MISSOURI IRP RULES

Key Drivers Underlying Rationale To Change Rules

May 20, 2005

Agenda

Agenda

- Historical perspective
- Key drivers for change
- Overview of issues with certain sections of the IRP rule
- Interim steps – how to address required IRP filing requirements while IRP rules are in the process of being revised

Executive Summary

- AmerenUE supports the concept of a less-prescriptive electric IRP rule with periodic reporting requirements

- AmerenUE recognizes the need to keep the Commission informed as to overall resource plans

Historical Perspective

Revisit 1999 – Year When Missouri IRP Rule Was Tabled

- Case No. EO-99-365
  - MO IOUs filed a petition to rescind Chapter 22
  - Stipulation and agreement reached whereby IOUs received a variance from the rules for certain "specified time periods"
  - IOUs agreed to conduct periodic meetings with Staff and OPC

- The "story behind the story"
  - June 1998 Agenda meeting – the Commission directed its Staff to look into rescission of its IRP rules.
  - Multiple IRP rule rescission discussions at IOUs semi-annual briefing sessions

FACTORS UNDERLYING 1999 PETITION BY IOUs TO RESCIND IRP RULE

- Time and experience showed that strict compliance with the IRP rule was not productive, i.e., second round of filings waived for all IOUs
- IRP rule inconsistent with the "issues" of the day, i.e., restructuring
- Perception that the IRP rule did not serve a useful purpose since most parties decided that compliance with the rules was too costly, too time consuming, and some sections of the rule were not relevant
- The realities of a rapidly growing competitive wholesale generation market were overtaking the largely theoretical world of decision tree analysis, chance nodes, and dispersion of the probability distributions contained in the Chapter 22 Rules

WHY IRP RULES?

- Integrated resource planning was intended to mandate the expansion of the range of options to include non-conventional supply-side options such as renewable resources, life-extension programs for existing plants, and demand-side options such as innovative pricing techniques, load management, and energy efficiency and conservation measures.

- Existing rules provided a learning experience for both IOUs and Commission Staff

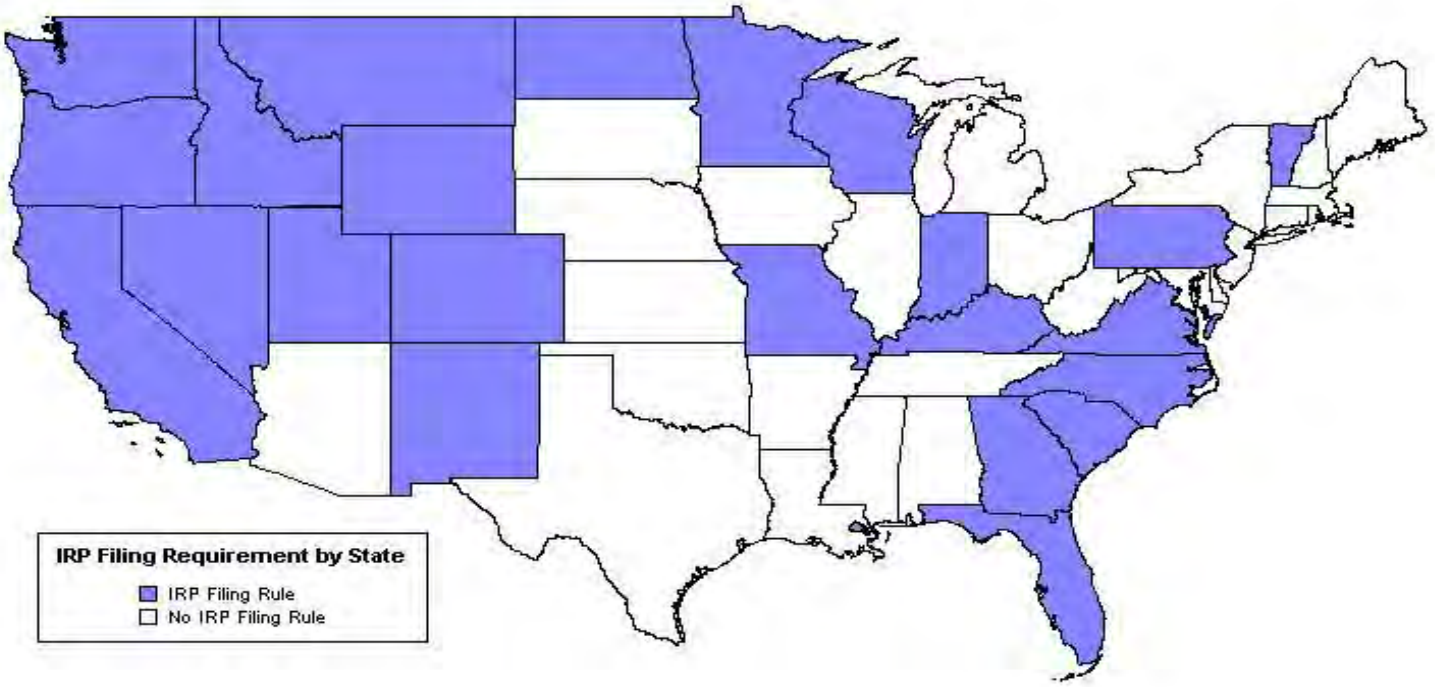
- The 1st round of IRP filings provided IOUs an insight into the Commission's perspective as to what is required of IOUs in the area of integrated resource planning

The MO Rules Have Not Been Updated In More Than A Decade….

- Rules don't account for changes in market dynamics…
- Improvements in analytical techniques…
- Increased data availability…

➢ The ability to demonstrate prudent decision making and thorough analysis of resource additions are the key considerations in modifying the rules.

National Overview Of IRP Rules



Key Drivers To Modify MO IRP Rules

Driver: Modernizing The Rules

- Create a set of rules that reflect current industry planning practices
- Most models around which MO IRP rules were developed either no longer exist or are no longer supported by vendors
  - REEPS – Residential End-Use Energy Planning System
  - COMMEND – Commercial End-Use Planning System
  - HELM – The Hourly Electric Load Model
    - There are preliminary indications that this model may be resurrected
  - DSManager – Demand side analysis benefit/cost tool
  - EGEAS – Electric Generation Expansion Analysis System
- Balance cost of IRP rule compliance with value
  - Is it appropriate to increase the size of the load forecasting staff to do end-use forecasting when average annual growth rates are consistently in the 1.5% range?
  - Is it appropriate to dedicate a staff of five to the design, implementation and evaluation of DSM/DR pilot programs?
  - Is it appropriate to spend hundreds of thousands of dollars per application to develop data to populate complex models that add little, if any, value?

Driver: Focus On The Appropriate Planning Issues

- Focus on issues that are used and useful to support the resource planning decision making process

Driver: Reduce The Prescriptive Nature Of The Rule

- MO has some of the most prescriptive IRP rules in the nation
- Current rules in retrospect have been overly prescriptive in most areas and have led companies to expend resources in areas where they would not have been required by most business planning practices
- **Rationale: Return responsibility to the IOUs to demonstrate prudence in planning practices**
- **Goal: Produce a better product**

Driver: Why Instill Flexibility Into The Process?

- Are there better ways of presenting resource planning related information and data to the Commission today than when the rules were written?

- Will there will be better ways of presenting information tomorrow than there are today?

- Relevance of current IRP rules is questionable – most stakeholders involved with compliance with the rules have decided that they are too costly, too time-consuming, and not relevant to the issues facing IOUs today

Overview Of Issues With Certain Sections Of The Current IRP Rule

Load Forecasting

- "Spirit" of the rule seeks a robust forecast where driver variables are clearly identified and fundamentals underlying driver variables are documented
- Load forecasting rules are detailed, written with specific forecasting tools in mind (REEPS, COMMEND etc.)
- Key questions

  - What are IOUs preferred approaches to load forecasting?
  - What expectations should the Commission have with respect to load forecasting?
  - Should analytical tool preferences be articulated in the rules?

Assessment of Load Forecasting IRP Requirements Across Nation

	State	Comments	Forecast Methodology Outlined	Bottom-Up Approach Prescribed	Presentation Format Specified
Hands Off	FL	Rules provide guidelines for the kind of information utilities need to file, not the methodology they should use.			●
	ID	Rules are flexible, with supporting information left to the utility's discretion.			●
	MN	No pre-defined rules regarding load forecasting.			
	MT	Rules are somewhat flexible in the processes and methodologies used by utilities when forecasting load.			●
	NM	No formal rules regarding integrated resource plans.			
	NC	Very little direction provided regarding load forecasting.			
	ND	Rules call for use of scenario analysis using end-use and econometric methodologies.	●	●	
	VT	With utilities given discretion on how to forecast load, key concern is to maintain consistency in method and reporting.		●	●
	VA	Rules are very flexible, with few guidelines regarding load forecasting process.			
	WA	Rules remain general on the topic of load forecasting.			
	WY	No requirements for load forecasting are identified.			
Moderate	CA	Rules are explicit, with scenario analysis requirements.	●	●	
	HI	Detailed rules about the type of determinants used in assumptions for scenario analysis.		●	●
	OR	Rules not prescriptive; load forecasts prepared by external entity used as benchmarks against those developed by the utilities.			
	PA	Ample direction provided with little said about the methodology to be used in load forecasting.		●	●
	SC	No mandated rules, but utilities have used load factor methodology , incorporating bottom-up approach in load forecasting.			
	UT	No formal rules; rules evolved from PacifiCorp's disconnect between planning and actual resource decisions.	●		
	WI	Forecasts are consolidated among Wisconsin utilities and limited to three-year period covered by state energy plan.			●
Aggressive	CO	Rigid rules about load forecasting methodology, reporting and presenting of data and assumptions.	●		●
	GA	Very detailed and prescriptive rules on load forecasting.	●	●	●
	IN	Rigid rules on scenario analysis and the level of detail submitted.	●		●
	KY	Explicit rules about process, but methodology and tools are left to the discretion of the utility.		●	●
	MO	Rules are highly specific and prescriptive in methodology and format.	●	●	●
	NV	Strict rules regarding the use of bottom-up approach, scenario analysis and presentation of load forecast data.	●	●	●

Demand-Side Resources

- The level of detail associated with the Missouri rules on how IOUs should address demand side resources in their planning is substanial
- The Missouri DSM rules address how to do: research, development, evaluation, accounting and reporting
- AmerenUE spent $ millions for measure level research and analysis, and program development
- AmerenUE spent tens of $ millions on DSM pilot program design, implementation and evaluation

Assessment of IRP Requirements Across Nation

Summary of State Rules/Requirements - Demand Side Management

	State	Comments	Categories				
			Research	Development	Evaluation	Accounting	Reporting
Hands Off	MO		●	●	●	●	●
	FL	Demand side resources are taken into account in load forecasting, but the rules are not prescriptive					●
	HI	Rules pay particular attention to the integration of demand side resources, but at utility discretion					●
	MN	Rely primarily on external stakeholders working groups to identify opportunities					●
	NC	No guidance provided on what should be included in IPPs related to demand side resources					●
	ND	Limited direction in the rules as to what information must be included in plans		●	●		
	NM	One utility must file an IRP every two years, but no direction is provided on substance of plan					
	VA	Rules require the utilities to show energy efficiency effects through scenario approach			●		●
	WA	General guidelines in the rules; rely on significant public involvement to develop effective programs					●
	WI	Focus on historical reporting					●
	WY	No guidance provided at all on what to report beyond the fact that demand side resources are considered					
Moderate	CA	Considered one of the more progressive plans, but still gives most discretion to utilities		●			●
	CO	Moderate direction provided to utilities regarding demand side resource analyses			●		●
	KY	Program research and development is at the discretion of the utilities			●		●
	MT	1 of 2 states with requirement to consider impact of demand side resources on T&D	●	●	●		●
	PA	Reporting focus is on the costs and impacts of programs; programs choice is at utility discretion			●	●	●
	SC	Rules focus on allowing utilities to be creative in their program design, but want clear accounting of value				●	●
	UT	While the IRP rules are replete with references to demand side resources, great discretion is given to utilities to identify the best programs and implementation strategies		●	●		●
Aggressive	GA	Heavily integrated process with significant direction provided by the IRP rules.	●	●	●		●
	ID	IRP rules create strong link between supply and demand side planning	●	●	●	●	●
	IN	1 of 2 states with requirement to consider impact of demand side resources on T&D		●	●	●	●
	NV	Strong quantitative analysis promoted in the assessment of demand side resource programs		●	●	●	●
	OR	Highly public process is associated with this aspect of the IRP process	●	●	●	●	●
	VT	Much discussion is included regarding demand side resources with general guidelines	●	●	●	●	●

Issues To Consider When Modifying DSM Portion Of The IRP Rules

- **Is the current DSM rule appropriate?** Is resource planning about the most cost effective method of supplying electric power? Or is it about the most cost effective method for its customers to consume electric power?

- What lessons have been learned throughout the industry?

- How have energy service companies (ESCOs) evolved since 1999?

- Is emphasis on dynamic pricing programs and de-emphasis on energy efficiency warranted?

- What is the best way to acquire DSM?

Risk Analysis

- Purpose of risk analysis rule
  - Identify critical uncertain factors affecting performance of resource plans
  - Establish minimum standards for methods used to assess risks associated with these uncertainties, and
  - Require the utility to specify and officially adopt a resource acquisition strategy

Issues To Consider When Modifying Risk Assessment Portion Of The IRP Rules

- Are rules related to risk assessment too prescriptive in nature?
- Should IOUs be able to:
  - Conduct its risk analysis around variables it finds most relevant
  - Address risk concerns in the manner they deem most appropriate
- Is more flexibility needed in determining
  - The range of scenarios considered and the basis for not considering others
  - The best presentation format for results, assumptions and methodologies tied to risk analysis

Assessment of IRP Requirements Across Nation

Summary of State Rules/Requirements - Risk Assessment					
		Categories			
State	Comments	Explicit reference to risk assessment	Guidance given on risk modeling tools	Reference to specific uncertainty factors to consider	Utilities required to use scenarios
MO		●	●	●	●
CA	Instructed to prepare 3 supply/demand scenarios to tackle uncertainty	●		●	●
CO	To include an assessment of planning reserve margins and contingency plans	●	●	●	●
FL	Rules provide some guidance on using both deterministic and probabilistic risk analysis	●			●
GA	Requires sensitivity analysis, but gives utilities the latitude to determine fit	●		●	●
HI	Specifies need to do scenario analysis, but gives utilities the latitude to determine fit	●			●
ID	Rules not dictated by contingency planning and uncertainties are recommended to be considered	●		●	●
IN	Holds utilities to assessing risk through quantitative and qualitative discussions	●		●	●
KY	Rules explicitly require utilities to adhere to rigorous risk assessment in resource planning	●		●	
MN	Expects utilities to tackle risk but provides no prescription rules for guidance				●
MT	Rules make no reference to risk analysis				
NV	Scenario and risk analysis are required by the rules, but rules are not prescriptive	●			●
NM	One utility must file an IRP every two years, but no direction was provided on substance of plan				
NC	No mention is made in the rules or orders regarding risk analysis				
ND	Rules are silent on risk analysis, but utilities have responded with risk assessments				
OR	Provides some guidance but requires adequate detail and information to determine feasibility of plan				●
PA	Rules are not substantive with respect to risk analysis				
SC	Utilities are given wide discretion in how they develop their plans and address risk				
UT	Rules and guidance are moderately detailed on risk analysis	●		●	●
VT	Very detailed rules with emphasis on both decision analysis and scenario analysis	●	●	●	●
VA	Risk assessment is not discussed in the rules or orders				
WA	Allows discretion in building risk assessment so as to reflect "best practices" in analytic approach				
WI	Resources planning rules result in static analyses and qualitative treatment of risk				
WY	No substantive rules on risk analysis				

Interim Steps – How To Address Required IRP Filing Requirements While IRP Rules Are In The Process Of Being Revised

IRP Filing Requirements

Requirement

- AmerenUE has IRP filing due December 2005
- Other MO IOUs follow in lags of 7 months according to size

Process Discussed For AmerenUE's December 2005 Filing

- Filing requirement will not be waived
- AmerenUE may seek waiver of specific sections of IRP rule

Questions

- Will MO IOUs who file under existing IRP rules be required to file again when revised rules are approved? If so, when?
- How will all MO IOU filings be coordinated when some IOUs may be required to make a filing under both the current and revised rules and others may only be required to file under the revised rules?
- Does the Commission really want to review a filing based on a rule that it knows will change significantly?

Next Steps

- Collaboration among all stakeholders to revise rules
- Workplan to achieve rule revision
- Collaborative steering committee structure to lead/guide the IRP rule revision effort