Service Date: JAN 17 1985

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 Electric Avoided Cost Rates.	)))	UTILITY DIVISION DOCKET NO. 84.10.64

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PROCEDURAL ORDER

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On October 16, 1984, the Commission issued Order No. 5091, Notice of Commission Action and Order Inviting Comments. On December 10, 1984, the Commission issued Order No. 5091a, Interim Order and Notice of Prehearing Conference. On December 19, 1984, the Commission staff conducted a prehearing conference. Pursuant to these previous orders and the prehearing conference the Commission has established the following procedures and deadlines for this docket.

1. In this order, the term "parties" includes the Montana Power Company (MPC), Pacific Power & Light Company (PP&L), Montana Dakota Utilities (MDU) and all intervenors. Individuals or entities listed on the "service list" for this docket are not "parties" to this docket unless they have been granted intervention by the Commission.

2. Copies of all pleadings, motions, discovery requests, prefiled testimony suggestions for changes in rules and briefs filed with the Commission shall be served on all parties to this docket. In submitting prefiled testimony, the original and ten copies must be filed with the Commission.

Failure to provide the requisite number of copies will constitute a defective filing and may result in testimony not being allowed into the record.

3. The Commission intends to examine issues related to avoided costs in both a rulemaking proceeding and in a contested case proceeding. The rulemaking proceeding will focus on changes that should be made in existing rules, 38.5.1901 through 1908, A.R.M., and new rules that should be adopted. Suggestions for rule changes should be made in a rulemaking format and should address such areas as contract terms and other subjects of general applicability. To the degree possible, the Commission wishes to focus the contested case hearing on the issue of the appropriate method by which avoided cost rates should be determined.

4. In its consideration of avoided cost methodology, the Commission wishes to have the following issues addressed; of course, parties are entirely free to raise others:

I. Costing Methodology

A. Generation Related Marginal Costs

i - Energy Related:

(a) How should energy-related marginal costs be computed (e.g., using the current base-peak, the peak method, running costs, opportunity purchases and/or sales)?

ii - Demand Related:

(a) How should demand-related marginal costs be computed (e.g., based on the costs of a combustion turbine, hydro upgrade, fuel offset, the resource plan, opportunity purchases and/or sales)?

(b) How do shortage/curtailment costs fit in with ii(a) above?

iii Market Value Concepts:

(a) In the recent MPC electric retail rate case, the Commission expressed its interest (Order No. 5051c, Finding Nos. 142, 143, 144 and 198) in knowledge of MPC's supply curve for new resources including conservation, firm purchases, QF purchases, and investor owned facilities. The Commission deferred to the next avoided cost docket the resolution of this issue for MPC.

1. Is a "life cycle analysis", an analysis based on "total costs", or a marginal cost analysis the appropriate criteria for comparing supply alternatives?

2. The Commission requests each utility to provide a supply curve of future resource acquisitions based on the "appropriate criteria" (A iii (a) 1 above). Quantity and price information for each resource option must be indicated along with the on-line or availability dates of each. Other interested parties may respond to 1 and 2 above if they desire.

3. Also, in Order 5051c, the Commission made the following request of MPC: "MPC is therefore directed to assemble a tabulation of all in place or contemplated long-term sales which it is aware of both within the Northwest region and to or from the Northwest region and present them in the next rate case" (Finding No. 14). To the extent MPC has this data it must now file it with this Commission. To the extent PP&L has any such data it also must report it to the Commission. MDU is requested to report the same, but not of course for the Pacific Northwest region. Rather, MDU should report any such data it may have for the integrated region (e.g., MAPP, WAPA) in which it operates. Each utility must report any such data not covered by protective orders, and indicate any such data that may be subject to protective orders in other jurisdictions.

iv. One possibility for minimizing the costs of meeting a utility's future -- incremental -- load growth is a "bidding process". This process would allow a utility and any other interested supplier to bid for the opportunity to provide the resources necessary to meet increments in a utility's load growth. The party with the lowest bid would in effect establish a price signal that could in turn be the basis of an avoided cost rate. In this regard, please respond to the following:

1. Please analyze the "bidding process" concept for setting avoided cost rates.

2. Does PURPA (FERC Order 69 part 292.101(c)) prohibit a state regulatory commission from using the "bidding process" as a means of setting avoided cost rates?

3. Would the "bidding process" minimize ratepayer costs?

B. Transmission Related Marginal Costs

i - Energy Related:

(a) Should a short-run or long-run approach be taken? Short-run costs could be based on ¢/KWH/mile/voltage level/time period; long-run costs could be based on capital investments combined with assumed load factors. In the case of MPC, for example, the Company has two distinct categories of transmission investment. One is the 500 KV transmission line; the other is for upgrades and reliability purposes (see Exhibit Nos. D through F of MPC's 1984 Long Range Plan).

ii - Demand Related

(a) See A i (a) above.

iii - Other

(a) Do FERC regulations prohibit marginal cost pricing?

(b) Do various inter-company power pooling agreements, or otherwise, recognize the value of qualifying facility (QF) power vis-a-vis a utility's own transmission investments; that is, do such contractual agreements prohibit the avoidance of, for example, MPC's projected transmission investments? Reserve requirements?

C. Distribution Related Marginal Costs

i - Energy Related:

(a) Are there any avoidable distribution-related energy costs?

(b) How would these (i (a) above) be computed and tariffed e.g., regression analyses, minimum distribution costs, etc.?

ii - Demand Related

(a) (See C i (a) and (b) above)

D. Other Costs

(a) Are there any costs that QFs impose on a utility for which they should be charged e.g., customer billing (and not interconnection costs) and line losses which are not included in interconnection costs?

E. (a) With respect to I A, B and C, above, why shouldn't whatever avoided cost method(s) that the Commission adopts equally apply to electric retail cost of service and rate design? That is, why shouldn't producers and consumers face precisely identical price signals (identical except for voltage level, time of delivery and differences in say customer costs)?

II. The Current Base Peak Method

(a) Since MPC and PP&L do not have coal-fired baseload plants in their resource plans, should Colstrip 3 and 4 costs be used as a baseload cost data base?

(b) Should the actual resources in a utility's resource plan be used as the basis of baseload costs in the base peak calculation?

(c) If a resource(s) in a Company's resource plan is used, should the future cost be discounted back to the present (by discounting, the Commission means converting cash flows occuring over time to time-equivelant values, adjusting for the time-value of money; by "time-value of money", the Commission means the time dependent value of money that may stem both from price inflation and from the real earning power of investments over time).

(d) Some possibilities for either baseload or peakload costs include BPA's 7(F) rate, MDU's Big Stone costs and opportunity purchases.

1. Does the 7(F) rate reflect true social costs?

2. With regard to the 7(F) rate please comment on the opinion that when a utility increases its requirements on a resource pool and forces the pool to acquire new higher cost resources the rate for all the utility's purchases will increase; that is, should the incremental resource in the 7(F) pool be the basis of marginal costs?

3. MDU's Big Stone is not a new plant; how should its costs be adjusted if used in the Base-Peak calculation?

4. What capacity factor should be used with the 7(f) rate?

(e) If Colstrip 3 and/or 4 continue to be used in the avoided cost calculation, should the actual book costs (AFUDC and plant investment) be adjusted to be in, for example, 1985 dollars? Why?

(f) Should real or nominal carrying charges be used to annualize capital costs?

(g) Should carrying charges reflect tax or service lives?

(h) Should equity costs in the carrying charge calculation be computed on a before or after tax basis?

(i) Provide a list of all components that should be included in a carrying charge.

III. Avoided Cost Adders

(a) Should general and common costs be added to the cost per KWH and per KW?

(b) Should fixed or variable operation and maintenance expenses be added to the cost per KWH or per KW?

(c) Should working capital adders be included in the cost per KWH and per KW?

(d) Should property taxes, state and federal taxes or any other tax be included in margnal cost calculations?

(e) Should any other adders be included?

(f) How should each of III (a) through III (e) be computed e.g., regression analyses, cost ratios, etc.? Why?

IV. Related Issues

(a) In MPC Docket No. 83.9.67, a Company witness proposed a "Fuel Offset" approach to computing generation-related demand costs. This method looks at the capital costs of a future resource in each year of the resource's operation and subtracts from this estimate fuel savings ($) due to the same resource's addition, resulting in a net cost.

1. If the Commission adopted this method, should the discounted present value of the actual resource cost or net resource cost be the basis of an avoided cost per KW? Why?

2. How should the fuel savings in the Fuel Offset be computed?

(b) AFUDC is a cost incurred by utilities in constructing generation plants.

1. If historic costs are the basis of current avoided costs, how should AFUDC be treated? Why?

2. If future costs are the basis of current avoided costs, how should AFUDC be treated? Why?

3. In their Michigan State University text, Authors Suelflow and Pomerantz hold that AFUDC should be compounded. Please comment (Allowance for Funds Used During Construction, 1975).

(c) In Docket No. 83.9.68, MDU's staff economist proposed using a slippage -- perturbation -- concept to compute avoided generation-related demand costs.

1. Please comment on the appropriateness of using this method for purposes of avoided cost rates.

V. (a) Alternative methods exist for computing marginal generation-related running costs. One method relies on production modeling programs such as MPC's PROMOD III. This method looks at the running cost of the marginal generation plant in each hour of the year.

1. Because QF power is not dispatchable by a utility, shouldn't all QF power be excluded in this calculation of marginal running costs?

2. Should larger than a one KW decrement be used in this calculation e.g., a decrement equal to say one or ten MWs?

3. Should the avoided cost be QF specific to reflect QF size, and QF willingness and ability to follow load?

4. Given a constant rate of load growth (4%), and a constant rate of inflation (5%), will the average revenue requirement per kwhr from rate payers of your utility be higher in 1990? in 2000? (in real dollars).

5. How much of the trend that you see (up or down) will be influenced by the cost of new or replacement energy resources.

6. If you expect the average cost of electricity to rate payers to decrease, explain which sources of energy will have a cost less than the average cost of embedded energy resources?

7. Should non-utility sources of energy including Conservation and QF production (non-dispatchable) be modeled as resources or as load reductions in the various utilities load and resources forcasts?

8. Is it more difficult to predict a decrease in load than an increase in load?

(b) Because utilities are required by PURPA to pay full utility avoided costs, it is difficult to achieve supply/demand equilibrium; this is because a utilitiy's avoided cost may bring on "x" units of power at cost "p"; but the same cost "p" could attract sufficient QF power to render the utility surplus for many years into the future.

1. Due to this problem, should the PSC set annual limits on QF power purchases so that surpluses are avoided?

2. Or, is there a way to make this process of setting avoided cost rates a dynamic process so that the Commission determined avoided cost rates change as necessary to balance supply and demand? (Different processes may be required for the various methods of computing generation and transmission avoided costs.)

3. Given that large amount of energy appear to be present in the state from non-utility sources, is the commission under any obligation to give utility resources some kind of preference?

VI. Other Issues

A. Conservation

i - In Order No. 5051c of Docket No. 83.9.67, the Commission stated that it would "...withhold detailed evaluation of MPC's various conservation programs, and their relative cost effectiveness until the next avoided cost docket" (Finding of Fact 141). The Commission also noted that "...the record is not adequate to establish a least cost resource strategy. A comprehensive analysis is required." (Finding 135). The Commission further stated that the objective of minimizing the "present value of the revenue requirement "...is most appropriately handled in "a comprehensive avoided cost proceeding" (Finding 145). The Commission also stated: "...The Commission intends to evaluate future resource additions to the utility system on a basis directly comparable to the alternatives. The Commission expects that the most appropriate technique is a comprehensive avoided cost proceeding." (Finding 143)

(a) For each utility, should avoided costs rates be based on cost effective conservation, or should conservation receive the avoided cost rate?

(b) Each utility must provide a supply curve of conservation investment opportunities. (This supply curve should break down the aggregate conservation contribution reported in I A iii (a) 2 above into its constituent parts to the extent data exists (e.g., residential, commercial, etc.).

B. The past two avoided cost dockets have created an obligation on the part of utilities and the PSC to develop and administer a variety of QF tariffs. This practice is a burden on taxpayers and ratepayers. For example, the Commission maintains different avoided costs from Docket Nos. 81.2.15, 83.1.2, and will likely have a third set out of the instant docket. Please provide comments on means by which these administrative costs can be minimized or avoided.

C. If this PSC allows MPC to, for example, rate base a portion of Colstrip 3 at original cost less depreciation (OC-D), does it naturally follow that OC-D for Colstrip 3 is the avoided cost rate? Why or why not?

D. Time Varying Avoided Cost Rates

i - Energy and Demand Costs

(a) Should the Commission tariff seasonal and time of day avoided costs rates to be consistent with electric retail rates? How?

(b) Should electric retail rates be the avoided cost rates? Why?

E. Levelized Rates

i -

(a) Should avoided energy cost rates be levelized?

(b) Should avoided demand (capacity) cost rates be levelized?

(c) (RE(a) and (b) above) How (i.e., in real or nominal terms)?

F. 1. In contrast to VI. C. above, if this Commission bases avoided cost rates on Colstrip 3 and 4 costs, does it naturally follow that the avoided cost rate is the appropriate rate for purposes of ratebasing a utility's plant investments?

2. In electric retail rate cases nominal weighted costs of capital are used to compute a portion of the utility revenue requirement. In avoided cost dockets, however, real weighted costs of capital are used to annualize capital costs. Economists argue for the use of real carrying charges. Please comment on the effects of and solutions to this inconsistency.

G. Given the latest FERC declaratory ruling on wheeling regulation, can you propose a means for arriving at a generic proposal by Montana utilities and QFs to present to FERC for approval of a wheeling "policy"?

VII. Standardized Reporting Requirements

To the extent utilities and parties file cost data pursuant to the above issue outline the Commission finds, as did the Pacific Northwest Power Planning Council, that such cost data must be standardized:

1. All cost data <u>must</u> be in January 1, 1986 dollars (note that each utilities June 1, 1985 annual avoided cost update will be in the same year's dollars).

2. Any life cycle cost analyses, carrying charge calculations, discounted present value analyses, cost levelization analyses by a single party must use consistent discount rate and price escalation rate assumptions.

3. Any cost levelizations must be reported in both constant January 1, 1986 dollars and in current dollars.

4. The Commission may consider tariffing avoided cost rates for power production in latter years (e.g., 1986-1995). Each utility and interested party should indicate how these future estimates should be developed and annually revised to reflect a changing load/resource balance.

<u>Schedule</u>

5. All dates listed in the following schedule are mailing dates. Parties must mail all material by the most expeditious method available at resasonable cost.

6. The following schedule shall apply in Docket 84.10.64:

a) January 25, 1985: Final day for intervention petitions to be filed with the Commission.

b) January 30, 1985: All utilities and intervenors shall file general statements describing the position they will take in their testimony.

c) February 13, 1985: Final day for:

-- Filing of initial testimony.
-- Filing any suggested amendments or additions to Rules 38.5.1901 through 1908, A.R.M.

d) March 1, 1985: Final day for submission of discovery.

e) March 22, 1985: Final day for responses to discovery.

f) April 12, 1985: Final day for filing rebuttal testimony.

g) April 30, 1985: Opening day of hearing.

Prehearing Conference

7. A prehearing conference will be conducted on April 22, 1985, at 2 p.m. in the Commission's Conference Room, 2701 Prospect Avenue, Helena, Montana 59620. At that time potential issues ripe for settlement will be discussed, as well as witness sequence and other procedural matters.

Intervention

8. Parties seeking to intervene after January 25, 1985, must file a Petition to Intervene with the Commission. The petition shall demonstrate (A) the position that the intervenor will take if the intervention is granted, (B) that the proposed intervenor has an interest in and is directly affected by this Docket, (C) that the intervention, if granted, will not delay or prejudice the proceeding in the Docket, and (D) good cause why the petition was not timely filed. (ARM Section 38.2.2401 *et seq*.).

Discovery

9. The term "discovery" as used in this order includes all forms of discovery authorized by the Montana Rules of Civil Procedure, as well as informal "data requests." The Commission urges all parties to conduct their discovery through the use of data requests as much as possible.

10. Written discovery and data requests will be served on all parties. Hopefully this will serve to reduce the number of duplicate requests. Unless otherwise agreed between individual parties, copies of answers to all written

discovery and data requests will be served only on parties specifically requesting them <u>and</u> on the Commission. In this connection the term "parties" includes the parties, their attorneys, and witnesses testifying on matters to which the answers relate, who are not located in the same town as the party. If any party wants material requested by any other party, it should so inform the party to whom the data request or written discovery was directed.

11. The party receiving discovery or a data request has five (5) days from receipt of the same within which to voice any objections it has to the request. The objection and notice thereof shall be served upon the Commission and all parties of record. The Commission may dispose of such objections by prompt ruling, or may schedule arguments on the objections. Failure to object promptly will be deemed acceptance of the request.

12. In the event any requesting party is dissatisfied with the response to any written discovery or data request, such party must, within five (5) days after receipt of such response, serve in writing upon the Commission, and simultaneously upon all parties of record, its objections to such response. The Commission may dispose of such objections by prompt ruling, or may schedule argument on the objections. The Commission will issue its order either sustaining or overruling the objections. If objections are sustained, a time period will be set within which a satisfactory response must be made.

13. Submission of written discovery or data requests after the period established for the same will be allowed by leave of the Commission only. Such requests will not be permitted unless the party making the request shows good cause as to why the request was not submitted within the time period allowed.

14. Unless excused by the Commission, failure by a party to answer data requests or other discovery from any party may result in:

(a) An order refusing to allow the disobedient party to support or oppose related claims, or prohibiting him from introducing related matters in evidence;

(b) An order striking pleadings, testimony or parts thereof, or staying further proceedings until the requests are satisfied.

Testimony and Evidence

15. The Commission contemplates a progressive narrowing of issues as prefiled testimony proceeds. Introduction of new issues or data in new areas will be carefully scrutinized and disallowed unless extenuating circumstances are clearly demonstrated.

16. At the hearing, prefiled direct, answer and rebuttal testimony will be adopted into the record without recitation by the witness.

17. All proposed exhibits and prefiled written testimony shall be marked for the purposes of identification prior to the start of the hearing. Parties shall arrange in advance with the court reporter the manner of identifying their exhibits.

18. When cross-examination is based on a document, not previously filed with the Commission, copies of the document will be made available to the Commission unless good cause is shown why copies are not available. Parties introducing data requests or other discovery must have copies of each request and response available at the hearing for the court reporter, each Commissioner, the Commission staff and all parties.

19. Parties may be permited to present "live" rebuttal testimony only if it is in direct response to an issue raised for the first time in cross-examination or the testimony of a public witness. Such testimony will be allowed only by leave of the presiding officer.

20. Citizens and citizen groups will, in the discretion of the Commission, be allowed to make statements without having submitted prepared written testimony; in addition, if they have prepared written testimony they may read it if they desire, or they may have it adopted directly into the record.

21. The rules of evidence applicable in the District Courts of the State of Montana at the time of the hearings in this Docket will be used at the hearings.

Prehearing Motions and Conferences

22. Motions by any party, including motions to strike prefiled testimony and motions concerning any procedural matter connected with this docket shall be raised at the earliest possible time. Prehearing motions shall be submitted on briefs unless otherwise requested by a party. If oral argument is requested, and the request is granted, the party requesting oral argument shall notice the same for hearing before the Commission.

DONE AND DATED THIS 10th day of January, 1985 by a vote of 4-0.

BY ORDER OF THE MONTANA PUBLIC SERVICE COMMISSION.

Clyde Jarvis

CLYDE JARVIS, Chairman

Howard L. Ellis

HOWARD L. ELLIS, Commissioner

John B. Driscoll

JOHN B. DRISCOLL, Commissioner

Tom Monahan

TOM MONAHAN, Commissioner

ATTEST:

Trenna Scoffield

Trenna Scoffield
Secretary

(SEAL)