



California ISO

2017 Expedited GIDAP Enhancements

Draft Issue Paper & Straw Proposal

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2017 Expedited GIDAP Enhancements

1. Introduction

The ISO plans to launch its next iteration of the Interconnection Process Enhancements (“IPE”) initiative in 2018. The ISO anticipates that the 2018 IPE initiative will cover a broad array of interconnection-related topics proposed by the ISO and its stakeholders. However, the ISO believes that two issues merit immediate attention and expedited resolution in order to provide parties relief while possible. These issues are (1) how long an interconnection customer may “park” for purposes of receiving a Transmission Plan Deliverability (“TP Deliverability”) allocation; and (2) how long interconnection customers have to submit, correct, and re-submit new interconnection requests within the ISO’s validation timeframe.

Deliverability Parking

Interconnection customers generally must receive a TP Deliverability allocation as part of the ISO’s study process in order to be eligible to provide Resource Adequacy (“RA”) capacity. Their ability to receive an allocation depends on, *inter alia*, the availability of TP Deliverability to allocate and whether they qualify for an allocation by obtaining a Power Purchase Agreement (“PPA”) or being shortlisted for a PPA. If they do not qualify, they may “park” their project for one year and be re-reviewed in the next year’s allocation process. If they do not receive an allocation after parking, they must convert to Energy Only (and be ineligible to provide RA) or withdraw from the queue.

Many Load-serving entities (“LSEs”) now require a completed Phase II study report to be in a Request for Offer (“RFO”) process, and as a result, there is a very short window for projects to be considered in RFOs and get shortlisted so that they can receive a TP Deliverability allocation, which occurs four months after the Phase II study reports are delivered. Only having this short window and the single year to park and continue participating in RFOs means that many projects have only two years before they are no longer eligible for an allocation of TP Deliverability. Most projects withdraw from the queue at this point rather than proceed as Energy Only. This was the intent of the shortlist requirement and one-year parking option, which worked well until the current slowdown in procurement led to a dramatic increase in projects being unable to receive a TP Deliverability allocation.

As an initial remedy, the ISO proposes to extend the parking period for one additional year. As a longer-term remedy, the ISO commits to examine the TP Deliverability qualification criteria comprehensively in a 2018 IPE initiative. This bifurcated approach will allow the ISO to provide immediate relief to the many projects currently parked, and it will allow the ISO and stakeholders to raise other issues within the longer timeframe of IPE 2018.

As explained below, the ISO proposes that interconnection customers only be allowed to park for a second year where (1) there is TP Deliverability capacity still available in their area; and (2) where the interconnection customer has not been assigned a network upgrade needed by later-queued interconnection customers.

Validating Interconnection Requests

Second, in recent years interconnection requests have become increasingly varied and complex, and interconnection customers have increasingly sought to make more changes before the Phase I studies begin. The ISO and Participating Transmission Owners (“PTOs”) seek to accommodate these complexities, but doing so has become challenging within the tariff-mandated validation window for new interconnection customers to make corrections to complete valid interconnection requests. These challenges are exacerbated by the fact that nearly all interconnection requests are received during the final few days of the interconnection request window, meaning that the full-month interconnection request window is underutilized, and ISO and PTO staff must process everything at once at the end.

To remedy this issue before the next cluster application window, the ISO proposes simply to shorten the actual interconnection request window, and lengthen the time for correction and validation. Specifically, instead of having the entire month of April to submit an initial interconnection request, the ISO proposes to open the interconnection request window on April 1 and then close the window on April 15 (or the next business day if the 15th is not a business day). In turn, the ISO, PTOs, and interconnection customers will have an additional 15 days for validation and correction. The ISO believes that these minor changes will help all parties and prevent potential delays to the Phase I study process.

2. Stakeholder process

Timely resolution of this stakeholder process is important to have any potential tariff changes in place for the 2018 deliverability allocation process and the 2018 Cluster 11 application window. Therefore, the ISO has set out the following accelerated stakeholder process schedule and appreciates stakeholder understanding and participation in this effort.

Stakeholder process schedule		
Step	Date	Activity
Draft Issue Paper/Straw Proposal	July 25, 2017	Post Issue Paper/Straw Proposal
	August 1, 2017	Stakeholder web conference
	August 8, 2017	Stakeholder comments due
Revised Straw Proposal	August 23, 2017	Post Revised Straw Proposal
	August 30, 2017	Stakeholder web conference
	September 7, 2017	Stakeholder comments due
Draft Final Proposal	September 21, 2017	Post Draft Final Proposal
	September 28, 2017	Stakeholder web conference
	October 5, 2017	Stakeholder comments due
Board approval	Dec 13 or 14, 2017	ISO Board of Governors meeting

3. Extended Parking

3.1. Background

An interconnection request consists of dozens of request components: the point of interconnection, sufficient transmission capacity to deliver power reliably, construction of necessary network upgrades by the PTO, etc. Among these components, interconnection customers request a deliverability designation: Full Capacity Deliverability Status (“FCDS”), Partial Capacity Deliverability Status¹ (“PCDS”), or Energy Only. Being designated FCDS represents that the generator can deliver its maximum capacity to the grid under peak load

¹ Partial Capacity Deliverability Status entitles a generating facility to a Net Qualifying Capacity amount that cannot be larger than a specified fraction of its Qualifying Capacity, and may be less pursuant to the assessment of its Net Qualifying Capacity by the ISO. An Interconnection Customer requesting Partial Capacity Deliverability Status must specify the fraction of Full Capacity Deliverability Status it is seeking in its Interconnection Request.

and contingency conditions.² An Energy Only designation represents that the generator's output can be delivered only subject to grid conditions.³

These designations play a key role in providing Resource Adequacy Capacity, under the California Public Utilities Commission RA program. An FCDS designation entitles a generating facility to a Net Qualifying Capacity ("NQC") amount that qualifies the generator's output to count toward an LSE monthly RA requirement.

An Energy Only designation, on the other hand, means that the interconnection customer will not be responsible for the costs of Delivery Network Upgrades, but "will be deemed to have a NQC of zero, and, therefore, cannot be considered to be a Resource Adequacy Resource."⁴

Importantly, an FCDS designation does not entitle a generator to "firm capacity." All generators are subject to congestion management, the ISO's security-constrained economic dispatch, and potential curtailment conditions.

Receiving Capacity Designations

An interconnection customer's ability to receive an FCDS designation depends on the ISO's TP Deliverability studies. TP Deliverability is "the capability, measured in MW, of the ISO Controlled Grid as modified by transmission upgrades and additions modeled or identified in the annual Transmission Plan to support the interconnection with Full Capacity Deliverability Status or Partial Capacity Deliverability Status of additional Generating Facilities in a specified geographic or electrical area of the ISO Controlled Grid."⁵

The ISO transmission planning process identifies large-scale network upgrades based on the location and amount of new resources that will ultimately be developed in discrete geographic areas. These network upgrades will add a certain amount of transmission

² *California Independent System Operator Corp.*, 124 FERC ¶ 61,292 at PP 94-112 ("For generators selecting full capacity deliverability, the maximum output of each facility can be delivered under peak conditions. Deliverability assessment(s) will be performed to determine the need for delivery network upgrades. The costs for delivery network upgrades will be assigned based on the flow impact of each generating facility on the ISO controlled grid. In addition, an analysis for reliability impacts will be done to determine the need for reliability network upgrades"). Deliverability designations are slightly different for wind resources because their "maximum capacity" is not necessarily commensurate with their nameplate capacity (minus auxiliary load), like it is for most generators.

³ *Id.* at P 95.

⁴ Appendix A to the ISO tariff. A Resource Adequacy Resource is "A resource that is designated in a Supply Plan to provide Resource Adequacy Capacity. The criteria for determining the types of resources that are eligible to provide Qualifying Capacity may be established by the CPUC or other applicable Local Regulatory Authority and provided to the ISO."

⁵ Appendix A to the ISO tariff.

capacity to the grid, which will then be available to meet the major network upgrade requirements of proposed new generating facilities in those geographic areas.⁶ The ISO then determines the volume of new generation in each area whose deliverability can be met by the additional grid capacity that the network upgrades will provide. The ISO then allocates the resulting MW volumes of TP Deliverability to those proposed generating facilities in each area that are determined to be most viable based on a set of specified project development milestones.⁷

Under current tariff provisions, an interconnection customer requesting TP Deliverability must meet certain minimum milestones:

- Must have applied for the necessary government permits for construction; and either
- Has secured financing or represents to the ISO that either it has a regulator-approved power purchase agreement; or
- Is included on an active short list or other commercially recognized method of preferential ranking of power providers by a prospective purchasing LSE.⁸

If there is sufficient TP Deliverability, the ISO will allocate it to the interconnection customers in the current queue cluster that meet the minimum criteria. If there are more qualifying interconnection customers than TP Deliverability available (which rarely occurs), the ISO will allocate the TP Deliverability by ranking interconnection customers based upon which TP Deliverability milestones they have met. Interconnection customers that receive TP Deliverability must submit an annual affidavit stating that they continue to meet TP Deliverability milestones.⁹ Interconnection customers that do not receive an allocation of TP Deliverability and do not choose to finance their Delivery Network Upgrades on a merchant basis have the option to “park” the project, convert their projects to Energy Only, or withdraw their interconnection requests.

Parking

“Option (A)” customers have the opportunity to “park” their interconnection requests, regardless of the allocation result for their project, for one year to participate in a second TP Deliverability allocation.¹⁰ Interconnection customers who park are then included in the next year’s TP Deliverability allocation process on the same footing as those participating

⁶ See *California Independent System Operator Corp.*, Tariff Amendment to Integrate Transmission Planning and Generator Interconnection Procedures, Docket No. ER12-1855-000 (May 25, 2012) at p. 4.

⁷ *Id.*

⁸ Section 8.9.2 of Appendix DD.

⁹ Section 8.9.3 of Appendix DD.

¹⁰ Section 8.9.4 of Appendix DD.

for the first time, based on their project's eligibility and criteria scoring at the time.¹¹ The ISO developed the parking option in 2012 in response to many stakeholders who were concerned that the length of the allocation window following the completion of the Phase II study may not be sufficient for some viable projects to achieve the project development milestones needed to obtain a TP Deliverability allocation.¹² The ISO believed that allowing Option (A) projects to park for one additional year was a reasonable accommodation because these projects have declared that they would not be viable absent a TP Deliverability allocation and would otherwise be required to withdraw from the queue or, at a minimum, downgrade their project to Energy Only status.

The ISO also considered some stakeholder requests to park for more than one cycle, but determined that a longer parking period could render the Phase II study results for the parked projects obsolete.¹³ Moreover, refreshing the study results every year would maintain a potentially large volume of projects in the study process and would exacerbate the problems caused by excessive queue size. The ISO thus concluded that the ability to park for only one allocation cycle struck an appropriate balance between allowing potentially viable Option (A) projects a second chance in the process for allocating TP Deliverability and preventing less viable projects from lingering in the queue and complicating the study process.

3.2. Historical Use of Parking and Current Issues

The annual deliverability allocation and post-allocation parking process began with cluster 5. Cluster 8 is the latest cluster able to participate with the parking option. Figure 1 is a graphical representation of the elections that cluster 5-8 projects have made following the allocation process, as a percentage of projects that participated in Phase II studies. Within the information portrayed in Figure 1 there are two trends that are worth noting: First, the percentage and number of projects that parked has been steadily increasing (save for an initial drop following cluster 5). Second, the number of projects that posted initial Interconnection Financial Security ("IFS") and received a Phase II study has been increasing since cluster 5, including a near doubling between cluster 7 (32 projects) and cluster 8 (60 projects). There can be a number of explanations related to these trends, but it is safe to assume that there has been an increasing number of projects, and many have

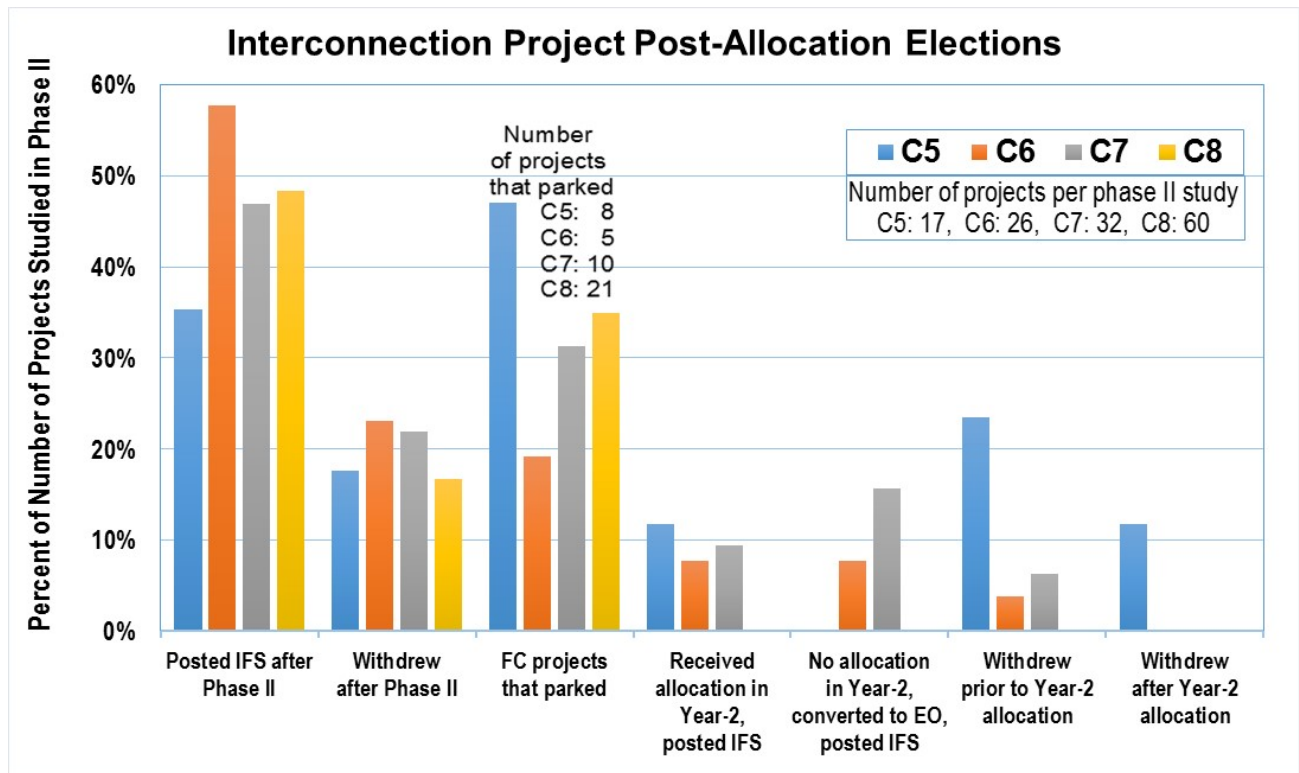
¹¹ Section 6.2.9.4 of GIDAP BPM.

¹² See *California Independent System Operator Corp.*, Tariff Amendment to Integrate Transmission Planning and Generator Interconnection Procedures, Docket No. ER12-1855-000 (May 25, 2012) at p. 35.

¹³ *Id.*

not met the minimum criteria for receiving an allocation of TP Deliverability and are parking with the hope of qualifying for an allocation in the next TP Deliverability allocation cycle.

Figure 1



The California investor-owned utilities' ("IOUs") recent appraisals of their procurement plans indicate that essentially all of the renewable capacity needed to meet California's 33% Renewables Portfolio Standard ("RPS") 2020 mandate has been procured. Most if not all of the incremental capacity needed is in the ISO queue, has completed the study process, and is expected to reach commercial operation by 2020. California Senate Bill 350 (de León, Chapter 547, 2015) increases the RPS to 50% by 2030, with incremental targets between 2020 and 2030. SB 350 also requires the California Public Utilities Commission to focus energy procurement decisions on reducing greenhouse gas ("GHG") emissions by 40 percent by 2030, doubling of energy efficiency, and promoting transportation electrification; and SB 350 requirements related to integrated resource planning¹⁴ require the implementation of an integrated resource planning process that will ensure that LSEs meet targets that allow the electricity sector to contribute to California's GHG reduction goals. It remains to be determined whether additional transmission capacity should be built to make the additional renewable capacity needed to make 50% deliverable, which impacts whether incremental renewable capacity should be procured as

¹⁴ Calif. Public Utilities Code §§ 454.51 and 454.52.

FCDS or Energy Only. As such, California LSEs' incremental procurement has stalled while they await a clear regulatory signal on these issues. There is no doubt that additional renewable capacity will be procured in the not too distant future and this is driving the desire to see the parking provision relaxed.

Small amounts of renewable and energy storage procurement have occurred fairly recently. These RFOs generally have required projects to have received their Phase II studies. In an effort to be in the best position to respond to any near-term procurement processes (including for when SB 350 related procurement does materialize), developers continue to submit projects for study in the ISO's ongoing Generator Interconnection and Deliverability Allocation Procedures ("GIDAP") study processes. The GIDAP was designed to allocate TP Deliverability to projects that were at a minimum included on a procurement process short list or willing and able to move forward with self-financing. Short of these, a project would not qualify for a TP Deliverability allocation and could park. However, with the current uncertainty affecting current procurement, developers have raised two issues: (1) a one-year parking process has become too short; and (2) the minimum eligible criteria to receive a TP Deliverability allocation are too high (perhaps because projects can only park for one year).

3.3. Issues Related to an Extending Parking Process

An extended parking period would result in more projects in the ISO interconnection queue that have completed the Phase II studies and are eligible for a TP Deliverability allocation. This would be advantageous to the LSE procurement process by presenting more projects ready to provide offers when the procurement process ramps up as anticipated. More projects participating in a procurement request for offers process increases competition, which is good for the procurement process.

There are nevertheless concerns related to an extended parking period. One of the benefits of a one-year parking period is that projects that are not moving forward are more likely to withdraw. This limits uncertainty in the cluster study process by limiting the number of upgrades that are assigned to projects that are not moving forward, which increases the certainty of the study results and mitigates the risk of changes coming from the reassessment process.

Projects that are parked typically do not execute generator interconnection agreements ("GIAs"), which can have a significant financial effect on later-queued interconnection customers. Section 14.2.2 of the GIDAP states that if an earlier-queued interconnection customer is responsible for financing a network upgrade, and that interconnection customer has executed a GIA memorializing that the PTO will construct the upgrade, then if that interconnection customer later terminates its GIA and withdraws, the financing obligation reverts to the PTO, thus preventing that financing responsibility from falling to later-queued

customers that also will trigger the upgrade. As such, an interconnection customer's executing a GIA is a tariff requirement for contingent upgrade financing responsibility protection for later-queued projects. If none of the earlier-queued interconnection customers assigned to finance a particular upgrade execute a GIA, their financing responsibility could fall to later-queued interconnection customers depending on the upgrade (rather than reverting to the PTO).

For example, if a cluster 9 project triggered an upgrade and was assigned cost responsibility for the upgrade in its Phase II study report, and a project in cluster 10 requires that upgrade as well, once the cluster 9 project executes its GIA, there is no risk of cluster 10 "inheriting" any cost responsibility for that upgrade. If the project terminates its GIA and withdraws, the PTO inherits the cost responsibility.

However, if the cluster 9 project withdraws *without* ever executing a GIA and the cluster 10 project's Phase II study report lists that upgrade as a required and potential upgrade, then the cluster 10 project inherits the cost responsibility for that upgrade (instead of the PTO). The concern is thus that projects parking for longer will increase the number of interconnection customer in queue that have not executed GIAs, which increases the risk for clusters that require the upgrades originally triggered by an earlier cluster.

3.4. Extended Parking Straw Proposal

Due to the procurement issues discussed above, as an initial remedy the ISO proposes to extend the parking period for one additional year. The ISO also commits to examining the TP Deliverability qualification criteria comprehensively in its 2018 IPE initiative. This bifurcated approach will allow the ISO to provide immediate relief to the many projects currently parked, and it will allow the ISO and stakeholders to raise other issues with a longer timeframe in IPE 2018. To be sure, IPE 2018 will examine a variety of generation interconnection issues raised by stakeholders and the ISO, not TP Deliverability alone.

With regard to the ISO's immediate proposal, a second year parking option would be available to any project that did not qualify for a TP Deliverability allocation for a second year or any project that chooses not to accept an allocation it did receive. However, the ISO proposes two new criteria on any project requesting to park for a second year.

Criterion 1:

A project will only be allowed to park for a second year when there is TP Deliverability still available in the project's area. This criterion is sensible because there is no need to remain parked if all TP Deliverability is allocated. The ISO recognizes that there is the possibility of projects in the current allocation cycle not being able to retain their allocation or withdrawing, which would release TP Deliverability to become available in next cycle. However, this result has occurred so infrequently in the past that the ISO does not believe that it is prudent to allow projects to remain parked on the hope that it could happen.

Criterion 2:

If a project has a network upgrade assigned to it,¹⁵ which is needed by later clustered projects, parking for a second year will not be allowed. The ISO does not believe that it is prudent for the second-year parking option to increase the very real risk that either later clustered projects or the PTO become required to finance an upgrade as a result of the parked project's delay.

With the extended parking option, the ISO further proposes to clarify that parking a project excludes that project from the opportunity to negotiate a GIA. A project will have to come out of parking to be tendered a GIA.

4. Interconnection Request Window & Validation Timelines

4.1. Background and Issue

Each year the ISO accepts new generator cluster interconnection requests from April 1 to April 30 (or the next business day if the 30th is not a business day).¹⁶ Although the interconnection request window is open for the entire month of April, in 2017 the ISO received 94% of interconnection requests during the last week of the window. Likewise, in 2016 the ISO received 80% of interconnection requests during the last week, having received no interconnection requests during the first two weeks of the application window.

Once received by the ISO, the ISO must forward a copy to the applicable PTO within five business days. For an interconnection request to be considered valid under Section 3.5.2 of the GIDAP, the interconnection customer must submit an interconnection study deposit; documents demonstrating site exclusivity or a site exclusivity deposit; and a completed interconnection application in the form of Appendix 1 to the GIDAP. The interconnection application includes proposed one-line diagrams and technical data including PSLF files (dynamic model, epc power flow data file).¹⁷ An interconnection request will not be validated by the ISO until the ISO and the PTO determine that the information is complete and sound.

If an interconnection request does not meet the requirements to be validated, the ISO will notify the interconnection customer and explain the basis for its determination. The interconnection customer must then provide additional information needed for a valid request. Once the requested information is provided by the interconnection customer, the ISO must notify the interconnection customer within five business days whether the

¹⁵ Excepting Area Deliverability Network Upgrades.

¹⁶ Section 3.3.1 of Appendix DD.

¹⁷ Section 3.5.1 of Appendix DD.

interconnection request is now valid. If not, the process repeats itself until the interconnection request can be validated. Generally, this can take numerous cycles. If an interconnection request has not met the validation requirements within 20 business days after the close of the application window or 10 business days after the ISO first provided notice that the interconnection request was not valid, whichever is later, the interconnection request will be deemed invalid and cannot be included in interconnection study cycle.¹⁸

Recently the ISO has been receiving more technically diverse and increasingly complex interconnection requests at a time when new reliability standards require time-consuming studies. This diversity and complexity has made analysis and validation more challenging for the ISO and PTOs, and it has made correcting data more challenging for the interconnection customers themselves. Further exacerbating the challenge, more interconnection customers attempt to make last-minute changes that can be difficult to accommodate within the current validation and scoping meeting timelines. If these challenges continue, they could jeopardize the ISO and PTOs' responsibility to keep the Phase I studies on schedule. Moreover, they threaten ISO and PTOs' goal to work with interconnection customers as much as possible to assure their projects are given every opportunity to be validated and ready for the Phase I studies.

Given these circumstances, it has become apparent to the ISO, the PTOs, and many interconnection customers that additional time is needed for the validation process. Failure to provide this extra time could result in an increase in the number of projects deemed invalid or delays to the study process.

4.2. Shortened Interconnection Request Window Straw Proposal

The ISO proposes to shorten the interconnection request window and lengthen the time for validation and correction. Instead of the entire month of April, the ISO proposes to open the interconnection request window on April 1 of and then close the window on April 15 (or the next business day if the 15th is not a business day). In turn, the ISO, PTOs, and interconnection customers will have an additional 15 days for validation and correction. The ISO believes that these minor changes will help all parties and prevent delays to the Phase I study process.

The ISO hopes to implement necessary tariff revisions prior to the cluster 11 window in April 2018. Nevertheless, the ISO is open to stakeholders' proposals for additional changes to the interconnection window and validation process in the IPE 2018 initiative.

¹⁸ Section 3.5.2.2 of Appendix DD.

5. Next steps

As a next step, the ISO will conduct a conference call to discuss this issue paper and straw proposal on August 1st. The ISO then invites stakeholders to submit comments on the ISO's draft issue paper/straw proposal. Comments are due August 8th and should be submitted to InitiativeComments@caiso.com.

Following review and evaluation of the comments received, the ISO will consider potential revisions to its proposal and issue a revised straw proposal on August 23rd.