

ATTACHMENT B

Phase 1-A elements:

Automatic Mitigation Procedures (AMP)

Proposed Changes re: Ordering Paragraph 20 (Excluding inerties from AMP)

Effective Date: October 30, 2002

Market and Monitoring Protocol Appendix A

2.1 Definitions

The following definitions are applicable to this Appendix A:

"Economic Market Clearing Prices" are the market clearing prices for a particular resource at the location of that particular resource at the time the resource was either Scheduled or was Dispatched by the ISO. Economic Market Clearing Prices may originate from the Day-ahead Energy market, the Hour-ahead Energy market (when these markets are in place), or ISO Real-time Imbalance Energy market. The Economic Market Clearing Price for the ISO Real Time Imbalance Energy Market shall be the BEEP Interval Ex Post Price, unless the resource cannot change output level within the hour (i.e., the resource is not amenable to intra-hour real-time dispatch instructions), or it is a System Resource. Economic Market Clearing Prices for the ISO Real Time Imbalance Energy Market for resources that cannot change output level within one BEEP Interval and System Resources shall be the simple average of the six BEEP Interval Ex Post Prices for each hour.

"Electric Facility" shall mean an electric resource, including a Generating Unit, System Unit, or a Participating Load ~~or a System Resource~~.

3.1.1.1 Reference Levels

- (a) For purposes of establishing reference levels, bid segments shall be defined as follows:

1. the capacity of each generation resource shall be divided into 10 equal Energy bid segments between its minimum (Pmin) and maximum (Pmax) operating point.
2. ~~for Energy bids submitted over the intertie Scheduling Points (import bids), 10 bid segments shall be established for each Scheduling Coordinator at each Scheduling Point based on historical volumes over the preceding 12 months.~~

A reference level for each bid segment shall be calculated for peak and off-peak periods on the basis of the following methods, listed in the following order of preference subject to the existence of sufficient data, where sufficient data means at least one data point per time period (peak or off-peak) for the bid segment. Peak periods shall be the periods Monday through Saturday from Hour Ending 0700 through Hour Ending 2200, excluding holidays. Off-Peak periods are all other hours.

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Proposed Change re: clarifying the frequency of reference price updates:

Effective Date: October 30, 2002

3.1.1.1 Reference Levels

(a) For purposes of establishing reference levels, bid segments shall be ~~defined~~ as follows:

1. the capacity of each generation resource shall be divided into 10 equal Energy bid segments between its minimum (Pmin) and maximum (Pmax) operating point.
2. for Energy bids submitted over the intertie Scheduling Points (import bids), 10 bid segments shall be established for each Scheduling Coordinator at each Scheduling Point based on historical volumes over the preceding 12 months.

A reference level for each bid segment shall be calculated **each day** for peak and off-peak periods on the basis of the following methods, listed in the following order of preference subject to the existence of

sufficient data, where sufficient data means at least one data point per time period (peak or off-peak) for the bid segment. Peak periods shall be the periods Monday through Saturday from Hour Ending 0700 through Hour Ending 2200, excluding holidays. Off-Peak periods are all other hours.

1. The lower of the mean or the median of a resource's accepted bids in competitive periods over the previous 90 days for peak and off-peak periods, adjusted for monthly changes in fuel prices using the proxy figure for natural gas prices posted on the ISO Home Page;

Proposed Changes re: Ordering Paragraph 20 (Re-instating \$0/MWh bidding requirement for bidders outside the ISO Control Area)

Effective Date: October 30, 2002

2.5.23 Pricing Imbalance Energy.

2.5.23.1 General Principles. Instructed and Uninstructed Imbalance Energy shall be priced using the BEEP Interval Ex Post Prices. The BEEP Interval Ex Post Prices shall be based on the bid of the marginal Generating Units, System Units, and ~~Loads and System Resources~~ dispatched by the ISO to increase or reduce Demand or Energy output in each BEEP Interval as provided in Section 2.5.23.2.1.

The marginal bid is the highest bid that is accepted by the ISO's BEEP Software for increased energy supply or the lowest bid that is accepted by the ISO's BEEP Software for reduced energy supply. In the event the lowest price decremental bid accepted by the ISO is greater and not equal to the highest priced incremental bid accepted, then the BEEP Interval Ex-Post Price shall be equal to the highest incremental bid accepted when there is a non-negative Imbalance Energy system requirement and equal to the lowest accepted decremental bid when there is a negative Imbalance Energy requirement.

2.5.23.2 Determining Ex Post Prices.

2.5.23.2.1 BEEP Interval Ex Post Prices. For each BEEP Interval, the ISO will compute updated supply and demand curves, using the Generating Units, System Units, and Loads and System Resources dispatched according to the ISO's BEEP Software during that time period to meet Imbalance Energy requirements and to eliminate any Price Overlap. The BEEP Interval Ex Post Price is equal to the bid price of the marginal resource accepted by the ISO for Dispatch, subject to any limitation applicable under Section 2.5.23.3. For each BEEP Interval of the Settlement Period, BEEP will compute the Ex Post Price so that it is:

- (a) greater than or equal to the prices of accepted incremental bids;

2.5.23.3.8 Requirement for System Resources to bid \$0/MWh. All Energy bids to the ISO from System Resources must be for \$0/MWh.

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Proposed Change re: Ordering Paragraph 30 (Clarifying ISO will AMP in all zones when the price in one zone is projected to exceed \$91.87)

Effective Date: October 30, 2002

Market and Monitoring Protocol Appendix A

4.2.2 Implementation

- (a) If the criteria contained in Section 3 are met, the ISO may substitute a default bid for a bid submitted for an Electric Facility. The default bid shall establish a maximum value for each component of the submitted bid, equal to a reference level for that component determined as specified in Section 3.1.1.
- (b) The Mitigation Measures will be applied to 1) all incremental bids submitted to the Real Time Imbalance Energy Market during the pre-dispatch process prior to the Real Time Imbalance Energy Market based on the projected Real-time MCPs that are

computed during this process; and 2) to the Day-Ahead and the Hour-Ahead Energy markets when these markets are made operational.

- (c) An Electric Facility subject to a default bid shall be paid the MCP applicable to the output from the facility. Accordingly, a default bid shall not limit the price that a facility may receive unless the default bid determines the MCP applicable to that facility.
- (d) The ISO shall not use a default bid to determine revised MCPs for periods prior to the imposition of the default bid, except as may be specifically authorized by the Commission.
- (e) The Mitigation Measures shall not be applied to Energy bids projected to be Dispatched as Imbalance Energy through the BEEP stack in the hours in which all Zonal BEEP Interval Ex Post Prices are projected to be below \$91.87/MWh. **If the zonal BEEP Interval Ex Post Price is projected to be above \$91.87/MWh in any ISO zone, the Mitigation Measures shall be applied to all bids, except those from System Resources, in all ISO zones. The ISO will apply Mitigation Measures to all bids taken out of merit order to address Intra-Zonal Congestion.**

Proposed Changes re: 1) Ordering Paragraph 35 (Clarify that accepted bids do not include mitigated or proxy bids); 2) Ordering Paragraph 39 (any accepted bid within a 90 day period can set the reference price) and 3) Clarification provided by Potomac Economics on how "soft" \$250/MWh price cap affects reference price calculations.

Effective Date: October 30, 2002

Market and Monitoring Protocol Appendix A

3.1.1.1 Reference Levels

- (b) For purposes of establishing reference levels, bid segments shall be defined as follows:
 1. the capacity of each generation resource shall be divided into 10 equal Energy bid segments between its minimum (Pmin) and maximum (Pmax) operating point.

~~2. for Energy bids submitted over the intertie Scheduling Points (import bids), 10 bid segments shall be established for each Scheduling Coordinator at each Scheduling Point based on historical volumes over the preceding 12 months.~~

A reference level for each bid segment shall be calculated for peak and off-peak periods on the basis of the following methods, listed in the following order of preference subject to the existence of sufficient data, where sufficient data means at least one data point per time period (peak or off-peak) for the bid segment. Peak periods shall be the periods Monday through Saturday from Hour Ending 0700 through Hour Ending 2200, excluding holidays. Off-Peak periods are all other hours.

1. Excluding proxy and mitigated bids, the accepted bid, or the lower of the mean or the median of a resource's accepted bids if such a resource has more than one accepted bid in competitive periods over the previous 90 days for peak and off-peak periods, adjusted for changes in fuel prices using the proxy figure for natural gas prices posted on the ISO Home Page; **Accepted and justified bids above the applicable soft cap, as set forth in Section 28.1.2 of this Tariff, will be included in the calculation of reference prices.**

2. If the resource is a gas-fired unit that does not have significant energy limitations, the unit's default Energy Bid determined monthly as set forth in section 5.11.5 (based on the incremental heat rate submitted to the ISO, adjusted for gas prices, and the variable O&M cost on file with the ISO, or the default O&M cost of \$6/MWh).

Proposed Changes re: Clarification provided by Potomac Economics on including bids above "soft" \$250/MWh price cap in the market impact test:

Effective Date: October 30, 2002

Market and Monitoring Protocol Appendix A

3.2 Material Price Effects

3.2.1 Market Impact Thresholds

In order to avoid unnecessary intervention in the ISO Market, Mitigation Measures for economic withholding shall not be imposed unless conduct identified as specified above causes or contributes to a material change in one or more of the ISO market-clearing prices (MCPs). Initially, the thresholds to be used by the ISO to determine a material price effect shall be as follows:

For Energy Bids to be Dispatched as Imbalance Energy through the BEEP stack: the lower of an increase of 200 percent or \$50 per MWh in the projected Hourly Ex Post Price at any location (zone or node) commensurate with the relevant pricing structure in effect in accordance with the ISO Tariff.

For Energy Bids to be Dispatched out of economic merit order to manage Intra-Zonal Congestion: if the price of the bid is \$50/MWh or 200 percent greater than the BEEP Interval Ex Post Price at that location (zone or node) commensurate with the relevant pricing structure in effect in accordance with the ISO Tariff.

Accepted and justified bids above the applicable soft cap, as set forth in Section 28.1.2 of this Tariff, will not be eligible to set the Market Clearing Price. Such bids shall be included in the Market Impact test, however, and, for purposes of this test only, shall be assumed to be eligible to set the Market Clearing Price.

Proposed Changes re: Ordering Paragraph 40 (In-Control Area hydro resources may set the market clearing price)

Effective Date: October 30, 2002

2.5.23.3.8.1 Hydro-Electric Resources within the ISO Control Area. Hydro-electric resources within the ISO Control Area are not required to submit \$0/MWh or other price-taker bids and are eligible to set a market clearing price.

Proposed Change re: Ordering Paragraph 41 (No price screen for local market power)

Effective Date: October 30, 2002

Market and Monitoring Protocol Appendix A

3.1.1 Conduct Thresholds for Identifying Economic Withholding

The following thresholds shall be employed by the ISO to identify economic withholding that may warrant the mitigation of the bid from a resource and shall be determined with respect to a reference level determined as specified in Section 3.1.1.1:

For Energy Bids to be Dispatched as Imbalance Energy through the BEEP stack: the lower of a 200 percent increase or \$100/MWh increase in the bid with respect to its Reference Level.

~~For Energy Bids to be Dispatched out of merit order to manage Intra-Zonal Congestion: any bid with a price of \$91.87/MWh or greater.~~

\$250/MWh West-Wide Price Cap

Proposed Change re: Ordering Paragraph 17 (Suppliers may bid and justify bids above \$250/MWh)

Effective Date: October 30, 2002

28. RULES LIMITING CERTAIN ENERGY AND ANCILLARY SERVICE BIDS

28.1 Damage Control Bid Cap

28.1. Notwithstanding any other provision of this ISO Tariff, Damage Control Bid Cap provisions of Sections 28.1.2 and 28.1.3 shall apply to the ISO's Energy and Ancillary Service capacity markets.

28.1.2 **Maximum Bid Level.** The maximum bid level shall be \$250/MWh. ~~The ISO shall reject any bid above this level.~~ **Market Participants may submit bids above \$250/MWh, however, any accepted bids above this cap are not eligible to set the Market Clearing Price and are subject to cost-justification and refund.**

Single Energy Bid Curve

Proposed Change re: Ordering Paragraph 54

Effective Date: October 30, 2002

5.13 Energy Bids.

5.13.1 Energy Bid Definition.

A single Energy Bid curve per resource per hour shall be used in: (a) the Real-Time Hourly Pre-Dispatch as set forth in Dispatch Protocol 8.6.4, and (b) the Real-Time Economic Dispatch (10-minute Imbalance Energy market). The Energy Bid shall be a staircase price (\$/MWh) versus quantity (MW) curve of up to 10 segments. The Energy Bid shall be submitted to the Real Time Imbalance Energy Market using the Supplemental Energy Bid template. The Energy Bid curve shall be monotonically increasing, i.e., the price of a subsequent segment shall be greater than the price of a previous segment. **Subject to the foregoing, sellers may increase or decrease bids in the ISO Real Time Market for capacity associated with those parts of the bid curve that were not accepted in or before the Hour-Ahead Market. For capacity associated with those parts of the bid curve**

previously accepted in or before the Hour-Ahead Market, sellers may only submit lower bids in subsequent markets.

5.13.2 Energy Bid Submission.

Changes due to the expiration of price mitigation

Proposed Change re: eliminating reference to Non-Emergency Clearing Price (which expires with along with price mitigation. This was overlooked in the black-line language submitting for the expiration of price mitigation submitted in the August 16, 2001 compliance filing to the July 17, 2002 Order)

Effective Date: October 30, 2002

11.2.4.2.2 Allocation of Above-MCP Costs

For each BEEP Interval, the above-MCP costs incurred by the ISO as a result of Instructed Imbalance Energy and Dispatch instructions for reasons other than for a transmission facility outage or a location-specific requirement shall be charged to Scheduling Coordinators as follows. Each Scheduling Coordinator's charge shall be the lesser of:

- (a) the pro rata share of the total above-MCP costs based upon the ratio of each Scheduling Coordinator's Net Negative Uninstructed Deviations to the total System Net Negative Uninstructed Deviations; or
- (b) the amount obtained by multiplying the Scheduling Coordinator's Net Negative Uninstructed Deviation for each BEEP Interval and a weighted average price. The weighted average price is equal to the total above-MCP costs divided by the MWh delivered as a result of ISO instructions with a cost component above the MCP.

The difference between ISO charges to Scheduling Coordinators with Net Negative Uninstructed Deviations and the total above-MCP costs incurred by the ISO due to Instructed Imbalance Energy and Dispatch instructions for reasons other than for a transmission facility outage or a location-specific requirement, as such difference is reduced pursuant to Section 11.2.4.1.2, shall be allocated amongst

all Scheduling Coordinators in that BEEP Interval pro rata based on their metered Demand, including Exports.

The Scheduling Coordinator shall be exempt from the allocation of above-MCP costs in a BEEP interval if the Scheduling Coordinator has sufficient incremental Energy bids from physically available resources in the Imbalance Energy market to cover ~~the~~ their net negative Uninstructed Deviation in the given interval ~~of a resource~~ and the prices of these Energy bids do not exceed the applicable ~~NECPL~~ maximum bid level as set forth in Section 28.1.2 of this Tariff.

Proposed Changes from September 20, 2002

Proposed Change re: advancing deadline for submitting supplemental energy bids from forty-five minutes before the hour to sixty minutes before the hour:

Effective Date: October 30, 2002

2.5.22.4.1 Timing of Supplemental Energy Bids.

Supplemental Energy bids must be submitted to the ISO no later than ~~forty-five (45)~~ sixty (60) minutes prior to the operating hour. Bids may also be submitted at any time after the Day-Ahead Market closes. These Supplemental Energy bids cannot be withdrawn after ~~forty-five (45)~~ sixty (60) minutes prior to the Settlement Period, except that a bid from a System Resource may specify that any portion of the bid that is not called prior to the beginning of the Settlement Period shall not be called after the beginning of the Settlement Period. The ISO may dispatch the associated resource at any time during the Settlement Period.

5.13.2 Energy Bid Submission.

5.13.2.1 Real Time Market. Bids shall be submitted for use in the Real-Time Hourly Pre-Dispatch in DP 8.6.4(j) and the Real-Time Economic Dispatch up to ~~45~~ sixty (60) minutes prior to the Operating Hour. Resources required to offer their Available Generation in accordance with Section 5.11.4 shall be required to submit Energy Bids for 1) all of their Available Generation ~~Generation~~ and 2)

any Ancillary Services capacity awarded or self-provided in the Day-Ahead or Hour-Ahead Ancillary Services markets. In the absence of submitted bids, default bids will be used for resources required to offer their Available Generation in accordance with Section 5.11.4. Resources not required to offer their Available Generation in accordance with Section 5.11.4 that were awarded or self-provided Ancillary Services capacity must submit an Energy Bid for no less than the amount of awarded or self-provided Ancillary Services capacity. Resources not required to offer their Available Generation in accordance with Section 5.11.4 may voluntarily submit Energy Bids. Submitted Energy Bids shall be subject to the Damage Control Bid Cap as set forth in Section 28.1 and to the Mitigation Measures set forth in Appendix A to the Market Monitoring and Information Protocol.

DP 7.3 Supplemental Energy Bids

Supplemental Energy bids may be submitted to the ISO no later than ~~forty-five~~ **sixty (60)** minutes prior to the beginning of the Settlement Period in accordance with the format and content requirements of the SBP. These Supplemental Energy bids cannot be withdrawn after ~~forty-five~~ **sixty (60)** minutes prior to the beginning of the Settlement Period, except that a bid from a System Resource may specify that any portion of the bid that is not called prior to the beginning of the Settlement Period shall not be called after the beginning of the Settlement Period. The ISO may Dispatch the associated resource at any time during the Settlement Period.

Proposed Change re: limiting the liability of Potomac Economics, Ltd., the entity calculating reference prices:

Effective Date: October 30, 2002

14.3 Market Participant's Indemnity.

Each Market Participant, to the extent permitted by law, shall indemnify the ISO and hold it harmless against all losses, damages, claims, liabilities, costs or expenses (including legal expenses) arising from any act or omission of the Market Participant except to the extent that they result from the ISO's

default under this ISO Tariff or negligence or intentional wrongdoing on the part of the ISO or of its officers, directors or employees.

14.4 Potomac Economics, Ltd. Limitation of Liability.

Potomac Economics, Ltd. shall not be liable in damages to any Market Participant for any losses, damages, claims, liability, costs or expenses (including legal expenses) arising from its calculation of reference levels under its Consultant Agreement with the ISO dated as of September 3, 2002, except to the extent that they result from negligence or intentional wrongdoing of Potomac Economics, Ltd.

Proposed Change re: extension on Amendment No. 43 provisions to pay System Resources the instructed price in all intervals:

Effective Date: October 30, 2002

11.2.4.1 Net Settlements for Uninstructed Imbalance Energy.

Uninstructed Imbalance Energy attributable to each Scheduling Coordinator for each Settlement Period in the relevant Zone shall be deemed to be sold or purchased, as the case may be, by the ISO and charges or payments for Uninstructed Imbalance Energy shall be settled by debiting or crediting, as the case may be, the Scheduling Coordinator with an amount for each BEEP Interval in accordance with Section 2.5.23.2.1.

Notwithstanding the foregoing or any other provision in this Tariff, ~~until October 1, 2002,~~ Uninstructed Imbalance Energy attributable to any Scheduling Coordinator for any System Resource Dispatched by the ISO shall be settled at the appropriate Instructed Imbalance Energy BEEP Interval Ex Post Price determined in accordance with Section 2.5.23.2.1.