BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Promote Policy and Program Coordination and Integration in Electric Utility Resource Planning.	R.04-04-003 (Filed April 1, 2004)

COMMENTS OF THE INDEPENDENT ENERGY PRODUCERS ASSOCIATION ON THE STAFF'S CAPACITY MARKETS WHITE PAPER

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In accordance with the Chief Administrative Law Judge's Ruling of August 25, 2005, the Independent Energy Producers Association ("IEP") submits its comments on the Capacity Markets White Paper prepared by the Commission's Energy Division.

The Energy Division staff has done an admirable job of describing the need for capacity markets and identifying the key issues that must be addressed. IEP urges the Commission to continue its progress toward defining and implementing a capacity market that will address California's current capacity shortfall and help establish a stable climate that will both encourage new investment and work to preserve existing needed generating capacity. At the same time, however, the Commission should not lose sight of the other steps needed to achieve the larger goal of establishing the conditions to maintain and attract sufficient investment to meet the state's power needs.

IEP's comments are presented in three parts: an initial section making general observations on capacity markets and overall goals and offering recommendations regarding infrastructure investment; the second discussing lessons learned from Eastern markets, responding to the five policy questions raised, and reacting to the related eight staff recommendations; and a final section addressing the administrative and timing issues raised by staff's proposals.

I. <u>GENERAL OBSERVATIONS</u>

In addition to the "structural imperfections" identified in the White Paper,[1] a capacity market is necessary because of mitigations that have been imposed on the energy market, including bid caps, the Must-Offer Obligation, Reliability Must-Run agreements, and out of merit order dispatch. In particular, caps on energy bids and other forms of price mitigation muffle the price signals that would ordinarily call attention to the need for additional demand response and investment in generation. A capacity market can provide ways to begin to overcome the defects of the energy market, including the lack of demand response and the distorted price signals resulting from price mitigation. Thus, the capacity market should be recognized as a mechanism needed to compensate for shortcomings of the current energy market. While unmitigated, competitive energy markets may be the best theoretical solution to the problem of attracting new investment and sustaining existing generation, the political reality is that unmitigated energy prices will not be permitted as long as ratepayers cannot readily respond to price signals. Therefore, as the White Paper acknowledges, capacity markets will remain an essential component of wholesale electricity markets as long as energy

[1] White Paper, p. 4.

markets remain mitigated and imperfect.

While the Commission's commitment to the development of capacity markets is a significant milestone in the evolution of California power markets, the Commission should retain a concurrent focus on other ongoing energy market reforms and on the tasks that must be completed in the next six to nine months:[2]

- The Commission's procurement process must continue to be refined so that more resources are secured through long-term contracts. In the present market conditions, long-term contracts are the primary way to stimulate investment in new generating plants and the repowering of existing plants. At the same time, improved transparency in the procurement process will help lend price and structural stability to energy markets.
- Resource adequacy targets and responsibilities must be clarified. The current condition, in which all Load-Serving Entities ("LSEs") apparently claim to be resource adequate, while aggregate forecasts show a need for 2,000 MW of additional resources and local capacity requirements are not yet enforced, is a recipe for crisis. The Commission must find a way to assign and enforce responsibility for

[2] Other urgent tasks lie outside the Commission's jurisdiction: approval of IEP's proposed Reliability Capacity Services Tariff by the Federal Energy Regulatory Commission; elimination of the Must-Offer Requirement; elevation of the energy bid cap to levels established in other areas; and elimination of the Automatic Mitigation Procedure.

resource adequacy as soon as possible.

- The resource adequacy requirement ("RAR"), including a local area requirement to ensure reliability, must be implemented on schedule and firmly enforced. Definition by the Commission of the components for a standard, commercially acceptable, tradable product to meet the RAR requirement is also critical.

At this stage in the market's development, the details of a capacity market will be the subject of disagreement and even controversy. This should not be surprising, in light of other jurisdictions' experiences to date. In other areas of the country, capacity markets have been initiated, implemented, criticized, revised, and revised again, and a similar stuttering progress may also be California's experience. Despite the differences of opinion that may exist about the details of capacity markets, even among IEP's members, IEP embraces certain principles and recommends them to guide the Commission as it moves forward.

1. Market solutions benefit consumers and should be preferred over administrative solutions wherever feasible. Competitive market solutions are more effective in facilitating the right levels of investment and in keeping costs to consumers lower. However, regulatory intervention begets further regulatory intervention. Administrative intervention in the design of the capacity market, for instance, unfortunately may be necessary as long as various price mitigation mechanisms and ineffective demand response remain in place.

2. Capacity markets can complement forward bilateral contracting and procurement Requests for Offers by providing price signals that support bilateral contracting. A centralized capacity market should not be conceived of as taking on more than a supporting role. This leads to a key question that the Commission should ask as it considers proposals for capacity markets: Does a centralized capacity market help encourage investment?
3. The capacity market should transparently reveal and recognize the locational value of capacity.
4. In addition to creating workable capacity markets, reducing the mitigation in the energy market will help foster a more competitive wholesale market. However, merely raising the energy bid cap in the wholesale energy market does not obviate the need for a capacity market. Raising the energy bid cap, while desirable, is not by itself sufficient to address capacity compensation issues. Other ISOs with energy bid caps of $1,000/MWh have found it necessary to create capacity markets.
5. Many of the actions needed to improve energy markets must be taken by the California Independent System Operator ("CAISO").

IEP also notes that the White Paper focuses on a short-term capacity market—basically a month-ahead market. A month-ahead market may be useful in helping LSEs to meet their month-ahead RARs. A month-ahead capacity market that produces a stable price signal over time will also contribute to a healthier investment climate in California. Investment in long-lived assets, like power generation equipment, demands stability. An enforceable RAR that consistently values and compensates capacity will help attract investment capital.

In addition, once the mechanisms and standard products of a month-ahead capacity market are in place, the same mechanisms and products could be used to facilitate commitments for longer periods. The capacity market is a tool for procuring resources, and that same tool may be used for additional purposes in response to evolving needs.

The White Paper discusses the role of a capacity market in mitigating the potential exercise of market power. IEP urges the Commission to carefully consider the need to distinguish true scarcity prices from the exercise of market power. Robust scarcity pricing mechanisms will improve the price signals coming from energy markets, which will stimulate both demand response and investment in existing and new generation units. Mitigating scarcity prices, which signal the need for new investment, will run counter to the Commission's goal of ensuring that California's energy infrastructure is sufficient to meet the needs of its citizens.

With these general observations in mind, IEP proceeds to address some of the details raised in the White Paper.

II. RESPONSE TO POLICY QUESTIONS AND STAFF RECOMMENDATIONS

IEP recognizes that its views on capacity markets and the details of how capacity markets are developed will likely be affected by the highly anticipated decision on Resource Adequacy. IEP urges the Commission to allow parties an opportunity to comment on capacity issues again after the draft decision on Resource Adequacy is issued.

In this section, IEP responds to the section on the lessons learned from Eastern markets and the related eight staff recommendations.

A. <u>Lessons Learned</u>

The White Paper identifies six lessons learned from the experience of Eastern capacity markets:

1. **A vertical demand curve causes unwanted volatility in revenues, and exacerbates market power in the capacity market. A sloped demand curve mitigates these problems.**

IEP agrees that the experience in Eastern markets with vertical demand curves has resulted in volatile and unreliable prices signals. The use of sloped demand curves appears to have greatly reduced price volatility and provided more stable and reliable prices.

2. **Capacity markets should use locational resource targets that account for transmission constraints.**

IEP has stressed the importance of deliverability in the RAR proceeding, and for similar reasons the capacity markets should reflect transmission restraints and transparently communicate them to the market.

3. **Bilateral capacity markets should be accompanied by a centralized market that accommodates smaller LSEs. This does not interfere with bilateral contracting and can increase the efficiency and reduce the market power in bilateral markets.**

IEP agrees that a capacity market can and should serve as procurement tool in addition to bilateral contracting. A centralized market need not and should not interfere with bilateral contracting. In all likelihood, bilateral contracting will be the primary means by which parties comply with the RA requirements.

4. **The ICAP demand curve should account for peak energy-market revenue.**

IEP notes that other markets adjust the demand curve payments to account for expected energy revenue. IEP believes that such adjustments, if implemented in California and over a longer timeframe, should be based on ex ante projections of market revenue, not ex post determinations of market revenue.

5. **Capacity should not be defined as nameplate capacity, but should be adjusted for performance.**

IEP agrees. Adjustment for performance emphasizes that capacity should come from physical assets.

6. **The demand curve should be designed so the fixed-cost recovery is somewhat above normal when installed capacity is short of the target adequacy level and below normal when installed capacity is above this level.**

This statement describes the goal established in some Eastern capacity markets. IEP notes that it took these markets several iterations to reach a demand curve that came close to performing as this statement describes. If the Commission adopts the demand curve approach, it should benefit from the experiences of other markets, but refinements as the market matures should be expected.

B. <u>Policy Issues</u>

The White Paper asks five policy questions derived from the lessons learned from other jurisdictions. IEP responds to these questions in the following paragraphs.

1. **Would a downward sloping demand curve capacity market construct, similar to the New York approach, be an appropriate mechanism to support California's resource adequacy program?**

In the context of an administratively established demand curve, the experience from other areas demonstrates that a downward sloping demand curve can simulate the true demand curve of a well-functioning market.

2. **Would a capacity market, such as in New York, assist LSE's to make adjustments by being able to sell excess capacity or buy it when they are short?**

The short answer is "Yes." A properly constructed capacity market should allow for fluid purchases and sales of capacity, which will allow LSEs to make appropriate adjustments to their portfolios as the real-time need for resource adequacy approaches. IEP expects that much of this activity would occur as the LSEs approach the required 100% showing for the month ahead.

3. **Would this mechanism assist California in meeting its goals to be resource adequate and reach a minimum of 15-17% reserve margins?**

Investment is made when markets are stable and dependable and prices are transparent. Capacity markets will provide stability and transparency, even if near-term new investment ultimately requires long-term bilateral contracting. Capacity markets that produce stable prices over the long term and are not threatened by regulatory intervention could produce the long-term expectations of stable revenue streams that could, by themselves, induce investment. In the near term, however, new investment almost certainly will be driven by bilateral contracting. A stable capacity market can help ameliorate the imperfections of energy markets.

A capacity market can also provide revenues to existing generators, which in some cases may be sufficient to ward off retirement of some <u>needed</u> reliability units. A reasonably liquid capacity market can also help LSEs fine-tune their portfolios to meet the target reserve margins.

4. To address deliverability concerns and meet the ISO's requirements, is it appropriate to investigate solutions for local areas as a first step?

Local areas present a microcosm of the larger system, and for that reason it may be easier to study deliverability and to develop solutions by focusing on the local area. Deliverability, however, is also a problem for the larger system, especially for contracts that are not supported by physical assets. If local deliverability requirements are not enforced (with penalties and sanctions for not meeting the requirements) within the RAR context, then the establishment of a capacity market cannot adequately meet local reliability needs.

5. Do capacity markets in local areas that are designed with downward sloping demand curves significantly mitigate market power concerns? What are other appropriate steps (e.g. subtraction of peak energy rents)?

The Commission must be careful to distinguish between prices that are the result of the exercise of market power and those that result from scarcity conditions. Failing to distinguish between the two will not promote investment in new generating resources. While a downward-sloping demand curve may address purported supplier market power, it also cushions the impacts of buyers' failure to procure by not letting the scarcity price go to higher levels.

C. Response to Staff's Recommendations

IEP offers the following comments to the eight recommendations staff makes in its White Paper:

<u>Recommendation 1</u>: Adopt a short-run capacity market approach with a downward sloping capacity-demand curve for the CAISO.

IEP commented on the short-run capacity market and the downward sloping demand curve in the previous sections.

<u>Recommendation 2</u>: Further investigate alternative availability metrics (e.g. UCAP v. ISO-NE's proposed metric based on performance during shortage conditions) and ensure development of availability metric that is applicable to hydro, wind, thermal and other generation technologies, and to appropriate demand response products.

Appropriate metrics are needed to reflect the relative reliability value of various generation technologies.

<u>Recommendation 3</u>: Consider subtraction of peak energy rents from the capacity payment.

While subtracting peak energy revenues from capacity payments may undermine the price signal to increase supply over the long term, subtracting energy rents, if done properly (*e.g.,* using ex ante, rather than ex post, adjustments), would seem a reasonable adjustment to the demand curve.

<u>Recommendation 4</u>: Adopt reasonable locational installed capacity requirements with locally varying demand curves.

Establishing local capacity requirements (and enforcing them) and local demand curves appropriately signals the need for new generation or transmission upgrades.

<u>Recommendation 5</u>: Consider protecting against capacity exports during times of

tight supply through the use of capacity prices that fluctuate seasonally.

Seasonal capacity prices can reflect the relative value of capacity at different times of the year. The total annual capacity payment, however, must be high enough to attract new investment in generation when capacity is expected to be in short supply. Moreover, to attract investment in peaking resources, the total seasonal capacity payment must be high enough to cover the fixed costs of a peaker.

Recommendation 6: Investigate the dependability of capacity import contracts during times of high West-wide load.

With regard to imports, the White Paper correctly highlights a significant distinction between California and the Eastern markets. IEP agrees with the White Paper's conclusion that imports are required to reliably meet California's demand. However, the White Paper implies, without fact or support, that imports may be less dependable than other resources and recommends the possibilities of "higher penalties for default, and/or a different price-setting mechanism."[3]

Imports are and will continue to be needed to support reliable operation of the California grid, and therefore imports must be accommodated without undue discrimination in the design of a capacity market. Import availability and capacity pricing should be determined on a comparable, but not discriminatory, basis. IEP believes that the proper forum for determining how to "count" the capacity contributions of imports (and other resources) is the Resource Adequacy proceeding.

Recommendation 7: Make the fixed-cost recovery curve explicit.

[3] White Paper, p. 41.

An explicit fixed-cost recovery curve allows potential investors more certainty about whether or not they will be able to recover the fixed costs of a proposed plant.

<u>Recommendation 8</u>: Strive for regulatory credibility.

IEP agrees that regulatory credibility and consistency are crucial to the establishment of investor confidence.

III. <u>ROLES AND TIMING</u>

The White Paper solicits comments on the respective roles of the Commission and the CAISO. IEP concludes that the CAISO should play the dominant role in the development and administration of centralized capacity markets. Capacity markets are integral to the CAISO's central functions, and the CAISO is more likely to have the expertise among its staff to create and improve a new market. The Commission will continue to play a crucial supporting role, because of its jurisdiction over public utilities, Energy Service Providers, and Community Choice Aggregation. But the CAISO is more vitally concerned, on a daily basis, with capacity issues, and particularly the problems that arise when capacity is in short supply.

The Commission and the CAISO should continue to collaborate and consult, but the Commission should be prepared to take a secondary role to the CAISO in the development and day-to-day operations of capacity markets.

IV. <u>CONCLUSION</u>

IEP cannot overemphasize the excellent job the Energy Division has done in producing the White Paper. The Commission should follow up on its staff's fine work, as it completes the other highly important actions that must be accomplished in the next six months. The capacity market will be an important component in the development of the California electricity market, along with other tasks that must be completed over the next six to nine months.

Respectfully submitted this September 23, 2005 at San Francisco, California.

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CERTIFICATE OF SERVICE

I, Melinda LaJaunie, certify that I have on this 23rd day of September 2005 caused a copy of the foregoing **COMMENTS OF THE INDEPENDENT ENERGY PRODUCERS ASSOCIATION ON THE STAFF'S CAPACITY MARKETS WHITE PAPER; R.04-04-003** to be served on all the parties via Electronic Mail and/or Hand Delivery.

I declare under penalty of perjury that the foregoing is true and correct.

Executed this 23rd day of September 2005 at San Francisco, California.

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