

**June 27/28 2012 Montana Public Service Commission
Workshop on Resource Planning/Decision Practices
Teamwork and Discussion Notes**

On June 27 and 28, 2012, principals from Graceful Systems (Pamela Morgan) and Benchmark Heuristics (Marty Howard) facilitated a workshop for the Montana Public Service Commission and stakeholders regarding electric utility resource planning and decision practices. During the workshop, the larger group split several times into small teams to explore specific questions. Below is the thinking generated by the small group work, as well as a transcription of the notes taken during a group discussion of the possibility of using the internet for easy access to commonly needed and/or interesting observations about the current context for resource decision-making.

I Decisions, Questions, and Observations

Task: teams were asked to think of about six decisions that a given stakeholder (e.g., Commission, utility, consumer advocate, community, or environmental advocate) might need to make about energy utility services; select one of those and think of the questions that stakeholder might have as it worked on the decision; then select one of those questions and think of the observations the stakeholder might make in formulating a view on the question.

A. One – Consumer Advocate Perspective

- i. Decision: To support/oppose the utility's position on distributed generation
- ii. Questions:
 - a. What is it?
 - b. What are the impacts (all)?
 - c. What are the reasons for the utility's position?
 - d. What do other stakeholders think and why?
- iii. Observations:
 - a. Reliability?
 - b. Cost?
 - c. Safety?
 - d. Rate impacts – LT and ST?
 - e. Environmental issues?

B. Two – Commission Perspective

- i. Decisions:
 - a. What is avoided cost?
 - b. Should we approve this as a rate-base asset?
 - c. Is ___ following the rules?
 - d. Should we accept, deny, or modify Staff's recommendation?
 - e. When should we decide?
 - f. What is in the public interest?
 - g. What resource needs more investigation?
 - h. What is the long-term effect?
- ii. Questions: for "Should we approve this rate-base asset?"
 - a. Does the resource exist?
 - b. Has it been addressed by earlier planning?
 - c. Do we have all of the information we need?
 - d. Is this resource mandated by law?

- e. Who are the intervenors?
- f. How does precedent inform us?
- g. What is the need?
- h. What other options are available?
- i. What are the benefits, costs and risks?
- iii. Observations: for “need”
 - a. Forecast load-resource balance
 - b. Statutory need
 - c. Lead time
 - d. Risk analysis results
- C. Power Project Developer/Operator Perspective
 - i. Decision: Should we build a new generating resource in Montana?
 - ii. Questions:
 - a. Where should we build?
 - b. Who’s going to use the power?
 - c. What type of power plant?
 - d. When should we build it?
 - e. What human resources are available, where?
 - f. Is there infrastructure in place?
 - iii. Observations: for what type of power plant
 - a. Type of fuel
 - b. Cost of fuel
 - c. Regulatory atmosphere
 - d. Environmental attributes
 - e. End use requirements
 - f. Public opinion
 - g. Available technologies
 - h. Timing and availability of materials and equipment
- D. Local government/Community
 - i. Decisions:
 - a. What tax rate?
 - b. Where to site infrastructure, zoning questions?
 - c. Economic development strategy?
 - d. Animal control?
 - e. What infrastructure and who runs it?
 - ii. Questions: for siting/zoning
 - a. Where is there existing infrastructure?
 - b. Where should we avoid?
 - c. Do we need more infrastructure?
 - d. What the existing uses of this site? Potential uses?
 - e. Who might be partners?
 - f. Who might be adversaries?
 - iii. Observations:
 - a. Placement of existing infrastructure
 - b. Placement of similar facilities, places of similar activities
 - c. Placement of unique features
 - d. Identity and address of the mayor
 - e. Identity of other jurisdictions involved

- f. What works to help people accept siting something close to them (e.g. compensation)

II Resource Planning and Procurement Goals

Task: teams were given a common resource planning or procurement goal (e.g., reasonable price, optimal mix of resources), asked to assume that this “state” exists, and (1) tell a story why it exists; (2) “see” what is happening by taking a stakeholder perspective and imagining what that stakeholder is seeing, hearing, doing, saying, thinking, and feeling; and (3) identify at least one potential consequence “that is “good” and why and one that is “bad” and why.

- A. Fair procurement practices
 - i. Story: statutes led to the development of rules that provided for a fair competitive procurement decisions process that featured transparency, participation, an open process, and regulatory oversight.
 - ii. Perspectives
 - a. Utility: good acquisitions, efficient needs process, enough flexibility to exercise discretion, limited regulatory challenges and protection of trade secrets
 - b. IPPs: equitable access, availability of continuing oversight, fair review of projects, lobbying access/leverage
 - c. Commission: trust, information, low prices compared to alternate futures
 - d. Consumers: have access to information, fair hearing process, ability to enter the market with distributed generation
 - iii. Consequences
 - a. Good: choices, broad-based benefits, equal footing between market participants, efficient use of time
 - b. Bad: lack of flexibility, constraint on bilateral trades, reduced utility profit incentive
- B. Lowest total cost to customers
 - i. Story: a customer-owned co-op took over, focused primarily on lowering bills, it used a diverse mix of resources and learned from past mistakes (e.g. California market meltdown), costs of regulatory oversight were low to nonexistent
 - ii. Perspective
 - iii. Consequences:
 - a. Good: obvious
 - b. Bad: how would one ever know whether one had the lowest total cost to customers?
- C. Reasonable price
 - i. Story: the price was higher 30-40 years ago but depreciation and inflation have brought it down in real terms. Neighboring states now have higher prices. There was a rigorous process for planning and risk taking and wise, long-term decisions were made.
 - ii. Perspectives:
 - a. Utility: sees low customer engagement, complacency internally and externally. Uncollectibles are low, as is use of low income bill payment assistance. Hears some complaints that the prices are still too high and things are too static for some (technology, price signals are lagging). There is some boasting going on.
 - iii. Consequences
 - a. Good: electricity is affordable
 - b. Bad: this is all subjective and time sensitive; reasonable is audience dependent

- D. Risk effectively managed
 - i. Story: Over time, good decisions got made, with good planning and implementation and people stayed on top of what needed to be done. Multiple measures were used to assess and manage risk and multiple perspectives were gathered. The system was flexible.
 - ii. Consequences:
 - a. Good: price stability, happy stakeholders, fewer crises, few complaints, regulatory process is perceived as stable
 - b. Bad: high cost, low reward/return environment, no longer proactive, locked-in, limited flexibility, less innovation
- E. Utility financially healthy
 - i. Story: Stable rates are producing a revenue stream that covers the utility's costs and produces a desirable return
 - ii. Perspective
 - iii. Consequences:
 - a. Good: lower cost of capital, investment in infrastructure and service quality improvements, investors like certainty
 - b. Bad: stable rates may not be affordable; public thinks the utility is complacent; concern about what utility/regulators may be ignoring; price signals poor; investors like growth

III Assessing the Comparability of States for "Best Practices"

Task: Teams were assigned one of the states from which planning/procurement practices were drawn and asked to identify ways in which that state was both like and not like Montana.

- A. Arizona
 - 1. Same: lots of open land; conservative; coal generation; net surplus energy; elected commission
 - 2. Different: temperature; population; natural resources (solar, wind); quantity of transmission access
- B. Colorado
 - 1. Same: terrain; rural electric co-ops; recreation economy; mining history and agriculture; renewable resource capability
 - 2. Different: rural identity; population; renewable resource enthusiasm; food; average income; appointed commission
- C. Idaho
 - 1. Same: rural; in WECC; conservative; terrain; population size and demographics; similar economy; similar issues; one large IOU
 - 2. Different: smaller overall area; one large urban center; no coal; proximity to west coast and California; no RPS or co-ops; pro-business
- D. Michigan
 - 1. Same: winter peaking; geographic and political bifurcation; RPS; significant summer load; strong wind resources; rival universities
 - 2. Different: MISO member; large industries; diverse stakeholders; slow economy; smaller land area; more utility customers; appointed Commission; large metropolitan area
- E. North Dakota

1. Same: low population and small urban areas; fairly homogenous population; large wind resource; good coal resource
 2. Different: topography; less public land; more diverse agriculture; more humidity; more oil development
- F. Oregon
1. Same: agriculture; historical resource extraction economy; significant wind potential; hydroelectric history; mountainous geography
 2. Different: significantly larger population; single large metropolitan area; coastal; predominantly urban and predominantly mild wet climate; large electric import/export interconnections to highly diverse systems; no international border
- G. South Dakota
1. Same: Several QF dockets; elected Commission; rural/urban split; many co-ops; PMA presence; coal resources; wind potential
 2. Different: avoided cost rates; interconnection potential; vertical integration; frequency of rate cases; business climate; population density; level of advocacy; consequences of deregulation efforts
- H. Utah
1. Same: one large IOU; large rural population; federal lands; energy-producing states
 2. Different: mostly thermal resources; one large urban area; diverse economy; higher average income (?)
- I. Washington
1. Same: hydro heritage; mountainous; same latitude; agriculture; wind resources; environmental emphasis; RPS; no organized market
 2. Different: one major metropolitan area; coast line (transportation, climate, economic relationships); population; size of dominant industries; no coal, gas or oil
- J. Wyoming
1. Same: large state, small population; more cows than people; lots of natural resources; topography; weather; IOUs and co-ops; lots of federal land; both export resources
 2. Different: resources closer to loads; more gas transmission; no MEPA; pro-development; appointed Commission

IV Assessing States' Resource Planning/Procurement Practices

Task: Teams were given one state's (or several similar states') summary of planning/decision practices and asked to address: (1) How is this practice "good"? How is it "bad"? (2) What intended consequences can we imagine come from following this practice? (3) What unintended consequences can we imagine come from following this practice? (4) What would we add to/remove from this practice to improve it? Why?

- A. Oregon
1. "Good"
 - a. Requirement to include distributed generation in planning decreases transmission cost and environmental risk
 - b. Flexibility in type of plan filed, in level of detail; plan may be more meaningful for utilities
 - c. The "teeth" in the plan provides a better way to judge resource acquisitions; allows state to identify what values are important
 - d. Use of Independent Evaluator removes bias or perception of bias

2. "Bad"
 - a. Distributed generation rule favors generation that may not be most economic
 - b. Plan requires comparing apples and oranges; no unified statewide energy policy
 - c. Process is overly prescriptive, less market flexibility, forecloses new options that must become available
 - d. Customers having to pay for the Independent Evaluator is not good for relationship building
- B. Utah
 1. "Good"
 - a. Procurement process should attract more bidders, use of Independent Monitor, policy favoring bidding
 - b. IRP processes generally okay
 2. "Bad"
 - a. Processes are too rigid
 - b. Requirement for pre-approval
 - c. Process may carry more cost than desirable (IE, etc.)
 - d. No modeling requirements
 - e. The exceptions from the bidding requirement may be too numerous, too broad

V Discussion of Using Technology to Support A Dynamic View of Decision-Making Context

- A. What kinds of information could a website like this contain?
 1. News articles, stories of general interest
 2. Information on cases in other jurisdictions that affect Montana utilities
 3. "Annual Reports" such as energy efficiency achievements and expenditures, power purchases/sales, plants operations
 4. Unit costs of resources
 5. FERC form 1 data, made useful
 6. Investor presentations
 7. History of energy efficiency work
 8. Current status of resource solicitations and other status updates
 9. Charts and underlying spreadsheet data for kinds of information currently in IRPs
 10. Forum for sharing ideas, questions, and information
- B. What are the concerns this might raise?
 1. What really makes sense to publish where?
 2. Would there be too much simplification of information, which could lead to misunderstanding and abuse?
 3. What is the cost-benefit of doing this?
 4. How would this information link with the Commission's rules and evidentiary requirements?
 5. How would we handle potentially different interpretations of data?