



# 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

## ***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**