Generating & Moving Electricity (physical) into Market Environment (Financial)

**Electric Grid**
- Architecture
- Generation – Power plants produce electricity from fuels or renewables
- Transmission - Move bulk electricity over long distances
- Distribution - Delivers electricity to end-customers

**Electricity Market**
- Customers create demand for power (load)
- Generators supply power
- RTOs balance supply and demand in the market
- Distribution utilities acquire power from the market and deliver to the customer

**Modeling & Simulation**
- Constructing a generation portfolio model
- Allows scenarios regarding the physical operation (generating and transmitting) and the communications overlay
- Modeling and research can also simulate the consequences of good and poor decisions

**ENERGY INFORMATION DASHBOARD (EIDA)**
VIRTUAL ENVIRONMENT TO SIMULATE MARKETS