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Washington

September 26, 2012

## MEMORANDUM

**TO:** Council Members

**FROM:** Lauren Casey  
Montana Energy Policy Analyst

**SUBJECT:**

In October 2011, the Montana Public Service Commission (PSC) applied for and was awarded funding from the National Association of Regulatory Utility Commissioners (NARUC) to get capacity assistance for a review of its administrative rules governing planning and procurement of new resources. The review is driven by the changing regulatory landscape and the potential opportunity to combine integrated resource planning (IRP) rules applicable to non-restructured utilities with those planning rules added in 2003 for restructured utilities into a single set of more comprehensive and robust rules.

Consultants Pamela Morgan and Martin Howard were selected through a competitive process to provide capacity assistance in this review. They conducted a series of interviews and workshops with interested parties in Montana, and a thorough review of planning and procurement practices in other states.

PSC attorney Jason Brown will present to the Council on the NARUC grant and consultant's findings, which can be found in the final report. The introduction is attached and the full report with suggested changes to the rules can be found at:

[http://psc.mt.gov/Docs/ElectronicDocuments/pdfFiles/N2012-5-56\\_IN\\_20120924\\_RP.pdf](http://psc.mt.gov/Docs/ElectronicDocuments/pdfFiles/N2012-5-56_IN_20120924_RP.pdf)



# Final Report

For the Montana Public Service Commission

Recommendations and a Draft Rule for Electric Utility  
Resource Planning and Procurement in Montana

**Pamela Morgan and B. Martin Howard**  
**9/21/2012**

## Introduction

The involvement of state public utility commissions in utility resource planning and procurement, prior to a utility's request to include the cost of a newly acquired resource in its rates, dates back about thirty years; the Montana Public Service Commission adopted its first rules on these matters in the early 1990s. This regulatory involvement in matters that previously concerned only the utility serves to protect utility customers in several ways. First, the formal and informal processes help ensure that utilities make their resource decisions in consideration of the broadest possible set of foreseeable outcomes, protecting utility customers from resource costs that were avoidable in light of what was knowable at the time of the decision. Even though a commission can always exclude from rates costs that it finds imprudently incurred given what was knowable at the time of decision, this choice can indirectly harm utility customers by raising the cost of capital the utility requires to make needed investments. Utilities, their customers, and their stakeholders are far better off simply avoiding such errors. Second, much about the future costs of resources is not knowable at the time of decision, given long resource lives and sometimes lengthy construction before a resource is placed in service. Through their involvement in resource planning and procurement, commissions have enabled a robust exploration of utility risk. Moreover, the information and insights revealed through effective resource planning and procurement practices have spurred utility investment in cost-effective energy efficient technologies that considerably mitigate household and business customer risk stemming from uncertainty about the future costs of resources.

Much in Montana's current practice of regulatory utility resource planning and procurement works to serve these purposes. To continue to serve its purposes, however, a practice must evolve as conditions change. Some changes have occurred (and continue to occur) since Montana stakeholders began work in 2001 to put in place a resource planning and procurement process through which a utility with no electric generating assets and only a small portfolio of contractual resources was to supply all of the electricity needs of its customers. In the following year, the restructured utility acquired ownership of some electric generating assets and significantly widened the set of contractual and market resources it used to meet customer needs. Since that time, the accelerating effects of technological change and globalization of economic and political forces have been exerting increasing influence on utility resource planning, adding uncertainty to resource decisions. An expanding variety of resource possibilities is an ongoing source of increasing decision complexity. The distribution system has assumed a growing role in receiving electricity, in addition to delivering it, as customers have added electric generation to their buildings and offered it to the utility under net metering. The possibility of economic electricity storage technologies in the future could provide unprecedented flexibility for system operations, but also challenge some existing planning and operational assumptions.

In this environment of changed and changing conditions, the Commission requested "capacity assistance" from the National Association of Regulatory Utility Commissioners (NARUC) to help the Commission and stakeholders review the resource planning and procurement practice and

determine whether the Commission’s rules were providing an effective framework for that practice to achieve its purpose in the years ahead.<sup>1</sup> The review that occurred included many conversations with interested parties in Montana, and a thorough review of the planning and procurement practices in states that are similar to or nearby Montana. From this work emerged the following suggestions for revisions and additions to the current rules in ARM 38.5.8201 et seq.

## Summary of Recommendations

***Reorganize the current planning rules to align more closely with the work and appearance of current resource plans and add certain areas of planning content.*** Current resource plans tend to assess the future need for services; examine how existing resources can meet those needs; identify options to accommodate anticipated gaps between future needs and future resources; and then assess what outcomes might occur when combining existing resources with various resource options and accounting for uncertainty. We recommend restructuring the rules to match this flow. We also recommend that the restructuring incorporate appropriate best practices, drawn from other jurisdictions and our own experience, which will enhance the power of the rules’ framework to produce a robust process. Among these additions is a consideration of the uses and capabilities of existing transmission and distribution facilities and possibilities for beneficial changes in those facilities.

***Update the concept of “resources.”*** The current rules – and the statutes they implement – extensively use the term “electricity supply resource,” which also (somewhat awkwardly) includes “demand-side management.” Demand- and distribution-side resources do fill resource needs, but in salient respects they are unlike classical energy supply resources. Accordingly, our recommendations include an enlarged definition of “resources” that includes within it three categories of resource types:

- The familiar “Power Resources” that are the market, contractual, and physical power production resources;
- “Demand-Side Resources” covering the full range of technologies that reduce the total need for electricity or allow customers to shape that need away from times of peak use of electricity; and
- “Distribution-Side Resources” that include distributed generation and storage technologies that may be located on a given customer’s premise or somewhere on the utility side of the meter but within the distribution system. While the actual number of these installed is small today, the next decade could see significant growth.

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<sup>1</sup> For more information about the Commission’s request and the consultants working on this project, please see Docket No. N2012.5.26, Inquiry by the Montana Public Service Commission, Graceful Systems LLC and Bench Mark Heuristics LLC into Best Practices for Electricity Resource Planning <http://psc.mt.gov/Docs/ElectronicDocuments/getDocumentsInfo.asp?docketId=10129&do=false>

***Make “Services” an explicit consideration in Planning.*** The current rules resemble most other jurisdictions in orienting planning toward the provision of kilowatt-hours (energy) or kilowatts (capacity). It is implicitly assumed that these are the only services the utility provides. Utilities have long provided other services, however, and there is a significant possibility for growth in this area through new pricing plans, new services to support Distribution-Side Resources, and new information-based services, such as energy management. To ensure that the planning conversations and analyses consider the range and types of services before embarking on a periodic review of needed resources, we recommend bringing consideration of the “Services,” as defined, into the practice. This encompasses provision in the existing rules for consideration of cost allocation and rate designs.

***Reaffirm the necessity of stakeholder involvement for a successful resource planning and procurement practice and improve how the rules support stakeholder involvement.*** The current rules acknowledge the importance of stakeholder and public involvement for the success of the resource planning and procurement processes but currently provide little framework for this to happen other than through a technical advisory committee (TAC) that the utility may assemble to assist its internal work. In recent years, the invitation-only TAC has come to bear most of the weight of stakeholder involvement in planning preparation, with Commission (other than a single Staff member included in the TAC), public, and other stakeholder involvement occurring only after the fact. While the TAC provides good support to the utility and should continue, the practice is weakening the ability of the processes to achieve their purpose, and needlessly creates uncertainty.

We recommend several additions to the rules framework to provide the opportunity for more conversation during the preparation of resource plans. A key piece of these recommendations is moving from a two-year to a three-year planning cycle. The current two-year time frame allows little opportunity for additional stakeholder or public involvement, and results in a work product that is less robust and specific than it should be. With this expanded time, we recommend:

- Beginning a planning cycle with a “plan for the plan” that allows broad input on the key issues of the day and sets expectations around the timing of various important planning steps;
- Periodic open briefings by the utility as it completes major chunks of the planning work, so all interested persons can track the progress and offer questions and comments;
- Making a draft plan available for stakeholder comment, providing the utility an opportunity to address lingering questions and concerns before finalizing its plan; and
- A Commission-hosted informal annual review of current industry and market conditions that provides an opportunity for all stakeholders to stay current on the specific resource actions – including procurement – that the utility plans to take and the context within which it will be taking those actions.

While we do not expect public involvement ever to be overwhelming, the utility’s planning process should be as much of an open book as possible—especially to the several parties,

including the Commission, who are interested in the utility's work, but currently have no way to participate until the planning process has concluded with a final plan.

***Reaffirm the statutory and regulatory preference for using competitive solicitations for resource procurement – particularly long-lived high profile resources – and improve how the rules support successful resource planning and procurement processes in the special setting of competitive solicitation.*** In current practice, a significant amount of resource procurement is occurring through competitive solicitation. Utilities understand that the framework of competitive solicitation provides a solid base for subsequent regulatory findings, providing a record that the utility adequately identified and analyzed the most relevant options and made its selection using a well-developed and applied methodology; in short, it shows that the utility followed the behavior of a prudent business organization. Procurement processes need the same robust stakeholder involvement as planning processes to raise important questions; this is most critical for decisions that involve long-lived resources, for which uncertainty causes a significant rise in the likelihood that things will not go as planned sooner or later in the life of the resource. Providing for this stakeholder involvement is challenging in the competitive solicitation setting. To address this challenge we recommend:

- Tightening the linkage between resource planning and procurement, so that the work of planning is as useful as possible for procurement, reducing and eliminating any redundant work;
- Making more explicit the qualities of a competitive solicitation that the Commission believes are most necessary to a finding that the ensuing resource decision(s) is prudent; and
- For procurements involving long-lived resources:
  - Providing a process by which stakeholders, including potential bidders and the Commission, can comment on a draft request for proposals and obtain answers to questions critical to their preparation of responsive bids; and
  - Providing for the involvement of a neutral expert to observe and report on the processes of a competitive solicitation that by their very nature cannot be subject to stakeholder involvement, assuring stakeholders and the Commission that those processes support a finding of prudence.<sup>2</sup>

***Propose adjustments to Montana's treatment of Qualifying Facilities in recognition of the improvements to the competitive landscape that the proposed changes to the resource procurement rules would support.*** Among the state resource planning and procurement practices we reviewed, those with robust competitive solicitation rules rarely offer standard contracts at administratively set avoided cost rates to Qualifying Facilities larger than a minimum threshold (e.g., 100 kW). QFs over this minimum size must to participate in the competitive solicitation processes. Considering our proposed changes, we recommend that the

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<sup>2</sup> It is anticipated that the Commission's contracts with independent observers would include provisions under which the person or persons involved would be available as witnesses in subsequent preapproval or ratemaking proceedings.

commission consider lowering the threshold for the availability of administratively set avoided cost rates to QFs from 10 MW to 1 MW and smaller in capacity.

***Suggest some minor housekeeping changes to tighten language and eliminate redundancies.***

The passage of time always raises questions of different ways in which to say or organize things. This project is no exception. During our work with the current rules, we found sentences we thought were less clear or more awkward than they could be. The content of some sections seemed to repeat other sections. We offer suggestions that seemed, to us, to be improvements.

## **Report Organization**

What follows is language for each of the following new or revised rules within ARM 38.5.8201 et seq.:

- 38.5.8201 Introduction and Applicability (revised)
- 38.5.8202 Definitions (revised)
- 38.5.8203 Goals (revised)
- 38.5.8204 Objectives (revised)
- 38.5.8205 Assessment of Assumptions, Forecasting, and Resource Plan Comments (new)
- 38.5.8206 Services and Needs Assessment (new, incorporating language from current rules, current practice and adding new ideas)
- 38.5.8207 Resource Alternatives Assessment (new, incorporating language from current rules, current practice and adding new ideas)
- 38.5.8208 Services and Resources Integration and Modeling (new, incorporating language of current rules, reflecting current practice, and adding new ideas)
- 38.5.8209 Transmission and Distribution Assessment (new, expanding on current language in ARM 38.5.8226)
- 38.5.8210 Action Plans (new, expanding on current language in ARM 38.5.8226)
- 38.5.8211 Planning Process (new, incorporating and adding to language in current rules)
- 38.5.8212 Resource Procurement (revised)
- 38.5.8219 Risk Management and Mitigation (revised)
- 38.5.8220 Transparency and Documentation (revised)
- 38.5.8221 Affiliate Transactions (revised)
- 38.5.8226 Electricity Supply Resource Tracking Filings (revised)
- 38.5.8227 Reward for Superior Performance (revised)
- 38.5.8228 Minimum Filing Requirements for Utility Applications for Approval of Resources (revised)

The language and/or concepts of current ARM 38.5.8213, 38.5.8218 and 38.5.8225 were incorporated in other proposed rules and, thus, are not included in the above list. We propose no revisions for ARM 38.5.8229 and so it does not appear either.

For each proposed new or revised ARM section, we provide:

- A brief introduction, if needed;
- The current rule;
- Our proposed rule;
- Either a redline version showing our specific changes to the current rule or, where the primary thrust of our recommendations is a restructuring of current rules, highlights on the current rule(s) we propose to restructure into the proposed rule; and
- An explanation of the proposed changes.

We encourage reviewers to not be alarmed at the number of changes we have proposed to the current rules. Small clarifying changes and the rearrangement of text make the actual number of changes appear to be much larger than it actually is. In keeping with the general stakeholder opinion with which we agree – that much of the current resource planning and procurement practice is serving its purposes well – most of our proposed changes do not alter the meaning and substance of the current rules but instead align the rules more closely with current practice and improve their readability. Of our substantive edits, we have tried to select carefully from the large pool of topics we examined, keeping only the few that we thought most likely to lead to generally improved results and value for all stakeholders.

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## **Introduction and Applicability, Proposed Revisions to ARM 38.5.8201**

### **Current Rule**

#### 38.5.8201 INTRODUCTION AND APPLICABILITY

(1) These guidelines apply to electric utilities subject to the provisions of [69-8-419](#) through [69-8-421](#), MCA.

(2) These guidelines provide policy guidance on long-term electricity supply resource planning and procurement. With the exception of ARM [38.5.8301](#), the guidelines do not impose specific resource procurement processes or mandate particular resource acquisitions. Instead, the guidelines describe a process framework for considering resource needs and suggest optimal ways of meeting those needs. Electricity supply resource decisions affect the public interest. A utility can better fulfill its obligations, mitigate risks, and achieve resource procurement goals if it includes the public in the electricity supply resource portfolio planning process. An independent advisory committee of respected technical and public policy experts may offer the utility an excellent source of up-front, substantive input that would help mitigate risk and improve resource procurement outcomes in a manner consistent with these guidelines. Consistent with these guidelines, and after an opportunity for public input, the utility must ultimately make electricity supply resource acquisition decisions based on economics, reliability, management expertise, and sound judgment.

(3) A utility should thoroughly document its portfolio planning processes, resource procurement processes, and management decision-making so that it can fully demonstrate to the commission and stakeholders the prudence of supply-related costs and/or justify requests for approval of electricity supply resources. A utility should routinely communicate with the commission and stakeholders regarding portfolio planning and resource procurement activities.



# **Montana's Electric Planning and Procurement Rules:**

## Comparing Best Practices and Post-Deregulation Options

Jason T. Brown

Montana Public Service Commission

October 10, 2012

# Disclaimer

Any opinions I express today are my own and not those of the Montana Public Service Commission (PSC) unless specifically noted as such

Unless specifically noted, the following quotes and “draft rules” are the work of consultants, not the PSC

# Background

# Goals of planning and procurement rules

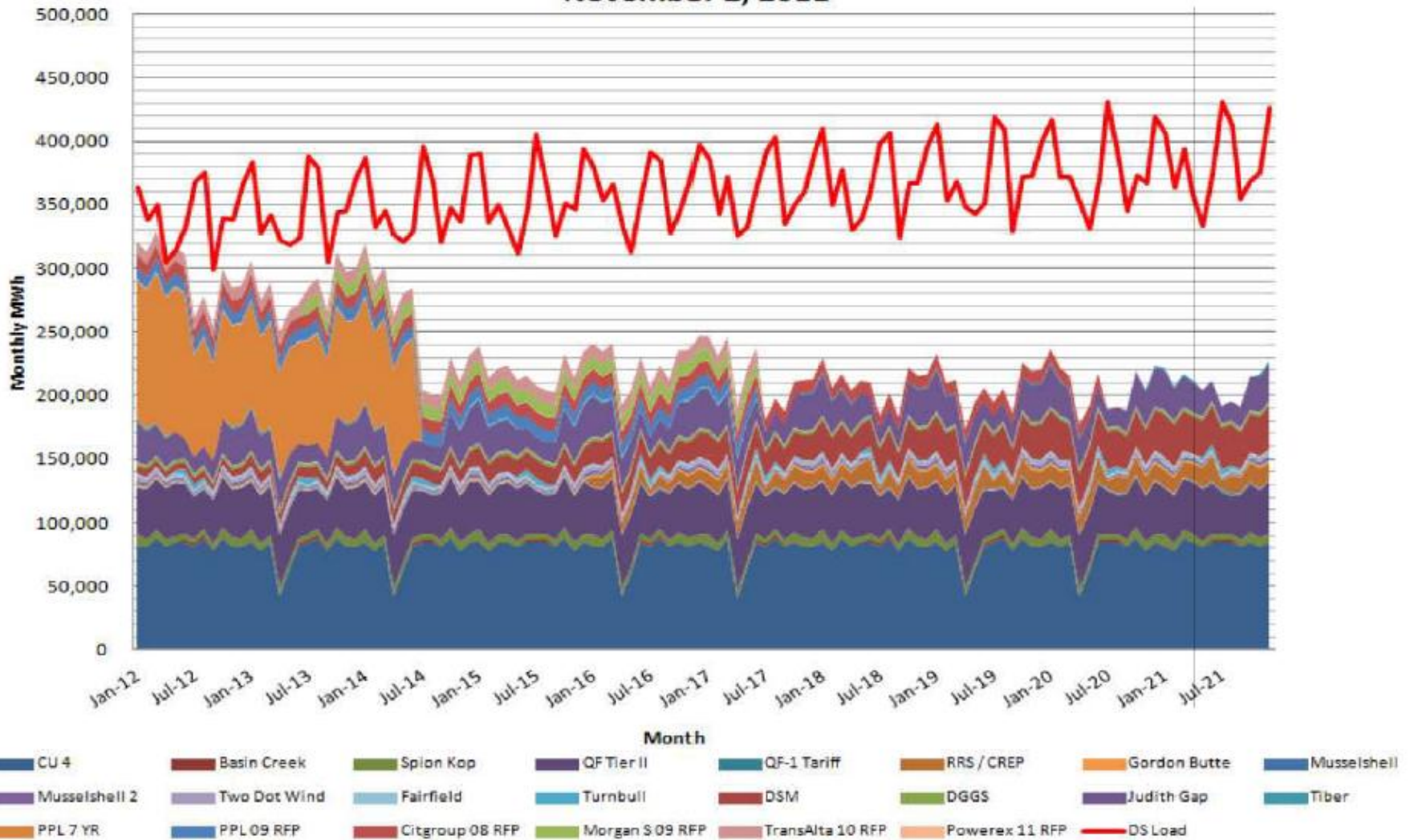
- Facilitate provision of adequate and reliable electricity supply services, stably and reasonably priced, at the **lowest long-term total cost**
- Promote economic efficiency and environmental responsibility
- Facilitate utility's financial health
- Facilitate a process to cost-effectively manage and **mitigate risks**

Admin. R. Mont. 38.5.8203 (emphasis added).

“These guidelines provide the basis for commission review and consideration of the prudence of a utility's electricity supply resource planning and procurement actions, and are the standards against which the commission will evaluate electricity supply resources for which a utility requests [pre-]approval”

Admin. R. Mont. 38.5.8201(4).

## NorthWestern Energy 2012 to 2021 Monthly HL Electric Supply Forecast November 2, 2011



*NorthWestern's 2011 Electricity Supply Resource Procurement Plan, PSC Docket N2011.12.96, p. 136 (Dec. 15, 2011).*

# Two major changes post-deregulation:

1. Utility re-acquiring its own generation assets
2. “Pre-approval”

“NorthWestern has legislative direction to pursue rate-based resources. . . . This is not viewed as a mandate, but an opportunity for NorthWestern to add rate-based resources. . . . [P]otential value can be derived from the terminal value, operational flexibility, and the greater cost certainty that may be associated with utility ownership.”

*NorthWestern’s 2011 Electricity Supply Resource Procurement Plan, PSC Docket N2011.12.96, p. 7 (Dec. 15, 2011) (emphasis added).*



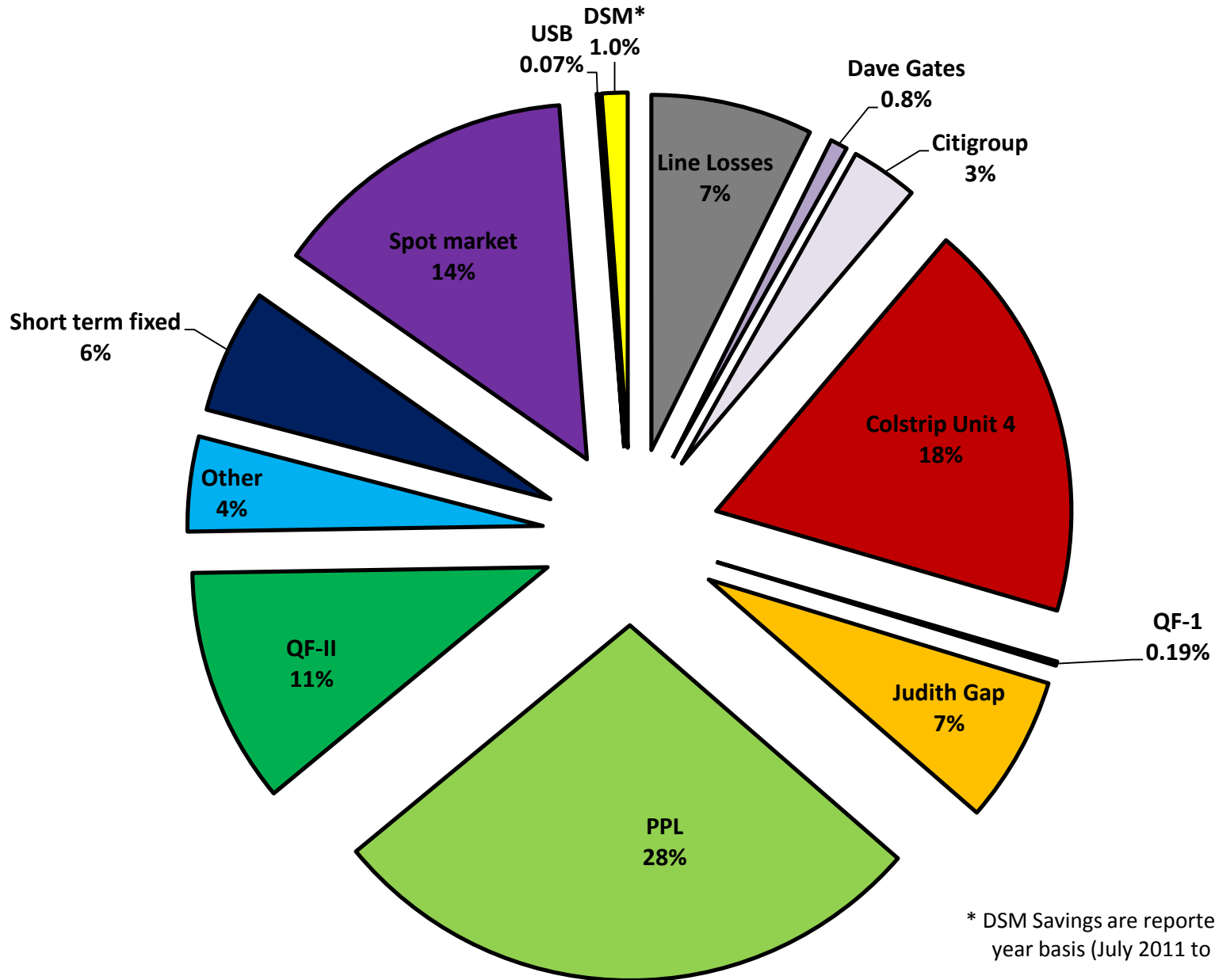
“It is unclear whether NWE believes that it has ‘legislative direction to pursue rate-based resources’ . . . or whether state law merely constitutes ‘an opportunity for NorthWestern to add rate-based resources. . . .’

This ambivalence characterizes much of NorthWestern’s public comments on this topic. . . . The Commission views rate-basing as a *permissive, not mandatory*, activity.”

“The expedited acquisition of a time-limited opportunity resource may not always be compatible with the preapproval process.”

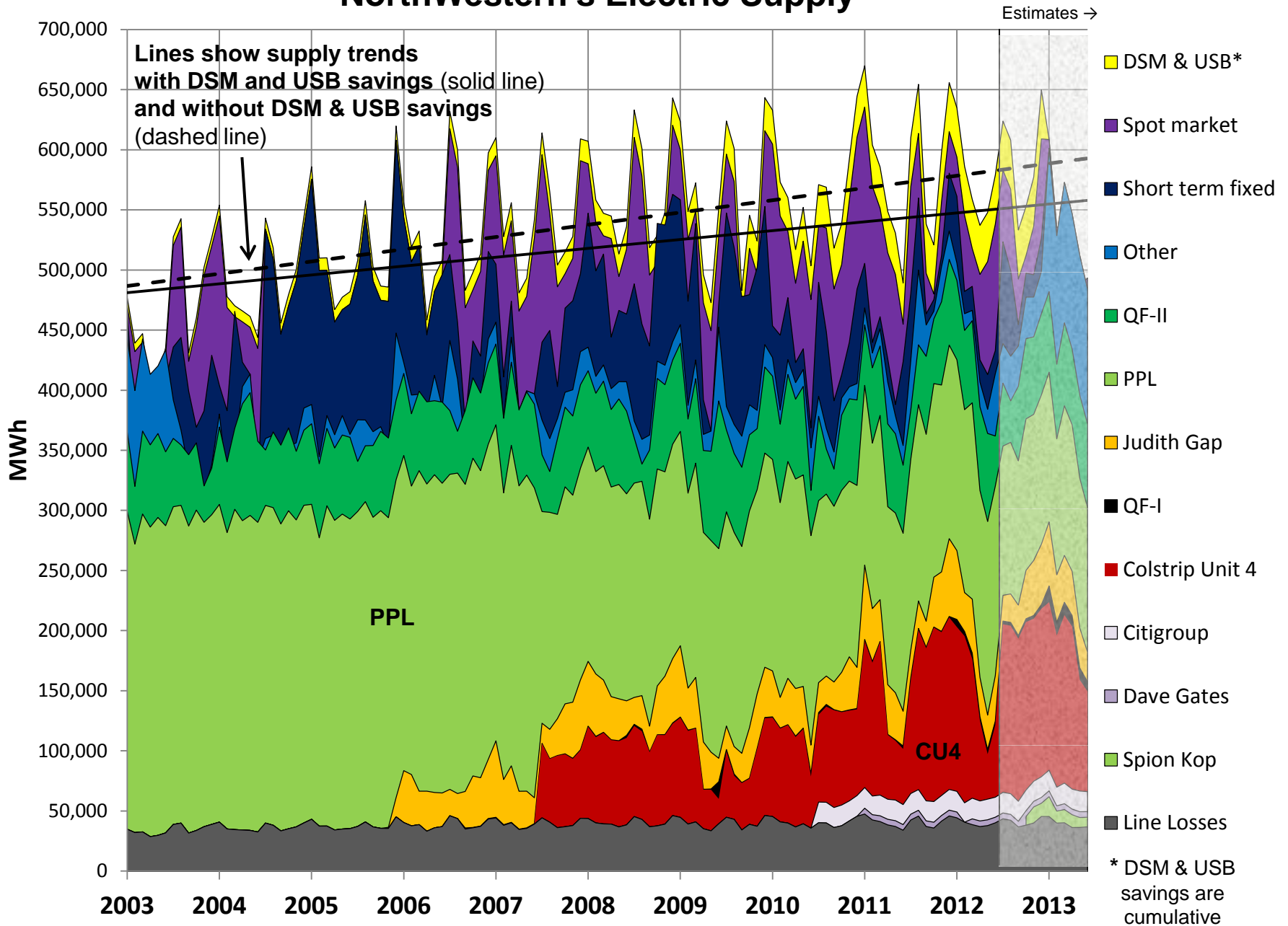
*PSC Comments on Plan, Docket N2011.12.96, ¶¶ 23, 25 (Sept. 28, 2012).*

# NorthWestern's Electric Supply in 2011



\* DSM Savings are reported on a tracker year basis (July 2011 to June 2012)

# NorthWestern's Electric Supply



A public utility that removed its generation assets from its rate base . . . may apply to the commission for approval of an electricity supply resource that is **not yet procured.**”

In order to grant ‘**pre-approval,**’ the Commission must find that “approval, in whole or in part, is in the public interest.”

Mont. Code Ann. § 69-8-421 (emphasis added).

# Consultants' Work

# Timeline

- **October 12, 2011:** National Association of Regulatory Utility Commissioners (NARUC) releases “Request for Proposals From States to Receive Capacity Assistance at their State Public Utility Commissions”
- **October 28, 2011:** PSC submitted a proposal for capacity assistance seeking “the assistance of an experienced consultant to survey the planning and procurement rules and practices in other states and draft a more robust set of rules for Montana.”
- **December 21, 2011:** NARUC issues a “Request for Qualifications” for consultants to perform work (under contract to NARUC) funded by the American Recovery and Reinvestment Act of 2009 through State Electricity Regulators’ Capacity Assistance and Training
- **February 14, 2012:** PSC selects Pamela Morgan of Graceful Systems, LLC and Marty Howard of Benchmark Heuristics, LLC

# Four main phases of work:

## 1. Stakeholder input

(completed May 11, 2012)

## 2. State-by-state comparison

(presented at 1<sup>st</sup> Public Workshop on June 27-28, 2012)

## 3. Recommendations

(presented at 2<sup>nd</sup> Public Workshop on August 21, 2012)

## 4. Final Report with draft rules

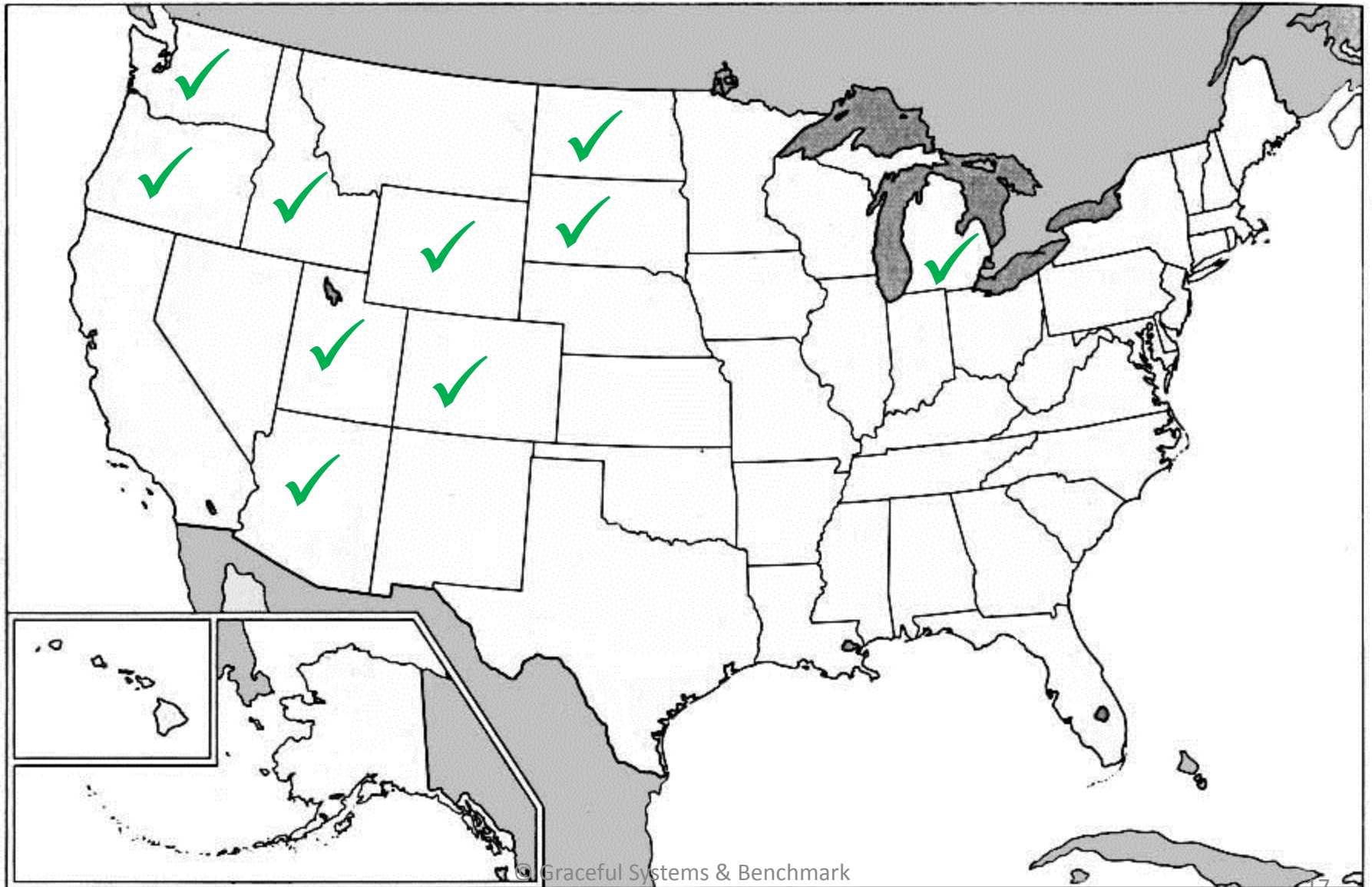
(completed September 24, 2012)

# State-by-state comparison

(presented at 1<sup>st</sup> Public Workshop on June 27-28, 2012)

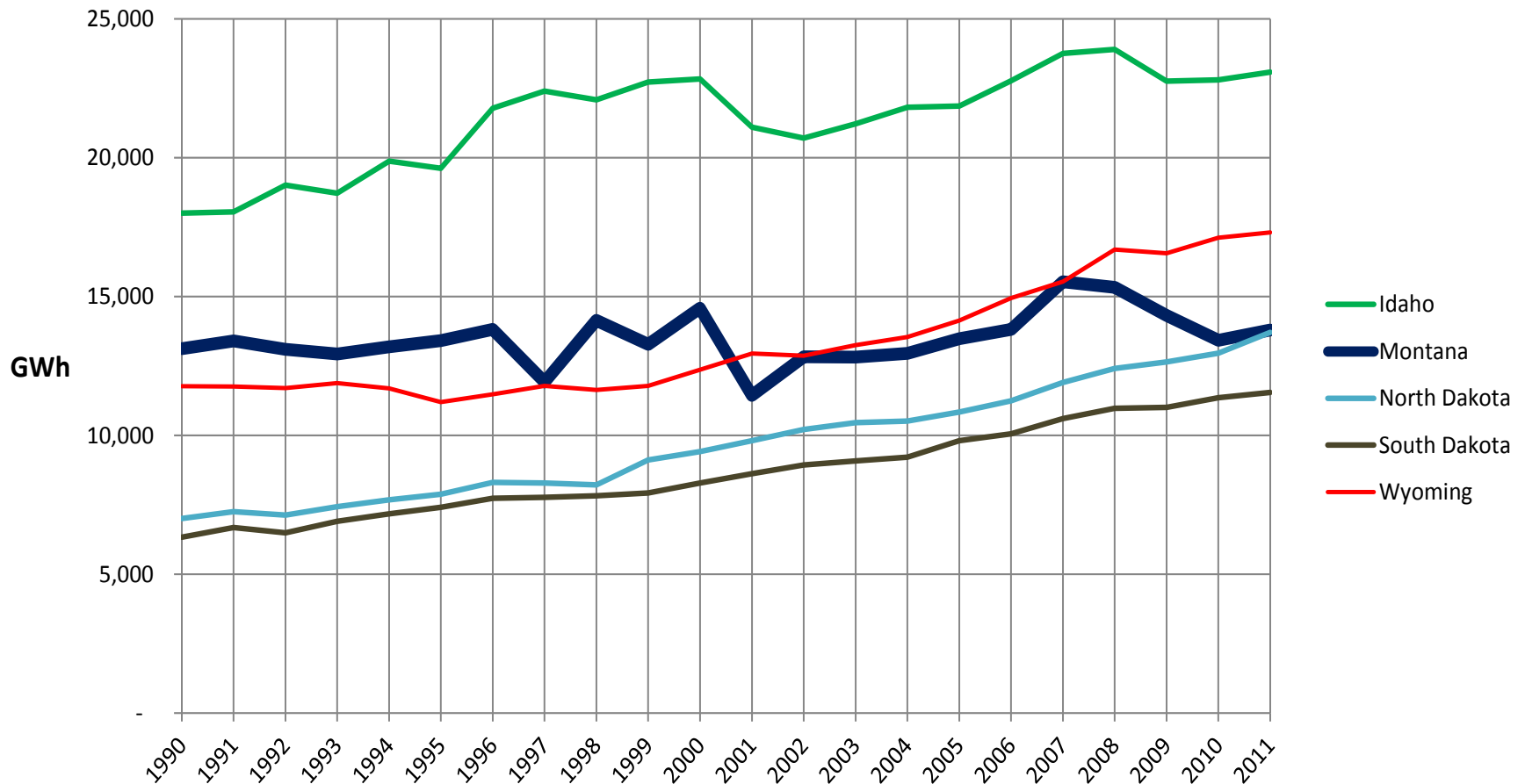


# Who Did We Look At?



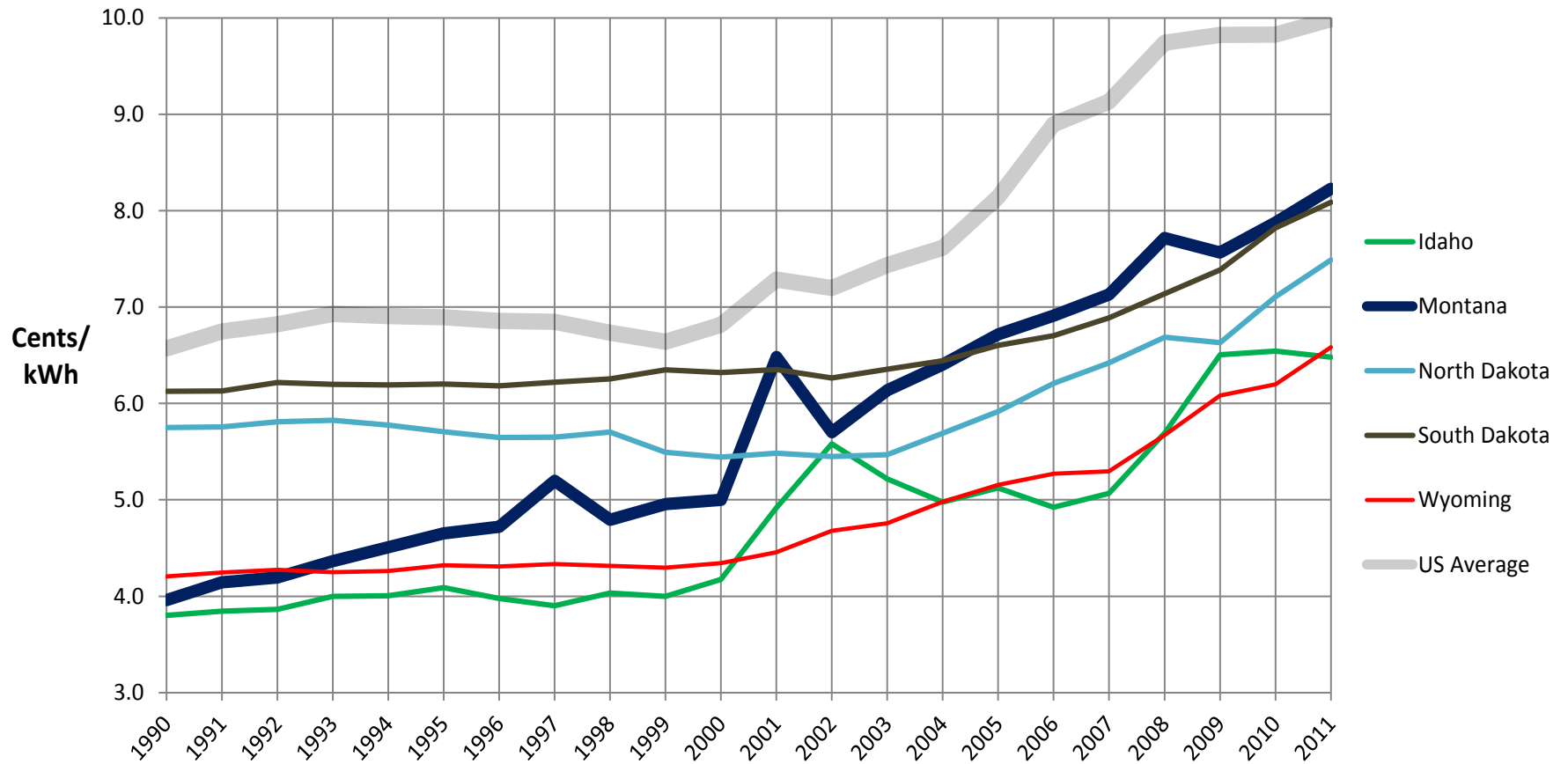
# Comparing the States: Consumption

## Annual GWh Consumption - Twenty Years/Five Smallest States



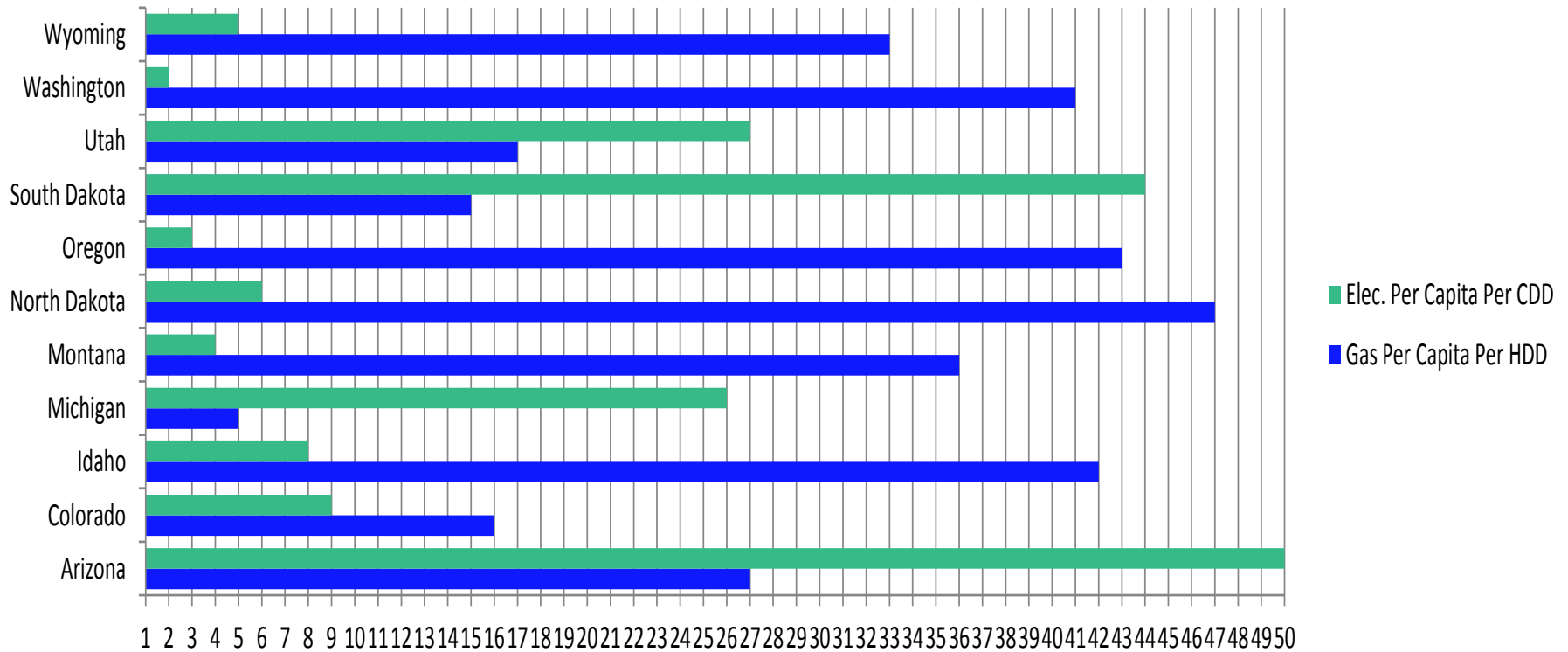
# Comparing the States: Prices

## Average Retail Prices - Twenty Years/Five Smallest Examined



# Comparing the states: Space Conditioning Effectiveness

## Per Capita Per Degree Day Energy Use - National Rank (1 is highest)



# Recommendations

(presented at 2<sup>nd</sup> Public Workshop on August 21, 2012)

# Procurement Guidance



Status Quo



Different

- Clear guidelines on when competitive bidding is not required, such as size or duration of resource choice or commitment to price and performance criteria
- Establish a list of questions expected to be addressed through competitive bidding; allow different means of achieving those

- Use competitive procurement whenever possible; follow industry standard practices; anticipate changing practices and stay flexible; explore a wide variety of resources; analyze risks and benefits of rate base

- Competitive bidding required unless exception applies or waiver granted
  - Exceptions commonly based on size and duration of resource acquisition
  - Waivers commonly available for short-term opportunities (e.g. resource owner's bankruptcy) or tax incentive constraints (e.g., expiration of PTC)

- Demand-side bidding separate from supply-side and not mandatory even if supply-side is required
- Targeted (rather than all source) bidding to eliminate need to find evaluation criteria capable of reducing all types of resources to a common basis such as \$/MWh

# RFP Review and Content

## Status Quo

- No provision for review
- Commission may hire outside consultant to help with planning and procurement processes
- Content:
  - Resources, products and services needed
  - Screening criteria and bid evaluation methodology with rating system for price and non-price factors

## More

- Circulate and accept comments on draft RFPs
- Require one or more bidders conferences
- Require filing of draft RFP with the Commission, opportunity for comment or hearing, and Commission acknowledgement

# Benchmarks, Self-bids and Build-Transfers

## Status Quo

- Rules address only affiliate bids

More

## Different

- Scoring may not favor ownership by awarding points for build-transfer or removing them for externalities of purchases
- Benchmark or self-build projects must “compete” in the RFP
- Separation of benchmark team and RFP team
- Filing or securing of benchmark bid before other bids due
- Benchmark price considered binding

- Allow bidders to propose development of utility-owned sites as part of RFP
- Utility-owned sites made available for purchase and use by bidders as part of their proposals



# Final Report with Draft Rules

(completed September 24, 2012)

# Consultants' Draft Rules

- Define “Demand Side Resources,” “Distribution-Side Resources” and “Services”
- Create three-year planning cycle with:
  - Opportunity to comment on draft plan
  - Annual review of industry and market conditions
  - Look back over time to compare forecasts to reality
- Reaffirm preference for competitive solicitations with:
  - Opportunity to comment on draft solicitation
  - Independent monitor
- Lower size eligibility of “Qualifying Facilities” for standard rates from 10MW to 1MW

# “Services”

- Kilowatts (kW) and kilowatt-hours (kWh)
- Price alternatives such as time-of-day rates, critical peak rates, and tiered rates
- Renewable energy-sourced offerings
- Information-based services and energy management
- Net metering
- Street lighting

# Procurement

- “In current practice, a significant amount of resource procurement is occurring through competitive solicitation. Utilities understand that the framework of competitive solicitation provides a solid base for subsequent regulatory findings, providing a record that the utility adequately identified and analyzed the most relevant options and made its selection using a well-developed and applied methodology; in short, it shows that the utility followed the behavior of a prudent business organization.”
- “Major Power Resource” is any plant expected to provide power for ten or more years; creates expectation that utility will acquire through a competitive solicitation unless an exception applies

# Transmission and Distribution

- “The utility. . . is engaged in a distribution system upgrade that includes not just replacement of aging infrastructure but upgrades to substations that will affect system operations. It makes most sense to us to integrate all these activities with the Resource Plan, rather than engage in them separately, because **many of the benefits of distribution investments relate to Demand-Side and Distribution-Side Resources.**”
- Federal Energy Regulatory Commission requires functional separation
- Dave Gates Generating Station currently provides transmission service

# Questions?

Relevant PSC dockets:

- N2012.5.56 – Planning and Procurement Rules Review
- N2011.12.96 – 2011 Resource Procurement Plan
- D2012.5.49 – 2011-2012 Electric Supply “Tracker”
- D2012.1.3 – Standard Rates for “Qualifying Facilities”