

Demand Resource Modeling in CETO Studies

Planning Committee
November 10, 2010

- LDA's unrestricted load is reduced by the forecasted amount of DR, EE and PRD (PRD pending FERC filing and approval)
- Assumes load reduction is realized year-round
- Assumes load reduction is greater under extreme weather conditions

LDA 50/50 load forecast: 10,000 MW

LDA 90/10 load forecast: $10,000 \times 1.06 = 10,600$ MW

DR forecast: 1,000 MW

Reduced 50/50 load forecast: $10,000 - 1,000 = 9,000$ MW

Reduced 90/10 load forecast: $9000 \times 1.06 = 9540$ MW

Reduced 90/10 load forecast should be:

$10,600 - 1,000 = 9,600$ MW

90/10 load is now understated by 60 MW

- Model DR as a generator that is derated to zero in the October – May period
- Would recognize that DR is not obligated to interrupt during non-summer period
- Would recognize that most DR is a fixed MW amount and does not increase under more extreme weather conditions
- Is consistent with treatment of DR as a resource in the RPM auctions

- Should Guaranteed Load Drop and Firm Service Level DR be treated the same?
 - Breakdown between GLD and FSL is not known beyond current summer
- Should Energy Efficiency continue to be modeled as a load reducer?
- Calculation of an LDA's Reliability Requirement would need to change to:

$$\text{Reliability Requirement} = \text{Internal generation} + \text{Internal DR} + \text{CETO} + (\text{EE}) * (\text{DR Factor}) * (\text{FPR})$$

- Will draft changes to Manuals 18 and 20 for approval at December PC meeting
- Target is to implement changes for upcoming 2014/2015 CETO studies used for May, 2011 RPM auction