# This is an electronic copy. Attachments may not appear. BEFORE THE PUBLIC UTILITY COMMISSION

### OF OREGON

LC 27

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In the Matter of IDAHO POWER COMPANY's	)	ORDER
2000 Integrated Resource Plan.	)	)

## DISPOSITION: PLAN ACKNOWLEDGED

Idaho Power Company (IPCo or Company) filed its 2000 Integrated Resource Plan (*IRP or Plan*) on June 30, 2000. The plan is intended to meet the requirements of both the Public Utility Commission of Oregon (OPUC) Order No. 89-507 and the Idaho Public Utilities Commission (IPUC) Order No. 22299.<sup>1</sup>

In preparation of its final 2000 IRP, the Company held two public meetings and solicited written comments from its customers, the general public, and the staffs of the Idaho and Oregon Public Utility Commissions.

The final Plan was filed on June 30, 2000. The plan describes the Company's loads and resources, provides an overview of technically available supply-side and demand-side resource options, and establishes a demonstrated need for new resources in 2004.

The Plan was docketed as LC 27. At the August 11, 2000, LC 27 prehearing conference the Administrative Law Judge adopted the following schedule:

1) Party comments on IRP	September 15, 2000
2) Staff final comments, recommendations,	
and draft order	October 20, 2000
3) Hearing or Commission Public Meeting	November 2000

Staff presented its analysis of IPCo's IRP to the Commission at the November 21, 2000, public meeting. Staff recommended that the Commission acknowledge the Plan, with specified ongoing reporting requirements. As discussed in this Order, the Commission adopted Staff's recommendation.

<sup>&</sup>lt;sup>1</sup> The Oregon Order refers to <u>Least-Cost Planning</u>, while the Idaho Order refers to <u>Integrated Resource Planning</u>. The terms are interchangeable.

## **OVERVIEW OF IPCo's INTEGRATED RESOURCE PLAN**

IPCo's filing consists of its 2000 Integrated Resource Plan and the following supporting materials: (1) Technical Appendix; (2) 2000 State and County Economic Forecast; and (3) Sales and Load Growth Forecast. In addition, the Company provided a copy of its 2000 Conservation Plan.

## Background

At IPCo's request, the Commission agreed to postpone the Company's scheduled June 1999 IRP until June 2000 (*see OPUC Order No. 99-079*). In requesting the delay, IPCo stated that recent and anticipated future changes in the electric industry at the national and state levels created uncertainty. IPCo maintained that a one year delay in issuing its IRP would allow it to better assess the scope and role of IRP in future electric resource planning.

The delay has allowed for clarification of some issues. For example, the 1999 Oregon Legislature's electric industry restructuring bill, SB 1149, conditionally exempts IPCo from restructuring in its Oregon service territory. In addition, the 1999 Idaho Legislature also considered restructuring. The Idaho Legislature decided to defer further consideration of restructuring and indicated a preference for a cautious approach to electric industry restructuring in Idaho.

Based on the above mentioned state legislative decisions, IPCo has assumed in its 2000 IRP that it will continue to be responsible for acquiring sufficient resources to serve all of its customers in its Idaho and Oregon service territories. The Company also assumes it will continue to operate as a vertically integrated electric utility. Recognizing continuing uncertainty in the evolving electric marketplace, IPCo's 2000 IRP assumes a 10-year planning horizon, rather than the 20-year horizon of previous IRPs.

IPCo states that it has attempted to build sufficient flexibility into its 2000 IRP so that if industry restructuring comes sooner than planned, neither the Company nor its customers will be harmed by resource decisions made in accordance with the Plan. Given this, the 2000 IRP has two prime goals:

- 1. To maintain IPCo's ability to serve the increasing demand for electricity within its service territory.
- 2. To ensure that any resource acquired to serve the Company's service territory loads will remain cost effective in a competitive market.

### Load/Resource Balance

Load: IPCo began its resource planning by forecasting future load. The Company's load requirement in 1999 was 1,765 average megawatts. The IRP's base case scenario predicts that IPCo's service territory load will increase to 2,109 average megawatts in 2009. This base case assumes a 1.76 percent average annual rate of growth over the 10-year planning horizon. To recognize uncertainty, the resource planning process also evaluated high

and low annual load growth forecasts of 2.32 percent per year and 1.21 percent per year, respectively.

<u>Generation Resources</u>: To serve system load, the Company owns a combination of hydroelectric and thermal generation facilities. Under median water conditions, IPCo's hydroelectric generating plants provide approximately 54 percent of the total system energy output and are a primary source of load following capability.

IPCo operates 17 hydroelectric generating plants located on the Snake River and its tributaries. Under median water conditions, these facilities annually produce approximately 1,071 average megawatts of electricity. Nearly 70 percent of this hydroelectric generation is provided by the T.E. Roach complex, which consists of Brownlee, Oxbow, and Hells Canyon dams.

IPCo is currently seeking renewal of the Federal Energy Regulatory Commission (FERC) operating licenses for a majority of its hydroelectric facilities, including the T.E. Roach complex. FERC operating licenses are issued for terms of 30 to 50 years. The license renewal process is very complex and requires a minimum of five years to complete. The Company expects the hydro relicensing process to continue through most of the IRP's 10-year planning horizon.

Under federal law, new hydro licenses are required to include measures for environmental protection, mitigation, and enhancement. These measures could influence the relicensed hydro plant's operations and costs. It is too early in the FERC process to determine what environmental conditions will be included in a renewed license and, therefore, what the operational and cost impacts will be. The Company states that its goal in relicensing is to maintain a low cost hydroelectric generation system while implementing measures designed to protect and enhance the river environment.

In regard to thermal resources, IPCo has ownership shares in the Bridger, Valmy, and Boardman coal-fired plants. These facilities provide approximately 910 average megawatts of annual generation. The Company also purchases 110 average megawatts of energy from 65 Public Utility Regulatory Policies Act qualifying facilities.

<u>Energy Conservation</u>: The IRP explains that, on a system basis, IPCo has shifted its energy conservation efforts from Company administered programs to the support of regional conservation efforts conducted through the Northwest Energy Efficiency Alliance (NEEA). This change derives from customer criticism and a resulting 1996 Company review of its system conservation programs.

From the review, IPCo determined that, given continuing industry restructuring, conservation programs premised on the deferral of program expenditures and cost recovery over an extended period of time was no longer practical. Therefore, the Company requested authority from the IPUC and OPUC to discontinue certain conservation programs. Since the Company conservation programs were operated on a system-wide basis, and with Oregon a small portion

(*about 5 percent*) of the system, IPCo first obtained IPUC approval to discontinue its conservation programs, then the Company made similar filings with the OPUC.

The Company still funds the Low-Income Weatherization Program. Under this program, grants are provided to local non-profit agencies to supplement federal funding of weatherization projects for low-income customers living in electrically heated homes. In addition, IPCo continues to offer Oregon Commercial Audits (*Schedule 82*) and the Oregon Residential Weatherization Program (*Schedule 78*).

NEEA's mission is to promote market transformation of energy efficiencies in the region. NEEA conducts such activities as market research, technology assessment, and planning. It also administers demonstration programs and promotes development of market infrastructure. For the period 2000 through 2004, IPCo will contribute \$1.3 million annually out of an annual NEEA budget of \$20 million.

System Balance: With basecase loads and median water conditions, the IRP predicts that with current generation capacity IPCo will experience energy deficiencies in the summer months of July and August in all ten years of the planning horizon. Additionally, the Company will experience winter energy deficiencies in November and December. Summer deficiencies are expected to increase from approximately 110 MW in 2000 to approximately 580 MW in 2009. Winter deficiencies are expected to increase from approximately 50 MW in 2000 to approximately 330 MW in 2009.

Under more adverse scenarios of low water conditions and/or high load growth, the energy deficiencies worsen. Assuming a scenario of low water conditions and high load growth, in the post 2004 period the Company's system will have continuous energy deficiencies.

<u>Resource Options</u>: To meet forecast load throughout the 10-year planning horizon, the IRP considered several resource strategies. These strategies included increased energy and capacity purchases from the Pacific Northwest market and the acquisition of additional generation capability from a portfolio of various generation technologies.

In the 2000 IRP, the Company plans to use seasonal market purchases to supplement Company resources throughout the planning horizon. Market purchases, however, are constrained by the ability of IPCo's bulk transmission system to import off-system purchases. The IRP analysis shows that the delivery of increased market purchases beyond approximately 250 megawatts will require substantial investments in additional transmission facilities. The cost of additional transmission capacity, estimated to range between \$400,000 to \$700,000 per mile, adversely impacts the economics of market purchases beyond approximately 250 megawatts.

To serve core system needs, the IRP analyzed the potential acquisition of currently available generating technologies, including thermal plants (*natural gas and coal*) and several renewable technologies (*wind, solar, geothermal, and fuel cells*). Two of these technologies, a 250 MW combined-cycle combustion turbine and a 250 MW simple-cycle combustion turbine were selected for further consideration.

While current costs preclude fuel cells, solar (*photovoltaics and thermal*), wind, and geothermal technologies as core generating resources, the IRP recognizes that these resources may have applications in a distributed generation strategy. Distributed generation (DG) resources are defined as small-scale generating units and energy-efficiency resources located near customer loads. The IRP states that a DG resource strategy could offer economic alternatives to the expansion of the transmission and distribution system and may also improve system reliability.

# **Resource Strategies**

Three strategies were chosen for final analysis and review: (1) A market purchase strategy; (2) A gas-fired combined-cycle combustion turbine strategy (CCCT); and (3) A gas-fired simple-cycle combustion turbine strategy (SCCT).

To meet expected load growth to 2004, the 2000 IRP determined that IPCo's existing resources will need to be augmented with market purchases of 250 aMW of energy in July and August and 200 aMW of energy in November and December. Beginning in 2004, system transmission constraints will limit additional market purchases and the Company will need to acquire new resources to serve expected loads.

Therefore, by 2004 the Company will need to either bring new Company-owned generating capacity on-line or enter a power purchase contract with the developer of an independent power plant. In either option, the location of the new generating resource will need to consider IPCo's transmission system constraints.

For a Company built plant, the IRP analysis took into account that system load deficits occur in only four months out of each year. Therefore, the IRP assumed that a resource with an operating capacity of only 30 percent is needed to meet projected load growth. Given this reasoning, an SCCT was selected as the preferred resource for acquisition by 2004.

As required by OPUC Order 93-695, a cost analysis of each of the three scenarios was performed with externality cost adders for  $CO_2$ ,  $NO_X$ , and TSP emissions. The cost analysis assumed a range of cost adders that are identified in the OPUC Order. Analysis results indicate that under high emission cost adders the CCCT strategy, rather than SCCT, is the least-cost option.

To determine the availability and cost of independent resources to meet load in 2004 and beyond, the IRP calls for the Company to initiate a Request for Proposals (RFP) to purchase energy and capacity. IPCo states that the structure of the RFP will allow for proposals that include diverse and innovative generation technologies. The results of the RFP will be compared to the estimated costs of an IPCo constructed SCCT resource.

The IRP states that the Company plans to acquire the generation output of a resource equivalent to a 250 MW SCCT during the months of energy deficiency beginning in 2004. Therefore, the actual resource acquisition will be through the RFP, with the Company-

built SCCT strategy serving as a benchmark to assist in the review and ranking of the RFP bid proposals.

# The Two-Year Action Plan

From the results of its IRP analysis, the Company proposes a two-year action plan that consists of the following specific items:

- 1. Purchase capacity and energy from the Northwest power market as needed to meet system load through 2003.
- 2. Initiate a Request for Proposals to purchase energy and capacity in 2004 and beyond.
- 3. Support the Company's hydroelectric relicensing process.
- 4. Consistent with FERC Order 2000, participate in Regional Transmission Organization discussions to ensure equitable access and efficient operation of the regional power grid.
- 5. Continue to participate in regional conservation through support of the Northwest Energy Efficiency Alliance and continue the Company's public purpose (*Low Income Weatherization*) and Oregon conservation programs (*Commercial Audit and Residential Weatherization*).
- 6. Investigate the potential for deployment of cost-effective distributed generation resources.

## PARTY COMMENTS

#### **Commission Staff**

In preparation of its final 2000 IRP, the Company, on March 17, 2000, provided Staff with a draft IRP. Staff reviewed the draft plan and provided its initial written comments to IPCo on April 6, 2000. The initial comments primarily discussed Staff's recommendation that IPCo consider adding a discussion of distributed resources to its 2000 IRP. Staff also indicated it needed additional time to conduct its review and that more thorough comments would be provided by the end of April. On April 26, 2000, Staff provided more detailed written comments to IPCo.

The draft IRP did not discuss distributed resources. Staff's initial comments suggested that the investigation and development of distributed resources may be of value to IPCo. Staff commented that distributed resources offer the potential of helping to relieve IRP identified transmission and distribution constraints, while also providing load management

opportunities. Staff also noted that one of the Oregon Commission's agency objectives for 2000 is to: Ensure that utility planning activities and electric industry restructuring rules encourage the deployment of cost-effective distributed generation. Therefore, Staff recommended that the IRP process would be an appropriate forum in which to evaluate the potential benefits of distributed resources for IPCo's system.

In its April 26, 2000, comments, Staff requested an expanded discussion of the Company's demand-side management programs and hydroelectric relicensing activities. In addition, Staff made several editorial suggestions and requested better explanations and/or clarifications of several issues discussed in the plan, including load growth, generating technologies, and societal costs.

On June 1, 2000, IPCo provided a written response to Staff's comments. This document contained revisions to the IRP which were intended to address issues noted in the Staff comments. On June 5, 2000, IPCo representatives met with Staff to further discuss and clarify revisions to the draft IRP. The final plan, as filed on June 30, 2000, addresses Staff's written comments.

On September 15, 2000, Staff provided written comments on IPCo's final IRP. In these comments Staff requested that IPCo keep the OPUC current on the Company's investigation of distributed generation resources. Staff also requested an update on the status and progress of the Company's RFP. Finally, Staff asked if the recent high prices and volatility in the wholesale market for electricity have caused IPCo to revisit its IRP determination to meet expected load growth to 2004 with market purchases.

On October 2, 2000, the Company provided a written response to Staff's comments. IPCo agreed to keep Staff fully apprised of its ongoing analysis of distributed resources. The Company indicated its intention to make periodic reports to OPUC and IPUC Staff regarding IPCo's efforts to develop distributed resources.

IPCo provided the following schedule of events for its RFP process and agreed to keep OPUC and IPUC Staff updated on an ongoing basis.

RFP Issue Date	August 4, 2000
Pre-Bid Meeting	August 18, 2000
Notice of Intent to Bid Due	August 25, 2000
Proposals Due	September 29, 2000
Short-List Determination	October 20, 2000
Complete Negotiations	December 29, 2000
Final Contract(s)	January 12, 2001
Commence Power Deliveries	June 1, 2004

Finally, the Company indicated that it is taking several actions to mitigate the potential impacts of higher than expected wholesale spot market prices. First, IPCo states that it will continue to use forward contracts as a means to hedge the risk of high wholesale spot market prices. In addition, the Company states that it has entered into a residential exchange program

contract with BPA to obtain 120 MW of relatively low cost supply beginning in 2002. the Company is also working with its large industrial customers to develop a mechanism for acquiring additional resources in the form of load reductions.

At the Commission's November 21, 2000, public meeting, Staff recommended the acknowledgment of the Plan, with the following reporting requirements:

- 1. The Company make periodic reports to the OPUC regarding its efforts to develop distributed resources.
- 2. Throughout the entire RFP process, the Company should keep OPUC Staff updated on an ongoing basis.

# **Public Comment**

No written comments were received from the public.

## **OPINION**

## Jurisdiction

IPCo is a public utility in Oregon, as defined by ORS 757.005, which provides electric service to or for the public.

On April 20, 1989, pursuant to its authority under ORS 756.515, the Commission issued Order No. 89-507 in Docket UM 180 adopting least-cost planning for all energy utilities in Oregon.

# **Requirements for Least-Cost Planning Under Order No. 89-507**

Order No. 89-507 establishes procedural and substantive requirements for leastcost planning and provides for the Commission's acknowledgment of plans that meet the requirements of the order.

<u>Procedural Requirements</u>: At a minimum, the least-cost planning process must involve the Commission and public prior to making resource decisions rather than after the fact. *See* Order No. 89-507 at 3.

<u>Substantive Requirements</u>: The substantive requirements were set forth in Order No. 89-507 as follows:

- 1. All resources must be evaluated on a consistent and comparable basis.
- 2. Uncertainty must be considered.
- 3. The primary goal must be least cost to the utility and its ratepayers consistent with the long-run public interest.
- 4. The plan must be consistent with the energy policy of the state of Oregon as expressed in ORS 469.010.

Based on its review, Staff determined that IPCo's 2000 IRP is in adherence to the Commission's least-cost planning principles. The Plan examined the Company's future resource needs, investigated resource options, and, recognizing industry and market uncertainty, developed a flexible strategy to meet expected system demand for electricity.

Finally, Staff noted that the Commission's least-cost planning order encourages cooperation and coordination with other states that also have an interest in a utility's resource planning process. In this regard, the Staffs of both the IPUC and OPUC support IPCo's investigation of distributed resources. In addition, both Staffs believe that the issuance of an RFP seeking proposals for energy and capacity in 2004 is an appropriate action.

### **Commission Findings**

Staff recommends acknowledgment of IPCo's 2000 IRP, with reporting requirements regarding the Company's investigation of distributed resources and RFP process. We understand that IPCo concurs with the Staff's reporting requirements. The Commission agrees that IPCo should report on an ongoing basis to the OPUC regarding the status of its distributed resources investigation and RFP process.

### EFFECT OF THE PLAN ON FUTURE RATE-MAKING ACTIONS

Order No. 89-507 sets forth the Commission's role in reviewing and acknowledging a utility's least-cost plan, as follows:

The establishment of least-cost planning in Oregon is not intended to alter the basic roles of the Commission and the utility in the regulatory process. The Commission does not intend to usurp the role of utility decisionmaker. Utility management will retain full responsibility for making decisions and for accepting the consequences of the decisions. Thus, the utilities will retain their autonomy while having the benefit of the information and opinion contributed by the public and the Commission.

Plans submitted by utilities will be reviewed by the Commission for adherence to the principles enunciated in this order and any supplemental orders. If further work on a plan is needed, the Commission will return it to the utility with comments. This process should eventually lead to acknowledgment of the plan.

Acknowledgment of a plan means only that the plan seems reasonable to the Commission at the time the acknowledgment is given. As is noted elsewhere in this order, favorable rate-making treatment is not guaranteed by acknowledgment of a plan. Order No. 89-507 at 6 and 11.

This order does not constitute a determination on the rate-making treatment of any resource acquisitions or other expenditures undertaken pursuant to IPCo's 2000 IRP. As a legal matter, the Commission must reserve judgment on all rate-making issues. Notwithstanding these legal requirements, we consider the least-cost planning process to complement the rate-making process. In rate-making proceedings in which the reasonableness of resource acquisitions is considered, the Commission will give considerable weight to utility actions which are consistent with acknowledged least-cost plans. Utilities will also be expected to explain actions they take which may be inconsistent with Commission-acknowledged plans.

#### Conclusion

IPCo's 2000 IRP is acknowledged with the recommendations adopted in this Order. The plan meets both the procedural and substantive requirements of Order No. 89-507. Achievement of the objectives in the Company's 2000-2002 Action Plan will contribute meaningfully toward the development of future integrated least-cost planning efforts and acquisition of least-cost resources.

## ORDER

IT IS ORDERED that the 2000 Integrated Resource Plan filed by Idaho Power Company on June 30, 2000, is acknowledged in accordance with the terms of this order and Order No. 89-507.

Made, entered, and effective\_\_\_\_\_\_.

**Ron Eachus** 

Chairman

**Roger Hamilton** 

Commissioner

Joan H. Smith

Commissioner

A party may request rehearing or reconsideration of this order pursuant to ORS 756.561. A request for rehearing or reconsideration must be filed with the Commission within 60 days of the date of service of this order. The request must comply with the requirements in OAR 860-014-0095. A copy of any such request must also be served on each party to the proceeding as provided by OAR 860-013-0070(2). A party may appeal this order to a court pursuant to applicable law.