

Energy Imbalance Market
Revised Straw Proposal Issued May 30, 2013
Comments of Morgan Stanley Capital Group, Inc.
Submitted June 14, 2013

Morgan Stanley Capital Group Inc. (MSCG) has reviewed the May 30 Revised Straw Proposal. This iteration has done a good job of filling in the substantive detail that will need to be developed for an Energy Imbalance Market to be implemented. There are still some areas where those details need to be fleshed out.

At this point in time we are still broadly positive and supportive of the concept. As regards any particular component, we are still absorbing and assessing the implications. Because our degree of understanding is still at such a tentative level, likewise, our views on the many issues at stake are preliminary. Similarly, many of our comments may be more in the spirit of brainstorming or raising issues and concerns, as opposed to constituting definitive positions.

With that preface, we offer the following thoughts on certain key items from the Revised Straw Proposal that particularly captured our attention:

- I. MSCG believes the proposal to run the EIM without assessing transmission charges for the first year is a sound idea. The collection of experience-based data over that timeframe should provide much useful insight into the best long-term approach. We do not yet have a view on what the theoretically correct approach is, but would observe that one key driver must be the extent to which the EIM impinges (or not) on the rights of firm transmission holders. Similarly, no non-market processes should be used to allocate or “set aside” transmission for EIM use.
- II. One issue meriting further discussion is the management of GHG obligations for EIM resources “deemed” to have delivered to California, and thereby incurred a compliance obligation under the California cap-and-trade program. In our view, the most efficient approach would simply be for the CAISO to take First Jurisdictional Deliverer responsibility for any such power. We are aware, however, of how adamantly the CAISO is opposed to taking on this obligation. In that context, we would make the following observation, and offer a few “brainstorms” for possible approaches that merit further discussions:
 - A: One theoretically reasonable approach, suggested by Clare Breidenich, would be to allow EIM bidders to post separate bids for California and non-California dispatches. We do not know what sorts of technical (e.g. software-related) issues this approach might raise, however, for both CAISO and bidders.
 - B: Another approach would be to have the CAISO purchase the required allowances and re-sell them to the resource at the price used by the CAISO to calculate the LMP. This would hold the resource harmless, financially, for GHG costs. The CAISO would have to periodically reconcile the Allowance Purchase and Sale Account, perhaps quarterly, and the net would create an uplift charge or credit.

C: Under any approach where the CAISO calculates a cost of GHG emissions for a resource, both front and back-end time lags will be crucial. That is, any index used should be the index published closest to the time of the dispatch decision. On the “back” end, notification of the resource that it has been deemed dispatched to California should occur ASAP. Practically speaking, there should be no more than a “next day” lag. For example, publish by 5:00 a.m. the day following, any EIM dispatches that are deemed to be California delivered for the previous calendar day.

One more general note on the methodology outlined in the Straw Proposal: Our interpretation of the methodology described is that the intent is to calculate an LMP for a resource that will never be less than its bid plus the (inferred) allowance cost. However, this is never explicitly stated in so many words. If this is an accurate interpretation, MSCG would appreciate it if the next iteration of the Straw Proposal would add verbiage so indicating. Equally, if we are wrong, we would appreciate some up-front statement of the objective, before “diving in” to the technical details of how the objective would be accomplished.

- III. In the next iteration of the Straw Proposal, MSCG strongly requests the CAISO to include some technical discussion about how widely integrated it expects the EIM to be. In particular, there is very little transmission that goes directly from PacifiCorp East (PACE) to CAISO. As a practical matter, how often will a resource located in PACE be an option to meet a need in, say, SP15 given that the only transmission connection between CAISO and PACE includes a DC tie segment? It would be very helpful to know, at least in its anticipated initial configuration, to what degree the EIM footprint will become a single, integrated whole, and to what degree it will be two or three mostly separate markets with a bit of interchange at the margins.
- IV. Section 3.7.8 on Uplift Allocations gave rise to many significant concerns. At this point in time, we are not prepared to argue that any given approach is “right” or “wrong”. However, we do hope that the potential impacts of various approaches are thoroughly analyzed, with regard to which categories of market participants would receive relatively more or less of the uplift. To be clear, allocations methodologies should be designed on principle, not impact, but impacts need to be thoroughly understood to avoid unintended consequences, and prevent misunderstandings by market participants as to what the impact of any given approach would be.

Some of the concerns we will express here probably can’t be answered via the CAISO stakeholder process - they may be within the discretion of the other EIM BAAs. Nevertheless, we believe it is appropriate to identify any and all concerns in any and all fora, in order to ensure maximum recognition and discussion of all concerns. A few examples of questions that came to mind when reading Section 3.7.8:

- Does the EIM methodology inappropriately shift Real-time uplift away from metered load, and particularly CAISO metered load, and instead disperse it to other market participants? We start from the rebuttable presumption that the

EIM ultimately exists for the benefit of metered load, and therefore said load should bear the uplift costs. Currently, CAISO bills RT uplift to load, presumably because load is the primary if not only beneficiary of imbalance service in terms of maintaining reliable operations, or because there is no other way to accurately assess the cost to those entities causing the system strain. It appears to us that the EIM proposal intends to add up all schedule deviations, instructed or not, across all participants in the EIM, load *and* generation, as a way to determine which BA is "using (benefiting from)" the EIM more. So, theoretically, if a large CAISO load spike is served entirely by PAC generators, any market uplift will be split 50/50 between PAC and CAISO, because CAISO considers the PAC generators a beneficiary of the service.

- How will PacifiCorp allocate its share of uplift? Can they rate-base it? Pass it to load? Pass it to participating generation? Much of the uplift driver of late in the CAISO has to do with revenue insufficiencies arising from SP15 congestion differences between DAM and RT. It is not clear how a PacifiCorp-BAA generator in Oregon, ramping up on a 5-minute economic bid, has any causation link to that.

V. The "Base Schedule" concept, and the related "Base Schedule Adjustment," are not entirely clear to us, and potentially raise some concerns. Stated simplistically, this process appears to take the traditional "checkout" process used for day-ahead interchange schedules, and expand it to include the full day-ahead "operating plan" for EIM-participating BAAs. It then further appears that the proposal is to give the CAISO rights to make "adjustments" to these base schedules. It would then be left to the BAAs to figure out how to charge or compensate various resources impacted by such "adjustments". First, we would appreciate confirmation or clarification in the next iteration of the Straw Proposal as to whether or not this is an accurate interpretation of the proposed process. Second, assuming our interpretation is roughly accurate, the process creates several points of anxiety. At the top of the list, the proposal to not use "economic bids" for such adjustments creates wariness about discrimination. For example, is there the potential for generators inside the EIM Entity receiving preferential treatment over others in the out-of-market redispatch order, for economics or perhaps even operational convenience? Could a merchant arm be favored versus independent generators? The proposal also appears to leave it to the BAA to determine how to settle such pre-market adjustments. Until the details of how this will work are fleshed out, MSCG will be concerned that there is systemic risk of discriminatory behavior.

VI. We assume that any resource choosing to participate in the EIM will need to "register" in some form with the CAISO. We further presume that part of that registration process will be to provide information on the resource's emissions profile, for use in calculating the GHG impact of the dispatch, and any compliance obligation, for resources deemed to be delivered to California. However, this is not explicitly stated in the Straw Proposal. If there is indeed a

field for emissions information, would entry be an option, or mandatory (presumably, any resource not providing emissions information would be assigned the ARB “default” rate)? All of this would be as opposed to the CAISO using some methodology of its own to estimate or calculate a resource’s emissions profile. It would be appreciated if this is explicitly clarified in the next iteration of the Straw Proposal.

Thank you for taking the time to review out thoughts. For questions or follow-up discussion, please contact Steve Huhman at (914) 225-1592, or via e-mail at Steven.Huhman@morganstanley.com.