# **BPM Carolinas**

# History

 Duke Power Bulk Power Marketing was created in April 1995 when FERC (Federal Energy Regulatory Committee) allowed Duke Power Co. to sell temporary surplus capacity and energy at market based rates.

BPM moved into this facility in Oct. 1997

# **Key Objectives**

- Fulfill native load requirements by committing companyowned generation resources in the most economically sound arrangement for every hour of every day
- Purchase external power to displace higher priced company-owned generation, when economically prudent, to meet native load demand
- Maximize earnings through off-system sales of excess generation that leverages our competitive advantages and capitalizes on market volatility while respecting the significance and importance of system reliability

## **Main Functions**

#### **Sales Functions**

- Hourly and Daily Energy/Capacity transactions (today)
- Prescheduled Energy/Capacity transactions (1 day to 30 days out)
- Forward Energy/Capacity transactions (30 days to 2+ years out)

### **Support Functions**

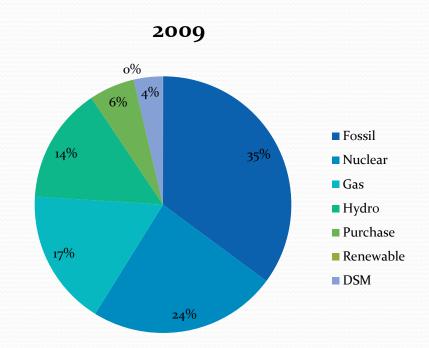
- Unit Commitment and Scheduling
- Transmission Procurement
- Emission Position Management

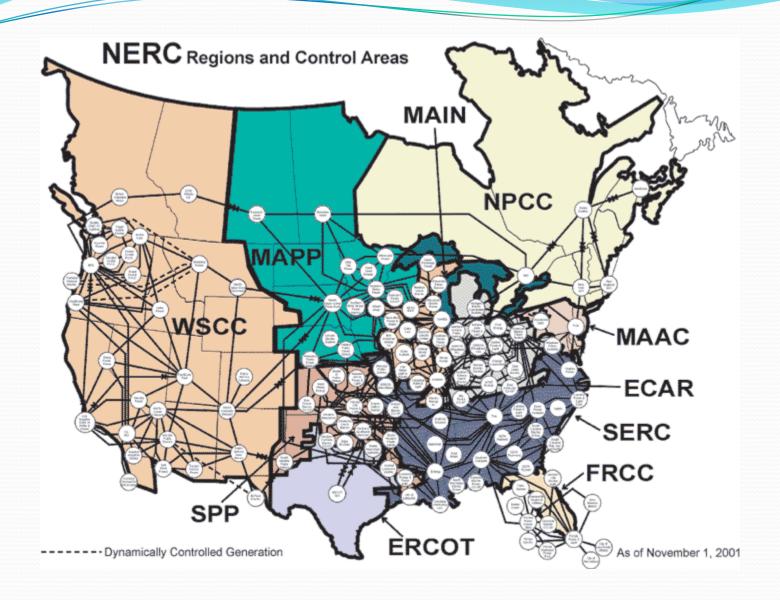
## **Carolina Generation**

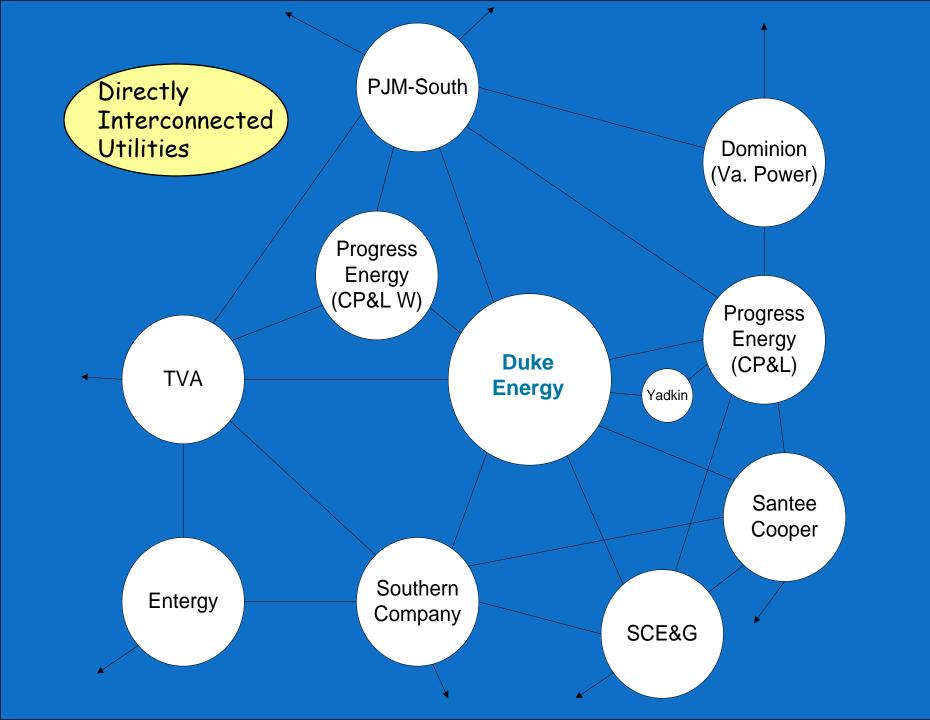
### **Annual Energy - MWH**

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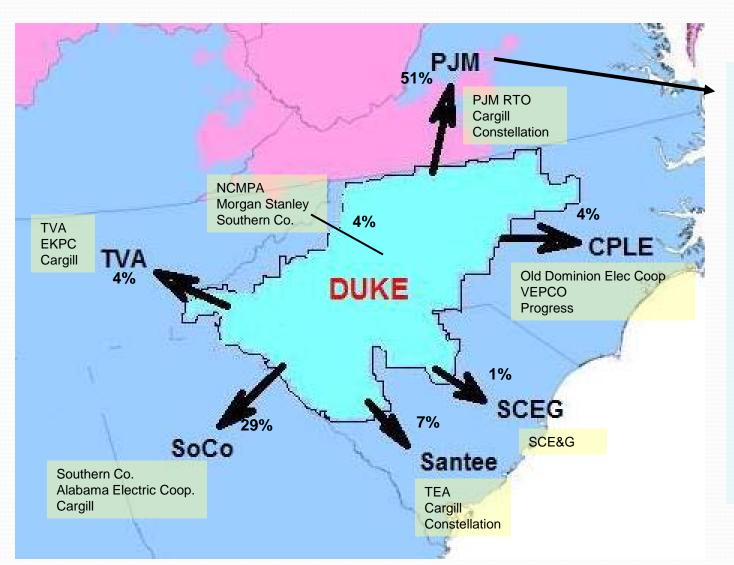
### **Peak Capacity - MW**







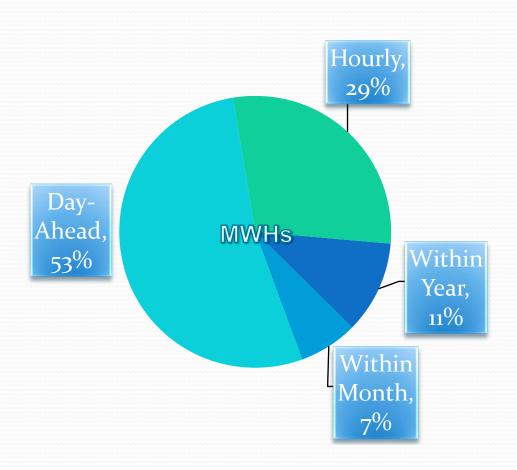
# Proximity to Multiple Markets



#### PJM:

- Organized Market (RTO)
- 95% of transactions are financial
- PJM West hub is the most liquid trading location adjacent to Duke's control area
- Duke's advantage: Gas on the margin (36% of PJM's capacity) vs.
  Duke's coal-based generation.

## **Product Mix**



#### As a result:

- Reactive to 24 hour market view
- ➤ High earnings risk
- Exposed to short term price volatility
- Failure to capture benefits of forward price volatility
- High exposure to operational risk

<sup>\*</sup> Excludes long term wholesale deals



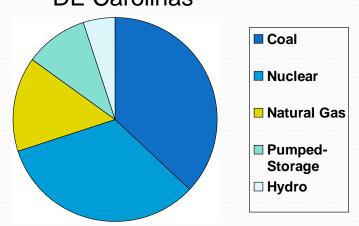


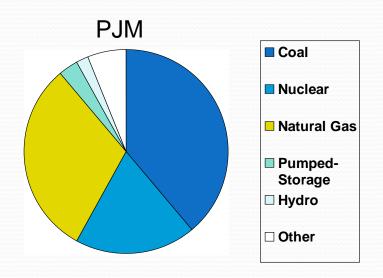




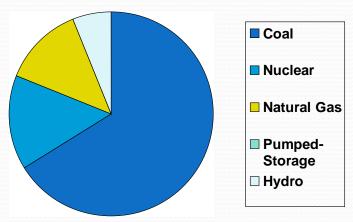
### RPO Overview - Carolinas

## Generation capacity by fuel type DE Carolinas



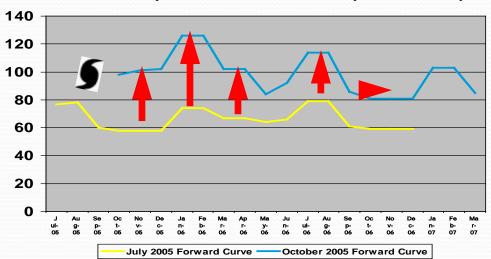


#### Southern Co.



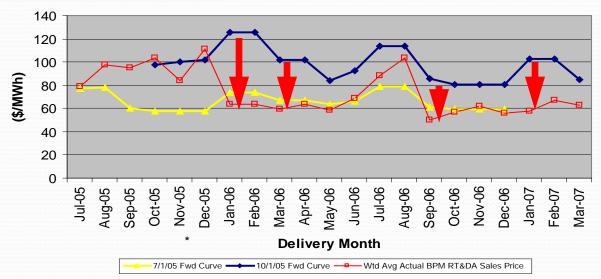
# **Price Volatility**

Forward prices versus actual 5x16 prices for the period Oct. '05 - March '07



Hurricane's Katrina & Rita drove up gas prices and, thus, the 18-month+ forward power curve moved up. This created a forward sales opportunity in the PJM market.

However, warmer winter temps and higher than anticipated gas storage drove actual, settled prices down.



## **Process Flow**

Weather Inputs

**Demand Curve** 

**Unit Commitment** 

Mid-Term Desk

Real-Time Desk

## **Business Risks**

- Price
- Volatility
- Operational
- Load Forecast
- Counterparty