From: Chaset, Nicolas L. Sent: 12/18/2013 10:31:56 AM To: Malnight, Steven (/O=PG&E/OU=CORPORATE/CN=RECIPIENTS/CN=S0M302774364) Dietz, Sidney (/O=PG&E/OU=Corporate/cn=Recipients/cn=SBD4); Johnson, Aaron Cc: (/O=PG&E/OU=Corporate/cn=Recipients/cn=AJJ9):Redacted Redacted Redacted Bcc: Subject: RE: Review of Discussion Points - CPUC/PG&E DR Discussion Steve Thank you for your comprehensive response. We will surely will continue to discuss these issues. Nick From: Malnight, Steven [S0M3@pge.com] Sent: Wednesday, December 18, 2013 10:03 AM To: Chaset, Nicolas L. Dietz, Sidney Cc: Johnson, Aaron; Redacted Subject: RE: Review of Discussion Points - CPUC/PG&E DR Discussion Nick, Thank you for your follow-up email from our meeting. It is good to understand each other's views. I've added comments below to sections of the email you sent. If you have any questions or would like to follow up on these items please work with Nick Ho, who is the day to day lead on these issues.

Steve Malnight

Steve

Thank you for taking the time to meet with us last week to discuss DR policy. So that we are both clear about policy positions and proceeding expectations, I wanted to send you the following review of our discussion. Please comment as you see fit with the understanding that your response will not be on the 'record' (hence my sending this and not Audrey or Rachel).

Regards

Nick

Load Modifying v Supply Side DR

I heard general agreement from you that bifurcating DR programs into a load modifying and supply side category made sense, but PG&E does not yet want to clearly define which existing programs should be grouped into either of the two categories.

Agree that bifurcation makes sense, but until the definition of load vs. supply is set and operational requirements for supply side is defined through the OIR (and CAISO market barriers addressed), PG&E cannot determine which current programs (or subsets of customers with them) can be treated as supply.

Demand Response Auction Mechanism (DRAM)

The primary tenants of the DRAM proposal are as follows:

- -Capacity contracts with between aggregators/customers and IOUs for TBD term (3-5 years was discussed)
- -DR resources procured in DRAM would be required to participate in CAISO energy market and be subject to Must Offer Obligation

While not opposed to the DRAM idea in principal, we are skeptical it will be the best way to capture more DR or new DR products. Also, PG&E would not support a DRAM run by the CAISO. The AMP RFP's or standard DR program like CBP could incorporate the new products that you are looking to capture and should be able to capture more MW of these new products due to their more flexible procurement structure. The RAM (Renewable Auction Mechanism) was for a very limited purpose and we would see any DRAM also for a limited purpose, at most. Many features of the DRAM (Advice Letter approval, annual solicitations, multi-year contracts) are very positive and could also apply to other methods of competitive solicitations like AMP RFPs where a more flexible/customized procurement can take place. Also a CBP type program that allows new aggregators and customers the opportunity to develop DR capability that could later be bid into a competitive solicitation may need to be retained. PG&E's view is that a wider range of procurement options is more likely to capturing the most DR.

- -Auction subject to a price cap based on long run avoided cost of capacity (metric similar to that used in existing DR C-E assessments)
- -Annual auctions for up to a defined quantity of DR capacity (i.e. 200 MWs in 2015, 300 MWs in 2016 etc.), subject to above price cap

We need to be careful to consider whether these auction sourced MW are incremental to our existing portfolio, or whether there will simply be a transfer from the load side to the supply side. Timing and duration of the current AMP contract obligations will be a key factor here. Also, depending on where we set the targets vs. the amount of supply in the market, we may or may not see the effect of competitive pricing. Finally, we should reserve judgment on how the DRAM will grow until we have had the first auction or two (if it is decided to have a DRAM). Much will likely be learned from the first auctions and the market outlook may be different than we anticipate today. We should keep our options open for how new DR products are acquired.

-Initial auctions for a suite of DR products that are different than current portfolio of DR resources (i.e. more starts, more hours and different months than existing DR resources)

We are not opposed to this idea as long as we arrive at the product definition in a fact-based manner. Again, setting the bar unnecessarily high could have the adverse effect of limiting the DR market potential.

-After 2-3 years of experience procuring new DR products, procurement of certain existing DR resources would be transitioned into the DRAM over another couple years

The DRAM may well have certain existing DR resources transition over, but the optimal use of the DRAM can best be determined after gaining experience with it and comparing that to other DR procurement methods. Also, trying to transition other established, stable utility programs like SmartTag and BIP to a competitive auction could result in the unnecessary reacquisition of such resources, adding unnecessary cost. Also, it is not yet clear if these programs which currently serve the IOUs with transmission and distribution level issues should ever be classified as "supply," given that the current definition of supply is so focused on meeting the needs of the CAISO. The costs and benefits of moving existing DR programs to the supply side should be an important consideration.

-DRAM would eventually be clearing house for all supply side DR, with potential for multiple different DR products to be transacted (i.e. Emergency DR: BIP; Contingency DR: AMP, CBP; Operationally Flexible DR: Local, System and Flexible RA DR)

We are open to exploring this concept further, but having all supply side DR go thru this one new mechanism may be a suboptimal approach.

Key aspects of DRAM implementation may include:

- -CPUC-led effort to define new DR product characteristics and capabilities (ex: Local RA DR) and refine existing DR products to improve their performance (ex: refine design of programs like AMP to more clearly link their dispatch with avoided conventional gen dispatch)
- -CPUC-led effort to develop market rules (ex: metering, settlement, and telemetry requirements for supply side DR) that facilitate efficient integration into CAISO market
- -CPUC determination of who should manage the auction (options include ISO, IOUs or 3rd party)
- -CPUC-led effort to set DR procurement targets (Energy Action Plan set a target of 5% of peak load, which would mean a nearly 3 fold increase in DR capacity)

We understand the need to set procurement targets for the purposes of the DRAM or for other DR procurement, but we also need to make sure that these targets are based on real system need and a robust cost-effectiveness methodology, and that the IOUs are not penalized or put at risk if the targets are not met. We would also be very concerned about a CAISO run auction, as this would be FERC jurisdictional and the CAISO does not have experience procuring DR products.

In our discussion of the DRAM, I did not hear explicit opposition to the concept, though I did hear you say that you have concerns. Specifically, PG&E is concerned that:

- -DRAM might diminish effectiveness of existing DR resources through resource shuffling from existing programs to the DRAM. After discussion of this concern, I believe we agreed that this concern could be addressed through DRAM and DR product design.
- -Experience working within the current CAISO market rules has led PG&E to believe that they are overly restrictive and impose costs on DR resources that make them not cost-effective. After discussion of this concern, I believe we agreed that one of the primary areas of focus of DRAM (and the supply side DR phase of the DR rulemaking) would be defining market rules that draw from best practices in other balancing areas to facilitate integration of DR into the CAISO market.
- -Changes to the current DR construct might diminish the overall quantity of DR currently available. After discussion of this concern, I believe we agreed that the goal of the DRAM (or any new procurement program for supply side DR) should focus on procuring DR resources in excess of what we already have. To this goal, we discussed the idea that DRAM would initially seek to procure new, more operationally flexible DR resources that rely on enabling technologies that are not typically in use within existing DR resources. Over time as existing DR contracts end, the DR capacity associated with these legacy resources would be rolled into the DRAM (or a like mechanism) as a defined type of DR product (in the case of BIP, it might be an emergency product, while in the case of AMP it might be a contingency product). After this discussion, I believe you seemed amenable to the general idea.
- -I also heard you say that the effort to define DR products for DRAM (or a like mechanism) and the setting of market rules are likely to be the most important elements of the implementation of this initiative.

We agree that you have captured most of our concerns. We are open to exploring the above as long as other procurement mechanisms are considered as well and appreciate your support in addressing these issues in the OIR.

Rule 24 Implementation

In our discussion of Rule 24, we talked about the two main areas of focus for Rule 24 systems implementation. The first being developing the necessary systems to allow 3rd parties to directly bid PG&E bundled loads into the CAISO market. The second being the development the necessary systems for PG&E to be able to directly bid customer loads into the CAISO market. Both systems will require significant IT implementations on PG&E's part, with uncertain but potential significant (10s of millions) costs. PG&E currently plans to file a cost recovery application focused on these Rule 24 systems upgrades in Q1 2014 (after Rule 24 PTMs are approved). This application will cover both third party and PG&E bidding into the CAISO market. From an implementation timing perspective, PG&E will prioritize developing its systems for 3rd party 'Direct Participation', with a target of rolling out these capabilities by 2015. In parallel, PG&E will pursue an initially more modest implementation of systems for its own bidding of DR into the CAISO market, but with a target of rolling out these capabilities by 2016. While implementation is under way, PG&E will utilize manual processes to enable limited 'Direct Participation' of its existing DR resources.

Mostly agree, but with the exception that even for 3rd party direct participation, PG&E expects that it may only be able to support limited scale implementation utilizing some manual processes in time for 2015. Full implementation will take 12-18 months from the time that funding is authorized by the CPUC.

Nicolas Chaset

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Phone: 510 219 2121

From: Chaset, Nicolas L. [mailto:nicolas.chaset@cpuc.ca.gov]

Sent: Tuesday, December 03, 2013 11:47 AM

To: Malnight, Steven

Cc: Johnson, Aaron; Ho, Nick; Abreu, Kenneth; Dietz, Sidney

Subject: Review of Discussion Points - CPUC/PG&E DR Discussion

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