



November 18, 2004

Mark Walker
Director of Public Affairs
Northwest Power & Conservation Council
851 SW Sixth Avenue, Suite 1100
Portland, Oregon
97204-1348

Dear Mr. Walker:

Enclosed please find the comments of Great Northern Power Development, L.P., on the draft of the Council's Fifth Pacific Northwest Electric Power and Conservation Plan.

Pease call me at (406) 494-2075 if you have any questions regarding these comments or if Great Northern can assist the Council in any way.

Sincerely,

Bill Pascoe
Consultant for GNPD

COMMENTS OF GREAT NORTHERN POWER DEVELOPMENT ON DRAFT FIFTH PACIFIC NORTHWEST ELECTRIC POWER AND CONSERVATION PLAN

Introduction

Great Northern Power Development, LP (GNPD) appreciates the opportunity to comment on the Draft Fifth Pacific Northwest Electric Power and Conservation Plan (the Draft Plan).

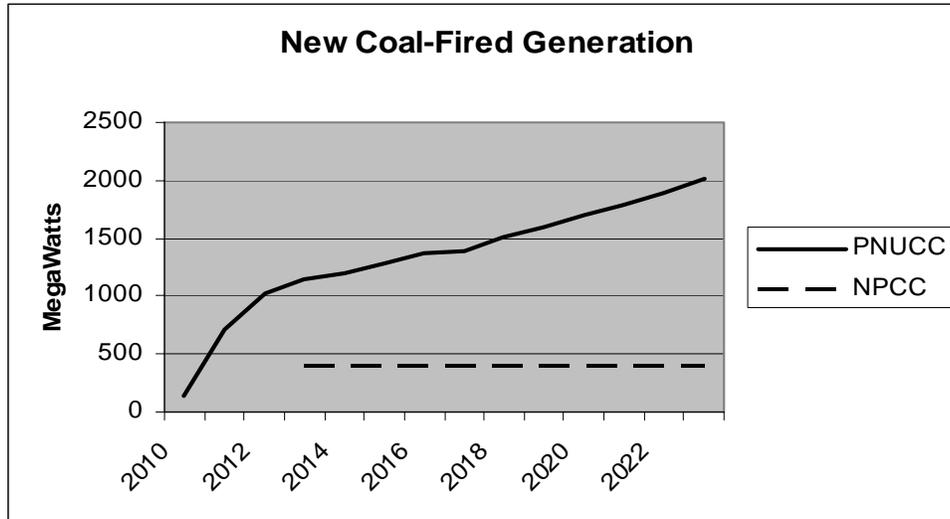
GNPD and Kiewit Mining Group are developing the Nelson Creek Power Project, a 500 MW lignite-fueled generating station located near Circle, Montana. The Nelson Creek project and its associated transmission lines will also help to facilitate the development of wind power projects in eastern Montana. Great Northern Properties, the parent company of GNPD is the largest owner of coal reserves in North America.

The Draft Plan represents the culmination of two years of effort by the Council and its staff to develop a blueprint for the Pacific Northwest's electricity future. This effort has resulted in a document that is excellent in many respects. GNPD appreciates the staff's willingness to listen to our concerns and consider our input as the Draft Plan was being developed. However, we believe the Draft Plan can be improved in certain areas to provide a more objective view of the benefits of additional coal-fired generation to Pacific Northwest energy consumers.

Coal-Fired Generation

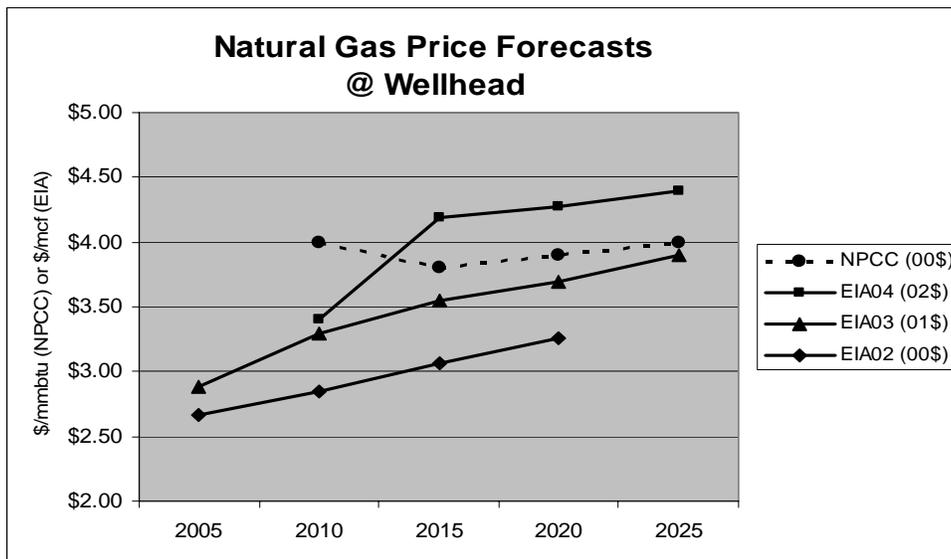
GNPD supports the emphasis in the Draft Plan on seeking a "least risk" plan for future resource additions. A plan that includes conservation, demand response, wind, coal and natural gas provides diversity that spreads risk as compared to placing an undue reliance on a single type of resource or on the wholesale power market.

We are, of course, pleased to see some coal-fired generation included in the Draft Plan. However, the positive response to our project by Pacific Northwest utilities indicates that there is serious interest in substantially more than the 400 MW of coal-fired generation in the Draft Plan. A PNUCC survey of utility integrated resource plans (IRPs) indicates that four regional utilities (Avista, Idaho Power, Portland General Electric and Puget Sound Energy) are planning coal-fired capacity of 700 MW by 2012 and 2,000 MW by 2023 (the end of the Draft Plan's study period). (See following chart.)



Gas Prices

Renewed interest by utilities in coal-fired generation is primarily attributable to the risk and uncertainty associated with tight supplies of natural gas and dramatic increases in natural gas prices over the last two years. These increases in gas prices are expected to be long-lasting as demonstrated by the rising long-term forecasts for future natural gas prices. (See following chart.)



The Council staff adjusted its gas price forecast upward prior to the release of the Draft Plan to a level slightly below the Energy Information Administration (EIA) 2004 forecast (after adjusting to common year dollars and heat content). However, EIA's 2004 forecast was released almost a year ago, in December 2003. EIA's 2005 forecast will be released in early December and should be reviewed by Council staff to determine if the trajectory of gas prices is continuing to rise and if a higher gas price forecast should be incorporated into the Final Plan.

In any event, the Final Plan should acknowledge that construction of more gas-fired generation will lead to further tightening of natural gas supplies and raise gas prices not only for new generating plants but for the gas-fired plants that make up 22% of the region's current generation mix and for Northwest residents and businesses that rely on direct use of natural gas for space heating, water heating and other purposes. The impact on gas prices (at the margin) by building more or less gas-fired generation is felt across all existing uses of natural gas. For example, every \$0.10/mcf increase in gas prices costs Northwest residents and businesses about \$55 million/year.

Carbon Taxes

GNPD is quite concerned about the manner in which emissions taxes or carbon taxes are evaluated in the Draft Plan. The Draft Plan includes "futures" with carbon taxes as high as \$30/ton of CO₂ which is equivalent to a tax of \$30/MWh on coal-fired generation (and \$12/MWh on gas-fired combined cycle generation). The average carbon tax over all "futures" is \$7.50/ton by the end of the study period. GNPD does not believe a carbon tax is inevitable or even likely to occur, especially at the higher levels assumed in the Draft Plan. Consider the following:

- A \$30/ton carbon tax is the equivalent of a 600% tax on the cost of the fuel burned in a coal-fired plant. A \$7.50/ton carbon tax represents a 150% tax on the cost of coal.
- A \$30/ton carbon tax on existing generation would raise electricity costs for Northwest residents and businesses by approximately \$1.3 billion/year. Such a tax would result in an average retail rate increase of about 15% for all Northwest electricity consumers.
- Oregon and Washington have adopted CO₂ offset values of \$0.87/ton and \$2.10/ton, respectively. These values are 3% and 7%, respectively, of the maximum \$30/ton tax assumed in some of the Draft Plan "futures".
- The imposition of carbon taxes in the Draft Plan leads to a greater range of price uncertainty for coal-fired generation than for gas-fired generation! This is in spite of the facts that: a) gas-fired generation is also affected by carbon taxes (roughly 40% of the impact on coal), and b) gas-fired plants entail significant risk due to the extreme volatility of natural gas prices.

- Given the substantial consequences of a direct tax on carbon emissions, it may be more politically expedient and economically efficient to implement a CO₂ “cap and trade” system similar to the one developed for SO₂ emissions. SO₂ emission allowances auctioned by EPA in 2004 sold for an average price of \$273/ton. This is equivalent to \$0.16/MWh for a coal-fired plant with the characteristics modeled in the Draft Plan.

Existing IPPs

The Draft Plan acknowledges the existence of a significant amount of generating capacity from gas-fired independent power projects (IPPs) that is not currently committed to serve Northwest customers. The Draft Plan assumes that energy from these projects is available to serve Northwest needs at market prices. GNPD agrees with this treatment of gas-fired IPP generation in the Draft Plan’s analysis.

Some of the earlier analysis by the Council’s staff ignored the capital costs of the existing IPP projects and considered only the fuel costs. Such an approach is clearly erroneous. The owners of the existing IPPs will seek to recover their investments and, if possible, to earn maximum returns on these investments by charging market prices for their power. While the capital cost of these projects may be sunk from the owners perspectives, these costs are certainly not sunk from a consumer perspective.

Transmission

From GNPD’s perspective one of the Draft Plan’s greatest shortcomings is its treatment of transmission to move power from new generating resources in Montana to consumers in the other Northwest states. Table ES-2 in the Draft Plan’s Executive Summary contains the following entries:

Resource	Levelized Cost (cents/kwh)
Montana pulverized coal for local load	3.81
Eastern WA/OR Pulverized Coal (or MT Coal w/ TX to Mid-C at embedded cost)	4.31
MT Coal Steam w/ TX to Mid-C at cost of expansion	6.04

Table ES-2 also contains this footnote: “11) There may not be enough existing transmission capacity to move 400 MW of output from MT to MidC at embedded cost.”

GNPD has spent most of the last year developing a transmission strategy for the Nelson Creek project. Our efforts have led us to conclude that 750-1000 MW of new generation can be delivered out of Montana through a combination of existing unreserved transmission capacity and low-cost upgrades. This conclusion may be at odds with the

conventional wisdom that transmission is an almost insurmountable barrier to new generation development in Montana. However, that conventional wisdom must be reexamined in light of recent analysis.

The recently completed Rocky Mountain Area Transmission Study (RMATS) includes a recommendation for upgrading the Colstrip 500 kV transmission lines through the installation of additional series compensation and intermediate substations. These upgrades are estimated to add 500 MW of capacity to the transmission system for about \$70 million, well within the embedded cost of the existing system. Our discussions with transmission planners intimately familiar with the Colstrip system indicate that the 500 MW capacity increase associated with these upgrades may be conservative. (The final RMATS report may be found at <http://psc.state.wy.us/htdocs/subregional/Reports.htm>.) The Northwest Transmission Assessment Committee (NTAC) is also studying transmission capacity out of Montana and its early results are encouraging.

Of course, definitive answers to the feasibility and costs of increasing transmission capacity out of Montana must be based on detailed studies conducted by the transmission owners. GNPD has made transmission reservations for the Nelson Creek project with NorthWestern Energy, BPA and the other owners of the Colstrip transmission lines. Deposits associated with these reservations total in excess of \$2.1 million. In response to these reservations, NWE and BPA have initiated transmission studies that should provide real answers by the spring of 2005.

GNPD understands that the 400 MWs of coal-fired generation in the Draft Plan is based on costs for a coal-by-rail project located in eastern Washington or eastern Oregon. We believe that the economics for a mine-mouth project in eastern Montana, with reasonable assumptions about transmission, are competitive with the coal-fired plant modeled in the Draft Plan. As such, we do not believe that the modeling in the Draft Plan needs to be redone. However, we do believe that it is incumbent upon the Council to include a balanced discussion of transmission for Montana exports in the Final Plan so that readers are not left with the impression that new Montana generating projects cannot be competitive.

Finally, GNPD must comment on what seems to be a lack of consistency in the Draft Plan when evaluating the costs of transmission for remote resources. The Draft Plan's analysis seems to indicate that transmission costs to deliver power from the proposed Tar Sands projects in northern Alberta are about one-half the costs of delivering power from eastern Montana. Given the somewhat greater distance from northern Alberta and the similar terrain, this is a questionable assertion. Whatever transmission assumptions are being used for the northern Alberta projects, including the application of DC technology, are equally applicable to eastern Montana projects.

Conclusion

GNPD appreciates the opportunity to comment on the Draft Plan. As indicated previously, we believe the Draft Plan is excellent in many respects. However, as discussed in our comments above, the Draft Plan has some deficiencies in its analysis and discussion of coal-fired generation. We trust that the Council and its staff will give our comments due consideration and incorporate them into the Final Plan in order to produce the best possible plan for the energy future of the Northwest. GNPD stands ready to assist the Council in any way we can.