- BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH -

In the Matter of Analysis of an Integrated Resource Plan for PACIFICORP.	)))))	DOCKET NO. 90-2035-01 REPORT AND ORDER ON STANDARDS AND GUIDELINES

ISSUED: June 18, 1992

By the Commission:

The Commission's interest in promoting Integrated Resource Planning (IRP) for its regulated utilities is ongoing. The process is expected to evolve over time and thus need periodic revisiting. The Commission will require PacifiCorp to pursue the least cost alternative for the provision of energy services to its present and future ratepayers that is consistent with safe and reliable service, the fiscal requirements of a financially healthy utility, and the long-run public interest. The Commission believes that the IRP Standards and Guidelines describe a process that will help utilities accomplish this goal.

PROCEDURAL HISTORY

The Commission established Docket number 90-2035-01, "In the Matter of the Analysis of a Least-Cost Power Plan for PacifiCorp," on Feb. 21, 1990, and ordered the Company to file its recently completed 1989 least-cost planning report, entitled Resource and Marketing Planning Program (RAMPP I). The name of the docket was subsequently changed to "In the Matter of the Analysis of an Integrated Resource Plan for PacifiCorp" to reflect the Commission's broader view of the planning process.

On April 24, 1990, the Commission held hearings to receive written and oral testimony concerning the Company's RAMPP I filing and to consider how best to proceed with integrated resource planning in Utah. On May 25, 1990, the Commission issued an Order finding PacifiCorp's general RAMPP I approach reasonable. This Order also requested that a Division-led task force identify and analyze relevant integrated resource planning issues that would require explicit Commission decision.

The Task Force's Interim Report, issued on September 28, 1990, analyzed critical threshold and procedural issues and recommended development of integrated resource planning rules for the Utah jurisdiction. The report also recommended active involvement in the RAMPP II planning process by the public and Utah regulatory representatives. As a result, the Commission's staff, the Division of Public Utilities (the Division), the Committee of Consumer Services (the Committee), the Utah Division of Energy (UDE) and Utah industrial representatives have regularly participated in the RAMPP II meetings held in Portland, Oregon. To facilitate local public involvement, a workshop was held in Salt Lake City on April 15 and 16, 1991, to explain PacifiCorp's integrated resource planning process.

On September 3, 1991, the Commission issued its Order on Draft Standards and Guidelines and requested written comments from the parties. Comments were filed on December 3, 1991 by PacifiCorp (Company), the Division, the Committee, UDE, Kennecott et. al. (Kennecott), Environmental Intervenors (EI), which includes several

Utah and regional environmental interest groups, Nucor Steel, University of Utah Professor Craig Hansen and Conserve-A-Watt, a local energy service company. Replies to comments were submitted on January 8, 1992.

DISCUSSIONS, FINDINGS AND CONCLUSIONS

THRESHOLD PROCEDURAL ISSUES:

Several threshold or procedural issues requiring Commission decision were identified in the Interim Report. The Draft Guidelines aggregated these issues into nine categories. Final Commission decisions on these issues are as follows.

1. The Commission has the legal authority to promulgate Standards and Guidelines for integrated resource planning:

The Interim Report raised the question whether the Commission had the legal authority to promulgate IRP rules. A clear statement of Commission authority is presented in the September 3, 1991 Order on Draft Standards and Guidelines.

Subsequent comments did not challenge this statement, though Kennecott et. al. asserted that the Commission has no inherent authority to engage in any pre-approval process. The process the Commission herein establishes raises no such question, however.

Kennecott reiterated its position that the state legislature explicitly withheld authority from the Commission to plan the energy market in Utah. The Commission, however, is merely issuing standards and guidelines for a utility directly under its jurisdiction in order to meet its legislative mandate to properly conserve energy resources.

The Division agreed with the Commission's position, but suggested that the Commission might pursue a permanent resolution through either judicial or legislative avenues. Given the lack of substantive arguments to the contrary and the affirmative argument contained in the Order on Draft Standards and Guidelines, the Commission concludes that it has the authority to promulgate IRP standards and guidelines.

2. Information Exchange is the most reasonable method for developing and implementing integrated resource planning in Utah:

There is general agreement among the parties on the benefits of using this approach to develop a comprehensive IRP. The Company has shown a willingness to solicit and respond to public input and the Commission finds that this method appears to be functioning quite well for RAMPP II. However, the Division, the Committee and UDE suggested the need for better documentation of the planning process by the Company. The Commission agrees that the process must be thoroughly documented and notes the Company's willingness to accommodate reasonable documentation requests. If necessary, parties can request that the Commission resolve disputed requests. The Commission finds that the free flow of information between parties is beneficial to the IRP process and concludes that Information Exchange approach to IRP, supplemented with appropriate documentation, will be used in Utah.

3. Prudence Reviews of new resource acquisitions will occur during ratemaking proceedings.

The parties are in basic agreement on this procedural issue, although Kennecott argued for stronger language. Kennecott maintained that the information exchange process should not restrict consideration of issues in proceedings to consider the prudence of resource acquisitions, rather the information contained in a comprehensive IRP could facilitate such a proceeding. The Commission finds that acknowledgment of an IRP will not foreclose full prudence examination of the resource acquisition at an appropriate later time.

4. PacifiCorp's integrated resource planning process will be open to the public at all stages. The Commission, its staff, the Division, the Committee, appropriate Utah state agencies, and other interested parties can participate. The Commission will pursue a more active-directive role if deemed necessary, after formal review of the planning process.

Kennecott, Nucor and the Environmental Intervenors requested that they be explicitly allowed to participate in the RAMPP process. The Commission finds that all interested parties can participate in the integrated resource process including the above mentioned parties.

The Company expressed reservations about the Commission's pursuit of a more active-directive role, arguing that it could lead to a Commission plan rather than a Company plan. The Commission wants to alleviate the Company's concern. The Commission has no intention of directing the Company's plan or having a Commission plan. However, the Commission reserves the right to request additional information and studies that might aid in its evaluation of the planning process.

5. Consideration of environmental externalities and attendant costs must be included in the integrated resource planning analysis.

This issue generated considerable debate. The Company generally opposed explicit internalization of environmental costs because such a requirement could substantially raise the price of electricity and affect the Company's competitive position versus other energy providers. The Company proposed that its IRPs include a discussion of its external cost analysis and show how such information would be incorporated into the Company's planning decisions. The Company deemed environmental dispatch an inappropriate way to recognize external costs because of its adverse impact on the cost and price of electricity. Should the Commission judge that monetization of environmental cost is appropriate, the Company urged that a range of values be accepted. The Company expressed concern about consistent regulatory treatment and stated a willingness to facilitate discussions between jurisdictions on environmental matters.

The Division maintained that the consideration of environmental externalities is an important public policy concern which market forces alone can not adequately address. However, the

Division cautioned the Commission against making electric utilities a particular vehicle to achieve improvements in the environment. The Division contended that consideration of external environmental costs could lead to the selection of higher internal cost resources which must be recovered in rates through higher prices. The Division argued that this impact on rates is concomitant with and part of the Commission's direction that environmental externalities be included in PacifiCorp's IRP.

The Division offered a number of recommendations on this matter. First, the issue of inclusion of environmental externalities in the IRP should be decided only after a through airing of the issue. Second, other externalities associated with the electric utility business should be identified and a determination made on how to include them in the IRP process. Third, the incorporation of external costs into ratemaking requires the study of a difficult set of analytical and policy issues. Decisions on these issues should be incorporated into the IRP design rather than be decided in a rate case. The Division then reiterated the Interim Report's list of environmental concerns that should be studied.

The Committee recommended that environmental impacts associated with different plans be explicitly quantified, e.g., pounds of emissions per kWh, and given a monetary value equal to the damage caused. The Committee requested that the implications of environmental dispatch, or "full" costs dispatch which includes external costs be explored. In addition, it asked for clarification of how external costs should be treated in the analysis. Are they to be taken into account in the acquisition of resources? If so, the Committee recommended that this be discussed in follow-up workshops.

Kennecott opposed the inclusion of environmental externalities in the IRP process on several grounds. Higher electric rates, less competitive Utah industries, lack of explicit legislative authority and usurpation other governmental agencies' power were cited as reasons to exclude externalities. Kennecott argued that it is speculative to base resource planning on unknown changes in regulations. However, if environmental externalities are incorporated in the IRP process then other externalities should also be considered. Kennecott also argued that having one industry adhere to some strict economic efficiency criteria does not insure benefit to the economy as a whole. In economic literature, this is known as the problem of second best. For example, acquisition plans that include external costs could result in higher electrical rates and forestall electric cars which pollute less than internal combustion autos.

The Environmental Intervenors, (EI), which represents several different environmental groups, recommended that environmental costs be included in the definition of total costs. Failure to account for these costs could perpetuate a serious market failure harming both ratepayers and the general public. Failure to assign a value to externalities implicitly assigns them a value of zero. It is clear such costs are greater than zero.

They recommended the explicit integration of environmental externalities into each resource acquisition strategy. All acquisition strategies should incorporate model runs that include costs associated with externalities so the Commission can assess the importance of such factors. They acknowledged that ratemaking treatment of such costs is complex and urged the Commission to form a task force to study the issue.

The UDE acknowledged that Total Resource Costs (TRC) to society is the relevant index for evaluating new resource options. Ideally, TRC should include all social costs including costs associated with environmental externalities. However, given the uncertainty involved with defining and measuring external costs, UDE concurs with PacifiCorp's current approach as an interim measure. This approach performs sensitivity analysis on the least cost resources selection using a range of external cost adders. UDE recommends that this issue be studied before the next IRP.

Two other parties submitted comments to the Commission on this issue. University of Utah Professor Craig Hansen recommended that a range of values as well as a most-probable value for external costs be used. He cautioned the Commission against requiring a minimal impact scenario which could produce a public backlash against environmental considerations. He endorsed the acquisition of a diversity of resources as a hedge against uncertainty and suggested competitive bidding for renewable resources as a means to insure their inclusion in the Company's portfolio. Conserve-A-Watt, a regional energy service company declared that environmental costs are clearly not zero and recommended the use of some estimate between 0 and $.04 per kWh.

The Commission finds that external costs associated with the electric utility industry are uncertain, but clearly not zero. The studies and testimony cited by EI as well as the Pace University study cited by Kennecott substantively support such a finding. In addition, the Commission finds that without some form of government intervention current market forces can not adequately address the externality problem. The 1991 Clean Air Act Amendments are an attempt by the Federal government to fashion property rights for emissions in order to marshall market forces to efficiently comply with a predetermined emission level. These regulations have forced industry to accept financial responsibility for costs formerly borne only by society.

Although it is uncertain whether such an internalization process will continue in the future, it is clear that utilities which acquired resources with high external costs are at risk if such a process persists. For example, the international community is currently negotiating limits on CO2 emissions which could affect costs or operation of thermal plants in this country. The plight of the Northwest region's salmon population could trigger new regulations that force utilities to change the current operation of their hydroelectric facilities. Such regulations could alter the value of these resources and force the acquisition of replacements. Thus, changing regulations can raise internal costs through changes in operation of current plant or requirements to add control technology or the purchase of emission permits. Such costs will ultimately be borne by either the ratepayer or the stockholder.

The Commission finds that prudent business planning must evaluate risk and uncertainty. Such evaluations will weigh the consequences of such risk and uncertainty with the costs of strategies that insulate the Company from such risks. The Commission finds that future internalization of environmental costs is a risk that is currently facing the electric utility industry. Therefore, the Commission concludes that an analysis of environmental risk must be included in the Company's IRP. The analysis should include the quantification of actual emissions as well as a range of dollar values for external costs for each acquisition strategy. In addition, the analysis should include an appraisal of how operations of existing and future resources might be affected and how this would impact costs. Both the IRP plan and the Company's action plan should address the Company's approach to environmental risk. Such information will be useful for Commission understanding and evaluation of the Company's IRP.

The Commission is sensitive to the concerns raised by the EI. However, until a better understanding of the problems of second best and global efficiency associated with externalities can be obtained, along with a reduction in the variance of estimates of their associated costs, the Commission, for now, will reject the recommendation to explicitly include external costs into the calculation of least cost and the subsequent acquisition of resources. Nevertheless, the Commission concludes that requiring the Company to conduct an analysis of the risks associated with future internalization of environmental costs is appropriate at this time. Given this conclusion, the Commission believes that it has allayed the Division's concerns that consideration of environmental externalities will necessarily lead to the acquisition of higher cost resources and therefore require higher rates. Higher cost resources would be acquired when it is in the interests of the Company and its ratepayers to reduce the risks associated with future regulations.

6. Integrated resource planning must evaluate supply-side and demand-side resources on a consistent and comparable basis.

The Division recommended that neither supply-side resources (SSR) nor demand-side resource (DSR) be given any artificially advantageous or disadvantageous treatment in the IRP or resource acquisition processes. Kennecott cautioned the Commission against giving arbitrary incentives for acquisition of DSR. UDE agreed with the comparable evaluation requirement, but requested clarification on the issue. UDE stated that PacifiCorp is currently giving full and equal treatment to both resources in the assessment process, but questioned the comparability at the acquisition stage. UDE noted that the two resources, DSR and SSR, are very different and comparable treatment of these resources would require further analysis by a task force.

The Commission agrees with UDE and finds that DSR and SSR are different resources in terms of their dispatchability, certainty of output, reliability and the risks associated with environmental externalities. Planning, acquisition and ratemaking treatment should be consistent and comparable while acknowledging such differences. Ratemaking treatment can affect the Company's willingness to acquire resources. Ratemaking treatment for DSR has yet to be determined in this jurisdiction and this uncertainty might create a disincentive to invest in such resources. The Commission concludes that disincentives must be studied in more detail and assigns this analysis to a task force to be described later in this order. The Commission reaffirms its position on this threshold issue. Demand-side and supply-side resources must be evaluated on a consistent and comparable basis. The Commission however encourages parties to study how best to implement such a requirement.

7. Avoided Cost should be determined in a manner consistent with the Company's Integrated Resource Plan.

The Division agreed with this requirement, while Kennecott argued that the IRP should explicitly identify the resources that are least cost and can actually be avoided. Avoided costs should be based on such resources. The UDE stressed the need for internal consistency of the Company's IRP and its avoided costs. Avoided costs are usually calculated by determining revenue requirement for the Company's IRP and comparing it to the revenue requirement of the IRP with a decrement of predicted load. However, avoided costs are used to obtain a cost-effectiveness level for DSR and thus the supply of DSR to be incorporated in the

Company's IRP. Thus, the avoided costs determine the IRP and the IRP determines the value of the avoided costs. Accurate estimation requires an iterative process. Competitive bidding might provide an accurate estimate of the initial avoided cost for such an iterative process. The Commission finds that consistency between the Company's IRP and its avoided costs is necessary for both internal consistency of the IRP and for an accurate measure of avoided costs. The exact nature of this consistency will be better addressed in the avoided cost proceeding, 91-2035-01, or its successors.

8. The planning standards and guidelines must meet the needs of the Utah service area, but since coordination with other jurisdictions is important, must not ignore the rules governing the planning process already in place in other jurisdictions.

The Division stated that coordination is desirable as long as Utah interests are not unduly compromised. Important issues requiring coordination include the treatment of environmental externalities and the cost allocation of DSR. Kennecott warned that Utah jurisdictional needs must not be secondary to any other jurisdiction and that the Commission should reserve the right to disallow costs for higher cost resources that were not in conformance with Utah planning guidelines. The Committee stated that consistent jurisdictional treatment of externalities is desirable.

The Commission finds that the jurisdictional needs of Utah will be a primary consideration in the Commission's evaluation of the Company's IRP. However, where possible and when minimal impact on Utah's interests exists, coordination with other jurisdictions will be pursued. The Commission directs the Company to pursue its plan to form a task force to study how environmental issues should be incorporated into its IRP on an interjurisdictional basis. Other jurisdictional issues such as the interjurisdictional allocation of DSR expenditures can be addressed by the ongoing PacifiCorp Interjurisdictional Task force on Allocations (PITA).

9. The Company's Strategic Business Plan must be directly related to its Integrated Resource Plan.

The Division agreed with this directive, but cautioned against unequivocal enforcement that would inhibit the pursuit of prudent resource acquisitions that were not included in the plan.

The Committee argued to strengthen this directive and recommended that potential conflicts between the two plans be reported to the Commission in an up-front and timely fashion. They requested that the Company be required to report on an annual basis its short-run and long-run strategic business plan and corporate objectives. The Commission finds that consistency between the Company's strategic business plan and its IRP is necessary to ensure that ratepayers receive the benefits from IRP. Details of the consistency will be spelled out in the specific guidelines listed below. (see guidelines 4.e and 4.h. on page 36)

STANDARDS AND GUIDELINES FOR IRP.

1. Definition:

Integrated resource planning is a utility planning process which evaluates all known resources on a consistent and comparable basis, in order to meet current and future customer electric energy services needs at the lowest total cost to the utility and its customers, and in a manner consistent with the long-run public interest. The process should result in the selection of the optimal set of resources given the expected combination of costs, risk and uncertainty.

The Commission requested that parties recommend whether "lowest cost" be defined as lowest rates or as lowest revenue requirement; whether lowest costs should include costs incurred by ratepayers as well as the utility; and whether lowest cost should include external costs.

Environmental Intervenors urged the Commission to include environmental external costs in the definition of lowest total cost for PacifiCorp's IRP, thus forcing the Company to integrate externalities into its resource selection process. They argue that without such a change in definition, the general public and ratepayers will be harmed.

UDE recommended that lowest cost should be interpreted as Total Resource Cost (TRC), defined as the discounted sum of the direct costs of production and consumption of electric energy services incurred by the utility, its ratepayers and the general society. It recommended that sensitivity analyses be done for external costs rather than to explicitly include such costs in the definition. In addition, it recommended that the calculation of

TRC for DSR include a dynamic view of DSR's future impact on load and avoided costs. The Company argued that measurement of lowest total costs is imperfect because when evaluating a new resource one must take into account its reliability, the risks associated with the resource, its external costs and its effects on the Company's flexibility to operate and plan the system. Evaluation of costs must be in relationship to quality of service. Kennecott requested that the calculation of total revenue requirements for each model run be required so that ratepayers are assured of obtaining the least cost resources.

The Commission finds that UDE's recommendation for using the Total Resource Cost to define the "lowest cost" criterion is reasonable; it should include the costs incurred by the utility and the ratepayer. However, the Company should also determine the costs incurred by the utility, that is, the present value of total revenue requirements of a resource acquisition strategy. If different strategies have the same total resource costs, the Company should choose that strategy that has the lowest total revenue requirement.

The Commission finds external costs do not have to be explicitly included in the definition of lowest total costs. To do so would require that the Company acquire resources that included the full estimate of the external costs associated with them. However, the Commission's directive to the Company to consider the long-run public interest requires consideration of environmental ramifications of the production and consumption of electric energy services. All other things being equal, the Company will be expected to pursue resource acquisitions that minimize adverse environmental impacts as a method of reducing risk. The Commission has stated that the IRP process should select resources that yield the optimal combination of costs and risks. The risk of future internalization of environmental costs must be analyzed by the Company and such risk assessment must be incorporated in the Company's decision making and final choice of resources acquired. The Commission concludes that its modified definition of IRP as explained by the discussion above reflects the Commission's view of the role of cost in the IRP process.

2. The Company will submit its Integrated Resource Plan biennially.

No party objected to this provision. Therefore, the Commission reaffirms its decision that submission of an IRP every two years is reasonable and will be required of the Company.

3. The integrated resource plan will be developed in consultation with the Commission, its staff, the Division of Public Utilities, the Committee of Consumer Services, and appropriate Utah state agencies. PacifiCorp will provide ample opportunity for public involvement and the exchange of information during the development of its Plan.

Nucor, Kennecott and the Environmental Intervenors requested that this requirement be amended to specifically name them as parties. The Commission finds that all interested parties may participate in PacifiCorp's public process but that it is not necessary to name all parties that may contribute to this information-exchange collaborative process. The guideline will be so revised.

3. (revised) The integrated resource plan will be developed in consultation with the Commission, its staff, the Division of Public Utilities, the Committee of Consumer Services, appropriate Utah state agencies and other interested parties. PacifiCorp will provide ample opportunity for public involvement and the exchange of information during the development of its Plan.

4. PacifiCorp's future integrated resource plans will include:

a. A range of estimates or forecasts of load growth, including both capacity (kW) and energy (kWh) requirements.

The Division suggested that the Commission specify that the load forecasts include: firm loads, non-firm loads, on-system and off-system loads, loads by jurisdiction and general class of service, forecast horizons of 20-years, and the Company's estimate of the likelihood that each forecast scenario may occur. The Company argued that it plans and acquires resources to meet the load requirements of its retail customers. Off-system or wholesale markets are uncertain and should not be relied upon for the disposition of substantial resources.

The Commission finds that more specific requirements for load forecasting will aid in the Commission's evaluation of the Company's plan. The Commission will add the following language to its load forecast requirement.

a. i. (new) The forecasts will be made by jurisdiction and by general class and will differentiate energy and capacity requirements. The Company will include in its forecasts all on-system loads and those off-system loads which they have a contractual obligation to fulfill. Non-firm off-system sales are uncertain and should not be explicitly incorporated into the load forecast that the utility then plans to meet. However, the Plan must have some analysis of the off-system sales market to assess the impacts such markets will have on risks associated with different acquisition strategies.

For example, the draft report of RAMPP II concludes that it will be more advantageous to over-build than under-build in the future. This is based on assumptions about the off-system sales market. The Commission finds that conclusions must be based on analysis not assumptions. Therefore, the Commission concludes that the off-system sales market must be analyzed in order to evaluate the risks of over- or under-building to meet future system load.

b. Analyses of how various economic and demographic factors, including the prices of electricity and alternative energy sources, will affect the consumption of electric energy services, and how changes in the number, type and efficiency of end-uses will affect future loads.

The Division argued that such analyses are a part of normal demand forecasting and should be included in any forecast. The Commission agrees with the Division and such analyses will be included in the Company's requirements for load forecasting under section a. ii. This change will require relettering of all subsequent requirements. A new set of requirements that includes all changes and relettering will be attached to this order.

c. An evaluation of all present and future resources, including future market opportunities (both demand-side and supply-side), on a consistent and comparable basis.

i. An assessment of all technically feasible and cost-effective improvements in the efficient use of electricity, including load management and conservation.

ii. An assessment of all technically feasible generating technologies including: renewable resources, cogeneration, power purchases from other sources, and the construction of thermal resources.

The Division recommended that the Commission clarify its definition of evaluation and assessment of all present and future resources. The Commission finds that such clarification will aid the Company is its future planning and adds the following guideline.

iii. (new) The resource assessments should include: life expectancy of the resources, the recognition of whether the resource is replacing/adding capacity or energy, dispatchability, lead-time requirements, flexibility, efficiency of the resource and opportunities for customer participation.

The Commission is cognizant of the fact that there is not a commonly accepted method for including all such factors into an optimization model. Therefore, the Commission concludes that although an evaluation of the resources in a consistent and comparable manner must consider the above mentioned factors, they need not be explicitly included in the model. The Commission will reletter requirement c. i. and c. ii. to b. i. and ii. and add section b. iii in its final Standards and Guidelines for IRP.

d. An analysis of the role of competitive bidding for demand-side and supply-side resource acquisitions.

The Division recommended that the Company should clearly explain how it intends to use competitive bidding in its acquisition strategy. The Company argues that competitive bidding is an implementation issue and although not directly incorporated in its IRP, it will be addressed in the Company's action plan. Kennecott supported the concept of requiring the Company to bid for new resources. It urged a go slow policy on DSR bidding because of the relative inexperience of all participants. The Committee argued that competitive bidding is one of the best ways to secure low cost resources and that it should be a permanent part of the IRP process.

The Commission notes that the Company is currently evaluating bids for power in its first RFP in Docket No. 91-2035-01. Further, the Commission notes that the Company's competitive bidding program is in its infancy and will require further study before the Commission decides whether formal inclusion in the IRP is warranted. Therefore, the Commission concludes that this issue is better addressed after the results from the competitive bidding process are analyzed. The issue will be addressed in Docket No.

91-2035-01. Therefore, the Commission will continue its requirement that the Company analyze the role of competitive bidding. This requirement will be relettered c.

e. A 20-year planning horizon.

No party objected to this requirement. Therefore, the Commission concludes that it is reasonable and reaffirms this requirement and will reletter it d.

f. A two-year action plan outlining the specific resource decisions intended to implement the integrated resource plan in a manner consistent with the Company's strategic business plan.

The Division recommended that the Company's action plan span a four-year time horizon. The action plan would describe specific decisions and actions to be taken in the first two years and would outline actions the Company anticipates taking in the last two years. In addition, the plan would include a report on the status of the specific actions outlined in the previous plan. The Company agreed that both suggestions would be useful additions to the IRP requirements. The Committee requested that the action plan be revised after any resource selection is made. The Company argued that an action plan submitted every two years is an adequate information requirement and sees little need for revising action plans between its biennial submission of their IRP.

The Commission finds that the Division's recommendations that were agreed to by the Company are useful additions to the IRP. The Commission finds that the Committee's request for a formal revision of the action plan is unnecessary as long as the Commission is kept informed about new acquisitions and their impacts on future plans. The guideline will be changed to the following and will be relettered e.

f. (new) An action plan outlining the specific resource decisions intended to implement the integrated resource plan in a manner consistent with the Company's strategic business plan. The action plan will span a four-year horizon and will describe specific actions to be taken in the first two years and outline actions anticipated in the last two years. The action plan will include a status report of the specific actions contained in the previous action plan.

g. Load forecasts integrated with resource options in a manner which rationalizes the choice of resources under a variety of economic circumstances.

The Division recommended revising this requirement such that the Company should plan different resource acquisition paths for different economic circumstances with a mechanism to select among and modify these paths as the future unfolds. The Division maintains that this is a rational way to deal with uncertainty. The Commission agrees with the Division's interpretation and will reword the guideline as follows and will reletter it h.

g. (new) a plan of different resource acquisition paths for different economic circumstances with a decision mechanism to select among and modify these paths as the future unfolds.

h. An evaluation of the cost-effectiveness of the resource options from a variety of perspectives: the utility, the ratepayer, different classes of ratepayers, state, and society as a whole.

The Division questioned whether the evaluation from the state's perspective should include economic and demographic impacts and impacts on other utilities in the state. The Division requested a better definition of the geographical and temporal meaning of "society's" perspective. Given the difficulty of defining these perspectives, the Division recommended removing the requirement of evaluating options from state and society perspectives. The Commission finds that these concepts are currently too difficult to precisely define and quantify and therefore will be excluded from the formal requirements. However, the Company will provide a description of how social concerns might be handled and how they might affect cost effectiveness decisions. For example, the Northwest requires that conservation measures be given a 10 percent cost reduction to account for social benefits. This requirements will be relettered g.

h. (revised) An evaluation of the cost-effectiveness of the resource options from the perspectives of the utility and the different classes of ratepayers. In addition, a description of how social concerns might affect cost effectiveness estimates of resource options.

i. An evaluation of the risks associated with various resource options and how the action plan addresses these risks in

the context of both the Business Plan and the 20-year Integrated Resource Plan.

The Division recommended the explicit identification of financial, competitive, reliability, and operational, i.e, dispatchability risks. The Division recommended the identification of the group, ratepayers or the shareholders, who bears the risk. The Commission agrees with this recommendation and revises the guideline to read:

i. (revised) An evaluation of the financial, competitive, reliability, and operational risks associated with various resource options and how the action plan addresses these risks in the context of both the Business Plan and the 20-year Integrated Resource Plan. The Company will identify who should bear such risk, the ratepayer or the stockholder.

j. Considerations permitting flexibility in the planning process so that the Company can take advantage of opportunities and can prevent the premature foreclosure of options.

The Division and the Company counseled the Commission on the benefits of such considerations and the Commission concludes that flexibility is in the public interest. However, acquisitions not contained in the plan will still come under the same scrutiny as any other resource acquisition when the Company applies for ratemaking treatment.

j. (reaffirmed) Considerations permitting flexibility in the planning process so that the Company can take advantage of opportunities and can prevent the premature foreclosure of options.

k. An analysis of tradeoffs; for example, between such conditions of service as reliability and the acquisition of lowest cost resources.

Division noted that this is tied to the risks issues discussed in section (i) (revised) but recommended that reliability be analyzed separately and that dispatchability be included in the analysis. The Commission finds that dispatchability is an element that is critical for reliability and should therefore be analyzed. The guideline will be reworded to reflect this concern.

k. (revised) An analysis of tradeoffs; for example, between such conditions of service as reliability and dispatchability and the acquisition of lowest cost resources.

l. A range, rather than attempts at precise quantification, of estimated external costs which may be intangible, in order to show how explicit consideration of them might affect selection of resource options, and one scenario showing the costs of resource acquisition strategy that has minimal environmental impact and thus minimal external costs to society.

The Commission finds that a range of estimates for external costs is appropriate for analysis of the risks associated with changing environmental regulation. The Commission agrees with Professor Craig Hansen that requiring a minimal impact scenario could produce a public backlash against environmental considerations and therefore concludes that an explicit requirement to include a resource strategy that minimizes environmental impacts should not be formally required but may be requested by the

Commission. The requirement is revised as follows:

1. (revised) A range, rather than attempts at precise quantification, of estimated external costs which may be intangible, in order to show how explicit consideration of them might affect selection of resource options. The Company will attempt to quantify the magnitude of the externalities, for example, in terms of the amount of emissions released and dollar estimates of the costs of such externalities.

Other Specific Guideline Comments:

Nucor requested that interruptible service and retail wheeling be considered as resources in the Company's IRP analysis. The Company responded with an offer to consider the benefits and appropriate pricing levels of future interruptible contracts during the planning process, but questioned the likelihood that retail wheeling would benefit all parties. If such opportunities can be identified, the Company recommended their inclusion in the Plan. However, the Company stated that retail wheeling is an issue with broad implications that must be considered before policy is determined. The Commission finds that future pricing policies for interruptible contracts should be studied as should retail wheeling.

UDE requested that the Company provide a narrative in its IRP indicating the link between rate design and least-cost goals. Since price affects consumer behavior, long-term rate design strategy should be consistent with IRP goals. The Company argued that rate design is an implementation issue and should be kept separate from the planning function. The Commission acknowledges that prices affect consumers decisions and therefore concludes that rate design and IRP goals should be consistent. The Commission finds that the requested narrative should not unduly complicate or interfere with the planning process and will provide some information for ratemaking proceedings, therefore it should be included in the IRP. The Commission will codify this request for analysis under the following guideline:

m. (new) a narrative describing how current rate design is consistent with the Company's integrated resource planning goals and how changes in rate design might facilitate integrated resource planning objectives.

5. PacifiCorp will submit its Integrated Resource Plan for public comment, review and acknowledgement.

The Division requested that deadlines be specified for submission of the IRP, public comments and regulatory acknowledgement. The Company noted that the Division's suggested three-month interval between submission and review for comments and acknowledgement of the report is not enough time to fully analyze and evaluate the planning process. They also noted that time requirements are likely to vary from one plan to another. The Commission finds that the planning process is fluid and strict adherence to deadlines might be detrimental to the quality of the submitted plan. Therefore, the Commission concludes that specific deadlines are not required at this time. However, the Commission expects that the Company's next IRP will be due in the Fall of

1993.

In order to clarify the review and acknowledgement process the Commission will add the following guideline.

6. (new) The public, state agencies and other interested parties will have the opportunity to make formal comment to the Commission on the adequacy of the Plan. The Commission will review the Plan for adherence to the principles stated herein, and will judge the merit and applicability of the public comment. If the Plan needs further work the Commission will return it to the Company with comments and suggestions for change. This process should lead more quickly to the Commission's acknowledgement of an acceptable Integrated Resource Plan. The Company will give an oral presentation of its report to the Commission and all interested public parties. Formal hearings on the acknowledgement of the Integrated Resource Plan might be appropriate but are not required.

7. Acknowledgement of an acceptable Plan will not guarantee favorable ratemaking treatment of future resource acquisitions.

The Division agreed with this requirement because it preserves the Commission's right to a prudence review and allows the Company flexibility in resource acquisition. The Committee recommended that the burden of proof be on the Company to prove why its acquisitions conform with the plan. The Commission finds that the present language is sufficient. Acknowledgement of the plan means the Commission deems the plan reasonable at the time it is presented. Cost recovery for acquisitions will be decided in a formal rate case.

8. The Integrated Resource Plan will be used in rate cases to evaluate the performance of the utility and to review avoided cost calculations.

There were no objections to this requirement. Therefore, the Commission finds that it is reasonable and in the public interest.

OTHER COMMENTS

The Commission requested comments and input on a number of other issues germane to the IRP process, some have been discussed within the body of this report but others need further discussion. The Commission requested comments on the following issues: the proper definition of lowest total cost, the proper role of environmental externalities in the planning and ratemaking process, the role of the regulatory environment to encourage the Company to pursue its IRP, the relationship between avoided costs and the Integrated Resource Plan, the role of competitive bidding for both demand-side and supply-side resources, and issues surrounding the interjurisdictional consistency of planning requirements.

1. Definition of Lowest Total Cost

The Commission's decision on this issue is discussed in the section on the definition of integrated resource planning on pages 15 through 17.

2. Role of Competitive Bidding

This was discussed in detail in section 4. d. of specific guidelines on page 21 and will be analyzed in Docket 91-2035-01.

3. Regulatory changes to insure Company pursuit of its IRP.

EI devoted a considerable part of its brief to the issue of regulatory reform and recommended that the Commission remove the current disincentives for DSR by decoupling revenues from profits. The Company argued that positive incentives which allow profits to be made on the provision of energy services are more effective than eliminating disincentives. Kennecott argued against EI's suggestions for regulatory change, implying that higher rates in Utah will ultimately result.

The Commission finds that demand-side resources, which includes end-use efficiencies, load management, and conservation, are more difficult to acquire than supply-side resources. Regulatory disincentives may exist. The Commission finds that currently there is no approved ratemaking treatment for DSR. Given the asymmetry of ratemaking treatment for DSR and the resulting uncertainty of cost recovery, the Commission questions whether the Company has sufficient financial incentive to pursue its IRP. Given the Commission's directive that DSR and SSR be treated on a comparable basis, the Commission finds that clarification of the regulatory treatment of DSR is necessary. However, this Docket has not provided an evidentiary basis for a Commission decision. Therefore, the Commission concludes that further study is warranted and establishes Docket No. 92-2035-04, "In the Matter of Ratemaking Treatment of Demand-Side Resources and the Analysis of Regulatory Changes to Encourage Implementation of Integrated Resource Planning". The Commission directs the Division to establish a cooperative task force or incorporate these issues into the existing DSR task force to study these issues and bring recommendations before the Commission. The issues to be analyzed include: the ratemaking treatment of DSR expenditures, approval of energy service charges for efficiency improvements and conservation, electric revenue adjustment mechanisms, the granting of a cost advantage for efficiency or conservation acquisitions, and the decoupling of revenues from profits and any other issues that the group deems germane.

ORDER

NOW, THEREFORE, IT IS HEREBY ORDERED that the standards and guidelines for integrated resource planning for PacifiCorp, Utah jurisdiction, be adopted. Appendix A attached to this Order, will specify the Commission's decisions on Threshold/Procedural issues and list the Standards and Guidelines for Integrated Resource Planning for PacifiCorp. The Company will prepare its IRP conformance with such procedures, standards and guidelines.

The Commission opens a new proceeding, Docket No. 92-2035-04, "In the Matter of Ratemaking Treatment of Demand-Side Resources and the Analysis of Regulatory Changes to Encourage Implementation of Integrated Resource Planning". The Division is directed to convene a task force to define the issues involved both short-run and long-run and bring recommendations on viable options before this Commission for its decision. The issue of consistency of avoided cost and integrated resource planning and the role of competitive bidding in the IRP process will be addressed in Docket No. 91-2035-01.

DATED at Salt Lake City, Utah, this 18th day of June, 1992.

James M. Byrne, Chairman

Stephen C. Hewlett, Commissioner

Attest:

Julie Orchard
Commission Secretary

Attachment A

Standards and Guidelines for Integrated Resource Planning
for PacifiCorp, Utah Jurisdiction

Procedural Issues:

1. The Commission has the legal authority to promulgate Standards and Guidelines for integrated resource planning.

2. Information Exchange is the most reasonable method for developing and implementing integrated resource planning in Utah.

3. Prudence Reviews of new resource acquisitions will occur during ratemaking proceedings.

4. PacifiCorp's integrated resource planning process will be open to the public at all stages. The Commission, its staff, the Division, the Committee, appropriate Utah state agencies, and other interested parties can participate. The Commission will pursue a more active-directive role if deemed necessary, after formal review of the planning process.

5. Consideration of environmental externalities and attendant costs must be included in the integrated resource planning analysis.

6. The integrated resource plan must evaluate supply-side and demand-side resources on a consistent and comparable basis.

7. Avoided Cost should be determined in a manner consistent with the Company's Integrated Resource Plan.

8. The planning standards and guidelines must meet the needs of the Utah service area, but since coordination with other jurisdictions is important, must not ignore the rules governing the

planning process already in place in other jurisdictions.

9. The Company's Strategic Business Plan must be directly related to its Integrated Resource Plan.

Standards and Guideline:

1. Definition:

Integrated resource planning is a utility planning process which evaluates all known resources on a consistent and comparable basis, in order to meet current and future customer electric energy services needs at the lowest total cost to the utility and its customers, and in a manner consistent with the long-run public interest. The process should result in the selection of the optimal set of resources given the expected combination of costs, risk and uncertainty.

2. The Company will submit its Integrated Resource Plan biennially.

3. IRP will be developed in consultation with the Commission, its staff, the Division of Public Utilities, the Committee of Consumer Services, appropriate Utah state agencies and interested parties. PacifiCorp will provide ample opportunity for public input and information exchange during the development of its Plan.

4. PacifiCorp's future integrated resource plans will include:

a. A range of estimates or forecasts of load growth, including both capacity (kW) and energy (kWh) requirements.

i. The forecasts will be made by jurisdiction and by

general class and will differentiate energy and capacity requirements. The Company will include in its forecasts all on-system loads and those off-system loads which they have a contractual obligation to fulfill. Non-firm off-system sales are uncertain and should not be explicitly incorporated into the load forecast that the utility then plans to meet. However, the Plan must have some analysis of the off-system sales market to assess the impacts such markets will have on risks associated with different acquisition strategies.

ii. Analyses of how various economic and demographic factors, including the prices of electricity and alternative energy sources, will affect the consumption of electric energy services, and how changes in the number, type and efficiency of end-uses will affect future loads.

b. An evaluation of all present and future resources, including future market opportunities (both demand-side and supply-side), on a consistent and comparable basis.

i. An assessment of all technically feasible and cost-effective improvements in the efficient use of electricity, including load management and conservation.

ii. An assessment of all technically feasible generating technologies including: renewable resources, cogeneration, power purchases from other sources, and the construction of thermal resources.

iii. The resource assessments should include: life expectancy of the resources, the recognition of whether the

resource is replacing/adding capacity or energy, dispatchability, lead-time requirements, flexibility, efficiency of the resource and opportunities for customer participation.

c. An analysis of the role of competitive bidding for demand-side and supply-side resource acquisitions.

d. A 20-year planning horizon.

e. An action plan outlining the specific resource decisions intended to implement the integrated resource plan in a manner consistent with the Company's strategic business plan. The action plan will span a four-year horizon and will describe specific actions to be taken in the first two years and outline actions anticipated in the last two years. The action plan will include a status report of the specific actions contained in the previous action plan.

f. A plan of different resource acquisition paths for different economic circumstances with a decision mechanism to select among and modify these paths as the future unfolds.

g. An evaluation of the cost-effectiveness of the resource options from the perspectives of the utility and the different classes of ratepayers. In addition, a description of how social concerns might affect cost effectiveness estimates of resource options.

h. An evaluation of the financial, competitive, reliability, and operational risks associated with various resource options and how the action plan addresses these risks in the context of both the Business Plan and the 20-year Integrated Resource Plan. The

Company will identify who should bear such risk, the ratepayer or the stockholder.

i. Considerations permitting flexibility in the planning process so that the Company can take advantage of opportunities and can prevent the premature foreclosure of options.

j. An analysis of tradeoffs; for example, between such conditions of service as reliability and dispatchability and the acquisition of lowest cost resources.

k. A range, rather than attempts at precise quantification, of estimated external costs which may be intangible, in order to show how explicit consideration of them might affect selection of resource options. The Company will attempt to quantify the magnitude of the externalities, for example, in terms of the amount of emissions released and dollar estimates of the costs of such externalities.

l. A narrative describing how current rate design is consistent with the Company's integrated resource planning goals and how changes in rate design might facilitate integrated resource planning objectives.

5. PacifiCorp will submit its IRP for public comment, review and acknowledgement.

6. The public, state agencies and other interested parties will have the opportunity to make formal comment to the Commission on the adequacy of the Plan. The Commission will review the Plan for adherence to the principles stated herein, and will judge the merit and applicability of the public comment. If the Plan needs

further work the Commission will return it to the Company with comments and suggestions for change. This process should lead more quickly to the Commission's acknowledgement of an acceptable Integrated Resource Plan. The Company will give an oral presentation of its report to the Commission and all interested public parties. Formal hearings on the acknowledgement of the Integrated Resource Plan might be appropriate but are not required.

7. Acknowledgement of an acceptable Plan will not guarantee favorable ratemaking treatment of future resource acquisitions.

8. The Integrated Resource Plan will be used in rate cases to evaluate the performance of the utility and to review avoided cost calculations.