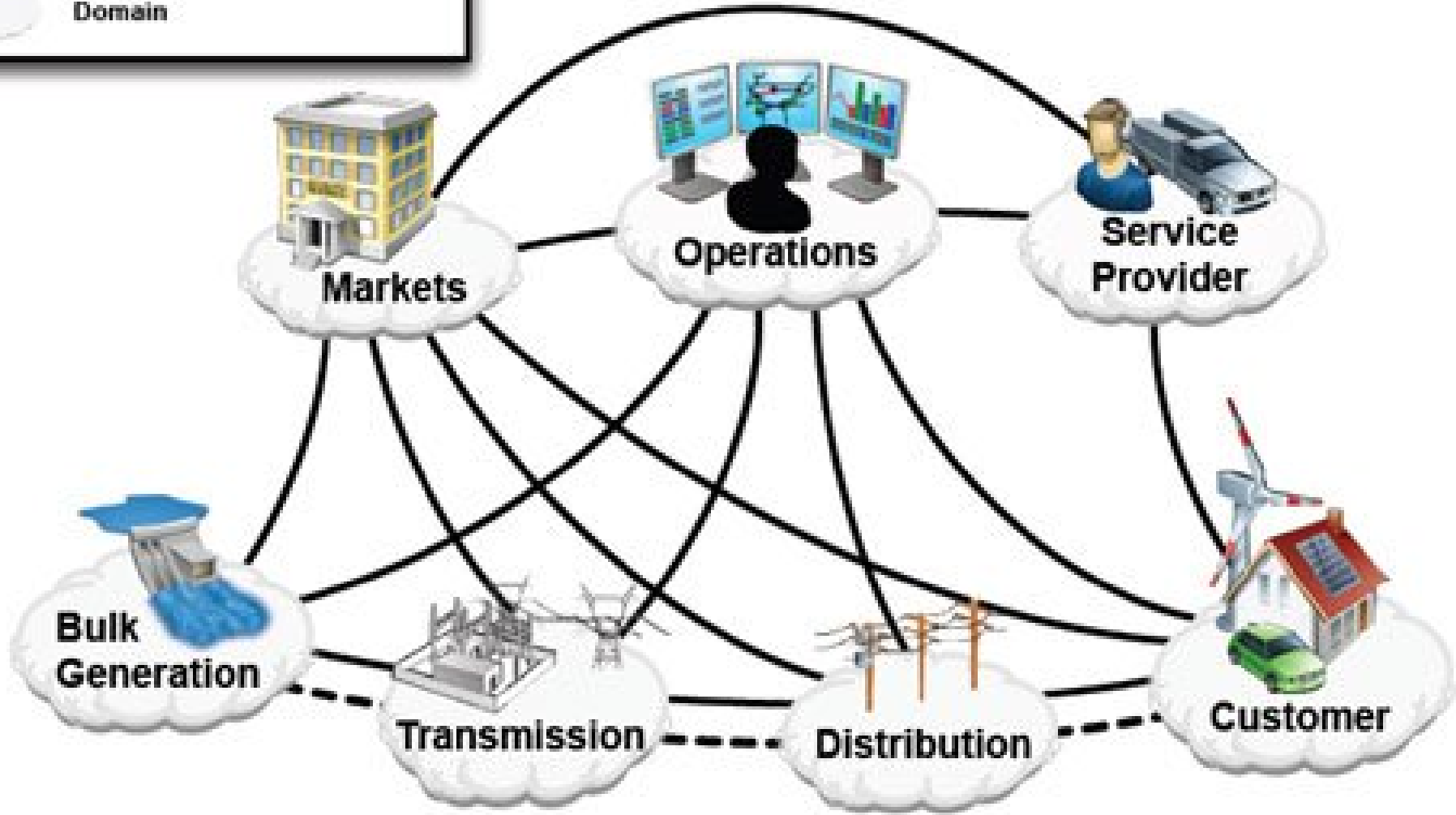


How Can Mobile Load Participate In New England Wholesale Markets?

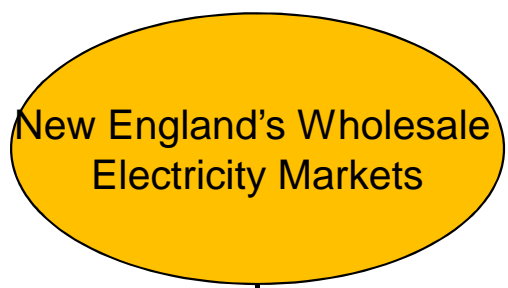
Robert B. Burke
GWAC Member
Principal Analyst - ISO New England Inc.

- This presentation represents the thoughts of the author and should **not** be interpreted as a description of the final implementation plans of ISO New England Inc.

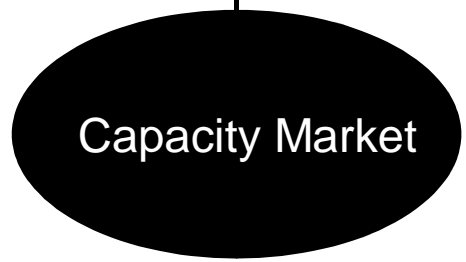


NIST Smart Grid Framework 1.0 January 2010

Quantity buying, selling, and reselling of the electric energy generated by a bulk power system to meet the system's demand for electric energy.



System for purchasing and selling electricity using supply and demand to set the price



Market where resources receive compensation for having invested in capacity and delivers in the capacity commitment period(s)



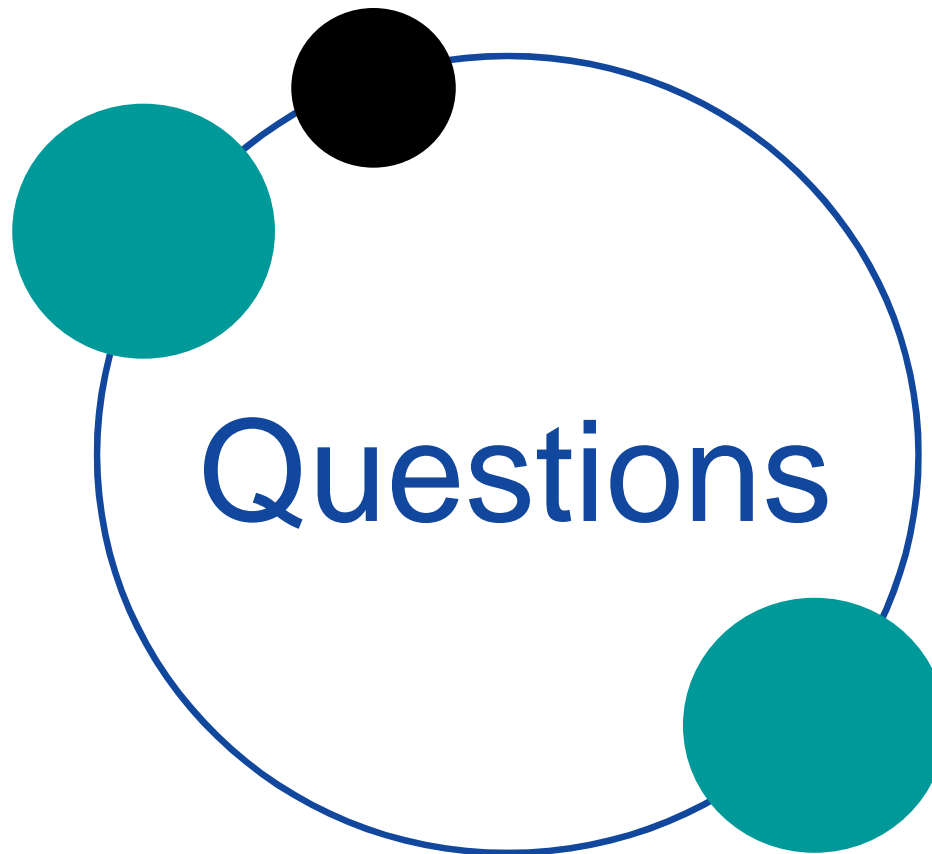
Services that ensure the reliability of production and transmission of electricity

- Demand Response Compensation in Wholesale Markets
 - pay demand response resources the full LMP capability to balance supply and demand;
 - dispatch demand response when the payment is cost-effective
 - allocate the costs proportionally to all entities that purchase from the relevant energy market in the area(s) where the demand response reduces the market price for energy.

- Plug-in Electric Vehicles (PEV)
- Plug-in Hybrid Electric Vehicles (PHEV)
- Vehicles may charge at:
 - Home
 - Public location
 - Corporate office
 - Remotely
- Create loads at new locations
 - Parking garages
- Different from Demand Response
 - Can be an interruptible load
 - Can increase load if dispatched

- Most people:
 - would prefer to probably plug their vehicle in when they get home or get to work
 - expect their vehicle to be fully charged when they are ready to leave each morning
- Result could be the equivalent of traffic grid lock during rush hour
- But electric system overloads do not slow the delivery of electricity
- They can result in local black outs

- Mobile loads would not be presented to the ISO individually
- Would be aggregated by an ARC
- Mobile loads might participate in:
 - Day Ahead Energy
 - Real-Time Energy
 - Reserves
 - AGC



Questions

Robert B. Burke

*GWAC Member &
Principal Analyst - Market
Development*

ISO New England Inc.

Office: 413-535-4356

Fax: 413-540-4226

Cell: 860-833-5370

rburke@iso-ne.com

Find other information on our site: www.iso-ne.com/Support/Training/TrainingMaterials

Web-based modules for Supply Resource and Demand Resource Operator
Training courses recently held.