Market Surveillance Committee Opinion on the ISO's Proposal for Congestion Management Reform

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I. General Opinions on the Proposal

We strongly support the basic approach embodied in the ISO's July 11, 2000, Congestion Management Reform Recommendation proposal, namely to start from the reality of real-time operations and work backward in time, making sure that forward trades are consistent with actual, real-time operations.

We also agree with the ISO that moving towards smaller zones, to be called Locational Price Areas (LPAs), is necessary to overcome the problems associated with intra-zonal congestion in the current market design. Yet moving all the way to Locational Marginal Pricing at the nodal level is not necessary, so long as the LPAs truly reflect virtually all transmission and operating constraints that arise in practice. Using smaller zones will make more transparent the problem of locational market power that is hidden, but by no means eliminated, through the existing market design. The locational price signals that will result from the proposed reform will do much to provide incentives for generation to locate where needed

We continue to study the mechanism for mitigation of local market power in the provision of Local Reliability Service. We are concerned that the proposed capacity auction bid cap (Alternative 2, p. 46, setting the bid cap equal to the variable cost of the highest-cost resource within the LRA) will overcompensate many existing low-cost generators. We are not yet convinced that the ISO's suggestions for some reimbursement from the generator to the ISO at the lower of the unit's energy cost or a reference energy price (p.47) will solve this problem.

The MSC intends to continue to receive input from market participants regarding the mitigation of local market power, and to work with ISO staff to evaluate alternatives for the capacity auction bid cap. In this regard, we do not believe that market power mitigation necessarily should guarantee that each generator earns profits in each hour; profitability over a day-long or even year-long period is a better test.

While we applaud the ISO's efforts to operate only a minimal set of markets and steer as clear as possible from forward markets, we must point out that this approach relies quite heavily on the ability of market participants to enter into long-term and forward contracts for the provision of Local Reliability Services. To facilitate these market transactions, it is essential that the ISO clarify the timing associated with self-provision of Local Reliability Services, and that the ISO provide market participants with the information necessary to conduct such trades. Without such information, and without clear market rules, pressure will mount for the LRS capacity auctions, intended only as a backstop, to serve as the primary means by which local reliability service is procured.

While the Market Separation Rule reduces the choices available to the ISO to deal with congestion, we see no reason in principle why efficiency requires a relaxation of the Market Separation Rule, so long as institutions are in place to permit other entities to accomplish the trades necessary efficiently to deal with forward market congestion. Thus, given the fundamental approach adopted in California, namely to segregate forward electricity trading from operation of the transmission network, we are prepared to support a reform that leaves the Market Separation Rule intact so long as all necessary steps are taken to facilitate inter-SC trades of adjustment bids.

The MSC reaffirms its concern that a broad retail rate freeze operates at cross-purposes with the desire to introduce price-sensitive demand into the wholesale markets. Whatever reforms are adopted to manage congestion management, they will be more likely to be effective if hourly metering is put into place and load becomes more price-sensitive.

Finally, and perhaps most important of all, the MSC remains deeply concerned about the lack of significant new generation capacity locating within California over the past several years, and with the relative paucity of improvements to the transmission grid since market

restructuring. The fact is, with growing load, congestion problems are bound to worsen, whatever protocols are in place to manage congestion, unless new generation locates near load and/or the grid is upgraded. We therefore urge the ISO to address issues of New Generator Interconnection Policy and Transmission Upgrades without delay. One of the attractive features of the ISO's proposal to manage congestion reform is that it permits a promising and straightforward method of handling new generator interconnection policy (see below).

II. Local Reliability Service (LRS) Auctions (§7.3)

We agree that congestion management must include acquisition by the ISO of sufficient local capacity and energy in each LPA to meet local reliability needs, recognizing the true transmission and operating constraints in the system. We also agree that certain generators are likely to possess significant market power in the provision of these services, so mitigating that market power is an essential component of congestion reform.

Market participants should be under no illusions about the proposed LRS Capacity auctions: while we hope that many LRS capacity auctions will be competitive, the market design must be based on the assumption that a great many will *not* involve workable competition.

A. Market Power Mitigation and the LRS Capacity Bid Cap

We focus our attention on the mitigation of market power in the two-day ahead Local Reliability Service auction. This is precisely where we would expect locational market power to be exerted under the reformed market design.

We favor additional LRS procurement on the Trading Day, to prevent the exercise of market power in situations involving unexpected needs due to line de-ratings, outages, or increases in load forecasts.

A bid cap is needed for the LRS capacity auction to mitigate market power (both in the auction itself and in forward markets). This bid cap should be set in recognition of the fact that the generators will be paid directly for their energy. Thus, it is reasonable to set the LRS capacity bid cap at a level that will allow moderately high-cost generators to be compensated for the extra costs they incur over those of lower-cost units who will typically determine the market-

clearing price for energy. This implies that an LRS capacity bid cap equal to the *difference* in operating costs between moderately high-cost generators and low-cost (fossil) units will be sufficient to compensate those units that are needed for local reliability for their higher cost structure. According to this logic, a uniform capacity bid cap can be set based on the distribution of heat rates in fossil units in the ISO control area, adjusted for natural gas prices. In addition, to compensate higher-cost units, we recommend the ISO give generators the option to pick an alternative contract, along the lines of today's "Condition-2" RMR contracts, which would guarantee the unit owner recovery of all going-forward costs in exchange for providing energy and ancillary services at the ISO's request. Therefore, we favor retaining contracts like today's "Condition-2" RMR contracts, which generators can elect, rather than setting the bid cap so high as to allow the highest-cost units to cover their costs.

B. Allocation of Cost of LRS Procurement

Charging load (through Scheduling Coordinators) within the LPA would seem to be the natural economic solution, since serving this load is more expensive because of transmission (import) limits into the LPA. This approach sends the right signals to load to reduce usage during peak periods, and for generation to locate within the LPA. We see no good reason for charging load within a larger area than the LPA.

III. Assorted Topics from the ISO CMR Proposal

A. Creation of New LPAs (§7.1.3, p. 35)

According to the principles articulated in the ISO's proposal, if there is more than a very small amount of congestion within an existing LPA, another should be created. Creating an additional LPA merely reflects the transmission constraints and operating protocols associated with actual real-time operations. Importantly, there is no presumption that conditions within a single LPA are competitive. Indeed, the ISO explicitly recognizes with respect to the LRS Capacity Auctions that "[i]n most cases, there may really be no auction, since there may be only one specific unit or owner that can provide the service. In such a case, the 'auction' may 'clear' at the LRS bid cap." (p. 47) But the hope is that genuine auctions can be run in at least some

cases, rather than relying heavily on RMR-type contracts which inevitably involve more direct regulation and less use of markets.

B. Firm Transmission Rights (§7.2, p. 39)

The proposal involves FTR auctions of "100 percent" with no position limits. (p. 32, p. 41) The MSC is uneasy with the plan to auction FTRs for a very high percentage of actual transmission rights without the imposition of position limits at least for a transition period. Though a monthly auction will help to mitigate the accumulation of market power, we are concerned that this may not be sufficient. Certainly, under the proposed arrangement, a very careful tracking of secondary trading is prudent in order to prevent the exercise of market power over congested interfaces.

We favor allocating the revenues generated by the FTR auctions to a transmission upgrade fund. These congestion revenues provide a useful signal of the value of upgrading transmission capacity.

C. Ancillary Services in Congestion Management (§8.3, p. 59)

The MSC supports the principle that transmission capacity reserved for use by Ancillary Services is valuable and is properly considered a cost associated with the provision of Ancillary Services. Therefore the MSC agrees that suppliers of A/S should bear the responsibility (cost) of securing the necessary transmission rights.

D. Recallable Transmission (§8.4, p. 62)

The MSC sees no reason, in principle, why market transactions cannot efficiently allocate transmission capacity, including capacity initially owned (or purchased) by one entity that the entity does not, as real time approaches, need. All that is required is for markets to develop that either (a) allow for the forward purchase or sale of contingent transmission rights, or (b) that allow for the purchase or sale of transmission rights at such time as the initial holder of those rights knows that it no longer needs them, yet with sufficient advance notice that others can fruitfully make use of those rights.

The MSC favors the reform of ETCs to eliminate institutional barriers to the development of these markets for transmission rights. The MSC encourages the ISO promptly to seek the necessary authority to reform ETCs so they fit better into the overall congestion management system in California.

IV. New Generation Capacity and Transmission Upgrades

We have left to the end what is probably the most significant issue regarding congestion in California's restructured electricity industry: the building of new generation capacity and the construction of upgrades to the transmission grid.

Central to expanding generation capacity within the State of California is providing generators with clear and predictable rules respecting the ISO's New Generation Interconnection Policy and transmission expansion policy. FERC and the ISO have correctly concluded that solving the congestion management problem was a necessary predicate to a workable new generation interconnection and transmission policies. However, the ISO's congestion management reform proposal does not include specific recommendations with respect to either new generation interconnection policy or transmission expansion. The Committee recommends that the ISO expeditiously address both of these matters, and, if possible, file with FERC proposals for a New Generation Interconnection Policy and for transmission expansions at the same time as congestion management reform is filed.

A. New Generator Interconnection Policy

A straightforward resolution to the new generation interconnection policy conundrum is much advanced by the congestion reform proposal. One attractive solution is a minimalist one: simply apply the congestion management rules according to their terms to new and existing generators alike. New generators would pay for their "direct" interconnection costs, but would not otherwise be obligated to pay for upgrades or other parties' congestion costs. Under this approach, generally applicable inter-zonal (i.e., inter-LRA) congestion rules are to be applied even-handedly to new and existing generators.

Under this proposal, existing generators could, if they chose, purchase FTRs to protect themselves for a period of time against the imposition of congestion costs by new generators. Likewise, a new generator could hedge against congestion costs by coordinating the purchase of FTRs with dates that its generation goes into service. Under the reform proposal, intra-LRA congestion would not ordinarily occur, and new generators thus would not be subject to any exactions to relieve it. If the presence of a new generator caused significant intra-LRA congestion, then a new LRA would be formed and the generally applicable congestion management rules would again apply.

Accordingly, the MSC is hopeful that the reform rules as proposed, in conjunction with the straightforward procedures just described, could reach a workable and economically efficient result for the interconnection of new generators.

B. Transmission Upgrades

Since the ISO commenced operation, precious few transmission upgrades have been made in the State of California. The ISO needs to streamline its procedures for proceeding with transmission upgrades. We are concerned that the cost of delaying the construction of new transmission lines (as reflected in congestion costs and cost-of-service interruptions) will in a number of cases far exceed the cost of the upgrades. Our advice is simple: get on with the job of upgrading transmission where the benefits exceed the costs. One of the attractive features of the ISO's reform proposal is that, by establishing markets for inter-LRA congestion, the new market design will provide price signals that will make it far easier for the ISO and market participants to measure the costs associated with congestion over various interfaces. This is just the information needed to inform transmission upgrade decisions.

A related issue is the extent to which upgrades should be available to parties that are willing to pay for them. We recommend that the ISO, as a matter of policy and subject to regulatory approval, direct PTOs to undertake any upgrade that a scheduling coordinator, generator, or other party is willing to finance. In return, the party financing the upgrade would receive a permanent, transferable FTR equal to the incremental transfer capacity the upgrade creates. This policy, together with more transparent congestion prices under the reform proposal, should facilitate economically justified expansion of transmission capacity within California.

Finally, the MSC advocates a straightforward benefit/cost test for transmission upgrades: in present value terms, do the system-wide benefits of an upgrade, in terms of reliability, reduced congestion, and more efficient provision of electricity, exceed the costs associated with that upgrade? We recognize that measuring these benefits and costs is far from easy, but such measurement is where attention should be directed. In contrast, efforts to draw a sharp line between upgrades needed for "reliability" purposes and upgrades attractive for "economic" purposes seem artificial and likely to delay the actual upgrading of California's transmission grid, the need for which is becoming increasingly urgent.