

# Energy Limited Resources

## Economic-bidding strategies tied to ICAP rules

### ***Issue Discussion:***

Suppliers have been using bid strategies that allow them to meet ICAP bidding requirements but cause operations and market problems under certain conditions. Units bid very high costs for the last segment of their bid curves in an attempt to prevent being scheduled in that range of their bid curve. The problem with this process is twofold. If the energy is requested, in some cases the units cannot attain the requested levels of output and real time price spikes can result which may not be a true economic signal of what the unit desires for this energy, if they could limit the conditions under which the energy would be requested.

### ***Staff Discussion:***

The staff discussions began with a review of the ICAP ELR and it is proposed that the bidding rules recommended for that issue be expanded to all unit types. Units would bid an upper point on their bid curve that would indicate the upper point that the unit can operate for that day or hour and an upper operating limit. In the scheduling process for SCUC, BME and SCD the unit would not be scheduled above the upper operating limit. Operating policy would be developed that will define the conditions under which a unit could be requested to operate to its full output. The rules would be unit type specific and based on emergency operations system conditions. Market Monitoring would develop criteria to determine if units are meeting their ICAP bidding requirements. These rules include reviewing bid practices over time, determining when a bid should include a de-rate and potential testing programs.

### ***Success Measurement:***

- Reduce price volatility by eliminating need for economic withholding
- Operations have a more realistic view of what MWs are available.

### ***Tariff Discussion:***

Tariff modifications may be required but they may be limited to the ICAP discussions. The bidding rules will allow for the two block bids desired by GT owners, allows combined cycle units to more accurately represent their actual capabilities on a daily basis without incurring penalties and it satisfies the ELR requirements.

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### ***Issue Discussion:***

The ELR units fall into two categories, those that require a re-charge period (some hydros and GTs) and those that are subject to environmental restrictions. The result is bid strategies and operating periods that are not efficient and the inability of operations to schedule units in times of system emergencies in the most efficient manner. Units that fall into these special categories can experience financial harm if they are requested to operate inconsistent with their DAM schedules.

### ***Staff Discussion:***

In the previous section we discussed the bidding rules that would apply to all units. These rules will satisfy all of the bidding and scheduling rules required for ELR units. Since the MMU plan for evaluating a unit's adherence to its ICAP obligation is a unit specific problem, specific rules can be applied to the ELR subset of suppliers. The plan would generally be as follows:

- GTs with DAM schedules that are started in an hour that was not scheduled in the DAM would not be financially harmed if requested to turn off and its replacement costs exceed its day ahead revenues. This would prevent units from continuing to run only to avoid unknown energy replacement costs.
- Environmentally restricted units would be allowed recovery of costs and MMU would calculate a mitigated minimum generation cost.
- Gilboa schedules could be modified in day and the unit would be held whole similar to the GT operation.

As with the ICAP units the operation of units outside the DAM schedules would be subject to emergency operating rules.

***Success Measurement:***

- Reduce price volatility by eliminating need for economic withholding.
- Improved operating flexibility
- Recognition of environmental restrictions

***Tariff Discussion:***

Since there would be unit specific treatment it is felt that the tariff would have to be modified. Specific treatment may be able to be handled in separate documents and manuals.