

Responses of CFCMA to CAISO Standard Capacity Product STRAW PROPOSAL

This document presents the comments of the California Forward Capacity Market Advocates (“CFCMA”) on the CAISO’s Straw Proposal of the Standard Resource Adequacy Capacity Product (“SCP”) of November 11, 2008. CFCMA is composed of five member companies: FPL Energy, NRG Energy, Reliant Energy, San Diego Gas & Electric Company (“SDG&E”), and Southern California Edison Company. CFCMA appreciates the thoughtful work behind the Straw Proposal, and we believe that CAISO’s work serves as a useful starting point for stakeholder development.

Overall, CFCMA is concerned that the CAISO Straw Proposal is neither complete nor well-founded. Furthermore, the CAISO seems to have ignored the well-established capacity performance standards and criteria that have been developed in the Eastern markets in favor of a proposal that represents little practical improvement to the existing construct and does little to assure that buyers maximize value from their capacity purchases. Moreover, the Straw Proposal fails to provide any useful direction on a number of important elements of the tariff that we believe must be resolved before filing at FERC.

CFCMA cannot support the per-resource performance standard of the Straw Proposal. As discussed in detail below, this approach is unduly discriminatory and will not provide appropriate incentives for improving resource availability. CFCMA emphasizes that the CAISO should aim for a workable, long-term, and thorough performance and testing standard in this process to avoid disruptions to the marketplace in future years that would arise if the CAISO decides to introduce changes to the standard. CFCMA also believes that the Straw Proposal errs in proposing that availability incentives take the form of de-rating capacity sold in subsequent years based on performance in a prior year. Although this method is used by both the NYISO and PJM, in the California context it raises a serious issue. If a supplier sells the capacity from a particular resource to an LSE, one party or the other will be forced to manage the quantity risk of the de-rate, since the number of SCP tags available to that resource would vary with the resource’s performance.¹ In eastern RTOs with capacity markets, the shortfall or surplus can be bought or sold in an organized, liquid market with transparent prices that allows suppliers to manage the de-rate risk by pricing the risk into the capacity transaction. Without such a capacity market, however, California suppliers are not able to price the risk of shortfall and will be challenged to transact small quantities to meet a capacity obligation.

¹ The number of SCP tags should also vary, we believe, with the tested capability of the resource, which could vary from year to year. That variability, however, is likely to be smaller and more directly under control of the resource owner.

The CAISO suggested shifting the de-rate risk to buyers in the recent stakeholder meeting, but such a provision would create a non-standard and non-fungible capacity product, with the quality risk borne by the buyer and dependent on the identity of the capacity supplier – a condition that exists in no other commodity market. Nearly all parties at the recent SCP meeting were in agreement that a financial penalty is preferable, for this and several other reasons. The two substantive proposals regarding penalties - from the Calpine group and CFCMA - are built on financial penalties. Given that an NQC adjustment is unworkable without a capacity market, CAISO should follow the collective lead of market participants, and focus on developing a workable financial penalty construct for performance.

CFCMA is very concerned by the many important topics *not* thoroughly discussed in the Straw Proposal. These include:

- **Transition and grandfathering.** Some RA resources are already under long-term contracts with LSEs, and it would be risky and disruptive not to allow grandfathering of these contracts. CFCMA offers as a starting point that all RA contracts entered into prior to some date (to be determined in the CAISO stakeholder process) will be grandfathered at least with respect to availability standards and performance incentives. The grandfathering would be contract specific and not extended to contract renewals (either negotiated or evergreen). In order to address this important question adequately, a more complete study and stakeholder engagement by CAISO of this issue is warranted.
- **Testing.** Annual capability testing is an integral part of earning SCP tags. The CAISO should have a strong interest in assuring that claimed capability can indeed perform. Self-testing or reliance on nameplate rating is simply not sufficient to earn valuable SCP tags. For the CAISO to develop a comprehensive, workable program it must think through how resource testing will interplay with the performance standard and penalties. At this time the CAISO does not need to develop the full testing methodology, but the SCP tariff language should establish the timing and essential principles of the testing requirement.
- **GADS data reporting.** Just as CAISO has a compelling interest in testing units to ensure the accuracy of each resource's capability, the CAISO should require GADS data submission of all CAISO RA resources, where available. Each supplier that wants to be eligible to sell capacity must be required to provide GADS data, if available, to the CAISO for purposes of both assessing performance and to have the necessary outage data to conduct the planning reserve margin study. This is a familiar requirement to the suppliers of most of the state's RA resources, since the eastern RTOs all require GADS data submission. Although we recognize

that not all RA resources may collect GADS data, there is no reason not to require those resources with GADS data to submit it to CAISO, subject to audit, and to base their performance metric on that data.

- **Imports.** Given the importance of external RA resources, the Straw Proposal is remarkably silent about their treatment as SCP. Our detailed comments below provide a suggested approach to measuring their availability.
- **Demand-Side Resources.** DR is likely to be a growing proportion of the RA resources available to CAISO, yet their treatment in the SCP Straw Proposal is thin. If DR is going to shift from reducing RA obligation to counting as a tradable SCP tag, DR resources must be held to standards. At the stakeholder meeting, the CAISO acknowledged that market-based demand response resources can have a comparable obligation (i.e. to bid into the DA market) and performance standard as other capacity resources.
- **Linkage between the Availability Metric and the Performance Incentive.** While the CAISO proposes a means to assess resource availability, it does not link availability to the penalty structure.

Given the wide range and importance of a number of missing pieces, CFCMA remains very concerned that the scope of outstanding issues and details yet to be developed make the CAISO's proposed schedule extraordinarily aggressive; there simply is insufficient time to develop a workable, thorough and long-term SCP tariff filing that has been given careful scrutiny by market participants. The SCP is critical regardless of the outcome of the CPUC's Phase 2 Track 2 proceeding. We expect that the SCP will be the quantum of traded RA product regardless of whether the CPUC adopts a bilateral or centralized mechanism. Furthermore, given the importance of California in the WECC market, the implications of a sound SCP design reach beyond CAISO's borders. We therefore strongly encourage the CAISO to take the time it needs to develop a comprehensive program that will work for the long-term rather than to cut corners that result in an incomplete proposal, leaving FERC to make decisions on undeveloped details or to send the proposal back to the CAISO for further refinement. Simply put, the CAISO should focus on getting the comprehensive framework right.

Our detailed comments are organized following the headers of the Straw Proposal. Our comments conclude with a summary of CFCMA's proposal for modifying the Straw Proposal, including a set of steps CAISO should take to implement SCP.

3.2.2 SCP Process

CAISO states that the “quantity of tags [in SCs’ Supply Plans] will be *based* on the amount of MWs a resource has sold to LSEs.”² The CAISO’s example³ shows that there is not a one-to-one match between MWs and SCP tags. A resource’s MWs may be derated in the calculation of QC, further derated in the calculation of NQC, and (if physical penalties are adopted) derated again based on prior years’ performance. It is simpler and clearer to say that the quantity of SCP tags in an SC’s Resource Plan is not greater than the quantity of SCP tags sold to that LSE.

There is a necessary linkage between the SCP Product Definition and the setting of the Planning Reserve Margin (PRM). The PRM reflects an expectation that resources will be less than fully available. If the quantity of SCP tags available to resources were set below NQC to reflect prior years’ performance, the PRM (expressed in SCP tag MWs) may need to be restated downward relative to the PRM (expressed in NQC MWs).

For example, the New York Independent System Operator (NYISO) shifted from an “Installed Capacity” (ICAP) metric to an “Unforced Capacity” (UCAP) metric in 2002. ICAP is developed from resource tests of maximum load carrying capability and implicitly includes a deliverability test, which is similar to NQC. UCAP (for most resources) equals the ICAP times (1 – EFORD), where “EFORD” is the “effective forced outage rate under demand” metric based on GADS data. The NYCA Installed Reserve Margin (IRM) Requirement is expressed in ICAP. In 2002, the IRM Requirement was set at 18 percent, or 35,960.5 MW of ICAP.⁴ The 10-year outage rate used in determining the IRM was 9.68%; consequently, the NYCA Unforced Capacity Equivalent of the IRM Requirement was set at:

$$(1 - 0.0968) \times 35,960.5 \text{ MW [ICAP]} = 32,479.5 \text{ MW [UCAP]}$$

Consequently, New York LSEs needed to secure, collectively, only 32,479.5 MW of unforced capacity from qualified resources in order to satisfy the IRM requirement of 35,960.5 MW of installed capacity. Resource owners must, however, make all 35,960.5 MW of installed capacity of the qualified resources available for dispatch when available, not just the lower quantity of unforced capacity qualified and sold from the resource.

4.2 Product Definition

CFCMA generally supports the nine principles enumerated in this section.

² Ibid., emphasis added.

³ SCP proposal page 14.

⁴ New York State Reliability Council, “Adequacy of LSE Unforced Capacity During the 2002 Summer Period” available at <http://www.nysrc.org/pdf/Reports/UCAPICAPpaper11-24-02final.pdf>.

1. *The purpose of the SCP is to meet the RA Requirement.* CFCMA agrees.
2. *The SCP is fungible and can be easily traded.* CFCMA agrees, though we believe that the standardization of the RA product will likely entail some modification to Section 40.4.1 of the Tariff detailing how NQC is calculated.
3. *All RA capacity will be represented by tags.* CFCMA agrees. If some RA resources are exempted from SCP requirements, there will no longer be a true “standard” in the RA product, and there will be an undue incentive to use exempted resources that are not required to comply with all the obligations. This “flight from quality” is contrary to the overall goal of ensuring equitable allocation of the costs of maintaining system reliability. Even grandfathered capacity under long-term contracts should be accounted for by SCP tags.
4. *A tag is equal to the total capacity sold as RA Capacity or submitted to obtain RA Compliance but no greater than a resource’s NQC.* CFCMA disagrees. CFCMA believes the following clarifications are important:
 - a. *Tag.* A tag should be 1 MW of RA capacity and the sum of all tags associated with a particular RA Resource cannot exceed the NQC of the RA Resource.
 - b. *Mandatory testing.* The nameplate rating of a generating unit may not reflect the actual, current net capability of the unit. Other RTOs require regular testing to verify the resource’s maximum dependable load carrying capability.⁵ CAISO should, likewise, adopt comprehensive testing requirements as part of the calculation of NQC. Accurately assessing a resource’s performance capability is critical for the ISO to know the MW it can realistically count on and to fairly and accurately apply penalties for non-performance.
 - c. *Quantity of Capacity Subject to RA MOO.* Except for the case in which a unit’s NQC is below its tested maximum dependable output because of deliverability, resources that have sold all their SCP tags should have an RA MOO obligation on the entire capability of the resource. Likewise, if less than all of the SCP tags have been sold, the RA MOO obligation is on the *proportion* of the Pmax equal to the *proportion* of SCP tags sold. This interpretation is consistent with how PRM studies are performed; system resources are assumed to be fully available in these studies unless on forced or partial outage. This section of the Straw Proposal, as written,

⁵ See, e.g., ISO New England “Installed Capacity, Manual 20” Revision 22, June 6, 2008; Attachment D, Section 3: Claimed Capability Ratings and Audits; New York Independent System Operator, Service Tariff §5.12.8 and “Manual 4, Installed Capacity Manual,” October 2008, Section 4.2 “DMNC Procedures”; PJM Interconnection “PJM Manual 21: Rules and Procedures for Determination of Generation Capability,” Revision 07, June 1, 2008.

can be understood to imply that a sale of 45 MW of SCP tags from acme_2_unit creates an obligation on the resource of 45 MW of the unit's Pmax of 100 MW. We believe that this interpretation, if accurate, is inappropriate. The resource has committed $45/50 = 90$ percent of its NQC and should, therefore, have an obligation to offer 90 percent of its Pmax (in this case, 90 MW) to CAISO.

5. *Each tag will be identified by three types of attributes: Resource ID, Quantity of NQC MWs, and valid dates.* We agree with minor clarifications. We believe that explicitly coding the Local Capacity Area (LCA) of the SCP tag would be helpful for two reasons. First, it will simplify verification that a particular resource is in a particular LCA. Second, it may be the case that some resources are not fully deliverable to an LCA, but are fully deliverable to the system generally. In this case, the one-to-one mapping between Resource ID and LCA is broken: the resource owner may be allowed to sell some SCP tags in the LCA and others without the LCA designation (or with a different LCA designation).
6. *The duration of a tag extends no longer than the publication date of the next NQC list.* Although CFCMA agrees with the general intent of this provision, to keep the SCP tags fairly short-dated, as a practical matter the publication date of the next NQC list is not known exactly and, consequently, commercial contracting could be impaired. There needs to be a window between the publication of the NQC list and the effective date of those new NQC values. This window will allow suppliers and LSEs to re-contract as necessary to reflect changes in resources' NQC. Moreover, the effective date should be standardized to remove uncertainty in contracting, e.g. an NQC value is valid from June 1 of one year to May 31 of the follow year. Tags could be dated, under this formulation, up to the effective date of the next NQC list.
7. *Tag Reporting for RA procurement will occur monthly.* While CFCMA believes it is important to allow intra-month shifts in RA obligations among resources, we agree that this is a feature that can be added at a later date.
8. *RA MOO allows the ISO to use all the capabilities of a Resource.* CFCMA agrees. However, the CAISO's proposal does not, in fact, implement this principle. With fully integrated energy and ancillary services (A/S) dispatch under MRTU, resource owners should be indifferent to generating energy or providing equivalent ancillary services, at least financially. We believe that the five proposed rules need further development.

First, CAISO should encourage all resource owners to provide priced schedules, rather than self-scheduled quantities. While we recognize that self-

scheduling will continue, we think it inappropriate to set up exceptions in the SCP that would make self-scheduling even more attractive.

Second, we agree that hydro will require rules to accommodate statutory obligations and water management issues that extend far beyond the CAISO's 24-hour optimization horizon. We are not convinced, however, that the proper solution is to exempt hydro that has submitted energy self-schedules from the A/S offer requirement. The treatment of hydro is another area that should be subject to additional stakeholder discussions to develop appropriate rules.

Third, this section should make clear that any RA Resources committed in the DAM, IFM, or RUC must also provide A/S bids in the RTM for the services for which they are certified, subject to physical and regulatory operating constraints.

9. *A tag is bound by the availability standards, penalties and credit requirements of the tariff.* Agreed. Allowing exemptions would create unduly discriminatory treatment of resources and/or LSEs.

5. Availability Standards

5.2 General Principles

CFCMA disagrees with CAISO's proposal to 1) let each resource establish its own benchmark based on its 5-year average rolling performance; and 2) the physical de-rate to NOC based on a prior period's performance.

The CAISO proposal to base performance penalties on a capacity de-rate in a future period is unworkable in the existing California market. Suppliers cannot manage de-rate risk without a market to both price the risk into commercial transaction or to buy and sell capacity to meet the obligation. LSEs should not be held responsible for supplier performance. CFCMA therefore recommends that CAISO and stakeholder efforts focus on a workable construct for resource testing and financial penalties between now and when a capacity market is implemented.

CAISO's Proposed Performance Metric

CFCMA disagrees with the approach of setting a "target availability" level for each resource that is "specific to each resource." This approach completely undermines the principle that SCP tags represent a reasonably homogeneous product. Further, it does nothing to weed out the poor performers and reward high performers that are providing an exemplary level of reliability service. An Olympic high-jumper does not win the gold medal for setting a personal best, but rather for jumping higher than the other

competitors. Similarly, setting the bar low for units with poor reliability, and then rewarding them for achieving some increment above that—even if that higher level is still far below average—ultimately fails to give the right economic incentives to build and maintain resources with high availability thus giving consumer a better value over the long-term for their capacity purchases.

Suppose, for example, two 500-MW CCs are, in nearly all respects, functionally identical. One CC, Unit A, has historically had a 10% EFOR; Unit B has historically achieved a 5% EFOR. Unit B is clearly providing a higher level of reliability services than Unit A, but if both units are granted 500 MWs of SCP tags, this important difference is not recognized. If SCP Tags are to be traded at uniform prices, the target availability must also be uniform; otherwise, the low-quality Unit As of the world receive greater compensation—per unit of effective performance—than the higher performing Unit Bs. This is a patently discriminatory outcome, and in our view could not be found just and reasonable by the FERC, which must ultimately approve these market rules.

An important clarification should be made based on the stakeholder discussion. The CAISO seems to have arrived at this proposal out of concern that many resources could not meet a high availability standard. The CAISO referenced some resource with 30-50% outage rates. Based on the discussion, it seems that part of the problem stems from the focus on maintenance and overhaul outages rather than forced outages. CFCMA maintains that the availability metric should be solely focused on forced outages and that CAISO approved maintenance outages should not be part of the availability definition. Under this metric the resources would be assessed as follows:

- a. Each resource is assessed qualifying capacity based on the CPUC's counting rules;
- b. Each resource is subject to annual testing, as appropriate;
- c. Each RA resource is required to bid or schedule its available capacity pursuant to Section 40 of the CAISO's MRTU Tariff unless it is on a CAISO approved maintenance outage;
- d. If an RA resource is called upon to provide energy in a manner consistent with its RA offer obligation and is not available to provide that energy due to a forced outage, that outage will be recorded and used along with other forced outage data for the relevant time period to calculate availability metric. If the RA resource fails to meet its target availability metric, it will be subject to a financial penalty; conversely, an RA resource that exceeds its target availability metric would be eligible for an

incentive payment.⁶

5.4 Objective of the Standard

The proposed availability standards should not merely seek to have resources achieve levels “at least as great as the level that the resource has historically been able to achieve.” Instead, the resource owner should be provided the financial incentive to maintain the most economic, cost-effective level of availability for the resource. Holding steady at a poor level of availability should not be treated the same as holding steady at a high level of availability.

CFCMA concurs that resources should not be penalized for performing *usual* levels of maintenance during off-peak periods, as authorized by the CAISO. This goal must be balanced, however, by the need to provide an incentive to resource owners to complete CAISO-approved maintenance outages on schedule. Principally, however, the SCP availability should focus on peak-period performance, and consequently maintenance issues should be secondary.

The Straw Proposal is unclear on a key question: is the objective to raise *all-hour* availability or *peak-period* availability? CFCMA believes that the objective should be to reward high availability during peak periods. This approach is consistent with the idea that SCP is primarily a vehicle by which LSEs meet their RA requirements, and RA requirements are set by reference to peak loads. Because the CAISO is unlikely to approve maintenance during peak periods the resources should be expected to be available for dispatch unless the CAISO approved an outage. As a general matter, maintenance outages (other than those approved by the CAISO as part of resource’s scheduled maintenance) should not be excused.

5.5 Establishing Target Availability

CFCMA has several concerns with the Target Availability metric as proposed.

First, as noted above, it is a relative standard, rather than an absolute standard. This allows resources with poor absolute performance (relative to peers) to receive the same availability score as a resource with good absolute performance. Consequently, resource owners will not have appropriate incentives to increase availability of resources.

⁶ Forced outages would be monitored via required GADS submissions. The CAISO stakeholder process needs to resolve which resources cannot practically abide by GADS requirements (e.g. intermittent resources and DR) and what assessment needs to be developed to monitor performance if the resources is called upon to provide energy (or curtail in the case of demand resource).

Second, if this approach to Target Availability were adopted, we do not believe that planned outage hours (including scheduled maintenance hours) should be included, given the manner in which CAISO proposes to use the metric. The availability metric examines *all* hours over the previous five years; consequently, the maintenance hours it sweeps up will include overnight and weekend maintenance, which is normal operating practice and not generally considered to be a reliability risk. The performance metric, however, will look only at a subset of peak hours. CAISO approved scheduled maintenance should not normally be performed during these hours. Consequently, we believe that, if this approach were to be used at all, this mismatch should be addressed by setting the benchmark with reference to the same subset of hours over the prior five years.

Third, as a practical matter, CAISO will need to establish the Target Availability prior to the beginning of the delivery year. Otherwise, commercial contracting will be complicated by an uncertain metric. We recommend that the Target Availability be computed on a *calendar year* basis, allowing it to be known in the January prior to the beginning of the *power year*.

Fourth, greater consideration would be needed regarding the treatment of resources with less than 5 years of data, a shift from consideration of peer data to unit-specific data creates an over-weighting of the early years' performance. This issue is particularly noteworthy because it is not uncommon for new units to have "break in" issues that lower availability in the initial start-up period. To understand this problem, notice that in steady-state, each year's performance has a 0.2 weight over five years, summing to a total weight of 1.0. Under the Straw Proposal, however, early years' performance has greater weight. While this problem could be fixed by rolling in real data over time, the simplest fix is to abandon the flawed idea of unit-specific performance metrics.

Resources that may require a Different Approach Highlight why Physical De-rates are Inappropriate

The existence of this category underscores why CFCMA believes that financial incentives and penalties are needed. Given the complexity of accommodating these resources in *any* SCP plan, however, additional stakeholder process is essential. It may become necessary to use different approaches in assessing whether particular resources were available, but there should be no ambiguity as to the standard of review for each class of resources.

- **Imports.** Since contracts to import may come and go over time, it is particularly ill-advised to have retrospective performance criteria for them.
- **Demand response.** Likewise, DR participants may come and go. A customer that agreed to be a DR resource in one year may not opt into a DR program in

all subsequent years. The metrics should therefore be tuned for in-period evaluation.

The parallel CAISO stakeholder process on DR must focus on definitions of availability and sizing of performance penalties appropriate to DR resources.

- **LD contracts:** The CAISO should not grant LD contracts SCP tags except, possibly, as a means of grandfathering pre-existing contracts.

6. Performance Incentives

6.2 Financial Penalties versus Capacity De-Rates

CFCMA takes issue with the characterizations of the pros and cons of financial penalties vs. capacity de-rates.⁷ CFCMA underscores that financial penalties provide the only workable construct absent a capacity market and we therefore recommend that the capacity de-rate options be eliminated from further discussion. Specifically regarding the pros and cons of financial penalties:

- *PRO: Immediate and direct feedback:* If financial incentives are structured symmetrically around the target availability, then it would be possible to assess them monthly and thus retain the desirable linkage between performance and payment. If only sub-par performance is penalized and there are no incentive payments for above-par performance, then some annual approach is needed; even in this case, though, it would be possible to use a rolling 12-month average of performance so that there is not a single end-of-year performance penalty/payment, which could adversely affect credit requirements.
- *CON: Does not provide as strong an incentive to perform as adjustment to NQC.* CAISO asserts this without explanation. Either approach impairs the potential revenue from the underlying RA resources, so the two approaches can be tuned to have equal revenue impact. CFCMA believes, however, that the improved immediacy of the financial penalties creates greater feedback and hence greater incentives for performance than an equivalent NQC penalty.
- *CON: ISO does not know the prices paid for capacity and therefore cannot size the penalty.* In the energy market, ISO does not know what contract prices, yet it imposes costs and charges on suppliers. Likewise, in eastern capacity markets, much of the volume is transacted bilaterally at prices not known to the ISO, yet

⁷ Straw Proposal at p. 26.

there are financial charges based on a common benchmark (typically the deemed Cost of New Entry or multiple thereof; see, Midwest ISO Tariff §69.3.7⁸).

- *CON: Suppliers will likely incorporate expected penalty cost into contract with LSE, thereby driving up the price of RA.* This statement is incomplete. First, any net penalty payments do not disappear. Presumably they are returned to load customers in some sensible way, such as described in the CFCM design proposal. Thus, any increase in RA prices would be offset by these penalty rebates. Second, the penalty structure can be designed to have an expected value of zero and, consequently, result in no expected increase in the price of an SCP tag. The CFCM design includes such a “revenue neutral” penalty structure precisely for this reason.

Furthermore, we disagree with CAISO’s implication that there will be no price effect from using a de-rate to NQC instead. Consider a 100 MW (NQC) marginal capacity resource that expects a shortfall of its energy revenues vs. going-forward costs of \$450,000 in each of the next several years. Historically, this unit has had 90% availability.

- No penalty: The resource requires at least $\$450,000/100 \text{ MW} = \$45/\text{kW-year}$.
 - NQC de-rate: Since the resource needs an expected *net* payment of \$450,000, it will seek a price of $\$450,000/90 \text{ MW} = \$50/\text{kW-year}$. Under a de-rate system, however, LSEs would need to buy fewer SCP tags, offsetting this price increase.⁹
 - Financial penalty: Since the resource needs an expected *net* payment of \$450,000, it will seek a price of $(\$450,000 + 10\% \text{ of penalty} * 100 \text{ MW})/100 \text{ MW}$. This price may be higher or lower than \$50/kW-year, depending upon the penalty rate. Specifically, suppose the penalty rate were \$40/kW-year; then the lowest price this resource would accept would be $(\$450,000 + \$40,000)/100 \text{ MW} = \$49/\text{kW-year}$. Notice that this is *lower* than the price in the NQC de-rate case. Moreover, if a resource expected that it could outperform the Target Availability, it would expect performance payments, not penalties, and therefore would require a lower capacity payment. Net penalty payments would be rebated to loads, offsetting any net price increase.
- *CON: Would result in additional credit requirements.* Although we agree that CAISO would need to assess whether additional collateral was needed, we

⁸ As filed in FERC Docket ER08-394-003, June 25, 2008.

⁹ See discussion of 3.2 above.

believe it is likely that nearly all resources will not need to post additional credit. Since most RA suppliers are substantial net recipients of payments, not creditors, the potential payments under the SCP requirements would almost surely be lower than the expected payments for energy and other services.

Looking at CAISO's claimed pros and cons of the "physical penalties":

- *PRO: Provide strong incentive.* We disagree, as discussed above.
- *PRO: For a resource that has been adjusted downward, exceeding target availability in subsequent year can lead to upward adjustment in NQC.* CAISO does not provide a proposed formula for this adjustment, but as we understand it, the metric would *only* provide this incentive to improve to a resource that has recently had a negative performance change. It would not, however, provide any incentive to improve above a unit's baseline performance level.
- *PRO: Would better reflect true NQC of resources and may result in investment in new resource in resource-constrained areas.* Resource outages are—or should be—modeled as part of the PRM studies. Thus the total quantity of capacity required can be correctly stated either in terms of total capacity (NQC) or net capacity (ANQC). Moreover, the use of physical de-rates could result in *incorrect* signals of resource need in load pockets: if a load-pocket resource has unusually poor performance in one year, its NQC for the following year would fall, requiring LSEs serving that area to find additional resources—even though the incumbent resource's availability is likely to rebound to historical levels, rendering the need for those additional resources moot.
- *CON: Likely the soonest a NQC derate could occur is for compliance year 2011.* We do not understand why this limitation would exist. Resources' availability is known now; adjustments to NQC could be made immediately, at least under the reformulation we offer below.
- *CON: Provides feedback to resource only after the end of the compliance year.* This issue is most troubling for resources that will not be an RA resource in the following year, such as retiring units, short-term imports, and certain DR resources.

Other Issues

Determining Capacity Price in Penalty Charge

CFCMA disagrees with the option presented on page 28, as this approach assumes that there is a continuing contractual relationship between the SCP Tag issuer and the LSE that ultimately submits that tag as part of its RA showing. It may well be the case, however, that the tag has been sold and resold several times, severing this direct link.

As discussed above, CFCMA sees no issue with using a proxy price for capacity. As shown in the example above, such an approach will have an impact on the market price of capacity similar to the impact of an NQC derate. Neither approach need raise the total *cost* of RA even in the short run, and in the long run, appropriate performance incentives should create positive benefits for consumers.

Monthly versus After-Year-End Assessments

We agree that, under the physical de-rate option, the penalty should be assessed by adjusting the capacity annually, rather than monthly. As noted above, it is commercially important that this new NQC value be known well in advance of the delivery year to facilitate contracting. Hence, NQC will need to be calculated based on some offset period, rather than the prior power year (which does not end until the next power year begins, providing literally no window for trading of firm quantities).

Performance during Peak Hours

CFCMA supports CAISO's intent to focus performance on peak hours. Overall, CFCMA believes that for market participants to fully understand the commercial implications and practical implementation of the peak hour proposal, the CAISO should provide much more specificity on the peak hour metric and the defined financial penalties that apply to performance in those hours. Specifically, we are concerned that including approximately 1,500 hours as "peak" dilutes the incentive unduly and sweeps in many hours that are knowably not "peak."

CFCMA wants to emphasize one element of a peak hour metric. The core reason for a peak hour performance metric is because capacity is a reliability product and reliable system operation is contingent upon a high level of performance during system contingencies. That is why the performance and penalty structure centers on these hours. That is not to say, however, that capacity will somehow fail to be availability in the non-peak hours. The purpose of the peak hours is to add extra emphasis to more critical hours. Given this, the CAISO should work to more carefully define these hours with the assurance that there is still an availability obligation for the hours that do not fall under the peak definition.

Financial Penalties and Bonus Payments

CFCMA is unconvinced by the metric proposed by CAISO. Setting relative standards for each unit, capacity resources are treated unequally and provided with no incentive to improve from their baseline.

Were the form of the penalty to be financial, CFCMA continues to believe that its proposal in the CFCM design is optimal. That design requested that CAISO specify which hours would be included in the availability metric; it has now done so, although we have reservations about including all months.

CFCMA Straw Proposal

The CFCM design that our coalition has consistently sponsored can be thought of as addressing four components of RA:

1. What should be bought and sold? In other words, what is the RA product?
2. How much should be bought and sold, and who determines these quantities?
3. How should the RA product be transacted?
4. What supplier incentives should there be to satisfy the must-offer obligation related to available RA capacity?

In many regards, the SCP is addressing the first and fourth components, and so we believe it is appropriate to look to the CFCM design for thoughtful answers to these questions. The CAISO has also previously stated that the CFCM design should be the starting point for an RA market—which CFCMA understands to include not only the “how” but also the “what.”

Steps of the SCP Process

1. Generation resources provide GADS data to CAISO, subject to audit, as appropriate
2. The ISO conducts comprehensive testing of all RA resources' claimed capability; this is an on-going process.
3. The ISO produces a Local Capacity Study and Deliverability Study for the relevant Delivery Year.
4. Each LRA establishes RA requirements for its jurisdictional LSEs.
5. Based on tested capability, deliverability, and other criteria, the ISO establishes the amount of Net Qualifying Capacity and local area designation for each resource for the relevant Delivery Year and posts this information in its NQC report. The MW quantity of SCP tags a resource may issue equals its posted NQC (e.g., a resource a NQC of 100 MW may issue up to 100 SCP tags). Tags expire at the end of each relevant Delivery Year.
6. LSEs submit RA Plans to their LRA & ISO (year ahead and month ahead), providing a list of SCP tags relied upon.
7. SCs submit Supply Plans to ISO (year ahead and month ahead), providing a list of SCP tags sold.

8. The ISO performs a validation on Supply Plans and RA Plans (in coordination with the LRAs). Resource Adequacy Resource IDs and SCP values identified in Supply Plans are logged in a database for use in ISO market systems. The CAISO contacts the Supplier SC if the Resource Plan(s) contain Tags not appearing in the Supply Plan, and vice versa.
9. The penalty structure can be designed to have an expected value of zero and, consequently, result in no expected increase in the price of an SCP tag. The CFCM design includes such a “revenue neutral” penalty structure precisely for this reason.
10. ISO calculates *net* credit requirements of designated RA resources (taking into account expected energy and A/S payments by CAISO to those resources), and SCs submit credit assurance provided by underlying Resources, if required.
11. In the Day-Ahead Market, RA Resources comply with all tariff must-offer requirements. A self-schedule of energy or ancillary services will be honored unless all priced offers have been used.
12. In Real-Time Market, committed and short-start RA Resources must remain available and submit Economic Bids for the Resource in HASP/RTM for energy and ancillary services for which they are certified.

Obligations of RA Resources

Resources that have sold SCP tags take on certain obligations to the CAISO. These include:

1. Submission of GADS data, where applicable, subject to audit.
2. Periodic testing of claimed capability by the CAISO.
3. RA Resources must comply with RA MOO for the portion of the resource’s capability equal to the portion of SCP tags sold as RA.

Transition

SCP Tags will be the exclusive means by which RA Plans and Resource Plans are submitted. Although CAISO is currently targeting a start date of 2010, it should remain open to a delay if needed to ensure a complete and sound SCP design.

All RA contracts entered into prior to some date (to be determined by in the CAISO stakeholder process) may be grandfathered at the election of the contract buyer. The grandfathering would be contract specific and not extended to contract renewals (either negotiated or evergreen). Additional details of grandfathering need to be discussed.