Integrated Resource Plans Criteria for an Effective Planning Tool

In response to volatility in the fuel market and concerns over generating capacity, many states in the 1980s began requiring electric utilities to undertake Integrated Resource Planning (IRP). Utilities were directed to examine both their energy demand and supply and identify any risks that could prevent them from meeting their customers' long-term energy needs at reasonable costs. Typically, an IRP requires the utility to conduct load forecasting as well as demand-side, supplyside, integration and risk analyses.

An IRP is a planning tool—it is neither a metric nor a measure to achieve particular goals. The basic IRP incorporates the following criteria:

- Reliability
- System demand
- System growth
- Fossil and renewable energy resources
- Base-load and peaking generation
- Strategies to enhance energy security
- Energy efficiency policies and programs
- Applicable federal and state laws/ policies
- Strategies to minimize costs for customers

States with IRPs or Similar Planning Process

- State has a filing requirement for long term plans State is developing an IRP rule and filing requirement State has an IRP rule and filing requirements
- State has no filing requirements for long-term plans
 - The environmental impacts of electricity supply and use
 - Local economic benefits

Among the 13 Midwest states, eight require traditional IRPs and four require a planning process that incorporates energy efficiency. These planning processes vary as to who must file a plan, how often, the period covered, the required content and the level of detail.

Not all IRPs are Created Equal

IRPs that result in more cost-effective energy efficiency usually include the following additional considerations:

- Energy needs are required to be met through efficiency first
- Supply and demand-side resources receive comparable treatment
- Incentives are linked to energy efficiency performance
- The energy efficiency analysis utilizes required and enforceable criteria
- All cost effective demand-side management (DSM) resources available in a utility's respective territory are based on independently performed potential studies
- An IRP planning cycle staggered with the DSM planning cycle so each planning process informs the other over time
- An analysis to determine whether increased efficiency measures would cause electricity sales to fall by such a significant amount that the utility would fail to recover its authorized costs



Policy in Brief: Minnesota

IRP process requirements are found in states with and without energy efficiency resource standards. Long-term targets for energy savings can be incorporated into a utility's IRP as load reduction from DSM measures. Minnesota incorporates their existing energy efficiency standard, which calls for electric savings of 1.5%, as an input to each utility's IRP. The Minnesota Public Utilities Commission then determines whether more energy efficiency can be achieved.

In 2007, the Minnesota legislature established the Conservation Improvement Program for the state with energy-saving goals for utilities of 1.5% of retail sales each year. Of the 1.5%, the first 1% must be met with direct energy efficiency energy savings, or conservation improvements. Utilities are permitted to request a lower target, but for investor-owned utilities, that target can be no lower than 1% per year. Electric savings more than doubled between 2007 and 2012 and the state now has 1.22% saved electricity as percent of total retail electricity sales.

State Utility Planning Requirements

| State | Planning Horizon | Frequency | Requirements |
|-------|------------------|---------------|--|
| IL | 5 years | Annually | Illinois IOUs need to have energy efficiency factored into their procurement plans (which include forecasts) that are submitted to the Illinois Power Agency. |
| IN | 20 years | Every 2 years | Indiana provides detailed guidelines for an IRP processes by an electric utility. As of March 2016, the Indiana Utility Regulatory Commission is revising energy efficiency plan rules. |
| IA | 20 years | Every 5 years | lowa requires utilities to submit plans that include required forecasts. |
| KY | 15 years | | Kentucky provides detailed guidelines for the IRP process including identification of demand-side management programs. |
| MI | - | - | Michigan's commission is charged with establishing standards for IRPs filed by an electric utility that requests a certificate of necessity, which address energy efficiency and DSM. |
| MN | 15 years | Every 2 years | Minnesota's resource plan is a set of resource options, including conservation (CIP standard), that a utility must use to meet the service needs of its customers over a forecast period. |
| МО | 20 years | Every 3 years | Missouri provides detailed guidelines for the IRP process of electric utilities and encourages energy efficiency measures by utilities. |
| NE | 20 years | Every 5 years | Nebraska directs utilities to incorporate IRP processes and include cost options when evaluating alternatives for providing energy supply and managing energy demand. |
| ND | 20 years | Every 2 years | North Dakota's utilities are required to submit resource plans as a result of regulatory decisions and settlement agreements. |
| ОН | - | - | Ohio's utilities' long-term forecast includes a resource plan, including energy efficiency and DSM programs. |
| SD | 10 years | Every 2 years | South Dakota requires electric utilities to submit a 10-year plan, including a statement of efforts toward "efficient load management." |
| WI | 2 years | Every 7 years | Wisconsin's commission undertakes a quadrennial planning process for energy efficiency and renewables. |

