

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

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Chair  
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In the Matter of Otter Tail Power Company's  
2003 Resource Plan

ISSUE DATE: May 29, 2003

DOCKET NO. E-017/RP-02-1168

ORDER ACCEPTING 2003 INTEGRATED  
RESOURCE PLAN, VARYING THE NEXT  
RESOURCE PLAN FILING DATE, AND  
REQUIRING INTERIM FILING

**PROCEDURAL HISTORY**

On July 1, 2002, Otter Tail Power Company (Otter Tail or the Company) filed its proposed Resource Plan covering the period 2003-2017, pursuant to Minnesota Statutes § 216B.2422 and Minnesota Rules Chapter 7843. On August 6, 2002, the Minnesota Department of Commerce (the Department) recommended finding the plan substantially complete.

By November 1, 2002, the Commission had received comments from Department and the Izaak Walton League of America (the IWLA).

On November 6, 2002, Otter Tail filed corrections to its July 1 plan.

On December 27, 2002, the Department filed reply comments.

On December 31, 2002, Otter Tail filed responses to the Department; Otter Tail filed responses to the IWLA on January 15, 2003.

The Commission met to consider the matter on March 20, 2003.

**FINDINGS AND CONCLUSIONS**

**I. Legal Standard**

**A. Jurisdiction**

The Commission has jurisdiction over this matter pursuant to Minnesota Statutes § 216B.2422 and Minnesota Rules parts 7843.0100 to 7843.0600.

## **B. Resource Planning**

In an effort to provide the electricity demanded by its customers, an electric utility considers both supply and demand. The utility can supply electricity through a combination of generation and power purchases. The utility can also manage its customers' demand by encouraging customers to conserve electricity, or to shift activities requiring electricity to periods when there is less demand on the electric system.

A resource plan contains a set of demand-side and supply-side resource options that the utility could use to meet the needs of its customers throughout the forecast period. Minn. Stat. § 216B.2422, subd. 1(d). In an "integrated" resource plan (IRP), a utility considers both the supply-side resources and the demand-side resources together, on an equivalent basis. Through the process of creating an IRP, a utility can identify the least expensive reliable combination of supply-side and demand-side resources that will meet the utility's requirements, consistent with state and federal law and public policy.

Generally, the resource planning statute and rules direct a utility to file biennial reports on (1) the projected energy needs of its service areas over the next 15 years; (2) its plans for meeting projected need; (3) the analytical process used to develop its plans for meeting projected need; and (4) the reasons for adopting the specific resource mix proposed to meet the projected need. These requirements are designed to ensure that utilities making resource decisions give adequate consideration to factors whose public policy importance has grown in recent years, such as the environmental and socioeconomic effect of different resource mixes. The process is designed to encourage participation from the public, other regulatory agencies and the Commission. The Commission must approve, reject or modify the proposed IRP, consistent with the public interest. Minn. Stat. § 216B.2422, subd. 2.

## **II. Otter Tail's Resource Plan**

### **A. Forecasting**

An electric utility must anticipate the amount of electrical energy its customers will demand over time, and how much capacity it will need to generate and deliver adequate electricity to meet the demand at any given point in time.

Otter Tail serves communities and rural areas in Minnesota, eastern North Dakota and northeastern South Dakota. The Company's service area is dominated by an agricultural economy. Many communities served by Otter Tail have had flat or declining populations for decades.

Unlike most of Minnesota's electric utilities, demand for electricity in Otter Tail's service area is highest in the winter. Including generating facilities, power purchases, and load management capability, Otter Tail has roughly 922.2 MW of dispatchable winter resources and 814.6 MW of dispatchable summer resources. Otter Tail projects that demand in 2003 would reach 694 MW in the winter and 604 MW in the summer in the absence of load control measures.

To prepare its 2003-2017 resource plan filing, Otter Tail used the SHAPES-II software to forecast the amount of energy customers will demand, and the amount of capacity Otter Tail will need to meet that demand. These total system forecasts are based on forecasts regarding the energy and

demand for specific uses, such as residential space heating and cooling. Other Tail then inputs these forecasts into the IRP Manager program, which is intended to identify the most cost-effective supply-side and demand-side alternatives necessary to meet the forecasted demand. Due to limitations in the IRP Manager program, however, Otter Tail regards its recommendations as preliminary and considers additional scenarios before making a final resource plan recommendation. This matter is discussed further under the heading of “Integration,” below.

The Department renews the criticism it has previously made of Otter Tail’s forecasting methods. The Department complains that the software is not well documented, providing little rationale for certain steps, and that the process may treat data inconsistently. Nevertheless, the Department finds sufficient basis to accept Otter Tail’s claim that no additional capacity will be required before 2010. Consequently, the Department concludes that Otter Tail’s forecasts are adequate for present purposes and recommends that the Commission accept them. But for its next resource plan, the Department recommends that Otter Tail improve its method for forecasting energy and demand.

No party opposed the Department’s recommendations. To the contrary, Otter Tail agreed to adopt a new method for forecasting energy and demand for its next resource plan, and intends to consult with the Department in implementing the new method.

Based on the foregoing discussion, the Commission finds the Department’s recommendations reasonable and will adopt them. The Commission will accept Otter Tail’s forecasts of energy and demand in its current resource plan, but will direct the Company to adopt a new method for generating such forecasts in the future.

## **B. Demand-Side Resources**

### **1. Overview**

Electric utilities incur costs for generating or otherwise acquiring electricity, transmitting the electricity (typically over relatively long distances at high voltages) to regional substations, and distributing electricity (typically over relatively short distances at low voltages) to where it is demanded. These costs tend to increase as the demand for electricity increases. In large part, the value of demand-side management derives from the ability to avoid the cost of acquiring, transmitting and distributing electricity.

Otter Tail operates an extensive radio-controlled load management system that is used to control annual peak demands and reduce the need for new generating capacity. Managed loads include water heaters, thermal storage units, residential and commercial demand controllers, and dual-fuel heating systems. The Company has the capacity to control about 13 percent of the highest load that would occur during winter peak periods if loads were not managed.

At the Commission's direction,<sup>1</sup> Otter Tail conducted a study to identify potentially cost-effective demand-side resources. The study focused on major commercial and industrial energy uses that Otter Tail thought it might be able to influence: air compressors, cooking, interior lighting, motors and adjustable speed drives, space heating/cooling and refrigeration, and vending machines. The Company evaluated the cost-effectiveness of its programs under three different scenarios:

1) maintaining the current level of incentive for participating in such programs, 2) doubling the incentives for participation, and 3) eliminating the incentives. The Company then estimated the amount of customer demand the Company could cost-effectively avoid through demand-side management programs.

The Company then "integrated" the results of this study into its resource planning by simply subtracting the avoided demand from the estimated total system demand, and using the adjusted system demand as the starting point for selecting supply-side resources.

While the Department raised a number of questions about Otter Tail's demand-side analysis, its chief concern regarded how the analysis was integrated into the larger resource plan. This matter is addressed under the heading of "Integration," below.

## **2. Consideration of distribution costs**

The Department notes – and Otter Tail acknowledges – that the Company did not consider avoided distribution costs when evaluating the value of demand-side management programs. The Department does not recommend any remedial action for the current plan; adjusting for distribution costs probably would not cause the Company to implement any different demand-side management programs before its next plan filing. But the Department recommends that Otter Tail take account of distribution costs in future resource plans. Otter Tail agrees to this proposal.

The Commission finds the Department's recommendation reasonable and will adopt it. The Commission will direct Otter Tail to consider avoided distribution costs when evaluating potential demand-side management resources for its next resource plan.

## **C. Supply-Side Resources**

### **1. Existing generators**

Otter Tail generates electricity from coal, dams ("hydro"), diesel fuel and natural gas. Otter Tail has three main coal-fired generating plants. It owns 100% of the Hoot Lake Plant, consisting of three units with a combined generating capacity of 155.5 megawatts (MW). It owns 53.9% of the Big Stone Plant, generating about 254.7 MW in winter and 245.5 MW in summer. And it owns 35% of the Coyote Plant, generating about 149.5 MW. The Company's six hydro units generate about 4.1 MW. Finally, the Company has several diesel and combustion turbine peaking facilities which it operates for only a few hours each year.

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<sup>1</sup> Docket No. E-017/RP-99-909 ORDER ACCEPTING 1999 INTEGRATED RESOURCE PLAN, VARYING THE NEXT RESOURCE PLAN FILING DATE, ORDERING CONTINUING DISCUSSIONS AND A STUDY OF GREEN PRICING PROGRAMS BY JULY 1, 2001 (March 14, 2000).

Otter Tail proposes to extend the retirement dates of two Hoot Lake units, but to retire the third unit in 2005. Otter Tail observes that, among other things, it can purchase replacement power more cheaply than it can run the unit it proposes to retire.

The Department argues that the rationale underlying decisions of this magnitude should be set forth in greater detail. Among other things, the Department recommends that Otter Tail analyze how pending environmental initiatives will influence the availability of its coal-fired plants. This matter is addressed further in the discussion of “Environmental Issues,” below.

## **2. Potential generators**

### **a. Pre-screening**

In its resource plan, Otter Tail reports having considered acquiring additional supply-side resources using solar power, fuel cells, microturbines, biomass, natural gas from landfills, natural gas from animal waste (“anaerobic digesters”), hydro power, and “pumped storage” whereby water is pumped uphill during periods of low electric demand and then run through a turbine during periods of high demand. But Otter Tail ultimately excludes all these options after an initial “pre-screening” phase.

The Department concludes that the record does not supply sufficient information to evaluate Otter Tail’s pre-screening process. Since Otter Tail does not project a need for additional electric supply before 2010, the Department does not see a need for Otter Tail to clarify this situation immediately. But the Department recommends that in its next resource plan, Otter Tail should provide a more detailed description of its pre-screening procedure, including the rationale for rejecting any of the considered resource options. Otter Tail agrees to this recommendation.

The Commission finds the Department’s recommendation reasonable and will adopt it. The Commission will direct Otter Tail to include in its next resource plan a more detailed description of its pre-screening procedure and the rationale for rejecting any considered resource option

### **b. Big Stone Plant site**

The IWLA alleges that Otter Tail has recently studied adding another generator at the Big Stone Plant site, but notes that Otter Tail makes no mention of this in its resource plan. The IWLA asked Otter Tail to address the status of these past plans and the prospects for building an additional generator by 2017, the end of the current planning horizon.

Otter Tail acknowledges that it continues to pursue development of a second generator at the Big Stone site, perhaps as an unregulated independent power producer separate from its regulated utility business. The Department observed that Otter Tail’s demand forecast does not, by itself, support the construction of a large new generator in the near future.

No party has asked that approval of the Company’s current resource plan depend upon a resolution of this matter. The Commission will direct Otter Tail to include in its next resource plan a status report on the development of any additional generators at the Big Stone Plant site.

### **c. Wind power**

Otter Tail acknowledges that wind-powered generation is a mature technology that produces no emissions, could displace the need for other fuels, and could help Otter Tail meet the state's renewable energy objectives (discussed below) and any comparable federal requirements. Otter Tail further acknowledges that sufficient wind exists within Otter Tail's service area to make a wind-powered generator operational, that wind power is the most cost-effective strategy for Otter Tail to pursue under some scenarios; and that Otter Tail is negotiating with a developer to build a wind turbine. But Otter Tail does not include wind power in its preferred resource plan.

The IWLA questions this outcome. The IWLA acknowledges that wind power looks less favorable under some scenarios than others, but argues that this is true of any source of new generation, including the generation that the Company included in its preferred plan. The IWLA dismisses concerns that an excessive reliance on an intermittent power such as wind would make Otter Tail's system unreliable, arguing that wind forecasts are becoming ever more reliable and that wind's variability is no greater than other types of variability that an electric system must accommodate. And the IWLA argues that the Federal Energy Regulatory Commission (FERC) will have implemented its system for pricing transmission capacity by 2017, permitting intermittent resources such as wind power to participate fully in competitive energy markets.

The IWLA estimates that 60 MW of wind-powered generating capacity would permit Otter Tail could meet its Renewable Energy Objective by 2015. Since 2015 is within the Resource Plan's planning horizon, the IWLA proposes that the Commission direct Otter Tail to acquire 60 MW of wind-powered generation.

Otter Tail asks the Commission to reject this proposal. Both the Company and the Department note that the Company's analysis does not indicate that the construction of a 60 MW wind-powered generator would be cost-effective at this time.

Moreover, Otter Tail explained that 60 MW of wind would not be sufficient to permit the Company to fulfill its Renewable Energy Objective. Otter Tail operates in three states, and any generating capacity it built would be allocated among those states. Otter Tail says that it would need to build a 120-MW generator, or obtain regulatory approval to change its allocators, before it could fulfill Minnesota's Renewable Energy Objective.

In opposing the IWLA's proposal, Otter Tail emphasizes that it has not foreclosed the option of acquiring wind-powered generation. Otter Tail does not forecast the need for more generation until 2010; that is sufficiently far into the future to permit Otter Tail to continue considering wind-powered generators among other alternatives. Otter Tail also continues to explore ways to make smaller wind-powered generators a cost-effective addition to its resource mix. In support of these claims, at hearing Otter Tail shared proprietary information that indicated how close a wind-powered generator was to demonstrating cost-effectiveness.

The Commission will decline to grant the IWLA's proposal. The fact that wind power appears promising under certain assumptions is not a sufficient basis for rejecting the Company's preferred plan. The Commission must consider the whole range of assumptions. And when the whole range of assumptions are considered, the analysis tends to favor a plan that does not include wind power.

That being said, the Commission acknowledges the various advantages that wind-powered generation can provide, and finds the Company's cost data promising. The Commission will therefore encourage Otter Tail to pursue cost-effective wind energy projects, and to provide an update in its next resource plan filing or earlier if significant change occurs.

## **D. Transmission**

### **1. Generally**

As part of its resource plan, Otter Tail attempts to minimize transmission costs by, for example, locating generators where they will require the least additional transmission facilities. The Department concludes that the Company's transmission planning process is adequate.

### **2. Relationship to independent system operator**

In 1996, the FERC issued Order No. 888.<sup>2</sup> That order requires a transmission-owning utility to make its transmission system available for use by others who might want to transmit electricity, and to provide access on terms that are no less favorable than the utility provides to its own generators. FERC suggested that one way to ensure the efficient, non-discriminatory management of the transmission grid was for transmission owners to have their transmission grid jointly managed by an independent system operator.

Otter Tail owns transmission facilities, and therefore is subject to the requirements of Order No. 888. On May 9, 2002, the Commission gave conditional authority to Otter Tail to transfer operating control of certain transmission facilities to the Midwest Independent System Operator (MISO).<sup>3</sup>

The Department recommends that Otter Tail provide a report on its status with an independent transmission system operator, including a discussion of its effect on the Company's transmission planning process, in its next resource plan. Otter Tail agrees.

The Commission finds the Department's recommendation reasonable and will adopt it. The Commission will direct Otter Tail to include in its next resource plan a report on its status with an independent system operator, including its effects on the Company's transmission planning process.

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<sup>2</sup> *Promoting Wholesale Competition Through Open Access Non-discriminatory Transmission Services by Public Utilities and Recovery of Stranded Costs by Public Utilities and Transmission Utilities*, 61 Fed. Reg. 21,540 (May 10, 1996), FERC Statutes and Regulations, Regulations Preambles January 1991 - June 1996 ¶ 31,036 (1996).

<sup>3</sup> *In the Matter of Otter Tail Power Company's Petition for Approval of Transfer of Operational Control of Transmission Facilities to the Midwest Independent System Operator*, Docket No. E-017/PA-01-1391 ORDER AUTHORIZING TRANSFER WITH CONDITIONS (May 9, 2002).

## **E. Environmental Issues**

### **1. Emissions control**

#### **a. Financial support**

Minnesota Statute § 216B.1692 permits an investor-owned utility in the state to pursue certain projects designed to reduce emissions and to recover those costs from ratepayers without undergoing a general rate case. The IWLA asks that Otter Tail explore the feasibility of emissions reduction projects at its Hoot Lake Plant Unit 3 generator, given the financial advantages provided by this statute.

Both the Company and the Department argue that the IWLA's request is not germane to the current docket because the financial feasibility of an emissions reduction project is unrelated to resource planning generally. And since Otter Tail serves customers in three states, Otter Tail notes that only a fraction of the cost of an emissions reduction project would be allocated to Minnesota, limiting the amount of cost recovery § 216B.1692 would provide for such a project.

The record of this case is not adequate to support requiring the Company to pursue an emissions reduction project. Nevertheless, the issue is relevant to this docket. While emissions reductions are not directly tied to resource planning, § 216B.1692 could influence a utility to modify a generator, which would necessarily alter the generation options available to that utility. Consequently, the Commission will direct Otter Tail to discuss in its next resource plan whether the Company has undertaken an evaluation of potential emission reduction projects at its Hoot Lake Plant Unit 3 that would qualify under § 216B.1692.

#### **b. Pending laws**

Otter Tail's plan discusses generally the pending federal legislation and regulations to control various emissions from power plants, including –

- the Environmental Protection Agency's New Source Review Program, designed to encourage pollution prevention projects, energy efficiency improvements, and investments in new technologies and modernization of facilities,
- the Bush Administration's Clear Skies Initiative, and
- emissions control legislation proposed by U.S. Senator Jim Jeffords.

The IWLA asks that Otter Tail further describe its plans to comply with these anticipated requirements. The IWLA proposes that Otter Tail make such a filing within 60 days of this Order.

The Company and the Department oppose this request. They argue that, given the number of proposals and the nature of the legislative and regulatory processes, such a plan would be pure speculation. But Otter Tail offers to make such a filing as part of its next resource plan; the Department supports this suggestion. In addition, the Department recommends that Otter Tail address how environmental initiatives influence the availability of its coal-fired plants throughout the planning period of its next resource plan.

The Commission agrees that the outcome of current efforts to adopt new controls on power plant emissions are simply unforeseeable at this stage. Consequently, any effort by Otter Tail to develop plans today for dealing with such controls would be unlikely to provide much value. Instead, the Commission will accept the Company's offer to incorporate those plans into its next resource plan filing. Presumably the legislative and regulatory processes will have progressed by then.

In addition, the Commission finds the Department's recommendation about Otter Tail's coal-fired plants reasonable and will adopt it. The Commission will direct Otter Tail to include in its next resource plan a report on how environmental initiatives influence the availability of its coal-fired plants throughout the planning period.

### **c. Haze**

The federal Environmental Protection Agency regulates emissions that might contribute to haze in "Class I" national parks and wilderness areas such as the Boundary Waters Canoe Area Wilderness and Voyageurs National Park. Certain sources of emissions may be asked to install best available retrofit technology (BART) to reduce their emissions by no later than 2013. Resource Plan at 12-6. Otter Tail notes that the rules implementing the EPA's policies are still under development, and the decision whether or not to install BART will be made on a plant-by-plant basis. But Otter Tail states that its "two BART eligible sources, Hoot Lake Plant unit 3 and Big Stone Plant, are both located a considerable distance [more than 300 kilometers] from any Class I area and are not likely to have a significant impact on those areas." Resource Plan at 12-7.

The IWLA questions the basis for the assertion about the impact of its plants on Class I areas. The IWLA notes that the Company's Hoot Lake Plant Unit 3 is located west and south of the Boundary Waters Canoe Area Wilderness and Voyageurs National Park. The Department joins the IWLA in seeking further analysis of this issue.

Given the potential cost of installing BART, and the potential effect of this cost on Otter Tail's decisions, the Commission sees merit in further analyzing Otter Tail's claim. The Commission finds the recommendations of the Department and the IWLA reasonable. The Commission will direct the Company to include in its next resources plan a more detailed analysis of the effects of the Hoot Lake Plant Unit 3 and the Big Stone Plant on the Class I areas of the Boundary Waters Canoe Area Wilderness and Voyageurs National Park.

## **2. Fuels**

### **a. Objectives**

Minnesota Statute § 216B.1691 encourages a Minnesota electric utility to meet various targets for buying or generating electricity from eligible energy technologies powered by the sun, the wind, hydropower or biomass. By 2005, a utility should buy or generate from eligible technologies at least 1% of the energy demanded by its retail customers. Each year, the utility should buy or generate an additional percent of power from these technologies until 2015, when the utility would be buying or generating 10% of its retail customers' needs through such technologies. The statute also encourages a Minnesota electric utility to provide 0.5% of its renewable energy objectives through biomass by 2010, and 1% by 2015.

Otter Tail states that it expects to meet the energy targets through 2006, and all the biomass objectives. The Department commends Otter Tail for adding renewable energy projects to its portfolio of supply options, and encourages them to continue these efforts. But the IWLA complained that it could not evaluate the Company's claims for fulfilling energy targets because the resource plan does not provide sufficiently detailed information. Otter Tail subsequently provided additional information to help the analysis.

The Commission's review of resource plans is enhanced by the analyses contributed by the Department and other interested parties. Of course, these analyses are more helpful when the interested parties have access to relevant information. Therefore the Commission will direct Otter Tail to continue working with interested parties in demonstrating compliance with § 216B.1691 and to report on its progress toward meeting the statutory objectives in its next resource plan.

Finally, the Commission appreciates Otter Tail's pursuit of cost-effective renewable energy projects and will direct the Company to continue these efforts in preparing its next resource plan.

#### **b. Renewable fuels generally**

As noted above, Otter Tail projects that it will meet § 216B.1691's energy objectives through 2006. But the IWLA complained that it could not evaluate these claims because the resource plan does not identify the energy sources that Otter Tail relies on to meet these targets. To verify Otter Tail's plans for meeting the statute's energy objectives, the IWLA asked Otter Tail to identify the relevant generating resources, the location of each resource, and the amount of energy produced by each resource. Otter Tail attempted to respond to the IWLA's request in its reply comments.

The Commission finds this information useful. Consequently, the Commission will direct Otter Tail to update this information in its next resource plan, identifying the generating resources, locations of resources and amount of electricity produced by each generating unit that Otter Tail intends to use to achieve the renewable energy objectives.

#### **c. Biomass**

As noted above, Otter Tail states that it expects to meet § 216B.1691's biomass targets. Otter Tail also acknowledges the possibility of increasing its use of renewable resource fuels (also known as renewable resource materials) at its Big Stone Plant.

The IWLA notes that the biomass statutory objectives pertain to the amount of energy produced from biomass, not the number of tons of biomass consumed. To support the claim that it will be able to fulfill the biomass mandate, therefore, Otter Tail must be able to quantify the energy yielded by various kinds of biomass. The IWLA asked Otter Tail to –

- clarify whether Otter Tail counts the renewable resource fuels used at the Big Stone Plant as contributing to its fulfillment of the statutory biomass objective,
- identify the content of these fuels, and
- identify the amount of energy generated through each type of renewable resource fuel.

In response, Otter Tail states that its renewable resource fuels consist of corn, soybeans, canola, sorghum, sunflowers, ground feed and wood waste, and estimates the amount of energy it will derive from each fuel. And Otter Tail affirms that it does intend to count these renewable resource fuels as contributing to its fulfillment of the biomass objective.

The Commission finds this information helpful to its understanding of Otter Tail's supply resources, and appreciates Otter Tail's cooperation in this analysis. The Commission will direct Otter Tail to update this information in its next resource plan.

#### **d. Alternative fuels**

Otter Tail reports using a variety of alternative fuels at its Big Stone Plant, including fuels derived from tires and waste toner. While Otter Tail currently consumes 44,600 tons of alternative fuels annually, it states that it could consume more than 100,000 tons annually.

The IWLA is concerned about the environmental effects of burning such a large amount of alternative fuels. The IWLA asks that Otter Tail examine these effects if alternative fuels are used to help meet Otter Tail's renewable energy objective pursuant to Minnesota Statutes § 216B.1691. Otter Tail opposes this proposal, noting that these fuels are already subject to review by the South Dakota Department of Environmental and Natural Resources.

The Commission finds merit in the IWLA's concerns. The Commission has not seen any review of the effects of these alternative fuels. If Otter Tail is already conducting similar analyses for the benefit of South Dakota, then Otter Tail should be able to provide the Commission with a discussion of how a significant increase in the use of these fuels would affect the environment. The Commission will direct Otter Tail to include such a discussion in its next resource plan if Otter Tail proposes to use alternative fuels at its Big Stone Plant to meet its renewable energy objectives.

### **F. Integration**

#### **1. Generally**

A general goal of resource planning is to identify the least expensive reliable combination of supply-side and demand-side resources that will meet a utility's requirements, consistent with law and public policy. To do this, a utility must consider demand-side and supply-side resources on an equivalent basis.

But, as noted in the discussion of demand-side resources, Otter Tail analyzes potential demand-side resource options separately from potential supply-side options. As a result, the Department argues, the Company cannot truly claim to select its demand- and supply-side resources simultaneously on an equal basis. The Department notes that other utilities have had similar difficulties getting their computer models to perform this type of analysis. The Department proposes no remedial actions for purposes of the current resource plan, but recommends that Otter Tail fix the problem for its next plan.

Otter Tail acknowledges the problem identified by the Department and states that it is investigating other resource models. The Company proposes to work with the Department to address these concerns once a new model is selected.

The Commission appreciates Otter Tail's cooperation in this matter. The Commission finds the Department's recommendation reasonable and will adopt it. The Commission will direct Otter Tail to implement for its next resource plan a method for treating demand- and supply-side resources on an equal footing. Also, given the complexity of this matter, the Commission will direct Otter Tail to make an interim report detailing its progress in modeling demand- and supply-side resources together.

## **2. Conservation Improvement Program mandate**

Again, the goal of resource planning is to identify the least expensive reliable combination of supply-side and demand-side resources that will meet a utility's requirements, consistent with law and public policy. Generally this requires considering demand- and supply-side resources on an equivalent basis.

But Minnesota Statutes § 216B.241, subdivision 1a, requires a public utility to make a certain minimum level of investment in demand-side management resources called energy conservation improvement programs (or CIP). Consequently, a public utility in Minnesota would want to select its preferred resource plan from among the set of plans that fulfilled this requirement, even if it is not the least-cost plan.

The Department questions whether Otter Tail's preferred resource plan would produce the required levels of CIP investments, and recommends that the Company be sure that its next resource plan fulfills this statutory mandate. In response, Otter Tail claimed that its preferred plan would produce the necessary investments, but acknowledged that the data it had provided had failed to reflect all of its anticipated CIP costs. The Company filed revised data, and agreed to ensure that its next resource plan would fulfill the statutory mandate.

The Commission accepts Otter Tail's offer and will direct the Company to select its next resource plan from among the set of resource plans that fulfill the minimum investment requirements of Minnesota Statutes § 216B.241, subdivision 1a.

## **III. Commission Action**

### **A. Acceptance of Otter Tail's 2002 Resource Plan**

Ultimately, the Department concludes that Otter Tail has demonstrated substantial compliance with the statutory and regulatory requirements for preparing a resource plan, and recommends that the Commission approve the plan.

The Commission finds the Department's recommendation reasonable and will adopt it. Otter Tail's resource plan meets applicable statutory and rule requirements. The Company's planning process is reasonable given its current needs, and the Company has shown improvements in its process. The Company's base plan meets the public interest criterion set forth at Minnesota Statutes § 216B.2422, subdivision 2. Consequently, the Commission will accept Otter Tail's current resource plan.

## **B. Request to Extend Next Resource Plan Filing**

Otter Tail asks to extend the filing date for its next resource plan from July 1, 2004 to July 1, 2005, and asks the Commission to vary its rules to permit this.

The Commission may vary its rules when the following three requirements are met:

- Enforcement of the rule would impose an excessive burden upon the applicant or others affected by the rule.
- Granting the variance would not adversely affect the public interest.
- Granting the variance would not conflict with standards imposed by law.

Minn. Rules part 7829.3200, subpart 1. In this case, the Commission finds that Otter Tail's request meets these requirements. Enforcement of the rule would impose an excessive burden on Otter Tail and granting the variance would not adversely affect the public interest. The resource planning process for Otter Tail consumes more than 2000 staff hours over the course of a year, and from \$20,000 to \$60,000 in Commission and Department assessments. There would be little, if any, additional benefit to customers or stakeholders from a 2004 resource plan versus a 2005 plan, considering that Otter Tail does not project the need for additional capacity before 2010 and no major resource planning issues remain unaddressed.

Further, granting the extension would not conflict with other legal standards. To the contrary, the law imposes a duty on the Company to inform the Commission if changed circumstances may significantly influence its resource plan. Minn. Rules part 7843.0500, subp. 5. This fact enhances the Commission's willingness to grant such an extension.

For these reasons the Commission will grant Otter Tail's request to extend the filing of its next resource plan until July 1, 2005.

The Commission will so order.

### **ORDER**

1. Otter Tail Power Company's 2003-2017 Resource Plan is hereby accepted.
2. Otter Tail is encouraged to pursue cost-effective wind energy in 2003-2017, and to provide an update if significant change occurs.
3. Otter Tail shall work with interested parties in demonstrating compliance with Minnesota Statutes § 216B.1691's objectives for using renewable sources of energy.
4. Otter Tail shall make an interim report detailing its progress in combining demand- and supply-side resource modeling.

5. Minnesota Rules part 7843.0300, subpart 2, is varied to make Otter Tail's next Resource Plan filing due July 1, 2005. As part of that plan, Otter Tail shall do the following:
  - A. Implement a more rigorous method for forecasting energy and demand.
  - B. Consider avoided distribution costs in the evaluation of potential demand-side management resources.
  - C. Provide a more detailed description of the Company's pre-screening procedure, including the rationale for rejecting any of the considered resource options.
  - D. Explain the status of any plans for adding an additional generator at the Big Stone Plant within the planning horizon.
  - E. Report any significant change in its pursuit of cost-effective wind-powered generation.
  - F. Report on the status of its relationship with an independent system operator and detail the effect on the Company's transmission planning process.
  - G. Discuss whether it has undertaken an evaluation of potential emission reduction projects at the Hoot Lake Plant Unit 3 that would qualify under Minnesota Statutes § 216B.1692.
  - H. Describe its plans for complying with emissions reductions laws.
  - I. Report on how environmental initiatives influence the availability of its coal-fired units throughout the planning horizon.
  - J. Provide a more detailed analysis of the Hoot Lake Plant Unit 3's and the Big Stone Plant's effects on Minnesota Class I areas of the Boundary Waters Canoe Area Wilderness and Voyageurs National Park.
  - K. Continue studying how cost-effective renewable energy projects can be added to its portfolio of supply-side resources.
  - L. Report on its progress toward meeting the renewable energy objectives of Minnesota Statutes § 216B.1691.
  - M. Identify the generating resources, location of resource, and amount of electricity produced by each generating unit that Otter Tail intends to use to meet the renewable energy objectives of Minnesota Statutes § 216B.1691.
  - N. Report whether it still intends to count the renewable resource fuels used at the Big Stone Plant as contributing to achieving the biomass objective of portion of Minnesota Statutes § 216B.1691 and, if so, the content of the fuels and the amount of electricity generated from each type of fuel.

- O. Examine the environmental impacts of significantly increasing the use of alternative fuels at the Big Stone Plant if Otter Tail plans to use the alternative fuels to meet any part of the renewable energy objectives of Minnesota Statutes § 216B.1691.
  - P. Implement a planning method that treats demand- and supply-side resources on an equal basis.
  - Q. Choose an optimal resource plan among a set of resource plans that fulfill the conservation spending requirement of Minnesota Statutes § 216B.241, subdivision 1a.
6. This Order shall become effective immediately.

BY ORDER OF THE COMMISSION

Burl W. Haar  
Executive Secretary

(S E A L)

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