

## **SCE Comments on CRR Issues Paper**

SCE offers the following comments on the CAISO CRR Issues Paper date March 19, 2007.

### **Nominations at the Trading Hub**

SCE continues to believe that only one option addresses both issues associated with trading hub requests (i.e. the effective priority given to hub requests and the limitation of awards once a binding constraint is reached). This option is to turn a trading hub request into a multi-point request and evaluate each point independently. By doing so, any single binding constraint will not impact other points in the hub and when a binding constraint does exist, it can be evaluated equally in the decision of which rights to award (i.e. the effective priority for trading hubs will be removed). SCE still believes that any measure that would limit the amount of requests that can be made would be either inefficient or ineffective. The effective priority that a trading hub right carries, which was not apparent during the dry-run, can be expected to increase the amount of trading hub rights that will be requested. This incentive artificially and inappropriately encourages LSEs to request CRRs at the hub above and beyond what would exist if the hub rights did not trump point-to-point requests. On its current course this policy runs the risk of causing additional constraints that limit the amount of trading hub rights that can be honored and/or displacing point-to-point requests. This behavior would be inefficient as parties try to obtain hedges with the highest probability of being awarded rather than requesting those hedges most needed within their portfolio.

SCE understands that the CAISO is concerned with the added complexity of treating hub requests as multi-point requests (e.g. tracking, granularity of quantity, etc.). Therefore, SCE proposes that the CAISO consider combining two of the proposed resolutions. That is, the CAISO would treat a hub request as a multi-point request and simultaneously reconfigure the trading hub to reduce the number of points within the right. If a configuration can be created that is representative of the current hub definition and is composed of fewer points, the burden of tracking and granularity of quantity can be resolved.

### **Inter-tie Capacity Set Aside**

The CAISO has put forth two options for modifications to the imports set aside. The first option is composed of two parts.

Part one would have the amount of source verified allocation requests be based upon the minimum demonstrable quantity of the '04-'05 showing and the '06 showing. SCE believes that this methodology is conditionally acceptable. SCE conditions this on the result of utilizing daily contracts as a verified source. If daily contracts are permissible as source verification, SCE would need to further understand how this proposal would be implemented. Additionally, SCE conditions this on the requirement to provide verifiable source data for the '04-'05 as well as '06 time frame. SCE notes that the dry-run was a

voluntary non-binding process and objects to utilizing any data from the dry run in the actual allocation process. Such a process would effectively make a non-binding process binding.

Part two modifies the amount of set aside in the second year and beyond by utilizing the results of the priority nomination process (instead of the results of the second tier of the annual process) to establish the inter-tie set aside. **SCE objects to this methodology.** SCE supports CRRs as an instrument to hedge congestion risk that is allocated to load. Based on this principle, SCE continues to believe that the structure for allocation of rights prior to a set aside for auction purposes is appropriate and no further changes are warranted. Further, it is not clear that modifying the set aside in this manner would be compliant with Orders 681 and 681-A. These orders require that LSEs be able to obtain LT-CRRs to hedge load without the need to participate in an auction. By limiting further the amount of rights a LSE can obtain in the allocation, it may result in an LSE being required to participate in an auction to obtain a sufficient hedge to serve load. This risks running afoul of Orders 681 and 681-A.

The second option put forth by the CAISO is to establish a fixed percentage of inter-tie capacity to be set aside prior to allocation. **SCE strongly objects to such a methodology.** SCE notes that Orders 681 and 681-A require that LT-CRRs be made available without the requirement to participate in an auction to obtain them. By setting aside a percentage prior to the allocation, the CAISO would tie up capacity for which LSEs may desire a LT-CRR upon. However, since those rights have been set aside for auction, the only way for the LSE to obtain such rights would be to annually participate in an auction to obtain them. This would clearly run contrary to the requirements of Orders 681 and 681-A.

### **General Auction Set Aside**

SCE strongly objects to the recently released CAISO proposal to set aside 20% of the grid capacity for the annual and monthly auction processes. Market participants have now spent years developing a comprehensive CRR proposal. At its foundation, CRRs were designed to be allocated and all elements of the proposal have been based on this premise. Notably, the allocation of auction revenues was based on the premise that only incremental CRRs would be available at auction. If this fundamental change, moving away from an allocation to an auction is made, then many other elements of the design may no longer be appropriate. Not only is a move away from an allocation inappropriate, if pursued, the other necessary changes that would need to be considered can not be accomplished in the time remaining before filing these modifications with FERC. SCE urges the CAISO to continue with the original proposal as it is sound and compliant with the requirements set forth by FERC.

### **Allowable set of Verified Resources**

The CAISO makes proposals on two aspects of verifiable resources. First, the CAISO proposes to continue to utilize a methodology contrary to the current tariff that was

adopted in the dry-run in which contracts as short as one day in duration would be allowed as a verifiable source. Second, the CAISO proposes to allow contracts already entered into but that have yet to deliver energy to be a verified resource. SCE objects to both proposals.

SCE notes that the source verified CRRs granted in the first two tiers will be eligible for conversion to a LT-CRR. SCE finds it completely unacceptable that a contract of as few as 8 hours<sup>1</sup> would make an entity eligible to obtain a right for 10 years that can then be renewed into perpetuity. Additionally, the incremental burden of demonstrating need based upon a daily contract is onerous. While the CAISO has proposed utilizing a certification from a corporate executive to ease this burden, SCE notes that this only makes the burden easier on the CAISO. The CAISO has proposed that such a certification would be subject to audit (as it should be). This potential for audit will require LSEs to obtain and verify every daily contract submitted or risk potential sanction for providing false information to the CAISO. This burden is unacceptable and unwarranted. A thirty day term as specified by the current tariff is sufficient and better demonstrates a commitment to utilize a resource that a daily contract does not.<sup>2</sup>

If the CAISO does allow contracts as short as one day to qualify as a verifiable source, then SCE requests that such sources not be allowed as a conversion to LT-CRRs. It should not be permissible to obtain a LT-CRR on the basis of a contract that clearly does not demonstrate a consistent need for such a resource. LT-CRRs should instead be allocated to those that can demonstrate a more substantial commitment to a resource.

Next, the CAISO has proposed allowing contracts signed during or prior to the showing period (i.e. calendar year 2006) but that do not begin delivery until some future date as a verifiable source. **SCE objects to this methodology as introducing burdensome complexity that can not be fully evaluated prior to implementation and that will likely result in an inequitable allocation of CRRs.** Simply put, the CAISO should not allocate CRRs from “phantom sources”; rather sources used for the allocation must be true physical sources. SCE notes that the CRRs allocated from resources that are not yet operational cannot be used as a physical hedge physical, which is the intention of the CRR showing/allocation in the first instance.

Chief among our concerns is how the CAISO will handle multiple requests for the same resource or where the requests are constrained by the available transmission grid. Two examples will help to clarify these concerns.

In example 1, consider two LSEs with a contract for energy with generator A. LSE 1 holds a contract that delivers from 2006 – 2016. LSE 2 holds a contract that delivers

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<sup>1</sup> CAISO has indicated that a daily contract for on or off-peak would constitute a verifiable resource. Since the Off-peak period is as short as 8 hours, a contract for 8 hours of delivery would become a verifiable resource eligible for LT-CRR nomination.

<sup>2</sup> The CAISO has claimed that some LSEs have demonstrated a string of one day contracts that in sum is equal to 30 days. This has been used as justification that such contracting is the equivalent of a single 30 day contract. SCE does not believe that this is equivalent in any manner. A string of contracts is simply indicative of no better offer from another seller during those consecutive days.

from 2017 – 2020. The CAISO would need to address which entity would be entitled to how many CRRs in the initial allocation. Given that these rights can be converted to LT-CRRs, it does not seem reasonable that an entity that will not be exposed to congestion until 2017 would be eligible for a right upon MRTU implementation. It is further unreasonable that in awarding such a right, another LSE could be left under hedged for a resource that will deliver in that time frame.

In example two, consider again two LSEs. In this case, LSE 1 has a contract with an existing generator A, and LSE 2 has a contract for a future delivery from a yet-to-be-built generator. Further, the yet-to-be-built generator will not be operational until a transmission upgrade is performed that will make both generator deliverable (and hence CRRs for the output of both plants simultaneously feasible). In this situation, if LSE 2 is allowed to obtain rights today for a resource that is not operational, they will take rights away from those that LSE 1 could have obtained for a resource that is delivering. This will result in LSE 1 being under hedged while LSE 2 obtains a hedge that is not needed until the unit is operational. Further, once the unit becomes operational, additional CRRs will be available as the transmission expansion is completed at the same time. Hence, LSE 2 is able to obtain a full hedge and is additionally able to obtain a hedge in the years before the project is built. Thus, LSE 2 could be significantly over hedged in total while LSE 1 will have foregone CRRs for a number of years and will only be able to obtain a full hedge after the transmission upgrade to accommodate LSE 2 has been built.

Finally, it is entirely possible that contracts for future deliveries may have a number of contractual exit clauses. This is common for new generating facilities that do not meet certain readiness criteria. Much as the CAISO has agreed that CRRs should not be introduced for transmission expansions until such facilities are energized, it seems equally problematic that a CRR could be issued for a resource that may never generate.

SCE continues to believe that a solution to encourage new generation (and many times the associated transmission) needs to be found with respect to CRRs. However, this is not the solution. The rules necessary to implement such a solution will be necessarily complex and SCE is not convinced that such rules can be developed in a timely manner to allow the currently in progress allocation of CRRs to meet the MRTU implementation deadline. For these reasons, SCE continues to believe that a demonstrated showing of resources with deliveries of energy in 2006 is sufficient and reasonable.

### **Renewal of Expiring LT-CRRs and ETC/CVRs**

SCE supports the proposal to allow the priority nomination of LT-CRRs and ETC/CVRs one year prior to their expiration to provide the proper assurance that rights holders will be able to renew such rights.

### **Credit**

SCE objects to not requiring appropriate credit requirements for negatively valued CRRs until after the close of the auction process. SCE believes that this inappropriately

transfers the risk from rights holders to load as the failure to securitize these rights could lead to an increased exposure to revenue inadequacy. SCE urges the CAISO to apply appropriate credit requirements to all auction participants prior to the auction process.

SCE supports the CAISO's proposal to include compliance measurement and consequences for any failure to meet the credit requirements. The value of CRRs will change from time-to-time causing the credit requirements to similarly change. Given this, the CAISO tariff needs to provide appropriate incentives to CRR holders to meet the credit requirements.

### **Merchant Transmission**

SCE continues to believe that latent transmission capacity paid by load should not be made available as CRRs to sponsors of Merchant Transmission. That is, the Merchant should only be able to obtain as CRRs the stand alone capacity added by their project. For many decades, the transmission system has been constructed on the basis that those that pay receive the benefits. If capacity on transmission was limited due to grid configuration, any changes in the future grid configuration that made such capacity available would provide benefits from those that paid for the grid. This cost benefit relationship must be maintained. For example, it would be inappropriate for a Merchant to make a low cost investment that then entitles them to thousands of CRRs on transmission that was already in the ground. With this principle in mind, SCE offers the following comments on the CAISO Merchant Transmission White Paper.

The CAISO proposed methodology for determining CRRs for Merchant Transmission Upgrades will in certain cases allow the MT Sponsor to realize more value in CRRs than the MT Upgrade provided to the grid. Take for example a simple model in which energy sourced from point A can travel directly to sink B or indirectly to B via C. Further assume that each path in the network is such that 50% of the energy sourced at A will flow directly to B and the other 50% will flow indirectly via C. Additionally, assume that A to B is capable of carrying 500 MW while A to C to B is capable of carrying 1,000 MW. In this case, the maximum CRRs that could be issued is 1,000 MW with 500 flowing from A to B and 500 flowing from A to C to B. Now assume that the Merchant Transmission Owner upgrades A to B such that it will flow 1,000 MW (i.e. their upgrade is 500 MW). Now, the CAISO could issue 2,000 MW of CRRs (1,000 from A to B and 1,000 from A to C to B). In this example, under the CAISO proposal, the Merchant would be eligible for 1,000 MWs of CRRs for a 500 MW upgrade. The extra 500 MWs was inherent in the system and not paid for by the Merchant (rather it has been paid by load). As such, the value of such CRRs should not be made available to the merchant.

SCE recognizes the difficulties in translating a MT Upgrade into a set of point-to-point CRRs. The value of a point-to-point CRR from A to B may reflect not just an upgrade between A and B, but also the value of other constraints on the grid. Conversely, an MT Upgrade between A and B may affect LMPs elsewhere on the network, meaning that its value would not be fully reflected in any A to B CRR. Therefore, there are cases where it

is reasonable that a MT Sponsor should receive a set of CRRs with various sources and sinks in order to realize the value of a particular MT Upgrade. However, the MT Sponsor should not be allowed to realize value that already existed on the grid before its MT Upgrade.

The ISO proposed methodology would allow a MT Sponsor to realize value that existed on the grid prior to the MT Upgrade. Even though the ISO will be allocating and auctioning many CRRs to market participants, there is no guarantee that the full capacity of the grid will be issued in CRRs (including all ETCs, TORs, and CVRs). There could be some “unissued” or spare CRR capacity that could have been issued on the pre-upgraded network. The ISO methodology seeks to prevent the MT Sponsor from realizing this pre-existing value by issuing “Capacity CRRs”. Capacity CRRs are CRRs with the same source and sink as the requested CRRs that would have been feasible prior to the MT Upgrade. However, the ISO methodology does not go far enough in preventing a MT Sponsor from realizing value from unissued CRRs that may be located between other nodes besides the requested CRR nodes. SCE suggests that instead of restricting Capacity CRRs to have the same source and sink as the requested CRRs, Capacity CRRs should be issued on additional paths. That would prevent the MT Sponsor from realizing value on these additional paths that was not related to its MT Upgrade.

In the special case of an upgrade to a Branch Group that is radially connected to only one node within the Full Network Model, MT Sponsor CRRs should be restricted to source and sink only from the Branch Group and the first other connected node within the FNM. In this special case, the value of an upgrade to that network element is truly confined to these two nodes. No other constraint besides the MT Upgrade can affect the difference in LMPs between these two nodes, meaning that such a CRR would not inappropriately reflect value from elsewhere on the grid. And the MT Upgrade can not affect LMPs at other nodes because the power flow distribution factors at other locations on the grid are identical between the two ends of such a CRR (because all power injected at the Branch Group will also be flowing over the first connected node). Therefore, such an MT Upgrade should not receive any other source/sink CRRs.

In the unusual case where an MT Sponsor upgrades the grid and the existing set of CRRs is made infeasible, no CRRs should be issued to the MT Sponsor. Allowing the MT Sponsor to accept counterflows until some more valuable CRRs become feasible could allow the MT Sponsor simply unlock CRR value that was unallocated in the CRR allocation process. The objective function of the CRR allocation is “maximize number of MW of CRRs issued”, not “maximize the value of CRRs issued”. Even though the objective function of the CRR auction is to “maximize the bid-based value”, it is possible that after the allocation and auction the set of issued CRRs is not a value-maximizing set. If so, allowing an MT sponsor to accept counterflows may just provide a vehicle for unlocking value that was already there that is unrelated to the MT Upgrade.

Further, SCE also proposes an additional restriction of not allowing any trading hubs or hubs of any kind as a source or sink for MT Sponsor CRRs; only actual P-nodes (Nodes

in the FNM for which a LMP is calculated) as sources and sinks. Trading hubs include value from all constraints within the area of which the hub is composed. For example, if there was an SP15 Trading hub, all constraints within SP15 contribute to its LMP. Allowing trading hubs as sources or sinks could allow the MT Sponsor to realize value from elsewhere in the zone not related to its MT Upgrade.

Finally, the use of Option CRRs should be eliminated. Options restrict the amount of CRR available to the rest of the grid, and to the extent the CAISO process does not successfully protect the latent capacity of the existing grid, allowing the allocation of Options CRRs can magnify the negative consequences to all of the other grid users. Finally, since Options carry no risk to the holder, allowing the opportunity for free Option CRRs provides incentives for the MT to request every possible combination of sources and sinks (i.e. thousands and thousands of requests). This result is inappropriate. SCE suggests that the CAISO limit the number of request the MT can offer. On an earlier stakeholder call it was noted that PJM only allows three different requests. Although three may not be correct limitation, the CAISO should put a reasonable limit on the number of CRRs a MT can request.

SCE accordingly recommends that the CAISO:

- a) Issue additional Capacity CRRs besides just those with the source and sink of the requested CRRs. This can be accomplished by performing the ISO's proposed first step to "fill up" the existing FNM with Capacity CRRs with the same sink and source as the nominated CRR, and then search for additional unissued CRR capacity on the existing FNM and fill it up with more Capacity CRRs. In particular, search for unissued CRRs from nodes that have a significant impact on the upgraded element as reflected in the Power Transfer Distribution Factors.
- b) For MT Upgrades made to Branch Groups radially connected to only one other first point of interconnection within the FNM, limit the MT Sponsor CRRs to have as a source and sink only the Branch Group and the first connected node.
- c) Do not allow MT Sponsors to accept counterflow CRRs to make other CRRs feasible.
- d) Do not allow trading hubs as sources or sinks for MT Sponsor allocated CRRs.
- e) Do not allow MT to request "Option CRRs"
- f) Limit the amount of request that a MT can make to a reasonable limit along the lines of such limits used in PJM.

