

IRP Workshop discussion
March 31, 2010

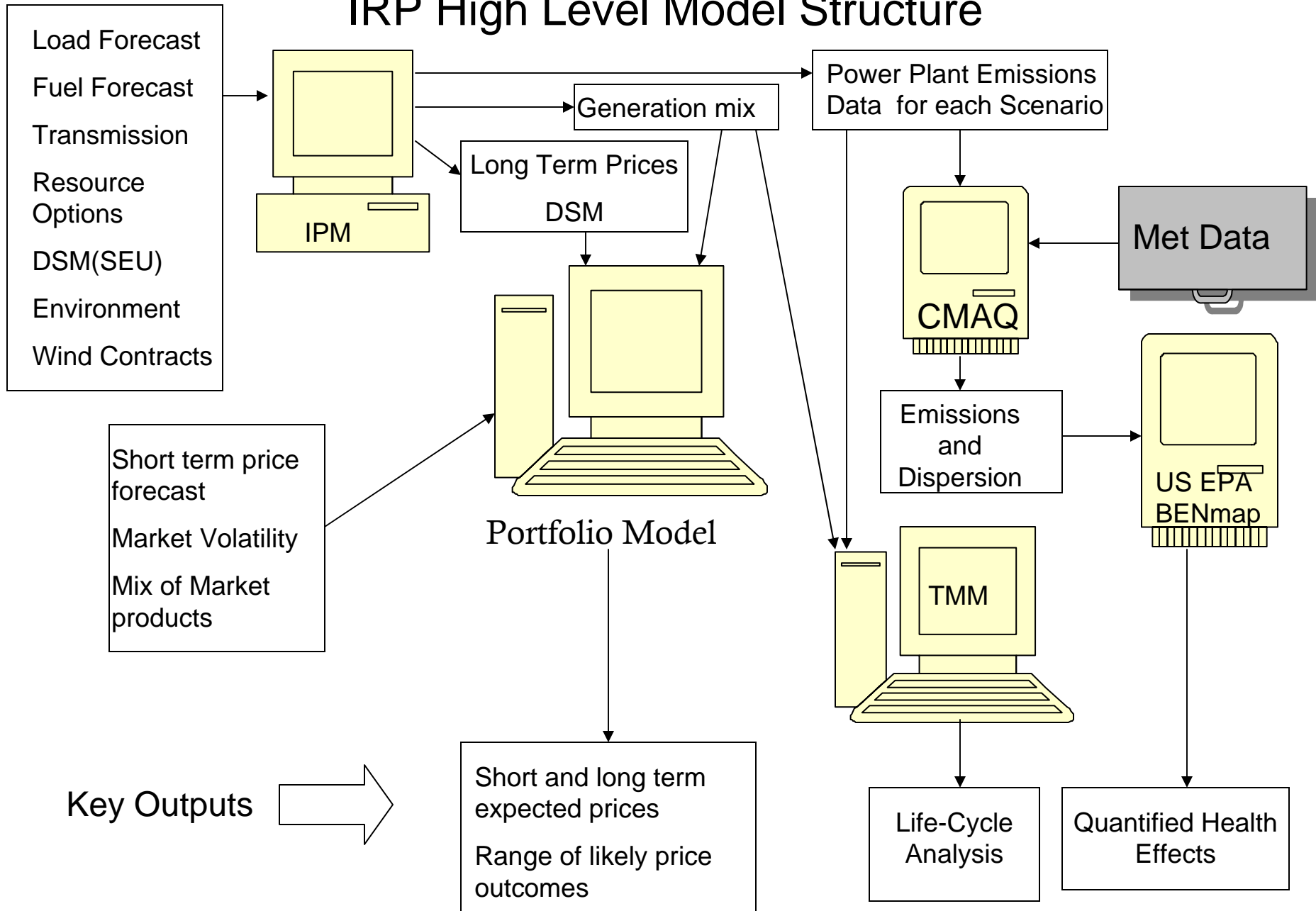
Scenario Development

- What can DPL affect from a resource planning perspective?
- How do changes beyond DPL's control impact resource planning and the IRP?

DPL's Tool Box

- Resource commitments
 - What resources are planned
 - Type (including DR)
 - Size
 - Ownership
 - Term
 - Where are resources located
 - In PJM
 - In Delaware
 - When resources are needed
- The IRP
 - Develop a reference case and then develop alternative scenario cases to consider alternatives that DPL can affect.
 - After completing scenarios using full IPM-environmental modeling framework, use sensitivity and risk analyses to consider “robustness” around reference and scenarios cases.
 - Delmarva’s 10 year plan is reset every two years.

IRP High Level Model Structure



DPL IRP Preparation Strategy

- Scenarios should focus on what DPL can actually affect
 - Run full IRP modeling: IPM-Portfolio-Environmental for each scenario
 - Obtain detailed results including environmental impacts
- Other factors outside of DPL control should be considered using sensitivity analysis to evaluate the robustness of the reference case or scenario
 - Doesn't require rerunning entire IRP modeling to develop meaningful results; adjust scenario results based on available information or rerun a subset of IRP models as appropriate.

Example Sensitivity Analysis

- For more OSW case after completing full model scenario analysis:
 - Examine effect of high/low load forecast or DSM on scenario results
 - Run portfolio model for price and price stability effects
 - Interpolate environmental benefits
 - Can examine incremental levels of OSW using a similar approach

The Reference Case will include the Following:

- the latest Load Forecast (2010) and RTEP results (2010)
- DPL commitments to purchase increasing amounts of wind energy in future years of the plan.
- DPL commitments for solar resources.
- Meeting the EE and DR targets as identified in the Energy Efficiency Act.
- The IRP presents a 10 year planning outlook that will be “reset” every 2 years.

Proposed DPL Scenarios

- Reference case Plus 150 Mw Land Based Wind
- Reference Case Plus 150 Mw Off-Shore Wind
- Reference Case Plus gas fired generation facility
- For each scenario prepare sensitivity analysis around key assumptions