

ERCOT Update on LaaR Participation in Replacement Reserve & Regulation Service

DSWG Meeting February 9, 2007

- —Code changes migrated into production on January 25
- —Service re-enabled for LaaRs on February 5
- —LaaRs qualified to provide RRS, BES & RGS are qualified to provide RPRS



Things a QSE should know/pre

- Deployment
 - ✓ Electronically Transmitted via XML
 - √ Hours of Capacity Dispatch included
- What does a QSE do when RPRS is procured from the QSE?
 - ✓ Receive and XML Message
 - ✓ Update Resource Plan Accordingly
 - ✓ Add entire capacity of RPRS Resource into Up Balancing Energy Bid Stack
 - ✓ Ensure Resource Ready for dispatch for specific hours



Things a QSE should know/pre

RPRS – Three step clearing process

Step 1: Local Congestion (LaaRs not eligible)
Generic Cost Based

Step 2: Zonal Congestion & System Balance Bid Based

Step 3: MCPC Calculation

- Online, available, but not active in the Resource Plan, RPRS bid required
- Paid: RPRS capacity accepted * RPRS MCPC



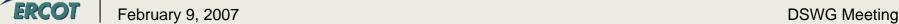
Things a QSE should know/pre(Cont')

- —LaaRs are not procured in Step 1 of RPRS but can be deployed in real-time to help resolve local congestion (Category 3 or 4)
- —LaaRs deployed as BES category 1 would be paid MCPE.
- —LaaRs deployed as BES category 3 or 4 would be paid OOME and not MCPE.



What is a Controllable Load Resource?

Load Resource capable of providing Regulation Service by controllably reducing or increasing consumption under dispatch control (similar to AGC) and that immediately responds proportionally to frequency changes (similar to generator governor action).





Background:

- In 2002 PRR307, Load providing Regulation services (Controllable Resources), was approved
- In June 2007 ERCOT was asked to provide a cost and impact analysis for implementing PRR307
- ERCOT estimated the project would cost between \$500,000 and \$1,000,000 and take up to a year to implement
- ERCOT proposed an alternate approach which could be implemented with no system changes, but with limitations

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Pilot Limitations:

- Meet all requirements for participation as a LaaR
 - IDR meter
 - Real Time telemetry at the controllable load installed and tested
 - Successfully complete qualification test
- Able to respond proportionately to frequency changes (similar to generator governor action
- Capable of reducing or increasing consumption in response to dispatch instruction (similar to AGC)
- Site has to "look", "act", and "smell" like a generation resource (eg; power flow at point of the settlement meter shall be a net generation point while providing services as a controllable load)
- Need to bid in as a "GEN" type and not "CLD" Resource
- Resource agrees to waive its right to receive any resource-specific premium payments that would result from a unit specific instruction (OOME)



Status Summary

- —Initiated pilot project in October 2006
- —To limit potential disruption to ERCOT frequency control only one Load Resource was allowed to participate up to 10 MWs
- Pilot successfully concluded in early January 2007
- —January PUCT Open Meeting PUCT directed ERCOT to open service up to all participants
- —ERCOT estimates up to 150 MWs of load could participate as Controllable Load



Next steps for the Controllable Load Program

- —Formalize qualification documents and post to ERCOT MIS
- —Issue 10 day Market Notice
- —Targeting early March for ERCOT-Wide release

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