

Co-located DR and Gen

DERS

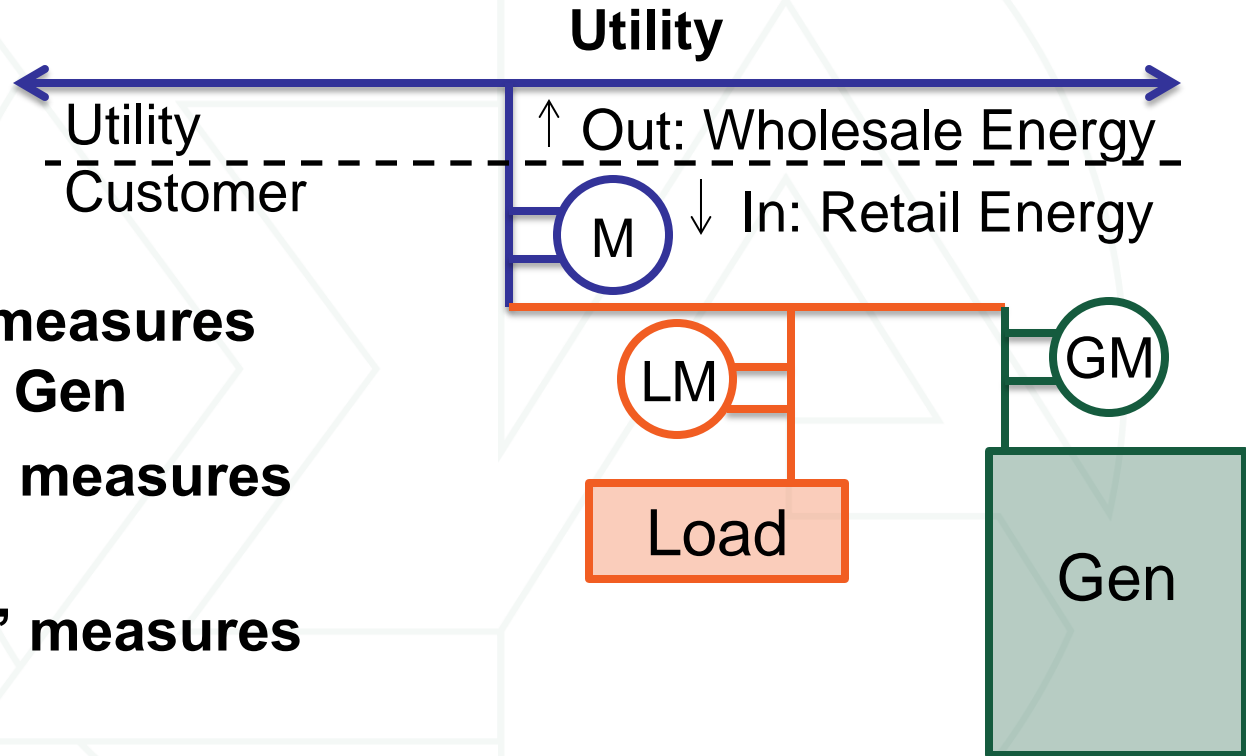
10/31/18

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PJM Status Quo: BtMG Participation as DR and Gen



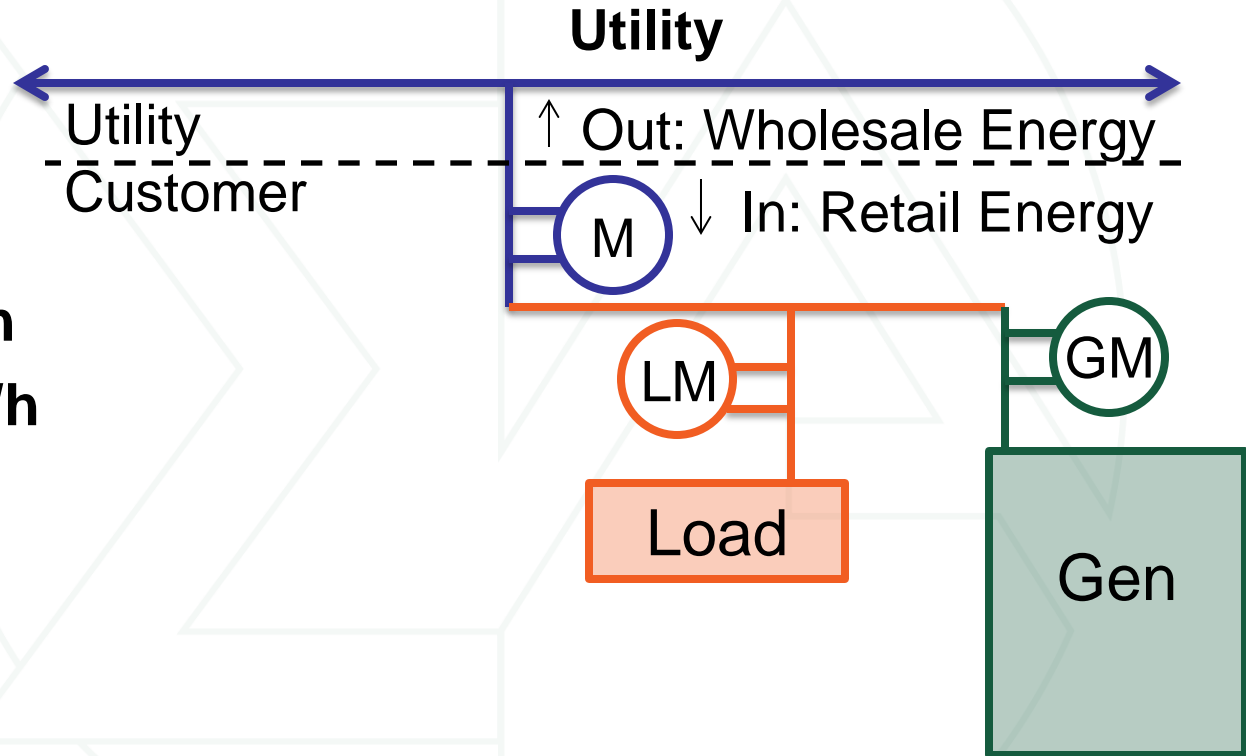
- **Meter “M” measures Load + Gen**
- **Meter “LM” measures Load**
- **Meter “GM” measures Gen**

Example

- **Load must be satisfied by gen in order to export power**
- **Load uses 2 MWh**
- **BtMG outputs 5 MWh**
- **BtMG offers and clears 3 MW capacity**



PJM Status Quo: BtMG Participation as DR and Gen



- **LM: -2 MWh**
- **GM: +5 MWh**
- **M: +3 MWh**

Emergency and Pre-Emergency DR

- **OATT Attachment K Sec 8.2 Participant Qualifications**
 - **On-Site Generators**
 - These generators (including Behind The Meter Generation) can be either synchronized or non-synchronized to the grid. **Capacity Resources are not eligible for compensation under this program.** Injections into the grid by local generators also will not be eligible for compensation under this program.

Economic DR Normal Operations

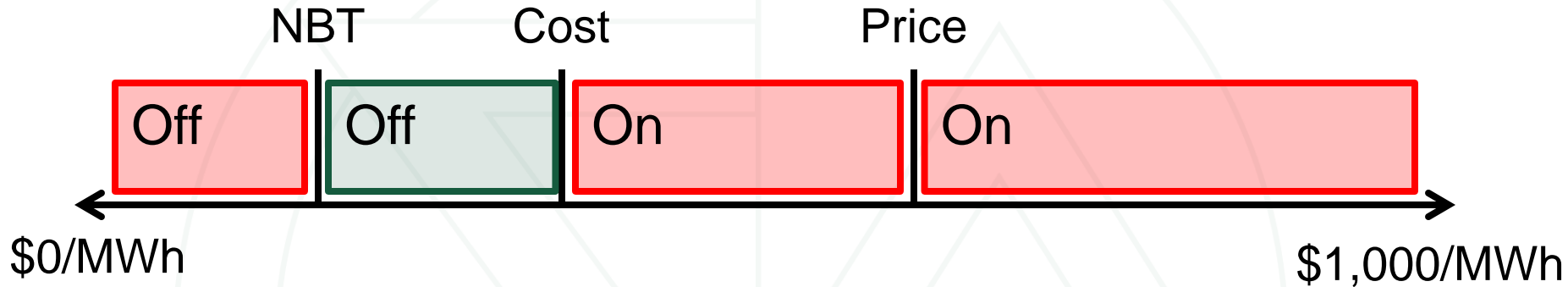
- **OATT Attachment K Sec 3.3A8(iv)**
 - **“PJM will require the Participant to provide information within 30 days to support that the settlements were submitted for load reduction activity done in response to price and not submitted based on the End-Use Customer’s normal operations.”**
- **When the generator is dispatched, what is the load’s normal operations?**



Economic DR Normal Operations

- **Generation has daily must offer obligation**
- **$NBT < \text{Cost offer of generation} < LMP$**
 - Use of generator is normal operations (economic)
 - No DR payments
- **$NBT < LMP < \text{Cost offer of generation}$**
 - Use of generator is not economic
 - DR Payments
- **$LMP < NBT < \text{Cost offer of generation}$**
 - Use of generator is not economic
 - No DR payments

Generation Status



- **If economic, the generator is on**
- **Below NBT would not result in DR payment**
- **Generator is not normally on between NBT and Cost**
- **No DR payment when exporting power**

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