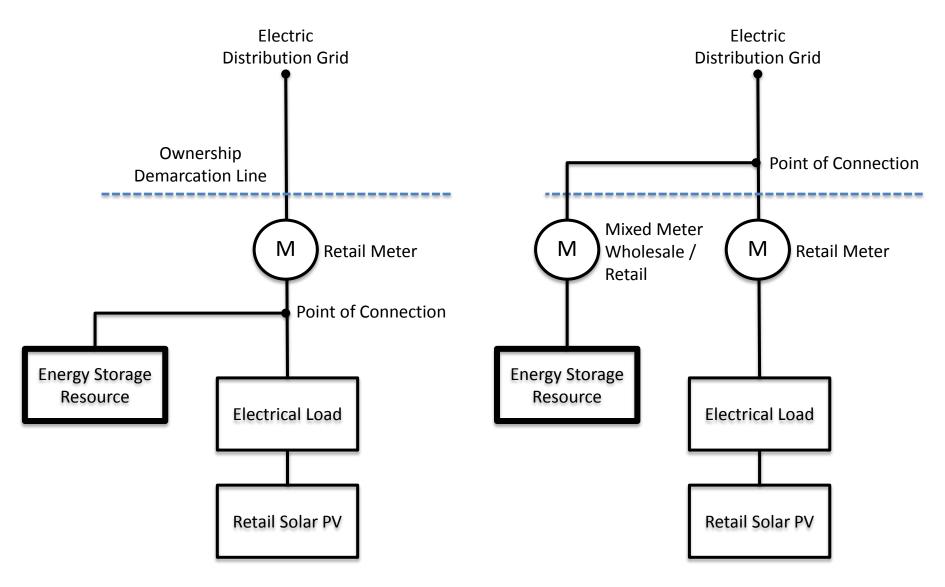
## A.F.Mensah

## **Problem Statement**

Distributed Resource, such as battery storage, that would like to participate in PJM markets have two options: i) Interconnect as a Generation Resource under the normal PJM queue process with associated Wholesale Market Participation Agreement (WMPA) or Interconnection Service Agreement (ISA) or, ii) Demand Response Resource with associated registration and certification process.

- i) It is cost prohibitive and time consuming for distributed resources to go through the PJM queue process and be designated as a Generation Resource:
  - A second service line may be required to be installed at the end user facility dedicated just for the distributed resource
  - Costly measurement and verification processes are introduced if the distributed resource intends to provide any service to the end user facility other than PJM market services.
- ii) The value a distributed resource can provide to the market is limited when designated as a DR resource. PJM Demand Response regulation certification requires that DR resources will never inject beyond the load meter which limits participation in PJM markets based on minimum instantaneous load during the hour.

## A.F.Mensah



**Demand Response Resource** 

**Generation Resource** 



## **Energy Storage Resource Definition**

PJM Tariff – Appendix – Attachment K

1.3.1G Energy Storage Resource

"Energy Storage Resource" shall mean flywheel or battery storage facility **solely** used for short term storage and injection of energy at a later time to participate in the PJM energy and/or Ancillary Services markets as a Market Seller.

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Does not prohibit an Energy Storage Resource from interconnecting to the distribution system and providing back up power; however, if the resource is not **solely** used to make wholesale sales into the market, it will be required to charge the energy storage resource at a retail rate.