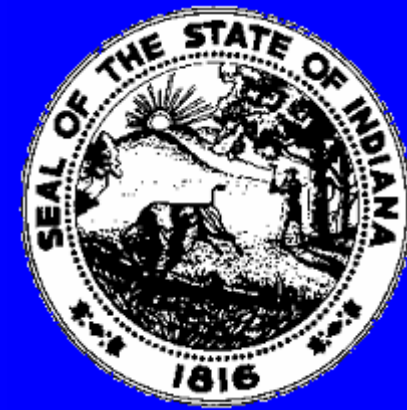


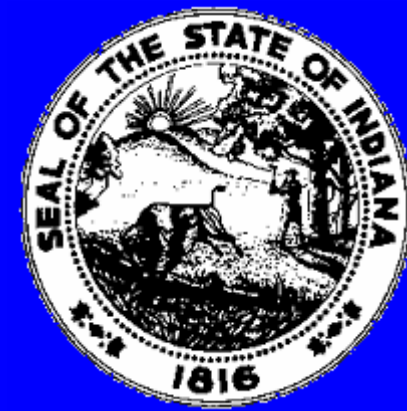
Indiana Utility Regulatory Commission



Introduction to Integrated Resource Planning (IRP)

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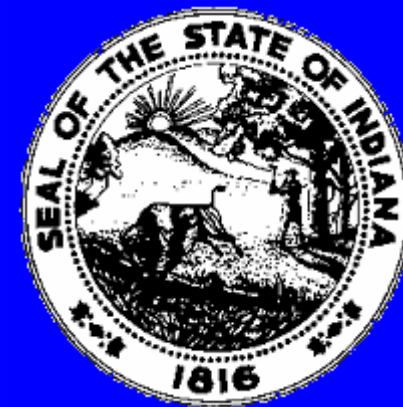


Integrated Resource Planning (IRP)

A utility's assessment of a variety of demand-side and supply-side resources to cost-effectively meet customer electricity service needs.

IAC 4-7-1 Sec. 1(s) Aug. 31, 1995

The IRP Process



- Forecast of customer energy and demand requirements
- Evaluation of demand-side resources
 - Conservation
 - Energy Efficiency
 - Load-shifting
- Evaluation of supply-side resources
 - Traditional generation technologies
 - Renewable resources

IRP filing requirements – methodology & documentation



- 20 year future period
- Load data by customer class
- Modeling process and performance
- Alternative forecast scenario analysis
- Fuel inventory and procurement practices
- Environmental emission allowances
- Generation expansion criteria
- Transmission
- Distribution
- Avoided costs



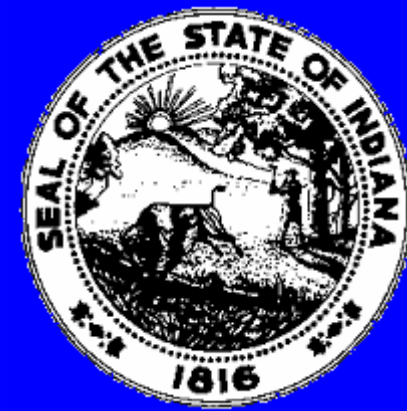
IRP filing requirements – energy & demand forecasts

- Historic and projected load shapes
 - Annual, seasonal, monthly, weekly
 - By customer class
- Weather
- Forecast performance
- Alternative forecasts



IRP filing requirements – resource assessment

- Generation capacity
- Fuel prices
- Environmental effects
- Purchase power
- Demand-side programs
- Alternative methods to meeting future demand
- Alternative supply-side resources



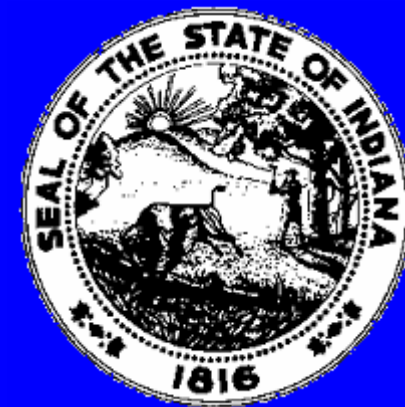
IRP filing requirements – selection of future resources

- Cost-benefit analysis
 - Participant test
 - Ratepayer impact measure
 - Utility cost
 - Total resource cost



IRP filing requirements –

- Resource Integration – A utility must select a mix of resources consistent with the objective of the integrated resource plan
- Short Term Action Plan – A short term action plan must be prepared covering each of the first two years of the IRP period



Benefits to IRP

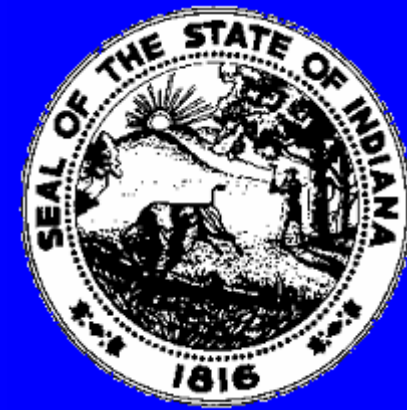
- Provides for a systematic and objective evaluation of all resources available to meet customer load requirements
- Provides for a portfolio approach to resources needs – reducing risk
- Develops a least-cost plan to meeting resources needs
- Potentially other “public” benefits



So why didn't utilities always do integrated resource planning?

- Traditional ratemaking allows the utility to earn a return on investments in supply-side resources
- Demand-side resources such as conservation and energy efficiency reduce utility sales thus affecting revenues and earnings

IC 8-1-8.5 Utility Power plant Construction

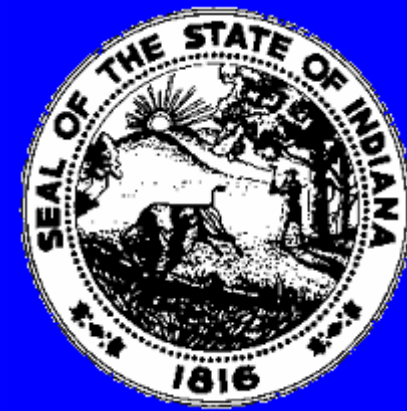


IC 8-1-8.5-2

Necessity for certification

Sec. 2. ..., a public utility may not begin the construction, purchase, or lease of any steam, water, or other facility for the generation of electricity to be directly or indirectly used for the furnishing of public utility service, even though the facility is for furnishing the service already being rendered, without first obtaining from the commission a certificate that public convenience and necessity requires, or will require, such construction, purchase, or lease.

*As added by P.L.43-1983, SEC.12. Amended by P.L.88-1985, SEC.6;
P.L.11-1987, SEC.14.*



IC 8-1-8.5-5 Estimate of costs; hearing on application; ...

As a condition for receiving the certificate, the applicant shall file an estimate of construction, purchase, or lease costs in such detail as the commission may require.



IC 8-1-8.5-6 Review of construction...

The commission shall, **at the request of the public utility, maintain an ongoing review** of such construction as it proceeds. The applicant shall submit a progress report and any revisions in the cost estimates for the construction.

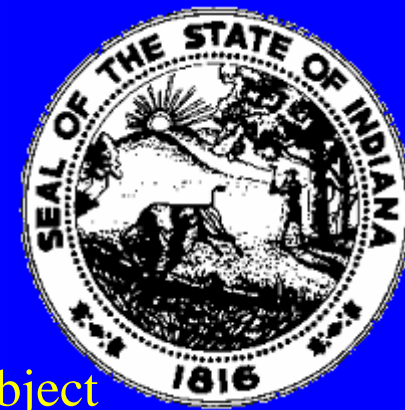
- If the commission approves the construction and the cost of the portion of the facility under review, the certificate shall remain in full force and effect.
- If the commission disapproves of all or part of the construction or cost of the portion of the facility under review, the commission may modify or revoke the certificate.
- Alternatively, the public utility may elect to forego commission review and defer the review of the construction and cost until completion or cancellation of the facility.



IC 8-1-8.5-6.5 Rates; recovery of costs

Absent fraud, concealment, or gross mismanagement, a utility
Shall recover through rates the actual costs the utility has
incurred in reliance on a certificate as follows:

- If the facility is completed and construction has been subject to ongoing review, the costs of construction approved by the commission during the ongoing review shall be included in the utility's rate base without further commission review.
- If a facility is and construction is subject to subsequent review, the costs of construction that do not exceed the estimate shall be included in the utility's rate base, except for costs that are shown to result from inadequate quality controls. Costs in excess of the estimate may be included in the utility's rate base if shown to be necessary and prudent.



IC 8-1-8.5-6.5 Rates; recovery of costs

- If a facility has been canceled and construction has been subject to ongoing review, the costs of construction approved by the commission during the review shall be recovered by the utility by inclusion in rates and amortization over a reasonable time. The utility shall be permitted to earn a return on the unamortized balance.
- If a facility has been canceled and construction is subject to subsequent review, the costs of construction incurred before cancellation that were included in the estimate and that have not been shown to result from inadequate quality controls shall be recovered by the utility by inclusion in rates and amortization over a reasonable time. The utility shall be permitted to earn a return on the unamortized balance. Costs that were not included in the estimate may not be included in rates unless shown by the utility to be necessary and prudent.

As added by P.L.53-1992, SEC.7.



Other IRP Uses

The Commission shall develop, publicize and keep current an analysis of the long-range need for expansion of facilities for the generation of electricity.

To aid the Commission IC8-1-8.5-3.5 provided for the establishment of a forecasting group (SUFG).