

DEPARTMENT OF PUBLIC SERVICE REGULATION
BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MONTANA

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IN THE MATTER OF the Commission's)
Investigation of Renewable Energy Issues.)
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UTILITY DIVISION
DOCKET NO. 94.1.4
ORDER NO. 5888

FINAL ORDER ISSUING GUIDELINES AND CLOSING DOCKET

Background

1. In March, 1994, the Montana Public Service Commission (PSC or Commission) initiated an investigation of renewable energy issues (Docket No. 94.1.4). The investigation has culminated in "Guidelines on Renewable Energy."

2. Focus on renewable energy arises from concerns about the reliance on electricity generated by burning finite fossil fuels and the associated environmental impacts. The growing demand for energy services will be met by a combination of traditional resources, demand-side management and non-traditional "renewable" technologies. Renewable energy technologies use "renewable" resources such as hydro, wind, passive/active solar, geothermal and biomass. Montana's resources include both fossil fuels (coal and natural gas) and renewable resources (hydro and wind), which may provide Montana's energy producers with an advantage in future energy markets.

Renewable Energy Notice of Inquiry

3. On March 11, 1994 the PSC issued a Notice of Inquiry (NOI) in Docket No. 94.1.4, inviting comments on the proper role of renewable energy in Montana. Topics of the inquiry included renewable energy assessment, development and implementation; strategies to disseminate information on renewable resources in Montana; the technological and economic status of renewable energy development; and the need for regulatory initiatives. Eighteen parties responded to the NOI.

4. In response to the inquiry, most parties indicate that an Integrated Resource Planning (IRP) process is the appropriate venue to evaluate all resources, conventional and renewable, as well as conservation and other demand-side resources. Respondents prefer cost-effective conservation as the primary focus of utility IRPs. While renewables may provide unique advantages in a utility's resource portfolio (e.g., low operating costs, modularity, flexibility, dispersion, and few costs associated with generation.), most respondents agree that these advantages are difficult to quantify and incorporate into utility IRP processes. Utilities cite cost recovery concerns, high capital costs, operational uncertainties and transmission access problems as barriers to acquiring renewable energy. Utilities fear that increasing use of renewables could result in higher rates, adversely affecting their ability to compete.

5. Some respondents state that the PSC's Least Cost Planning (LCP) guidelines are adequate to evaluate all resources, including renewables, while others prefer specific incentives, such as renewable set-asides. Most agree that the tools used in the resource evaluation and acquisition processes should be improved. Concerned that more research and experience is needed on renewable alternatives, some recommend special rate treatment for research, development and demonstration projects meeting specific criteria.

Renewable Energy Symposium

6. The PSC sponsored a two-day renewable energy symposium to develop a better understanding about renewable energy, promote the exchange of information and ideas among interested parties, and identify possible roles of the PSC and others in developing a renewable energy policy. The symposium addressed the following subjects: renewable technology status and resource assessment; planning and acquisition issues; negative aspects of utility-scale wind generation; distributed utility concepts and applications; renewables in a competitive electric utility industry; and regulatory options for renewable energy.

Preliminary PSC Guidelines on Renewable Energy

7. On September 18, 1995 the Commission issued a "Notice of Preliminary Guidelines on Renewable Energy and Request for Comments." The Notice contained six preliminary proposals regarding renewable energy policy developed from information collected during the course of this docket. The text of the Preliminary Guidelines is available in the Notice, and is modified in its final form in & 50, infra., as a result of the comments in this Docket.

8. The PSC conducted public meetings in Missoula and Hamilton to discuss the guidelines. The public witnesses generally supported increased development of renewable resources. They stated, however, that pursuit of energy conservation should always come first, before any new generation, renewable or otherwise. Many expressed frustration that the guidelines were not aggressive enough, lacked enforcement mechanisms, and would result in insufficient acquisition of renewable resources by utilities. A petition presented at the Missoula meeting, signed by over 1,000 people, called for the utilities and the PSC to work toward increased energy conservation, attention to low-income needs, and the use of renewable energy resources.

9. The PSC has received written comments from the following parties:
- Montana Power Company (or MPC);
 - PacifiCorp;
 - Department of Environmental Quality (or DEQ);
 - Montana Environmental Information Center (or MEIC);
 - Renewable Northwest Project (or RNP);
 - Northwest Conservation Act Coalition (or NCAC);
 - Fort Peck Tribes; and
 - Center for Energy and Economic Development (or CEED).

General Comments on the Preliminary Guidelines

10. MPC and PacifiCorp generally support the approach taken by the PSC in these guidelines. MPC offers comments and recommendations on each guideline, stating its intention to build on and improve the guidelines to ensure consistency with least cost planning and consider the changes in the industry. PacifiCorp adds that it has an active renewable energy program and lists its various projects.

11. According to DEQ, the preliminary guidelines are a reasonable approach to improving the process by which utilities evaluate renewable generating resources. However, DEQ suggests that the Commission not proceed with a rulemaking to amend the IRP rules since the future of IRP itself is unclear. Rather, the Commission's inquiry into restructuring in Docket No. D95.7.96 is more important and timely, and the Commission's attention should not be diverted by incremental improvements in the IRP regulations.

12. MEIC wants stronger, more aggressive guidelines set forth in a formal rulemaking. The guidelines should use the knowledge, experience, and expertise around the region and the nation on renewables. Although utilities assert that renewable energy technology is not ready to implement, MEIC argues that the technology for renewables is available and working. MEIC suggests including environmental externalities in energy planning, rules or strategies, and incorporating into the rules a 10 percent renewables adder and a renewables set-aside with separate bidding. MEIC believes that the rules should require utilities to examine opportunities for decentralized renewable energy development.

13. According to RNP, the Commission's focus on renewable resources and its emphasis on appropriate areas for policy guidance and encouragement will not, by itself, produce tangible results. RNP suggests that renewables will have an increased role in the future of electricity generation, and utilities should not consider competition as an impediment to renewables development.

14. NCAC believes that the preliminary guidelines establish the analytical and technical groundwork for future renewables acquisitions in Montana and encourages the PSC to continue its efforts as part of an overall least-cost energy strategy.

15. According to the Fort Peck Tribes the principles that will characterize Montana's future electric industry should be defined before changes are made to existing structures. The Tribes feel that one of these principles should be the increased development of renewable energy resources (but within the framework of a competitive generation market).

16. CEED opposes adoption of the guidelines because the Commission should not have any particular policy with respect to renewables. Given the momentum toward competition, any attempt by the Commission to influence utility behavior toward selection of one type of resource

over another is likely to be unavailing or even counterproductive. Furthermore, CEED maintains that these generalized guidelines, which lack an enforcement mechanism, will not accomplish tangible results. According to CEED, renewables are not competitive in the marketplace. Forcing utilities to purchase these resources could eventually result in additional stranded utility investment and place utilities at a competitive disadvantage.

Comments on Specific Guidelines and PSC Response

I. Niche applications.

17. MPC agrees that niche applications could provide cost effective alternatives to distribution and transmission facilities. These applications are offered by others, and MPC has chosen not to enter this type of business. MPC suggests that while utilities could provide lists of suppliers and installers, it should not be required to conduct a cost-effectiveness analysis to determine when customers might be better served by a renewable application. MPC states that correctly priced traditional electric services will provide consumers with information needed to decide whether to choose renewables.

18. PacifiCorp supports the guideline as a reasonable addition to the IRP reporting requirements which will help identify applications where renewables make sense.

19. DEQ suggests rewording this guideline with language referring to specific situations that should be investigated, including PV installations in lieu of line extensions and/or dispersed renewable installations that alleviate transmission or distribution constraints or congestion.

20. According to MEIC, private renewable energy businesses currently supplying much of the residential part of this market should not be displaced. Also, utilities should not be able to claim that only developing niche applications is a sufficient renewable energy program. RNP agrees, adding that asking utilities to examine these opportunities is a good first step, but not enough to ensure action. RNP maintains that the Commission should require utilities to capture all cost-effective renewable niche applications within their service territories by a pre-determined date.

21. To identify cost-effective uses of niche applications for renewables, NCAC asserts that utilities must go beyond traditional planning considerations and accurately and discretely characterize the avoided costs of transmission and distribution. NCAC suggests that cost recovery decisions of future transmission and distribution investments should include a consideration of whether all cost-effective opportunities for niche renewable applications were identified and explored.

22. The Commission finds that **Guideline I** is not meant to force MPC or any other utility into a new line of business, or threaten established businesses. The Commission agrees that accurate pricing of utility services is the best means to provide customers with information on which to base decisions. However, utilities are encouraged (but not required at this time) to provide

information about alternative suppliers and installers where appropriate (such as the use of photovoltaic in lieu of line extensions).

23. The Commission incorporates the revisions recommended by the DEQ. The Commission also agrees with the NCAC that identifying cost-effective applications of renewables may require utilities to refine their planning processes. This guideline and its reporting requirement should make utility efforts to identify "niche" applications more transparent. Interested parties are encouraged to review these utility efforts in future utility proceedings and rate cases.

II. Upgrades to IRP and resource acquisition processes.

24. MPC suggests as a revision: "Utilities should continuously review their IRP and resource acquisition process and upgrade as necessary..." MPC adds that compliance with the Commission's least cost planning rules already requires that utilities review and appropriately update IRP processes. Another level of planning would refocus the LCP process from a system load and resource optimization to a local area load and resource optimization process, requiring more time, manpower, data requirements, with costs that may exceed the benefits of more detailed planning.

25. PacifiCorp, on the other hand, supports this guideline and acknowledges that current utility models cannot capture all the resource characteristics listed.

26. MEIC argues that the current IRP process is flawed because its language allows utilities to bypass or ignore its requirements. As evidence, MEIC alleges that MPC's most recent LCP ignored social and environmental costs in its final screening. MEIC asks how renewables stand a chance of being considered when the current process allows conservation and DSM to be significantly cut. MEIC also suggests adding the word "flexibility" to the list of characteristics that utilities should include in their plans.

27. According to RNP, the Commission should, within a public process, develop a list of renewable energy attributes that utilities should include in their planning. NCAC's suggests that advisory groups and public input can help form a consensus on appropriate ways to account for non-quantifiable system benefits of renewables.

28. The Commission agrees with and adopts MPC's recommended revisions to **Guideline II**. The Commission also agrees with MEIC's suggestion to add "flexibility" to the list of attributes in the guidelines. The Commission leaves with the utilities the decisions regarding the cost-effectiveness of refining their planning processes, but encourages them to document their decisions to facilitate review by interested parties. See ARM 38.5.2001(9), (10) and (11).

III. Green pricing premiums.

29. MPC states that it already monitors other utilities' green pricing programs and surveys, to the extent information is available. The company also suggests survey results are not reliable. The company adds that in a more competitive environment, green pricing programs could

increase a utility's risk, although competition also may help to identify a market willing to pay more for environmentally benign resources.

30. PacifiCorp agrees that green pricing may provide a way to expand the range of pricing options available to customers. PacifiCorp currently reviews other utilities' green pricing experiences, and plans to continue this activity.

31. According to DEQ, green pricing will never produce optimal investment in renewables; this guideline should be dropped.

32. MEIC asserts that green pricing is a viable concept, but since the best resource choices for the long term are conservation and renewables, any process which complicates acquisition of these resources should not be implemented.

33. RNP provides a summary of survey results indicating that a majority of the general public supports and would pay an extra charge for renewable development. However, green pricing should not be a policy, or a substitute for a policy, to promote renewable energy acquisition. RNP argues that all customers directly benefit from a diverse utility portfolio and should equitably share the costs. Utilities should be required to develop all resources that are identified in their IRP process as societally cost-effective. Green pricing options should be used only for increments beyond IRP recommendations.

34. NCAC states that the public has consistently expressed preferences for environmental protection and sustainable energy practices, and suggests that those utilities which attempt to understand what their customers value will become better competitors. However, NCAC maintains that green pricing should not relieve utilities from acquiring all societally cost-effective renewables. Green pricing programs should be used to fund renewable projects beyond those called for in a utility's least cost plan.

35. On **Guideline III**, the Commission finds that utilities should not need green pricing programs to acquire **cost-effective** renewables as identified in IRP processes. However, there is still uncertainty regarding the costs of environmental externalities and the benefits provided by renewables. Green pricing programs may facilitate additional renewables acquisition beyond that identified in utility least cost plans and could provide a means for customers to display their support for resources that provide hard-to-quantify benefits. The Commission clarifies the language in this guideline.

IV. Non-price preference.

36. MPC argues that this guideline should be deleted because it adds confusion and subjectivity to the planning process. According to MPC, the purpose of least cost planning is to put all resources on a level playing field, and the process already considers attributes such as modularity,

dispersion, and risk reduction. PacifiCorp takes the position that each utility must assess for its own system the benefits of non-price attributes that a particular renewable resource may offer.

37. MEIC would strengthen this guideline to ensure that the LCP process promotes the selection of resources with the least overall costs. RNP maintains that including non-price factors (as suggested in its comments on Guideline II above) would eliminate the need for "tie-breakers." NCAC would support this rule if the LCP process adequately considered hard-to-quantify factors and a renewable and non-renewable resource were still tied.

38. According to CEED, this preference would be impossible to implement in a competitive environment since more discretion must be placed in utility management to make the price and non-price judgments required in resource planning and acquisition.

39. The Commission agrees that **Guideline IV** may be difficult to integrate into current utility planning processes. However, until more accurate tools are developed to quantify "non-price" costs and benefits of resources, the Commission finds that when resources rank relatively close, the resource that qualitatively (at the discretion of utility planners) provides the most non-price benefits is preferred.

V. Research, development and demonstration.

40. MPC generally supports this guideline with the exception of subpart 5, claiming that investment in RD&D is actually limited by its total associated risk.

41. PacifiCorp maintains that its function is primarily to bring to its customers electricity and energy services at least cost. However, under some circumstances, the best way to acquire additional information may be investing in a technology that is not yet commercially available, i.e., an RD&D project. The company is concerned that the Commission may require it to make an investment without any assurance of cost recovery, and recommends that the Commission clarify this guideline further to provide more guidance.

42. According to MEIC, utilities should tap into the knowledge and experience of other utilities and organizations, and these rules should emphasize acquisition over research. Regarding subpart 2, MEIC is concerned that utilities will claim sufficient power is available through thermal generation. Regarding subpart 5, MEIC argues that utilities must take an active role in educating investors about the benefits of using renewable energy.

43. RNP lists numerous sources for information on renewables, and promotes encouragement of investment in renewables RD&D activities that do not repeat previous research. RNP suggests some revisions and comments for each of these RD&D guidelines.

44. NCAC maintains that modest investments in RD&D can be valuable. Utilities should be encouraged to contribute to statewide and/or regional RD&D efforts, but RD&D should not

become the total renewables effort. NCAC recommends that utilities develop explicit renewable RD&D goals which will make their progress in meeting those goals more transparent to the public.

45. The Commission agrees to remove subpart 5 of **Guideline V**. The intent of this guideline is to provide additional guidance for utilities when considering RD&D investments. The Commission does not intend to "require" utilities to make investments without any assurance of cost recovery. However, the Commission generally does not pre-approve utility investments; decisions to invest in a particular project remain the sole responsibility of utility management.

VI. Renewables working group.

46. MPC would be willing to receive and consider information and/or informally exchange information with a working group if one is formed. PacifiCorp has participated in several renewable working groups, and maintains that while there is value in the exchange of information, the most significant factor that will facilitate the use of renewables will be lower costs for renewables relative to alternatives such as gas-fired resources or wholesale power.

47. According to MEIC, a working group could help ensure that renewables are fairly considered in utility planning, but MEIC is concerned that the group could hinder the acquisition of renewable energy by becoming another level of bureaucracy.

48. RNP strongly supports this guideline with the goal that such a group provide recommendations in the electric industry restructuring docket (Docket No. D95.7.96) on means to continue renewables investment. These means should include the ideas of a renewables minimum portfolio standard and a non-by passable system benefits charge on the transmission or distribution system. NCAC also strongly supports this guideline due to the efficiencies that can be gained by sharing data and working in a coordinated way on renewables issues.

49. The Commission finds that continued collaboration on renewables is worthwhile and affirms **Guideline VI**. The Commission strongly encourages Parties to continue discussions on renewables via the formation of a working group or some other venue.

Revised Guidelines on Renewable Energy

50. The following are the Montana Public Service Commission's Guidelines on Renewable Energy, revised per the comments received in response to the Commission's *Notice on Preliminary Guidelines on Renewable Energy and Request for Comments*. The *changes* are noted, as *italicized*, incorporated into the Preliminary Guidelines and finalized as revised.

I. Specialized applications (previously "niche") review and summary. As part of the least cost planning process, each utility should perform a review of existing applications of renewable energy technologies, in place on its system, that take advantage of specific locations, transmission system constraints or unique characteristics of their application, and to identify additional potentially cost-effective applications. *Special attention should be paid to such applications as photo-voltaic installations in lieu of line extensions and dispersed renewable installations that alleviate transmission or distribution*

constraints or congestion. Each utility should summarize the results of its review in its least cost plan.

II. Upgrades to least cost planning and resource acquisition processes. Utilities should continuously review their least cost planning and resource acquisition processes and upgrade as necessary. Each utility should make a critical review of its planning process to determine how well it captures the types of attributes inherent in renewables that can add value to its resource portfolio.

As part of its least cost plan, each utility should describe how its methodology considers the following resource characteristics: modularity, dispersion, fuel diversity, geographic diversity, flexibility, and environmental impacts.

III. Green pricing premiums. Utilities should attempt to ascertain customers' willingness to pay for difficult-to-evaluate measures, such as reducing environmental externalities. Green pricing programs should be evaluated and implemented, if appropriate, as a means to allow customers to contribute towards these measures.

IV. Non-price preference. When resources rank relatively close in the least cost planning process, preference should be given to the resource that provides the most benefits when non-price attributes such as modularity, dispersion, and risk reduction are considered.

V. Research, development and demonstration. Utilities needing more information on specific energy technologies should invest in research, development, and demonstration (RD&D) projects to confirm the technology's commercial readiness; its actual operating cost and performance characteristics; to address system integration issues; and to assess any environmental benefits.

The PSC should not pre-approve utility resource investments. However, the utility should reasonably expect to receive rate treatment for its RD&D project expenditures that pass the following four (# 5 deleted) threshold conditions:

1. The technology is projected to be commercially available soon, and its price relative to resource alternatives is dropping;
2. The output of the technology is projected to be needed within the utility's planning horizon;
3. The technology should offer unique system integration, environmental, or other benefits to the utility;
4. The technology, site, or process is unique to the utility's service territory in a way that justifies specific utility investment, or the technology's promise is widely acknowledged as evidenced by the willingness of other entities to bear enough risk to reduce the utility's risk to a level justified by the potential benefits.

VI. Renewables working group. Interested parties should consider establishing a renewable energy working group to compile and disseminate renewables information, participate in least cost planning collaboratives, review utility least cost plans, intervene in utility rate cases and other dockets with the Montana PSC, and interact with other state and national agencies and organizations.

Conclusion

51. Although renewable energy policy is related to the issues in the restructuring docket, the Commission finds that issuing these guidelines on renewable energy before an outcome in the restructuring NOI is appropriate and timely. These guidelines convey the PSC's views on renewable energy policy and will not be formally incorporated into the PSC's least cost planning rules. A rulemaking is not appropriate at this time, although the Commission's least cost planning rules may need to be amended or revised as a result of the restructuring docket.

52. The guidelines provide a balanced approach to renewable energy in light of the changing electric industry, focus consideration of renewable resources in utility planning processes, and clarify to the public the process for utilities in consideration of renewables.

53. Although the concepts of renewable adders or set-asides may have merit, the Commission does not find that either option is appropriate at this time. The Commission encourages continued discussion of these ideas as well as renewable energy policy in general.

54. These guidelines are the culmination of a thorough, focused, investigation spanning two years, and involving numerous diverse parties. The guidelines are intended to inform utilities and others of the Commission's views on renewables. The electric industry is in a transition period with an uncertain future, but renewable energy will have a role in that future. As the industry restructuring evolves and the future becomes clearer, the role for renewables should also become clearer. These guidelines should help to ensure that utilities continue to consider renewables in their planning processes.

55. Docket No. 94.1.4 is closed, with the understanding that the Guidelines will be incorporated into considerations on the changing industry. The Commission appreciates the efforts all the parties have put into this docket, and strongly encourages parties to continue these efforts.

Dated this 19th day of December, 1995 by a vote of 4 - 1.

BY ORDER OF THE MONTANA PUBLIC SERVICE COMMISSION

NANCY MCCAFFREE, Chair

DAVE FISHER, Vice Chair

BOB ANDERSON, Commissioner

DANNY OBERG, Commissioner
(Voting to Dissent)

BOB ROWE, Commissioner

ATTEST:

Kathlene M. Anderson
Commission Secretary

(SEAL)