&E in its sole discretion may dispatch one or more service accounts (SAs) to address transmission or distribution reliability needs.

9. Interaction with Customer's Other Applicable Programs and Charges:

   Customers enrolled in the BIP may also participate in one of the following PG&E DR programs: Scheduled Load Reduction Program (Schedule E-SLRP) or the Peak Day Pricing (PDP) rate option.

## NOTICE

Notice of AL 4956-E was made by publication in the Commission's Daily Calendar. PG&E states that a copy of the Advice Letter was mailed and distributed in accordance with Section 4 of General Order 96-B.

## PROTESTS

PG&E's Advice Letter AL 4956-E was timely protested by Comverge, Inc., CPower, EnerNOC, Inc., and EnergyHub (collectively, the "Joint Demand Response Parties"). PG&E timely replied to the Joint DR Parties' protest on December 14, 2016 and made substantive revisions in response to the protest in Supplemental AL 4956-E-A filed December 21, 2016.

The following is a more detailed summary of the major issues raised in the Joint DR Parties' protest.

**Cap of reliability–based DR capacity credited to Resource Adequacy**

The Joint DR Parties dispute PG&E's contention that it has a right to increase the Schedule E-BIP capacity to reflect the elimination of the DBP, pursuant to D.16-06-029. The settlement approved in D.10-06-034, which established the reliability DR capacity cap, allowed a reduction of BIP capacity counting, if the customer was dually participating in PG&E's DBP or Peak Day Pricing Program (PDP). However, the Joint DR Parties point out that the settlement adopted by D.10-06-034 left the issue of allocation of available reliability capacity among the utilities and third party aggregators unresolved.

**Clarification and Modification of the Eligibility Language**

The Joint DR Parties object to the first proposed eligibility criterion, because, in fact, customers may participate in BIP through a retail "demand response provider" other than PG&E. Customers of PG&E's BIP may not know the specific meaning of the term Demand Response Provider (DRP), as it relates to the wholesale market, and thus they may be misled into believing that they cannot participate.

They recommend changing the eligibility criterion to: "Customers may participate with third-party aggregators in Schedule E-BIP; however, neither those third-party aggregators nor the customers themselves may be the Demand

Response Provider (DRP) of record for those customers and may not bid the associated capacity from those customers into the wholesale market. Also, customers are prohibited from participating in Schedule E-BIP even if PG&E is the DR provider and the customer is participating in another capacity- based program, like Optional Binding Mandatory Curtailment (OBMC)."

The Joint DR Parties also object to the second proposed eligibility criterion clarifying that the load serving entity (LSE) must approve the registration of participants in the CAISO DRRS. They state that Schedule E-BIP is a retail tariff and does not discuss wholesale market participation. They contend that this language misuses retail tariffs to the competitive disadvantage of third party DRPs who do not have the ability to use retail tariffs to ensure LSE approval of RDRRs at CAISO.

**Equipment Installation**

The Joint DR Parties question the proposed requirement that a BIP participant may only be added to an aggregator's portfolio 45 days after the installation of metering equipment. They state that the language seems to only apply to aggregator-enrolled customers, and not customers directly enrolled by PG&E. They contend this requirement is discriminatory against third party DRPs and should be rejected.

**Testing and Retesting Requirements**

The Joint DR Parties request clarification that the monthly notification test PG&E sends does not require curtailment. They request clarifying tariff language to state that the test is for the notification system, not the actual curtailment.

The Joint DR Parties further object to the retesting requirement of an entire aggregation portfolio, when an individual participant fails to meet its firm service level (FSL), but the overall aggregation does perform. Although this is an already existing requirement, the Joint DR Parties claim it is unnecessary, redundant, egregious for aggregators, and punitive to their customers. They argue that this requirement obliterates the purpose of aggregation.

The Joint DR Parties recommend that the test results should be based upon the performance of the aggregation portfolio, not individual customers, and that retests (if required) should be limited to the individual customers that failed to meet their FSL.

**Program Triggers**

The Joint DR Parties object to proposed language stating that PG&E may "in its sole discretion" dispatch one or more customers in an aggregation for transmission or distribution reliability purposes. They state that such a dissection of a portfolio would destroy its value. They contend that, since resources must be dispatchable by sub-LAP, for PG&E to bid into the market, this would expose customers and the aggregators to performance risks that are not manageable. They request this option be removed from the tariff.

## DISCUSSION

In response to the Joint DR Parties' protest PG&E filed Supplemental AL 4956-E-A, which addresses many of the protested issues. We discuss each protested issue below and our disposition on the matter.

**Cap reliability–based DR capacity credited to Resource Adequacy**

In its reply PG&E did not address the protest to the cap of reliability based DR capacity credited to RA.

When the Commission adopted D.10-06-034 the DRAM was not in existence, and so, its effect on the amount of E-BIP capacity was not anticipated at the time. Further, the elimination of DBP and AMP was only recently ordered in D.16-06-029. These Commission orders preceded PG&E's filing of the instant AL. PG&E is not requesting to increase the counting of E-BIP capacity towards the reliability DR cap, and therefore the Joint DR Parties protest on this matter is out of scope.

We therefore let PG&E's verbiage on this issue stand.

**Clarification and Modification of Eligibility Language**

In its reply and Supplemental AL, PG&E agreed to make changes addressing the protest and clarified the eligibility language as follows:

> Customers may participate with third-party aggregators in Schedule E-BIP; however, neither those third-party aggregators nor the customers themselves may be the Demand Response Provider (DRP) of record for those customers and may not bid the associated capacity from those customers into the CAISO market. Also, customers are

> prohibited from participating in Schedule E-BIP if the customer is participating in another capacity-based program, even if PG&E is the DRP, such as the Capacity Bidding Program (CBP).

We agree with PG&E's resolution of this protest.

Regarding PG&E's proposed use of its retail tariff to require participants to have their CAISO registrations approved by their LSE, PG&E correctly points out that LSE approval is required per CAISO rules. PG&E is required to bid all E-BIP loads into the CAISO market by May 1, 2017 in order to receive RA credit, and therefore, this is a legitimate qualification for Schedule E-BIP. Otherwise, ratepayers could be required to pay twice for the resource: through the BIP payments and through backstop RA procurement.

We agree that PG&E can specify this condition for participating in its E-BIP program, because it is a fact that CAISO registration requires LSE approval. Further, we are unpersuaded that this retail tariff provision gives IOU DRPs a competitive advantage over third party DRPs, because presumably, third party DRPS can impose the same conditions through their customer agreements.

We agree, however, that the language should be clarified to make it clear that it is PG&E's responsibility, acting as the DRP, to register the resource at CAISO, which requires LSE approval. Therefore, we modify the Schedule E-BIP language on Sheet 1, to state as follows:

> PG&E, acting as a Demand Response Provider (DRP), must be able to register customers who are participating in the Schedule E-BIP into the California Independent System Operator's (CAISO) Demand Response Registration System (DRRS), which requires Load Serving Entity (LSE) approval. To the extent that PG&E is unable to register the customer and/or receive the LSE's approval, the customer will be ineligible to participate in the Schedule E-BIP.

PG&E shall submit a Supplemental AL within 7 days of this resolution making this change to the Schedule E-BIP.

**Equipment Installation**

PG&E replied that the proposed requirement for 45 days prior operations of metering equipment of aggregator-enrolled (but not directly enrolled) customers was "unintentional." PG&E also clarifies that CAISO requires new RDRR registrations to provide 45 days of historical metering data.

In its Supplemental AL, PG&E corrected the requirement to apply to all E-BIP participants, whether aggregator-enrolled or directly enrolled. We accept this resolution of the protest.

**Testing and Re-testing Requirements**

PG&E replied to the request for clarification of the testing language with affirmation that no actual testing will be done in conjunction with its monthly notification test.

PG&E agreed to the Joint DR Parties' alternate proposal: in the event an aggregation fails a load curtailment test, only individual customers in the failed aggregation will be re-tested, not the whole aggregation.

PG&E incorporated both the above changes in its Supplemental AL.

The Joint DR Parties' preferred proposal was for no retesting to be required of individual customers who failed to adequately drop load, as long as the aggregation performs as a whole. They point out that one of their customers' most common complaints occurs when they are required to retest, even when they individually performed adequately on the previous test.

We recognize that retesting of an entire aggregation is discouraging to all the performing customers and may result in them dropping out of the program, which would negatively affect the aggregator as well. Therefore, we agree with PG&E's elimination of a retesting requirement for the whole aggregation. We also accept PG&E's compromise to only require retesting of individual customers that did not perform. We are sympathetic to Joint DR Parties' argument that what matters most is the performance of the aggregation, not the individual customers. However, we see this as a broader policy change requiring consideration in a formal proceeding with all the IOUs' programs in mind.

We accept PG&E's resolution of the protest. We also note that this individual retesting condition could be minimized by aggregators screening customers accordingly.

**Program Triggers**

The Joint DR Parties protest PG&E's proposed language allowing it to dispatch, "at its sole discretion," one or more customers of an aggregation for transmission or distribution (T&D) reliability needs.

The Joint DR Parties also contend that, since resources bid into the CAISO market must be dispatchable by sub-LAP, this would expose customers and aggregators to unmanageable performance risks. We disagree. They Joint DR Parties are confusing the wholesale market bidding of BIP, which does involves sub-LAP dispatch, with the retail dispatch of BIP for local transmission and distribution reliability events, which are not subject to CAISO rules.

In its reply, PG&E states that the practice of dispatching individual customers is not new and should be a positive feature for aggregators, because it ensures that the fewest E-BIP customers possible would get dispatched in a local T&D reliability event. PG&E considers this feature an important ongoing part of E-BIP and urges the Commission to maintain it.

With the exception of the phrase "in its sole discretion", we affirm that the current Schedule E-BIP tariff already allows PG&E to dispatch individual customer for T&D reliability needs. Thus, the Joint DR Parties protest goes beyond the scope of the relief requested by PG&E.

PG&E states in its reply that this additional phrase was an attempt to align the Schedule E-BIP tariff with the Capacity Bidding Program (CBP) tariff, which already contains similar language, and to assure that it can be triggered even if it does not align with the specified event triggers.

Schedule E-CBP does contain language stating that the CBP program may be called "when PG&E, in its sole opinion, forecasts that generation resources or electric system capacity may not be adequate."[1] We take the phrase "electric

[1] PG&E Schedule E-BIP, Sheet 11, www.pge.com/nots/rates/tariffs/ERS.SHTML#ERS

system capacity" to mean the "T&D system" in the context of Schedule E-CBP. Therefore, it is true that an equivalent phrase appears in the Schedule E-CBP, wherein PG&E may trigger the program for T&D reliability events. However, Schedule E-CBP does not state that individual customers may be triggered for a T&D reliability event; rather it states that trigger occurs by "load zone" (defined as CAISO sub-LAP in PG&E's Supplemental AL). On that point, PG&E's reply is not entirely accurate in comparing the BIP to CBP.

Nevertheless, we find the Joint DR Parties protest unpersuasive. In practice, the BIP is designed as a retail program used for T&D reliability events, much as it is now becoming a wholesale RDRR in the CAISO market. As the distribution grid operator responsible for maintaining local reliability, PG&E makes the decision about when to trigger a program should there be a local T&D reliability event. The addition of this language only clarifies this fact for the customer. Equivalent clarifying language already exists in Schedule E-CBP, and we see no reason to deny PG&E's request here.

## COMMENTS

Public Utilities Code section 311(g) (1) provides that this resolution must be served on all parties and subject to at least 30 days public review and comment prior to a vote of the Commission. Section 311(g) (2) provides that this 30-day period may be reduced or waived upon the stipulation of all parties in the proceeding.

The 30-day comment period for the draft of this resolution was neither waived nor reduced. Accordingly, this draft resolution was mailed to parties for comments on March 15, 2017.

On April 17, 2017 PG&E, CPower and EnerNoc (the latter two parties in the JDRP, or "JDRPP") commented timely on the draft resolution.

### PG&E's comments

PG&E provides more details about its registration of unbundled E-BIP customers (having other entities than PG&E as LSE) in CAISO's DRRS. PG&E points out that it has 30 MW of RDRR contracts in its 2017 DRAM counting towards the reliability DR cap.

We therefore deleted inaccurate language regarding the status of third party RDRR integration into the CAISO market.

PG&E also states that it had no objections from LSEs to register their customers through the DRRS and clarifies that it understands that the draft resolution allows locations to remain eligible for E-BIP even if they are in an aggregation that does not meet e.g. CAISO's minimum size requirement, as customer enrollment in BIP changes over time. PG&E would bid the location in a resource as soon as CAISO's requirements can be met.

We confirm PG&E's understanding of remaining E-BIP eligible while a location temporarily is not in an aggregation that meets CAISO's RDRR resources.

PG&E refers to Application A.17-01-012, et al. which indicates that revisions to the reliability cap will be considered there and notes that the settlement adopted in D.10-06-034 does not limit the amount of reliability MWs for third party DRPs acting on their own in the CAISO market.

Furthermore, PG&E requests to correct in the required Tier 1 AL on Sheet 1 – Eligibility, that participation in the program requires 100 kW (kW) or higher maximum demand **during the summer on-peak or winter partial-peak** for at least one month over the previous 12 months.

We agree to this clarification because it is already specified on Sheet 2 of Electric Schedule E-BIP.

**JDRPP's comments**

The JDRPPs support the draft resolution with the several comments and proposed modifications enumerated below.

- The draft resolution is in error that "no RDRR have been integrated into CAISO markets by third Party DRPs …

As noted above we corrected the draft resolution in this regard.

- JDRPP reiterates the alleged inequity of allowing PG&E to using available capacity under the cap to move its customers into BIP ahead of third party DRPs.

> JDRPP acknowledges that an AL may not be the appropriate place to resolve this dispute and recommend that the Commission decline to adopt PG&E's proposal and defer the issue to A. 17-01-012.

As PG&E commented, the reliability MW cap issue is scoped into A. 17-01-012 and is more appropriately addressed there. We see no reason to delay or reject PG&E's request while this matter is pending in A. 17-01-012, therefore we maintain PG&E's proposal.

The JDRPP request that the retesting language be clarified to say that "In the event an aggregation fails a load curtailment test, only individuals in the failed aggregation will be retested."

We agree with the modification requested by the JDRPPs, but to be more precise, we clarify that the aggregations consist of Service Agreements (SA) and are within one sub-LAP. Therefore the tariff language shall state:

> "In the event an aggregation within an aggregator's CAISO sub-LAP portfolio fails a load curtailment test, only the SAs in the failed aggregation that failed to reduce their loads below their FSL, will be retested".

- The JDRPP reiterates its protest against PG&E's request to clarify that it may dispatch individual SAs "in its sole discretion" for local distribution reliability events.

JDRPP introduced no new argument on this point, therefore we reject these comments.

## FINDINGS

1. The September 15, 2016 Guidance Ruling in R.13-09-011 directed Pacific Gas and Electric (PG&E) to file an Advice Letter (AL) to reflect incorporation of its Base Interruptible Program (BIP) participants' load into the California Independent System Operator's (CAISO) market as a Reliability Demand Response Resource (RDRR).
2. We find the Joint Demand Response Party's protest unpersuasive that it is improper for PG&E to use its retail tariff to stipulate CAISO rules requiring

Load Serving Entities (LSE) approval of Demand Response Registration System (DRRS) registration.

3. It is reasonable to require PG&E to clarify that it is their responsibility, as the Demand Response Provider (DRP) of record at the CAISO, to register the BIP customer's load in the CAISO's DRRS.
4. The Commission may wish to review whether retesting should only be required when a whole aggregation fails a load curtailment test. This matter is not appropriate for the instant AL, which is utility-specific, and is more appropriate for a formal proceeding.
5. PG&E did not request that it shall be able to trigger BIP on an individual basis for distribution and transmission reliability. This requirement is already in the existing tariff.
6. PG&E's proposed language clarifying that it may dispatch individual customers "in its sole discretion" in the event of a transmission and distribution reliability event is reasonable.
7. All other protested issues were resolved by PG&E's Supplemental AL.

**THEREFORE IT IS ORDERED THAT:**

1. Advice Letter (AL) 4956-E and Supplemental AL 4956-E-A are approved as modified herein.
2. Pacific Gas and Electric shall file a Tier 1 Supplemental AL, within 7 days of this resolution, conforming Schedule E-BIP to the changes approved herein.

This Resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed and adopted at a conference of the Public Utilities Commission of the State of California held on April 27, 2017; the following Commissioners voting favorably thereon:

TIMOTHY J. SULLIVAN
Executive Director