

**Renewable Northwest Project's Informal Comment to PUC Staff  
Incremental Costs Draft Rule, 03/16/09 Version  
March 25, 2009 for March 31, 2009 Workshop**

**Methods for Hedging Market Purchases over Long Time Horizons**

OPUC Incremental Costs Draft Rules (03/16/09 version), Section 6(b) (renumbered Section 7(b) in RNP's 3/25/09 edits), allows for forecasting proxy plant fuel price based on spot price forecasts for fuel at an appropriate trading hub or hubs plus an estimate of hedging costs to largely eliminate fuel price risk for the time horizon of such a plant. An important yet challenging concept here is hedging costs over the time horizon of the qualifying electricity. While liquid markets for standardized fuel price hedging instruments over a long time horizon may not be available, RNP contends that methods do exist for effectively hedging forecasted fuel prices over long time horizons.

One such method for fuel cost hedging over a long time horizon is the use of an appropriately indexed Exchange-Traded Fund (ETF). An ETF holds assets such as stocks or bonds and trades at approximately the same price as the net asset value of its underlying assets over the course of the trading day. There is an ETF indexed to oil prices called the U.S. Oil Fund (symbol "USO") that could be bought as a hedging tool. For example, if an electricity company estimates \$50 million in fuel costs for a proxy plant, the company could purchase \$50 million worth of the USO ETF. Each year, the company could sell some portion of the USO stock to purchase fuel. As the cost of fuel rises and falls, so would the value of the remaining shares held.

Another strategy employed for long term hedging is to buy a strip of futures contracts (e.g., natural gas NYMEX contracts) out as far as a liquid market exists and load the remaining fuel requirements into the last available year ("Strip and Roll"). As each year expires and a new contract year is available, the back-loaded contract purchases are rolled over into the newly available out-year. The value of the contracts held generally rises and falls with fuel costs and thus can ultimately hedge the entirety of a long-lived project.

In addition to these approaches, other fuel hedging approaches that might be considered include:

- Buying a long term, fixed price contract for electricity
- Purchasing a gas production and/or storage field
- Buy a low or zero variable cost generator and sell output on the spot market.

In conclusion, the fuel hedging cost is an important factor in comparing fixed cost renewable resources to proxy plants dependent on variable and relatively unknown fuel costs. It is inaccurate to conclude that hedging strategies do not exist or that costs cannot be determined. In general, the hedging costs derive from the capital and transactions costs associated with each of the methods. While the Incremental Costs Draft Rule need not call for a particular hedging approach, electricity companies and ESSs must be prepared to adhere to the draft rule's requirement to include forward price curve hedging costs.

