

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Gregory Scott	Chair
Edward A. Garvey	Commissioner
Marshall Johnson	Commissioner
LeRoy Koppendrayer	Commissioner
Phyllis A. Reha	Commissioner

In the Matter of Great River Energy's 2001
Resource Plan

ISSUE DATE: February 8, 2002

DOCKET NO. ET-2/RP-01-160

ORDER APPROVING GREAT RIVER
ENERGY'S 2000 RESOURCE PLAN,
ACCEPTING COMMITMENTS TO
IMPROVEMENTS AND CONSULTATION,
AND ENCOURAGING CONSIDERATION
OF GREENHOUSE GAS EMISSION ISSUES

PROCEDURAL HISTORY

On February 1, 2001, Great River Energy (GRE) filed its 2001 integrated resource plan (Resource Plan).

On April 19, 2001, the Minnesota Department of Commerce (the Department) submitted a letter indicating that it found GRE's filing "significantly complete," given the applicable rules (Minn. Rules, part 7843.0400, subp. 1-4) and the Commission's Order in the last resource plan proceedings of the predecessor cooperatives, Docket No. ET-2,3/RP-98-366 and ET-7/RP-97-001.¹

On July 16, 2001, the Department and the Izaak Walton League of America (IWLA) each submitted comments on GRE's proposed Resource Plan.

On September 17, 2001, Dakota Electric Association (Dakota Electric) and GRE submitted reply comments.

The Commission met to consider this matter on December 19, 2001.

¹ Cooperative Power Associations's last resource plan was filed jointly with Dairyland Power Cooperative. United Power Association's last resource plan covered just that cooperative.

FINDINGS AND CONCLUSIONS

I. GRE'S RESOURCE PLAN

GRE is a generation and transmission cooperative formed on January 1, 1999 by the merger of United Power Association (UPA) and Cooperative Power Association (CPA). GRE is owned by the 29 member distribution cooperatives that own UPA and CPA. Through its distribution cooperatives, GRE serves about 520,000 retail accounts in Minnesota and Wisconsin.² GRE's 2000 summer peak was 1,908 megawatts (MW). UPA and CPA continue to own their respective generation and transmission facilities, but GRE manages and operates all the assets. The Cooperative expected to control about 2201.8 MW of accredited generating capacity by the summer of 2001.³ The Cooperative also controls more than 4,300 miles of transmission lines.

The first step in GRE's planning process was the development of the demand forecast. The Cooperative then compared its demand, plus a reserve margin, to its existing resources. To cover future deficiencies, GRE then evaluated its supply-side and demand-side options. From that evaluation, the Cooperative selected the preferred resources to cover projected deficiencies over the next five years and developed its short-range action plan.

II. THE DEPARTMENT'S RECOMMENDATIONS

The Department noted that the current resource plan filing was GRE's first since the new cooperative was created and that the Commission's role in GRE's planning process is advisory. Therefore, despite considerable concern over the type and scope of the Cooperative's analysis, the Department did not recommend rejection of the current resource plan. Rather, the Department recommended that the Commission advise GRE to commence a new production-cost modeling process and make other planning changes to prepare for possible future certificate of need proceedings. The Department indicated a willingness to meet with the Cooperative to discuss its analysis.

The Department included a number of specific recommendations:

1. Regarding GRE's planning approach, the Department recommended that GRE immediately start development of a production-cost model for determining its least-cost plan, including the 50 and 75 percent renewable and DSM scenarios required by Minn. Stat. § 216B.2422, subd. 2. The

² One of the distribution cooperatives is in Wisconsin.

³ GRE's capacity resources are listed in Table VI-1 on page VI-3 on the Cooperative's February 1 filing.

Department indicated that the analysis should be completed before the Cooperative files its next certificate of need or integrated resource plan filing, whichever comes first. The Department also suggested that GRE's effort be preceded by consultation with the Department.

2. Regarding GRE's energy and demand forecasting, the Department recommended that GRE develop econometric methods wherever possible to forecast energy requirements. At a minimum, the Department added, each member system should use an econometric model to estimate its energy requirements for the residential and small commercial customers.

The Department also recommended that the Commission advise GRE to discuss in detail the reasons why the Cooperative and its member systems chose an intuitive method (judgment) over an analytical statistical method. In addition, for each forecasting method chosen, the Department indicated that the Commission should require GRE to explain its rationale for doing so. The Department added that GRE should provide documentation of any intuitive methods used.

3. Regarding demand-side resources, the Department recommended that GRE perform a DSM potential assessment to determine the range of achievable DSM by member cooperatives given differing levels of incentives to customers.⁴ The Department added that GRE should use this information to set energy- and demand-savings goals for the planning period.

The Department also requested that the Commission adopt its recommendation for GRE to consider implementing, as soon as possible, the following DSM programs:

- Residential Refrigeration
- Other Energy Star Residential Appliances and Lighting
- Stand-Alone Commercial Lighting Project
- Building Recommissioning
- Commercial Building Design Assistance
- Residential and Commercial Air Conditioning Efficiency
- Ground-Source Heat Pumps
- Appliance Load Control.

The Department also indicated concern about the quality of GRE's DSM reporting. The Department pointed out that different filings with the state agencies have given differing spending and savings amounts. Accordingly, the Department recommended that the Commission advise GRE to set up an improved DSM reporting format for itself and its member cooperatives.

4. Regarding environmental issues, the Department recommended that the Commission should

⁴Using information it had available, the Department estimated that the Cooperative may be capable of 350 MW of new demand savings during the planning period just by investing its minimum-spending requirement in a cost-effective manner.

advise GRE to include in its next resource plan filing an evaluation of whether and how its SO₂ and NO_x strategies are the least-cost methods of compliance. The Department also recommended that the Commission advise GRE to include in its next resource plan filing an update on its mercury reduction goals, strategies, and achievements to date. Finally, the Department recommended that the Commission advise GRE to monitor industry-based initiatives for cutting greenhouse gas emissions and to develop a CO₂ contingency plan to see how resource mix changes can lower the cost of meeting customer demand under different forms of regulation. The Department offered to meet with GRE and other interested parties to help the Cooperative develop a contingency plan prior to the next resource plan filing date.

III. RECOMMENDATIONS OF THE IZAAK WALTON LEAGUE

IWLA's comments focused on renewable energy resources and GRE's DSM programs. IWLA indicated that its recommendations would help the Cooperative to continue providing low-cost, reliable power to its customers while minimizing the environmental impacts of electricity production. IWLA made the following recommendations:

1. IWLA recommended that the Cooperative establish a specific schedule to achieve the statutory goal of 10 percent renewable energy resources by 2015. IWLA also stated that more stringent environmental requirements will increase the necessity for GRE to pursue clean renewable resources. IWLA added that renewable resources, particularly wind additions, often are the most cost-effective resource option.
2. IWLA stated that GRE should aggressively study opportunities to add distributed generation (DG), adding that DG may provide a site-specific, cost-effective alternative to certain transmission additions.
3. IWLA offered the following examples of energy efficiency programs for the Cooperative to consider:
 - incentives for customers to install more efficient air conditioners;
 - commercial lighting programs (for both new construction and retrofits);
 - promotion of efficient compressed air equipment, motors, adjustable speed drives, and commercial cooling systems;
 - incentives for recommissioning of commercial and industrial buildings;
 - building design assistance; and
 - financing assistance, such as low-interest loans.
4. IWLA recommended that the Commission set a demand savings goal for GRE's energy-efficiency programs and suggested that 19 MW annually would be a reasonable goal over the forecast period.

IV. REPLY COMMENTS OF DAKOTA ELECTRIC ASSOCIATION

DEA responded to several of the issue areas raised by the Department and made the following recommendations:

1. DEA requested a Commission finding that standby generators provide many societal benefits in addition to savings in wholesale purchased power costs and that GRE member cooperatives should encourage their construction.
2. DEA noted that in an attachment to its comments the Department had referred to a DEA marketing program for its load management rates as apparently deceptive. The Cooperative denied that its marketing was deceptive, explained why it believed its marketing was reasonable, and asked the Commission to make a finding that the DEA example used by the Department did not constitute misleading advertising.
3. DEA asked the Commission to find that electric storage rates provide appliance end-use fuel choice for cooperative customers and promote the efficient use of generation and distribution facilities.

V. REPLY COMMENTS OF GREAT RIVER ENERGY

GRE responded to several of the statements and recommendations made by IWLA and the Department. GRE indicated that it does not agree with many of the criticisms of its plan but that it nevertheless recognizes the need to improve certain aspects of its planning process. The Cooperative continued to maintain that its market-based planning approach is appropriate and results in the lowest possible costs and rates to its member cooperatives and their retail customers.

The Cooperative proposed to include the following items in its next resource planning filing:

- a production cost model;
- an econometric forecast;
- a discussion of methods to meet the state's renewable energy objectives;
- the results of a DSM potentials study;
- long-term energy- and demand-savings goals; and
- updates on its environmental performance.

GRE noted the usefulness of production cost models for utility planning and agreed to provide one in its next resource plan filing. However, the Cooperative stated that the industry is changing and argued that many different products and resource options are no longer priced based on cost. Accordingly, the Cooperative argued that market-based price signals provide the most efficient way of choosing means of production in a market and that making choices on this basis will lead to the lowest cost to ratepayers and the greatest benefits to society. GRE added that in a cooperative

there is no conflict between the interests of the ratepayer and those of the shareholder/owner. The Cooperative concluded by stating that it will continue to perform market analyses in order to make resource addition decisions that will keep rates as low as possible.

GRE also responded to criticisms of its wind and renewable resource analysis. The Cooperative noted that a number of things have happened since it made the resource plan filing and acknowledged that incorporating the new information and objectives would possibly change the results of its analysis. GRE stated that the Department's wind comments focus too narrowly on the stated price of wind and do not recognize other costs of including wind in a resource portfolio. The Cooperative noted transmission costs and wind variability as issues that must be considered. Nevertheless, GRE noted that customer preferences and new legislative requirements provide reasons to invest in wind and that it continues to do so.⁵ The Cooperative indicated it would use then-current pricing information when it prepares its next resource plan filing.

GRE indicated its appreciation for the Department's comments on forecasting and stated that it will further develop and document its forecasts. The Cooperative noted that it will use both an econometric forecast and a residential end-use survey in preparing its next resource plan. Nevertheless, GRE indicated that judgment will play a part in the forecasting process, as members often have insights that cannot be captured in econometric models.

GRE agreed with the comments that its DSM programs require additional development and would benefit from a better understanding of the cost-effective potential for DSM in its service territory. The Cooperative also agreed that its program would benefit from more standardized data reporting by its members. GRE noted that a statutory change has established new spending and program guidelines for cooperatives. Accordingly, GRE stated that it would conduct a DSM Potential Assessment for its service territory in 2002 to help identify new measures and to facilitate the setting of demand and energy savings goals. The Cooperative added that it is creating a staff position to coordinate the collection of DSM data and the development of new conservation efforts. Finally, GRE acknowledged that several of its load-shifting and load-building programs are not energy conservation measures but defended them as effective in reducing peak demand, improving load factors, and/or reducing rates.

GRE stated that it accepted the Department's recommendations in the environmental area and agreed to provide the information requested by the Department. The Cooperative indicated that its goal is to minimize the overall cost of a resource and that environmental control strategies are a part of that cost. GRE included its 2000 Environmental Performance Report in its reply comments. Finally, the Cooperative indicated its willingness to meet with the Department and other interested parties to develop CO₂ contingency planning.

⁵ GRE noted that it was the first utility in the state to voluntarily invest in wind resources to sell to its members. The Cooperative indicated that it will expand the capacity of the Chandler wind farm and that it will purchase the output of a 21-MW wind farm to be completed in 2003.

Regarding transmission, GRE indicated that it strives continuously to make improvements to the existing network to increase its efficiency and life. The Cooperative noted that it is in the process of upgrading its direct current (DC) line to modernize the controls, reduce the losses, and increase the capacity by 2.5 percent.

GRE proposed to file its next resource plan in February 2003. The Cooperative indicated that it would be able at that time to complete agreed-upon studies and to include the results of other ongoing studies.

GRE concluded by requesting that the Commission accept its current resource plan, as well as the commitments it has made for its next resource plan. The Cooperative indicated its willingness to continue to work with the Department to address its concerns with various aspects of GRE's planning process.

VI. COMMISSION ANALYSIS AND ACTION

Under Minn. Stat. § 216B.2422, subd. 2, the Commission's decision in resource plan dockets of cooperatives is advisory only. That is, the Commission cannot direct GRE in resource plan proceedings to select or avoid any specific resource options or to reject the resource plan as a whole. However, the Cooperative does have a filing requirement. As a result, the Commission does have the statutory authority to impose reasonable information filing requirements.

A. Acceptance of the Plan

Having reviewed GRE's filings and the comments of all parties, the Commission will accept the instant resource plan and the demand forecasts contained therein. The Commission recognizes that this is the first resource plan prepared since the merger of the two predecessor cooperatives and finds it an acceptable effort.

The Commission will not find, as urged by the Department, that this resource plan is insufficient to justify approval in a future certificate of need proceeding. The Commission is disinclined to make a declarative statement on the adequacy of an analytical framework for a future certificate of need proceeding since such a proceeding could be quite far in the future and there could be persuasive reasons for granting a certificate of need that do not follow directly from the results of a production cost model. The Commission is certain, however, that the Cooperative understands that the Department, which would be a key participant in any future certificate of need proceedings, has indicated it would deem the analysis provide by the Cooperative in this resource plan insufficient to justify approval in a future certificate of need proceeding.

B. Analytical Process Changes and Items to be Included in the GRE's Next Resource Plan

While the Commission could further explore details of specific issues, GRE has indicated its intent to undertake additional studies and analytical processes before preparing its next resource plan.

Further, the Cooperative has indicated that the resources selected for future implementation are likely to change as a result of new statutory requirements and future analyses. In these circumstances, the Commission will accept the commitment of GRE in its response comments to change its analytical processes, to provide desired information in its next resource plan filing, and to interact with the Department and other parties as necessary to carry out that commitment.

C. CO₂ Concerns

One plausible contingency with far-reaching consequences is a future mandate or incentive program to reduce utility emissions of greenhouse gases. Gases in our atmosphere differ in their ability to absorb heat from the sun. Many heat-trapping “greenhouse” gases – including carbon dioxide (CO₂), methane, and nitrous oxide – occur naturally in the atmosphere, but certain human activities contribute to them. The EPA reports that burning coal produces CO₂ and nitrous oxide; mining and shipping coal also releases methane.

As concern grows that increased levels of greenhouse gases will alter the Earth’s climate, so grows the risk of a new legal need to reduce greenhouse gas emissions. The Commission is persuaded that electric utilities must begin considering this contingency to adequately protect ratepayers.⁶

In a similar proceeding regarding Minnesota Power’s Year 2000 Resource Plan, the Commission formally encouraged the Company to address various questions regarding CO₂ and other greenhouse gas emissions in its next resource plan.⁷ The Commission is persuaded that it could be beneficial for GRE to do likewise in its next resource plan. In this Order, therefore, the Commission will formally encourage the Cooperative to do so. See Order Paragraph 3.

D. DEA’s Recommendations

It is not necessary to make findings on the subjects raised by DEA. It will be more appropriate to consider these subjects (and the findings requested by DEA) in relevant DEA dockets. The Commission emphasizes that it has made no findings about the Department’s filed comments that DEA found objectionable.

⁶ See, for example, *In the Matter of Alliant Energy 1999 Resource Plan*, Docket No. E001/RP-99-1185 ORDER MODIFYING RESOURCE PLAN AND SETTING STANDARDS FOR NEXT RESOURCE PLAN (June 8, 2000); *In the Matter of the Application of Northern States Power Company for Approval to Merge with New Century Energies, Inc.*, Docket No. E,G-002/PA-99-1031 ORDER APPROVING MERGER, AS CONDITIONED (June 12, 2000) at 10, 13, and appendix.

⁷ See *In the Matter of Minnesota Power’s 2000-2014 Resource Plan*, Docket No. E-015/RP-99-1543, ORDER APPROVING MINNESOTA POWER’S 2000 RESOURCE PLAN, REQUIRING SUPPLEMENT, AND SETTING REQUIREMENTS FOR NEXT RESOURCE PLAN (August 21, 2000) at page 12.

E. Filing Date for GRE's Next Resource Plan

Consistent with the two-year increment between filings established by Minn. Rules, Part 7843.0300, subpart 2, GRE's next resource plan filing is due by February 1, 2003. GRE suggested that it file its next resource plan on the date indicated by the rule. The Commission concurs, particularly in light of this year's statutory changes and the concerns raised by IWLA and the Department.

ORDER

1. The Commission hereby accepts the instant resource plan and the demand forecasts contained therein, recognizing that this was the first resource plan prepared since the merger of the two predecessor cooperatives. The Commission cautions the Company to take note that the Department, which will be a key participant in any future certificate of need proceedings, has indicated it would deem the analysis provide by the Cooperative in this resource plan insufficient to justify approval in a future certificate of need proceeding.
2. Regarding analytical process changes and items to be included in the GRE's next Resource Plan, the Commission will accept the commitment of GRE in its response comments to change its analytical processes, to provide desired information in its next resource plan filing, and to interact with the Department and other parties as necessary to carry out that commitment.
3. In its next Resource Plan filing (on or before February 1, 2003) GRE's filing may also address the following:
 - A. total CO₂ and other greenhouse gas emissions for 1990 and the most recent year for which the most complete emissions information is available for all sources that provide GRE electricity;
 - B. possible effects on GRE's system and ratepayer costs of international or national policies:
 1. policies that promote unrestricted emissions trading and/or carbon sequestration possibilities to meet any CO₂ emissions reduction requirement;
 2. policies that permit but restrict or limit emissions trading and/or carbon sequestration possibilities to meet any CO₂ emissions reduction requirement;
or
 3. policies that prevent emissions trading and/or use of carbon sequestration possibilities to meet any CO₂ emissions reduction requirement.

- C. In discussing the possible effects on GRE's system and ratepayer costs of the international or national policies cited above in Section B, GRE could address
1. how various CO₂ emission reduction levels change the effects;
 2. how the timing of CO₂ emissions reduction requirements may affect GRE's system and ratepayer costs;
 3. how other factors, such as technological advances, conservation efforts or fuel conversions could affect GRE's system and/or ratepayer costs;
 4. whether GRE's actions regarding climate change and potential actions appear prudent in response to developing international and national climate policies; this portion of the supplemental filing could describe industry and industry-approved climate change initiatives, i.e. the Electric Power Research Institute's Climate Change Targets and the Department of Energy's Climate Challenge Program, and how GRE views such programs; and
 5. how GRE can address Minnesotans' concerns that mercury concentrations limit the consumption of fresh fish taken from Minnesota lakes.
4. The Commission will maintain the usual the two-year time increment between filings, which means GRE's next resource plan filing is due by February 1, 2003.
5. This Order shall become effective immediately.

BY ORDER OF THE COMMISSION

Burl W. Haar
Executive Secretary

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