

**Regulatory Assistance Project Electric Resource Long-range Planning Survey<sup>1</sup>**  
Compiled by CM  LB

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**Policies**

1. Is any form of long-range electrical resource and/or investment planning required?  
 Yes  No

North Dakota regulates three investor-owned electric utilities. One of these utilities, Montana-Dakotas Utilities Company (MDU), is required to file an Integrated Resource Plan. The other two utilities (Otter Tail Corporation d/b/a Otter Tail Power Company and Northern States Power Co. d/b/a Xcel Energy) both serve portions of Minnesota and are required to file biennial IRPs with the Minnesota Commission. These utilities have historically provided copies of their IRPs to the North Dakota Commission. This information-sharing is not a formal requirement, but it is expected by the PSC.

2. If yes, what planning processes are going on?

Integrated Resource Planning is done by all three utilities (see above). A Certificate of Need is required for certain projects<sup>2</sup>. North Dakota is also active in working with MISO on regional transmission planning issues.<sup>3</sup>

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<sup>1</sup> All responses written from notes compiled and edited by Liz Baldwin, RAP researcher. Corrections to the draft document, suggested by the contact person(s), have been incorporated.

<sup>2</sup> The Certificate of Need process is required for new projects outside the city limits of a corporate municipality. The process applies to the three regulated utilities only and is designed to reinforce the respective boundaries of the investor-owned utilities and the electricity cooperatives that serve North Dakota's rural areas.

<sup>3</sup> For the last 20 years, North Dakota has had excess generation. Regionally, the supply has begun to tighten, due mostly to growth in the Minneapolis corridor. Several utilities have come together to form a resource coalition and are planning a number of new projects in the region, some of which are dependent upon new transmission being built. (North Dakota currently has a limit on electrical exports, due to grid stability and limited transmission infrastructure.) The Upper Great Plains Transmission Coalition, a group of regional stakeholders, is working with MISO to develop a regional transmission plan to bring energy to Minnesota. The ability of North Dakota utilities to export energy to this market will depend on what transmission infrastructure is put into place.

3. Please describe the IRP process.

MDU files a plan every two years. (The other two utilities submit copies of their IRPs as noted above). MDU's plan is acknowledged by the Commission in an informal process that takes place without formal hearings. The plans from all three utilities are informally reviewed by Commission staff, with no formal acceptance or rejection of the plans. The plans are used as a source of information to guide the actions of the company and to keep the Commission informed about upcoming activities.

4. Is it statewide or utility-specific planning? What types of entities are required to participate?

The process is utility-specific as MDU is the only entity formally required to file an IRP.

5. Is there any relationship between this process and other decisions, e.g. construction permits, likelihood of inclusion or pre-approval of rate treatment for the anticipated resource investments?

There is no formal relationship between the IRP process and other decisions. Inclusion in the IRP is not a requirement for rate treatment, but it is a factor that informs the certificate and ratemaking processes.

6. This form of planning has been required since what date?

Since the late 1980s.

7. How is this process enforced, if at all? If a utility does something inconsistent with the Plan, does it have to explain itself satisfactorily to avoid a charge of imprudence? Is it routine for utilities to diverge from a Plan with an explanation? Are there any consequences for non-compliance?

There are no formally prescribed consequences for non-compliance. Divergence from the plan historically has not been a problem. Typically, if the utility anticipates diverging from the plan, it will inform the Commission about upcoming changes through informal presentations to the Commission.

8. Is anything similar required for non-electric natural gas-related planning?  
 Yes       No

### **Required Elements**

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9. Back to the IRP process. Which of the following resources must be explicitly evaluated/included:

Generation

Transmission

Distribution

Energy efficiency

Load Management

Other demand side measures

Specific generation (e.g. renewable, distributed)

Others

There are no requirements about what specific demand and supply side elements must be specifically evaluated. Typically, generation, energy efficiency, and load management have all been considered.

What tests must be included/utilized?

No tests are required, but a variety of tests are generally used for DSM programs with more weight generally given to the Rate Impact Measure test. Load modelling programs are used to evaluate various options on the supply side.

10. Describe the analysis required by the regulatory body (what is compared to what to make decision? How are resources compared to each other? Cost with one set of resources vs another, economic, environmental?)

The exact analysis isn't specified, but should result in the least cost present value revenue requirements. Generally, the utilities evaluate a variety of resource options, including demand side options. Any options that are not found cost-effective during an initial screening are eliminated. The remaining alternatives are compared with each other, and various resource portfolios are modeled under a variety of scenarios to find the least cost resource mix. If the least cost mix is not chosen, an explanation should be given about why another mix was selected.

11. Does the process investigate how the employment of one strategy vs. another may increase the consumers' exposure to risk (e.g. natural gas prices)? If so, how?

Sensitivity analysis is done for natural gas prices. Natural gas generation is generally only used to meet peak demand.

12. Is a comparison of supply or T&D infrastructure and demand side options/resources required? Yes No

Options on both the demand side and supply side that pass the initial cost-effectiveness tests are compared. Comparison of these resources with T&D options

would occur if T&D improvements proved cost-effective beyond the initial cost-effectiveness screening process, but to date this has not occurred.<sup>4</sup>

13. The plan's objectives, from the regulatory perspective:

To ensure reliability at most efficient cost.

14. The plan's objectives, from the utility perspective:

To ensure reliability at most efficient cost.

15. Are alternative scenarios analyzed as part of the plan? Yes No

High, low and medium load forecasts are done, based on different economic scenarios for the region. Sensitivity analysis is done for fuel costs. Power availability is also looked at as the supply tightens and build vs buy decisions need to be made.<sup>5</sup>

16. Are externalities considered? If so, which ones and how are they considered?

Environmental externalities are not explicitly considered. North Dakota has a statute that forbids the use of environmental cost adders. Externalities affecting the environment, jobs, or other situations might become a factor if two plans were similar in cost, but one plan offered clear advantages or disadvantages, either environmentally or in terms of job creation.

17. What is the planning horizon?

20 years

Length of Energy and Demand forecasts

20 years

Length of Short-term Action Plan

No specific short term action plans, but there is a shorter range "look ahead" at the next few years.

18. How often do utilities have to file plans? Update plans? What actually happens?

Plans are filed every two years. Plans can be updated as needed.

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<sup>4</sup> In the late 1980s, a number of plants were built, leaving North Dakota over-supplied and resulting in low demand for new energy. During this period, purchased power has been readily available and cost-competitive when compared with alternative solutions, such as transmission upgrades.

<sup>5</sup> North Dakota is currently in a "building mode", with a number of coal and wind projects proposed by the utilities, in order to meet growth in the region, particularly in the Minneapolis corridor. Growth in North Dakota remains low, although loads have shifted along with population migrations from rural areas into urban and suburban areas.

19. What monitoring or other processes are used to determine consistency of investments with plans? Are there consequences for non-compliance?

Monitoring is generally continuous, but investments have been reviewed during rate cases to determine whether they were consistent with the plans. Generally, inconsistency hasn't been a problem. If investments diverged from the plans and the Commission found them imprudent, an adjustment could be made to the rate base.

During 2005, legislation was enacted that enabled an advanced determination of prudence for some resource investments. See section 49-05-16 of the North Dakota Century Code. <http://www.state.nd.us/lr/cencode/T49C05.pdf>

20. Are environmental issues considered in the planning process?  Yes  No  
If yes, please describe.

They are considered, but without the use of environmental cost adders. Generally, following EPA regulations is the main way that environmental issues are considered, although environmental issues could help decide between two competing plans (see Question 16, above).

21. Is reduction or elimination of carbon emissions an issue? If so, how is it dealt with?

Reduction of carbon emissions hasn't been an issue. There is a carbon dioxide pipeline project in North Dakota that pipes carbon dioxide from a synthetic natural gas production plant to Canadian oil fields where it is used to aid the oil extraction process. This does not address electric plant CO<sub>2</sub> emissions, but does eliminate a large amount of CO<sub>2</sub> emissions from the natural gas plant in a profitable way. The Commission also encourages actions that offset carbon emissions, such as planting trees.

### **Agency Process**

22. Is there a formal acceptance and/or acknowledgement process used for the resource filing?  Yes  No

Plans are acknowledged informally.

23. Does the agency hold public hearings on draft/final utility plans?  Yes  No  
If not, describe what does happen.

The Commission does not approve resource plans. MDU is advised by public advisory groups, which include consumer groups, college professors, and other interested members of the public. The advisory groups work with the utility in developing the plan.

24. Other ways the public participates and comments on plans are:

(Prompts if needed: email or mailing lists, interactive web sites)

25. What action can the Commission take on the plan(s)?

- Review it
- Accept it
- Approve it
- Reject it
- Acknowledge it
- Require utility to modify and resubmit it
- Other

There are no restrictions on what action the Commission can take.

26. Have resource acquisition decisions changed as a result of the planning process?

- Yes No Not Sure

27. Are competitive processes used to acquire new resources? Yes No

28. If yes, do you require regulatory review and approval of the competitive solicitations used?

The Commission encourages the use of competitive bidding, but it is not required and occurs on a case by case basis. Currently, NSP has a competitive bidding process that was approved in Minnesota; it uses this process in North Dakota as well. Otter Tail and MDU use competitive bidding selectively, issuing RFPs in situations when they expect to receive some meaningful responses. There has not been any routine review or approval of the solicitations or of the resulting bids, although NSP 's process undergoes this kind of review and approval in Minnesota.

29. Do utilities file an energy efficiency or DSM plan? Yes No  
If so, is it separate or integrated with other plans?

There is a DSM component to the IRP that details DSM plans that expect to be implemented.

30. Is competitive bidding used to acquire EE resources? Yes No

31. Does the regulatory agency have open dockets, or is it considering opening a docket investigating any long-range electrical investments? Yes No

32. Citation and description:

33. Are utility plans available on-line? Yes No If so, what is the address?

Is on-line publication voluntary or mandatory? Voluntary

34. Citation and description of State policies (legislation, rules/regs, PUC orders) governing this planning process:

The Order requiring MDU to begin filing annual IRPs was issued January 27, 1987 in Case No. 10,799 and amended to allow biennial filings on March 11, 1992 in Case No. PU-399-91-689

Certificate of Need statute is in the North Dakota Century Code, chapter 49-03.1

35. Do you anticipate any changes to this process in the near future?  Yes  No  
If yes, please describe.

36. Have there been any recent settlements or orders in rate cases or other dockets that may affect resource procurement or investment incentives?  Yes  No

See response to question 19 regarding new statute

37. Does your state do performance-based regulation?  Yes  No  
If so, please describe briefly.

For the past five years, North Dakota has had PBR for two utilities under different but similar plans based on five performance factors: outage information, employee safety, customer service, rates compared to other utilities in the region, and change in costs. Participating utilities (Otter Tail and NSP) were given an allowed baseline return on equity (ROE) for performance within a certain range; performance outside that range results in either a positive or negative change in the utility's allowed ROE. The PBR was done on a voluntary basis, with Otter Tail and NSP participating (MDU decided not to pursue it). The plans were scheduled to sunset in 2005, but both utilities filed to extend their plans. The Commission denied NSP's extension request by Order dated August 10, 2005 in Case No. PU-400-00-195. Otter Tail's PBR plan was implemented in Case No. PU-401-00-36. For more information see orders in these cases posted on the Commission's web site at <http://www.psc.state.nd.us/jurisdiction/electricity-orders.html>

38. If your state uses PBR, is successful compliance with an approved resource plan one of the areas subject to incentives or penalties?  Yes  No

39. Are there any regulatory incentives specifically for energy efficiency, other DSM, or renewables?  Yes  No (Examples: lost revenue recovery, shared savings, bonus rate of return) If so, please describe briefly.

40. Do any tariffs include a fuel/purchased power clause?  Yes  No  
If so, how does it work?

The fuel clause adjustment covers the fuel component of utility-owned generation and purchased power costs. It is 100% pass-through. Each month, a fuel clause billing surcharge is set based on sales forecasts for the upcoming month, which factor into a four-month moving average. True-ups are adjusted monthly and spread over the four-month period. The adjustment provides dollar for dollar recovery of fuel expense.

41. Does your state have any renewable mandates (e.g. from a legislated standard or goal, or a regulatory settlement or Order)?  Yes  No

Can EE or DSM savings be credited toward a utility's renewable mandate?  
If so, please describe, including how the mandate relates to power vs. RECs.

### **State Energy Plan**

42. Is there a State Energy Plan?  Yes  No  
43. Is it connected to the planning described above?  Yes  No  
44. If yes, who is responsible for the Plan?

45. What is included in the Plan, apropos of long-range electrical planning?