Key Elements of Integrated Resource Planning

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Outline

I. IRP—What is it and where does it come from?

II. Basic Structure

III. Important Themes and Examples
I. What is it and where does it come from?

- Late 1970’s
  - Huge cost overruns on coal and nuclear units
  - Delays in in-service dates created shortages
  - Price increases made energy efficiency an attractive option

- 1979 Three Mile Island accident
  - 60 nuclear units canceled
II. IRP– Structure
At each step, incorporate stakeholder/customer values, environmental goals, corporate values, state/Fed regulation.
NOW--With all that Information? You Integrate *Supply and Demand*

Large utility IRPs include significant computer modeling for *portfolio optimization*
What about risk?

What about risk?

- Risk cannot be eliminated, but it can be managed
  - Risk is defined in terms of probabilities, so sooner or later some risks will be realized, and will translate into $.
- Non-Strategies
  - Ignoring risk
  - “It’s always been done this way”
- Make a fresh assessment of risk and attempt to limit it.
At each step, incorporate stakeholder/customer values, environmental goals, corporate values, state/Fed regulation.
Public Participation – opportunity to educate and build support and constituencies
At each step, incorporate stakeholder/customer values, environmental goals, corporate values, state/Fed regulation.
An Action Plan

Even though IRPs look out over 20-30-year horizons, they also should have an *action plan* that describes what should happen in the near term – the next several years.
III. Essential Themes and Examples

• Public Participation
• Role of the Commission
• The IRP Analysis
• Implementation
Public Participation

• Is public participation meaningfully incorporated into the IRP process?
• Are there established processes that ensure public participation?
• Are data made available to stakeholders allowing alternative analysis or verification of IRP assumptions?
Public Participation

- Georgia PSC convenes three sets of hearings
  - One immediately following Georgia Power’s filing
  - One following intervenor/staff testimony
  - One following GP rebuttal testimony
- North Carolina PUC must schedule at least one public hearing once an IRP is filed
  - Often makes use of “technical sessions”
- NC Rule R8-60(i)(9)(k) allows staff or intervenors to file “alternative" IRPs
The role of the commission

• What is the role of the commission in *shaping* the outcome of the IRP filing?
• Does it have authority to require fundamental changes or to address deficiencies in the utility filing?
• Is that authority established by legislation and/or codified with the rules that govern the IRP process?
The role of the commission

- SC -- PUC can approve, modify or reject an electrical utility's integrated resource plan
  - S.C. Admin Code Section 58-37-40(C)(2)-(3)
- VA -- SCC denial of Dominion’s IRP due to among other reasons, inadequate modeling
  - December 2018 IRP Denial
  - September 2019 IRP Update
  - June 2019 Amended IRP Approval
The IRP Analysis

- Is the IRP analysis and scenario planning comprehensive across all technologies and energy resources?
- Does the analysis include non-utility resources and forecast of customer-owned resources?
- Does the analysis consider a wide range of possible scenarios?
- Are the methodologies transparent and accessible?
The IRP Analysis – What to Include

• The South Carolina Energy Freedom Act (Act 62, H3569), reformed SC IRP
• S.C. Code Ann. 58-37-40(B)(1) Items to include: peak load and energy forecasts, reliability, new resource alternatives, renewable resources, and existing resource retirements
• Virginia Clean Economy Act (new Clean Energy Reqs.)
• VA IRP Guidelines:
  • Statutory IRP Requirements
  • SCC Order Docket PUE-2008-00099 (2008)
Implementation

- Does the IRP process meaningfully guide resource procurement?
- Are there established procedures or protocols for ensuring accountability?
Implementation

• Most IRP processes are non-binding, but certification process does connect with the IRP

• In the SE, Georgia has the strongest connection between planning and procurement
  • For each block of resources identified in the IRP, GP conducts an RFP
Questions
About RAP

The Regulatory Assistance Project (RAP)® is an independent, non-partisan, non-governmental organization dedicated to accelerating the transition to a clean, reliable, and efficient energy future.

Learn more about our work at raponline.org

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