Comments of Morgan Stanley Capital Group Inc.
Regarding Convergence Bidding in the California Independent System Operator Market

(August 24, 2007)

On August 14, 2007, following the August 10, 2007 meeting of the Market Surveillance Committee (“MSC”), the California Independent System Operator (“CAISO”) issued a request for additional comments regarding the implementation of convergence (or virtual) bidding in the CAISO energy markets. Morgan Stanley Capital Group Inc. (“MSCG”) supports the implementation of convergence bidding at the nodal level and appreciates the opportunity to provide the following comments.

1. Would convergence bidding enhance your organization’s business needs. If so, how?
   What does your entity view as the primary benefits of convergence bidding to the CAISO’s energy markets?

   MSCG manages risk on a portfolio basis that is a combination of physical and financial products, both day-ahead and real-time. Convergence bidding will provide MSCG with another vital set of tools to manage its risk, including those risks associated with congestion costs and the exposure to day-ahead and real-time prices. Price convergence between the day-ahead and real-time markets, price discovery, price transparency, and increased market liquidity which arise out of convergence bidding facilitate a wider variety of types of players and products for more choices and greater flexibility to all market participants. More players and products mean increased competition and more efficient markets, ultimately leading to lower costs and prices to customers.

   Price convergence between the day-ahead and real-time prices created by convergence bidding will increase MSCG’s confidence that the resulting market prices can be relied upon as a reference point or index, increasing MSCG’s ability to manage its risk.

   Finally, convergence bidding is a fundamental component of competitive, fully functional markets. Such markets naturally clear (converge). Only by “clearing” or converging can a market create the balance between supply and demand, in which sellers sell, and buyers buy, the amount they desire, given the value imputed by the market. It is this interface which produces equilibrium among supply, demand, and pricing that brings about the efficient allocation of scarce resources (i.e. electricity) that defines a true competitive market. Morgan Stanley places importance on convergence bidding because we strongly support competitive markets crafted to include the tools that facilitate the supply/demand equilibrium that defines such markets. Convergence bidding is a vital component of such markets.

   The existence of a convergence bidding mechanism also will discourage non-competitive behavior and “under- or over-scheduling”, while encouraging market participants with physical assets to bid and schedule such assets realistically, further enhancing Morgan Stanley’s confidence in the overall efficiency and functionality of the market. Convergence bidding also
provides market participants with an important hedge against significant risks, such as asset performance, load forecast uncertainty, and congestion.

The benefits of convergence bidding, in the form of enhanced competition, greater market efficiency, and, ultimately, lower prices, are substantial. MSCG encourages CAISO to implement virtual bidding at a nodal-level in order to maximize the benefits to CAISO’s energy markets that have been realized for several years in other regions.

2. What are your entity’s views on the level of granularity at which the CAISO should introduce convergence bidding (LAP-level virtual bidding or nodal-level virtual bidding)?

The CAISO should implement convergence bidding at the nodal level and avoid a “staggered” approach. Implementing convergence bidding at the LAP-level first, with the intention of moving to nodal-level convergence bidding later, will result in a less efficient market, market confusion, and greater administrative cost. As has been recognized by other parties, including the CPUC, a convergence bidding mechanism will create substantially greater benefits if implemented at the nodal-level. Implementing convergence bidding at the LAP-level will only diminish these benefits in the near-term. As CAISO staff has recognized, the MRTU software will integrate nodal-level convergence bidding capabilities from the start. Delaying the implementation of nodal-level convergence bidding is not necessary and should therefore be avoided.

The benefits to implementing nodal-level bidding now are numerous. The nodal-approach will benefit far more market participants than LAP-level bidding, which will only benefit a handful of larger participants such as IOUs. This is because a large majority of market participants, including generators, LSEs, municipals and marketers, all transact, and have price exposure at the nodal level. Under a nodal-level system, generators can hedge their short-term operating exposures, load can hedge local forecast uncertainty, and municipal entities as well as parties that operate at the ties and within an LAP can hedge congestion risks. Since zonal prices do not converge at the same level as nodal prices, convergence at zonal levels is of limited, if any, benefit to most players in the market.

In addition, nodal-level convergence bidding will limit the opportunity for market power by providing market participants with the incentive to monitor closely nodal prices. The additional transparency provided through nodal-level bidding will direct greater attention to prices, enabling the DMA to more effectively monitor market operations and market participant behavior. Anti-competitive behavior and price anomalies will be identified more quickly under a nodal-bidding approach rather than under LAP-level bidding.

For these reasons, MSCG strongly supports immediate implementation of convergence bidding at the granular level. Clearly, nodal-level pricing would provide significantly more value to a much large number of market participants, and would avoid the extra administrative complexities and costs inherent in a future transition from one to the other.
It should also be noted that there are no documented “market failures” associated with nodal-level convergence bidding. In contrast however, there have been documented problems when convergence bidding is limited to the LAP level.\(^1\) In fact, issues of “gaming” are reduced substantially in a nodal-level market because any potential gains through a gaming opportunity would be neutralized very quickly as other market participants observe a price discrepancy and enter nodal bids of their own to capitalize on it.

### 3 What are your entity’s views on position limits (limiting virtual bidding to a percentage of the MW volume at each node)?

Imposing position limits on convergence bids will impede both the ability of market participants with physical assets to effectively hedge, and the ability of all market participants who engage in convergence bidding to maximize the available benefits offered through such a mechanism. Imposing position limits is unnecessary because, as pointed out above, an active market will quickly render unprofitable any gaming opportunities. If a decision is nonetheless made to impose position limits, then such limits should be transitional only, and should have a specified timeline for removal.

### 4 What are your entity’s views on allocating costs to virtual bids?

Virtual trading activities provide important benefits to the market, and therefore should not be discouraged by allocating high transaction costs to such bids. The Federal Energy Regulatory Commission has determined that attaching high costs to virtual transactions “threatened the ability of virtual traders to participate in ISO-NE’s markets and thus threatened to minimize, if not eliminate, the market benefits attributable to their trading activities.”\(^2\)

To the extent the CAISO makes its unit commitment decisions using its own demand forecast and/or physical load bids, there is little justification for assessing Bid Cost Recovery on virtual demand or paying a share of Bid Cost Recovery to virtual supply. The same holds true for Ancillary Services, since these products are purchased to protect against uncertainties related to physical load and physical generation. CAISO should carefully consider the relevant cost causation principles when determining what, if any costs will be assigned to virtual bids. To the extent CAISO believes virtual bids are, in part, a cause for additional cost, it should require a more in-depth review of the true impact of virtual bids so that these costs are allocated

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appropriately. Also, cost savings resulting from the implementation of nodal-level convergence bidding must be factored into the equation as well.

5 What are your entity’s views about the optimal number of LAPs in California?

Morgan Stanley sees no reason to increase the number of LAPs in California. Although this theoretically creates greater granularity, unless the number of LAPs is essentially equal to the number of nodes, most market participants would not benefit. Certainly the complexity, and time and resource requirements needed to substantially change the number of LAPs in California would not come close the justifying the minimal benefits, especially when compared to implementation at the nodal level.

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