

North Dakota Public Service Commission
INFORMAL HEARING
December 17, 2008

Otter Tail Corporation
Renewable Resource Cost Recovery Rider
and Determination of Prudence
Application

Case No. PU-08-742

Summary of Proposal

Otter Tail Corporation (Otter Tail) requests the commission determine its investment in the Ashtabula Wind Energy Center is prudent and approve its 2009 Renewable Resource Cost Recovery Rider (Renewable Rider).

Initial Case Approving Rider and Langdon Center

The commission approved Otter Tail's initial Renewable Rider on May 21, 2008, Case No. PU-06-466. In its order, the commission determined that:

- Otter Tail's investment in the Langdon Wind Energy Center was prudent.
- The investment should be allocated to North Dakota based on its share of total energy consumed.
- The Rider should be displayed separately on customers' bills.
- Otter Tail must make an annual filing each year by September 1 to update the Rider for new projects and adjust for any over or under-recoveries of actual costs.
- A return on equity rate of 11.25% is to be used until the costs can be rolled into base rates.

Determination of Prudence for Ashtabula Center

In this proceeding, Otter Tail has added its investment in the Ashtabula Wind Energy Center (Ashtabula Center) near Lake Ashtabula in Barnes County, North Dakota, to its Renewable Rider for 2009. The Ashtabula wind farm constitutes a 48 MW ownership share and is expected to be operational by the end of 2008.

North Dakota state law gives preference and a rebuttable presumption that generation facilities built in North Dakota are prudent. The rebuttable presumption does not impact how we review the prudence application but does require stronger evidence before staff can argue to the contrary.

It is also worth noting again in this proceeding that there is a financial disincentive to owning wind in North Dakota, absent a generation rider, because purchased power costs are automatically passed through to consumers via the monthly cost of energy adjustment whereas dollars invested in a wind farm are not recoverable until the next rate case. The commission already understands this but noted again for the record in this proceeding.

During Otter Tail's initial Renewable Rider informal hearing on April 23, 2008, Otter Tail disclosed that owning wind generation is cheaper than purchasing the energy from the market place or from a wind developer. Otter Tail claimed that an ownership position in the Langdon Center saves customers about 10% in energy costs. Staff has not tried to determine the accuracy of that statement but intuition suggests cutting out the middleman has the potential to save money for a knowledgeable participant like Otter Tail.

Since the commission has already determined that the Langdon Center was a prudent investment, staff compared the projected costs of the Ashtabula Center to the Langdon Center noting that it will cost about a cent more per kWh in year one. However, the rapid recovery of investment dollars through tax incentives quickly diminishes the higher cost.

Given the upfront tax incentives at both the state and federal level through energy credits and accelerated depreciation, the projected cost estimates suggest that Otter Tail's customers will initially pay slightly more in rates than they otherwise would for the first 3 years of the wind farms' 25 year service lives. Because these tax incentives provide for early recovery of dollars invested, the breakeven point for customers occurs between years 3 and 4 with a very favorable rate thereafter in comparison to today's market rates.

As long as these significant tax benefits exist, it would be difficult for staff to overcome the rebuttable presumption that generation facilities located in North Dakota are prudent. This is not to say that the addition of wind in perpetuity will always be the best course of action or prudent. Even with all the tax incentives to encourage the build out of wind generation, wind remains an intermittent resource which does little to address base load needs.

There is an additional level of complexity that arises when trying to determine what the proper amount of wind is for a utility's generation portfolio. Absent greater study and analysis, staff believes that the state's renewable energy objective of 10% is a reasonable level. According to Otter Tail's application, the Langdon and Ashtabula energy centers will generate about 6.7% of Otter Tail's projected 2009 retail energy sales. Otter Tail also has purchase power agreements for wind energy from 39 MW of plant capacity that will provide another 3% of 2009 energy requirements.

Staff believes the Ashtabula wind facility is a prudent investment.

2009 Renewable Rider

With the addition of the Ashtabula Center, the current Renewable Rider of .193 cents per kWh increases to .51 cents. The increase appears disproportionate given the Langdon investment was only slightly smaller in size (40.5 MW compared to 48 MW). However, there are many factors that contribute to the difference including escalating costs of construction in recent years, significant

under-recoveries of the Langdon Center in 2008, differences in projected kWh sales, differences between actual and projected costs, capacity factor differences and so on.

The commissioners are well aware of the trends in construction costs having presided twice over the Big Stone 2 hearings. Staff will not write further here except to say that construction costs for the Ashtabula Center were higher than its initial Langdon facility. Further knowledge of construction cost differences between the two wind farms can be obtained by reviewing the trade secret documents contained in the commission's vault.

With regard to 2008 under-recoveries, the initial rate approved by the commission of .193 cents per kWh consumed in 2008 was calculated by spreading the recovery of costs over an entire year's worth of sales. Unfortunately, the Rider was not in place until June, 2008 even though the Langdon Center was operational at the beginning of 2008. As a result, a large amount of under-recoveries occurred in 2008 and are brought forward in this proceeding. In retrospect, a higher rate should have been approved for the last 7 months of 2008. The under-recoveries alone contribute .104 cents per kWh to the overall increase requested for 2009 of .317 cents per kWh.

A change in sales volumes also impacts the overall cost per kWh generated. Otter Tail's 2009 Rider includes a projected increase of 12% in retail sales. The increased volumes are predicated largely on the successful startup and operation of the Tharaldson Ethanol Plant in Casselton, North Dakota. The large increase in sales volumes will offset the other factors that increase the Renewable Rider by about .063 cents per kWh.

Change in Method

In this application, Otter Tail attempts to smooth out the disparate cost of energy impacts by customer vintage by slowing down the immediate flow-through of front end tax benefits to customers. This is not to say the customers are harmed in any way. Customers still benefit from a reduced rate base for tax incentives recovered but not disbursed immediately to customers via the Renewable Rider. The tax benefits are then flowed through to customers over the life of the asset. Without this new approach, customers in year ten will pay little or nothing for wind energy generated while other customers on either side of year ten would not be so lucky.

Staff pursued the idea of leveling cost recovery still further, similar to a yield to maturity calculation, which would establish a fixed annual recovery amount over the life of the property. Even with Otter Tail's new approach, first year customers pay a considerably higher rate than later year customers for ostensibly the same service and number of electrons received. However, this same type of thing occurs with other kinds of utility investments as the regulatory value of assets diminishes over time due to depreciation thereby requiring a smaller return on

investment in later years. There are reasons to maintain this type of regulatory approach but the large front end tax incentives for wind generation renewed staff's interest in flattening out the cost recovery.

In the end, staff concluded that Otter Tail's method results in stable rates with small incremental rate changes over time. It is a good in-between approach to staff's thoughts of equal cost recovery over the life of the asset and the immediate flow through approach that was used by Otter Tail in its initial Renewable Rider filing. Staff has not completely abandoned its thoughts on leveling out cost recovery but believes regulatory stability in shaky economic times is the best course of action.

Projected vs. Actual

As part of its review, Staff also compared the projected costs of the Langdon Center in the initial filing to the actual and projected costs in this filing noting that operating and maintenance expenses and the overall revenue requirement for 2008 were within 5%. However, the cost of energy on a kWh basis for Langdon is more than a cent higher than initially projected. Staff determined that the difference is not caused so much by higher cost levels but instead is primarily caused by lower than normal production during the first 3 months of start up. The production levels since then have been more reasonable and staff believes the Langdon Center continues to be a good and prudent investment.

Comparing the actual costs to projected costs for the Langdon Center gives staff comfort in Otter Tail's ability to project and manage its costs with respect to the Ashtabula Center.

In conclusion, the requested 2009 Renewable Rider mechanism appears reasonable based upon Otter Tail's past performance and its current projected costs.

Recommendation to Approve

Staff recommends the commission determine that the Ashtabula Wind Energy Center is a prudent investment and approve the 2009 Renewable Resource Rider.

Recommended Changes

Remove Separate Line Item Requirement

The separate line item on customers' bills for the Renewable Rider is misleading and confusing to customers and staff recommends it be combined with the monthly cost of energy adjustment until the investment can be included in base rates. Our initial order requiring a separate line item was based on a noble goal of transparency to customers. However, staff believes a separate line item for the Renewable Rider causes more confusion than clarity.

The Renewable Rider is not an add-on to the customers' bills for the cost of Otter Tail going green as some might think. Neither does the Renewable Rider indicate what the cost is for a wind generated kWh. The Rider is purely a cost recovery mechanism that divides total revenue requirements of wind generation, not yet included in base rates, by retail kWh sales and nothing more. Consequently, customers are billed more through the Rider as resources are brought on-line giving them the impression that wind energy is expensive and now with the new rider—getting more expensive.

The benefits of wind energy on the other hand are flowed through the cost of energy adjustment. Wind energy is being deployed to off-set the cost of energy purchases otherwise necessary. So, the customers are seeing an increased cost of deploying wind on their bill through the Renewable Rider with little hope of identifying the cost savings occurring in the overall cost of energy adjustment for reduced energy purchases. Staff believes that both the cost and the benefits derived should be combined and included as part of the cost of energy adjustment. It should be noted again that purchased wind energy is already included in the cost of energy adjustment.

Include Renewable Energy Resources in Base Rates

Please note that staff is no longer opposed to including these facilities in base rates. At the initial informal hearing, staff interjected that it was opposed to including the Langdon facility in base rates because its revenue requirements decreased dramatically from one year to the next. Solidifying recovery through rate base treatment would lock in recovery at higher levels than necessary as time went on. However, Otter Tail's new method of smoothing out the costs of these facilities over the life of the asset has reduced those concerns.

Change the Annual Filing Requirement

The commission's initial order requires Otter Tail to file its annual Renewable Rider by September 1 of each year. Staff recommends that the date for filing the application be changed from September 1 to January 1. Changing the date will lessen end of year workload, provide an opportunity to review an additional 4 months of actual costs and will coincide more closely with the typical construction schedule of renewable facilities to be completed by the end of a calendar year end.

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