

UI Solutions Group's

Energy Supply Module



Available typically
as part of our
**Integrated Resource
Planning Solution**

Today more than ever it is important for utilities to meet their customer's forecasted energy demand considering sustainability and reliability goals as well as market dynamics, technology complexities, and constraints in portfolio mix - all while controlling costs to ensure affordable energy is available to customers.

UI's Energy Supply Module allows for a **Production Cost Model (PCM)** to produce a fuel forecast and an **Expansion Planning Model (EPM)** to forecast the long-term construction needs, thus enabling the utility to provide comprehensive and informed results to comply with **IRP filings requirements** and meet **LRP** needs.

UI'S ENERGY SUPPLY MODULE ENABLES UTILITIES TO:

- ▶ **Enable dual functionality – PCM and EPM:** Production Cost Model mode produces a detailed and robust fuel and purchased power forecast necessary for financial planning. Expansion Planning mode allows for a long horizon view of capital construction needs.
- ▶ **Integrate seamlessly with other UI solutions:** The results of the Production Cost Model and Expansion Planning are fully integrated into UI's suite of products, with seamless handoff to the utility's Budgeting and Financial Planning groups.
- ▶ **Empower the user with a simple user interface:** The creation of the IRP Plan is facilitated by providing a simple user interface to feed all necessary data, and to easily modify parameters on the fly to create and compare multiple IRP plans. This flexibility allows for the modeling of new technologies, new attributes, and new constraints without additional software.
- ▶ **Deliver rapid IRP results to key stakeholders:** Rather than waiting a day or more to provide answers to executives, the Energy Supply model speeds up the turnaround time by providing prompt answers.
- ▶ **Inform the user with the how:** Users become owners of all relevant information on how a plan is formed via UI's full drill-down capabilities, thus allowing for greater analysis and better decision-making.

COMPONENT EXAMPLES

Our **Energy Supply Module** can be configured with robust components, including:

Unit Cost Modeling:

Maintains variable O&M, fuel and emissions costs at each viable contribution by each business unit.

Production Cost Modeling:

Solves dispatch profiles for each time increment of a run that aim to minimize costs, and/or meet environmental goals to meet the given demand.

Expansion Planning:

Plans for the long-term to meet the utility's demand in the form of modeling new plant construction, retiring aging plants and transitioning to renewables.

The Power of Integration: UI's Energy Supply Module integrates with other modules, which ensures data accuracy and saves time.

