

Treatment of RMR Units

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Definition of Must-Run

- A unit is must-run when ...
 1. It is needed for reliable grid operation, and
 2. A transmission “fix” is infeasible in the relevant time frame, or uneconomic relative to the cost of keeping the unit available to run
- Must-run situations differ widely
 - Unit otherwise runs in-market -- or not
 - Unit is needed under normal operating conditions or during contingency conditions only
 - There is scarcity – a forecasted need for additional capacity in that location – or not

“One Size Fits All” Doesn’t Work

- A bid cap won’t work for some non-market units – no matter how high the cap.
- Even where caps are workable, a single formula is not.
 - Bid caps of variable costs (VC) plus 10% result in underpayment for non-market units.
 - Bid caps set at replacement cost result in overpayment in non-scarcity situations.

There Are Different RMR Circumstances

1

Units that run predominantly in-merit

RMR hours predictable

2

Units that run primarily for RMR reasons

RMR hours unpredictable (contingency only)

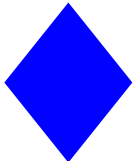
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Units facing major cap adds

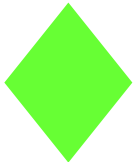
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Scarcity situation

5



Bid caps work



Retirement Candidate – bid caps don't work



New entry pricing appropriate

RTOs Need an RMR Menu

- 1 Formula bid cap (in-market units)
- 2 Negotiated bid cap (predictable RMR)
- 3 Annual contracts (contingency RMR)
- 4 Multi-year contracts (plant investment needed)
- 5 New entry pricing (additional capacity needed)

Note: Menu assumes RTO with SMD, ICAP

1 Formula Bid Cap (VC + 10%)

- Appropriate for “in market” units -- units that run in merit most of the time and are RMR for relatively few hours.
- Recovery of fixed costs depends on market revenues: energy margin during in-merit hours, ICAP, A/S revenues.
- Good as a default, but does not work for all circumstances.

2

Negotiated Bid Cap

- Appropriate for units that run mainly as RMR, not in merit.
- If energy bids are capped at VC +10%, even with ICAP revenues the owner may not cover fixed operating costs.
- The RTO should be permitted to negotiate a unit-specific bid cap to cover annual operating costs during estimated RMR run hours.
 - Should not include return on sunk investment – the owner has an opportunity to recover that from ICAP revenues.
 - The negotiated cap should be good for one year at a time.
- Will work for units whose RMR hours are relatively predictable

Single Year Capacity Contract

- A high cost unit that is needed for RMR purposes only sporadically – e.g., in contingency circumstances only – needs different treatment.
- The promise of occasional energy payments under RMR conditions -- even if the unit were not bid capped at all -- may be insufficient to justify continued availability of such a unit.
- For such units, the RTO should be able to enter into annual contracts with capacity payments. The need for the unit on an RMR basis should be re-evaluated annually.

4

Multi-Year Capacity Contract

- An RMR unit that needs major capital additions may not be able to recover them through ICAP payments or even a negotiated bid cap. Without a multi-year contract, the investments will not be made and the unit will be retired.
- The RTO should be able to enter into a multi-year contract with such a unit – if it has determined that the contract would be less expensive than a transmission fix, or that a transmission solution cannot be implemented in the required timeframe.

5

Scarcity Situation

- Scarcity occurs when – on a planning basis – new investment is needed to supply load.
 - Artificial scarcity caused by withholding does not justify scarcity pricing to remaining units, because there is no need to attract new investment.
- In general, new investment -- generation, transmission or demand side -- should be attracted by high market prices – for energy, ICAP and/or FTRs.
- However, if the scarcity is localized such that it is not reflected in market prices (such as a need for more local voltage support) an administrative process to solicit investment may be needed.

Scarcity Pricing

- Before the RTO agrees to pay for new RMR capacity, it needs a process to ensure that the least cost solution is chosen.
 - At a minimum, it must compare the cost of a transmission fix.
 - It may post a price for a transmission solution, and take bids for generation/demand side contracts to avoid the transmission fix.
- If new generation “wins”, its bid should set LMP for incumbent RMR units during its contract period.
 - This is when “scarcity pricing” is appropriate for incumbent RMR units.
 - This pricing effect on incumbents must be factored into the economic evaluation of the least cost solution.

Scarcity Pricing --Transmission Fix

- If transmission expansion “wins,” then the incumbent RMR units would get a bid cap based on the cost of the transmission solution – on an interim basis, before the transmission fix goes in.
- Once the transmission is built, if the incumbent units are no longer needed for RMR, they are no longer cost capped and they simply operate in the market. If they continue to be needed on an RMR basis, they would go back to the appropriate category (1 through 4).

Summary

- Bid caps should allow an RMR unit to recover its “to-go” costs -- through a negotiated unit-specific cap if necessary.
- In the case of retirement candidates, a capacity payment may be required to allow an RMR unit a reasonable opportunity of cost recovery.
- Scarcity pricing – allowing an existing RMR unit to price up to replacement cost – should be used only in the context of a competitive or administrative process to solicit competing solutions in the determination of the least-cost alternative.