

STATE OF NEW HAMPSHIRE
PUBLIC UTILITIES COMMISSION

DE 10-195

In the Matter of:
Public Service Company of New Hampshire
Petition for Approval of Proposed
Power Purchase Agreement with Laidlaw
Berlin Biopower, LLC.

Staff Closing Statement

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SUMMARY RECOMMENDATION

Pursuant to RSA 362-F:9, I, the Commission may authorize electric distribution companies to enter into multi-year purchase agreements for renewable energy certificates (RECs) and purchased power to meet “reasonably projected renewable portfolio requirements and default service needs” if it finds such agreements, as may be conditioned by the Commission, to be in the public interest. In determining the public interest, the Commission must find that the proposal is, on balance, substantially consistent with the factors listed in RSA 362-F:9, II (a)-(e). See Order No. 24,965 (2009) at 16.

Public Service Company of New Hampshire’s (PSNH or the Company) obligation to purchase the energy, capacity and REC products under the purchased power agreement (PPA) with Laidlaw is contingent upon, *inter alia*, a final, nonappealable Commission decision “approving and allowing for full cost recovery of the rates, terms and conditions” of the PPA. Because, if the PPA is approved, its terms would be incorporated into a FERC-jurisdictional tariff, the PPA would be essentially self-executing and Commission’s authority to review PSNH’s performance of the PPA in the future is, with few exceptions, very limited. Thus, the Commission should give the PPA the most thorough and careful scrutiny.

As the petitioning party, PSNH bears the burden to show not only that the PPA is necessary to meet reasonably projected REC requirements and default service needs but also that it is in the public interest. See e.g., Order No. 25,043 (2009) at 20. For the reasons provided in Staff’s testimony and this closing statement, PSNH’s fails to meet its burden on either count. Rather than reject the PPA, Staff recommends that the Commission condition its approval on the parties to the PPA agreeing to the six changes detailed in Staff’s testimony. Staff Exhibit 1 at 47. While the Commission must consider all of the statutory factors, Staff’s closing statement focuses on the most crucially relevant ones.

THE PPA IS GROSSLY OVER-PRICED

Despite PSNH’s claim that it conducted no specific tests to assess the PPA’s cost-effectiveness, during the course of negotiations with Laidlaw, PSNH did perform a cash flow analysis, develop a long-term energy price forecast, compare the PPA prices with comparable renewable projects, and commission a capacity price forecast from Levitan Associates. The results of those tests do not show that the PPA is cost-effective and PSNH now denies that they have much value, relying instead on the “structure” of the PPA, including the Cumulative

Reduction account and the Purchase Option, to support its request that the PPA be approved. For example, PSNH would have the Commission believe that long-term price forecasts have no analytical value even though it has used them extensively in prior proceedings and has included one in its recently filed Integrated Resource Plan to support continued operation of the Newington station. As well, the Levitan long-term capacity price forecast included in the IRP is even used in this proceeding to demonstrate the reasonableness of the PPA capacity prices.

In contrast to PSNH's claim that it conducted no specific cost-effectiveness tests, Staff's assessment involved the use of three standard tests and updated data. Staff Exhibit 6. Use of these tests is necessary because PSNH chose to enter into bilateral negotiations with one developer, Laidlaw, and did not conduct a competitive solicitation the results of which could be taken to fairly reflect competitive market conditions.

The first test, comparing the PPA prices with the prices for comparable renewable energy projects, demonstrates that PSNH could have received the same products that it is purchasing from Laidlaw from two competing biomass projects (Concord Steam and CPD) at prices that represent discounts of 12.6% and 8.5% respectively compared to Laidlaw. IPP Exhibit 25, Attachment 1. Over the full 20-year term of the agreement, these discounts represent cost savings of between \$135 and \$200 million. In addition, a comparison of the Laidlaw and Lempster PPAs demonstrates that the same products could have been purchased from Class I wind power resources at about half the price that PSNH will pay Laidlaw. Staff Exhibit 1 at 24. Had this been the case, customers could have saved up to \$800 million over the 20-year term.

Staff's second test, comparing the individual energy and REC prices in the PPA with long-term forecasts of market energy and REC prices, showed that PSNH could pay Laidlaw \$285 million in above-market energy costs and \$280 million in above-market REC costs over the 20-year term of the agreement. Staff Exhibit 1 at 26 and 28. The conclusion that the PPA is likely to require PSNH to make significant above-market payments is supported by an alternative analysis that involved comparing the PPA prices with long-term market price forecasts developed by Ventyx, an independent forecaster. This comparison indicates that PSNH will pay approximately \$334 million more over the 20-year term of the PPA than if it had purchased the products in the market at prices forecast by Ventyx. Staff Exhibit 14 at 2.

Staff's third test uses cash flow analysis to determine whether the equity returns received by investors under the PPA fall within a reasonable range. The results of the analysis showed that after tax and after debt service returns to investors ranged from 60% to 106%, well outside of the range of returns that developers of merchant power plants located in the US can reasonably expect to earn. Staff Exhibit 1 at 37. Over the 20-year term of the PPA, these returns amount to a total profit of about \$280 million. One advantage of using cash flow analysis for this PPA is that the cash flows are independent of the single largest cost component, fuel costs. This is because the PPA effectively provides for the dollar-for-dollar recovery of those costs. A second is that cash flows are independent of REC market prices, arguably one of the most difficult cost components to forecast. The result is that cash flow analysis is far more certain than comparing PPA prices with long-term forecasts of market prices.

Based on these test results, Staff concludes that the PPA is grossly over-priced.

THE POTENTIAL IMPACT OF THE PPA ON RATES IS UNACCEPTABLE

Under its base case analysis of the impact of the PPA on the 2014 energy service rate, Staff assumed that Schiller fuel costs would be at their historic level, energy market prices would be higher than 2010 prices, REC market prices would be twice their current level, capacity market prices would remain at their current level, and PSNH's migration rate would not rise above the level reached in mid-2010. These assumptions can hardly be described as extreme or unreasonable, yet they result in a bill increase of \$3.50 per month for the average residential customer equivalent to a 5% increase in the energy service bill. Staff Exhibit 16. Further, if the bundled price under the PPA increases over time as predicted, the average residential customer could pay more than \$3.50 per month every month over the 20 year term, a high price for what amounts to a modest boost in the economy of the North country. Staff Exhibit 3. If the plant performs above expectations, and fuel costs increase above historic levels, and market prices remain at their current levels, and migration stabilizes at the level reached in November of 2010, residential customer bills could increase even more dramatically by up to \$5.75 per month. Staff Exhibit 16.

PURCHASING ALL OF THE REC OUTPUT OF THE LAIDLAW FACILITY IS CONTRARY TO RSA 362-F:9, I

RSA 362-F:9, I provides for electric distribution companies to enter into multi-year purchase agreements for RECs “to meet reasonably projected renewable portfolio requirements.” In this proceeding, the phrase “reasonably projected renewable portfolio requirements” means the product of the Class I percentage in any year and the MWhs of electricity supplied by PSNH in that year to its energy service customers. When account is taken of the Class I RECs already under contract to PSNH and the Class I RECs produced by Schiller Unit 5, Staff contends that PSNH does not have a need to acquire additional RECs until 2016 to meet its “reasonably projected” requirement. Staff Exhibit 1 at 13. The PPA, however, obligates PSNH to purchase all of the RECs produced by the facility as soon as it is operational, which could be as early as 2013. Even after 2016, the RECs delivered by Laidlaw will exceed PSNH’s “reasonably projected” requirement through 2023 assuming the rate of customer migration does not fall below the level just prior to the Company’s filing. Id. Staff estimates that during the first 10 years of the agreement PSNH will purchase from Laidlaw 3 million more RECs that it will need to meet its RPS Class I obligation, representing approximately one-third of the total RECs produced by the facility over the 20-year term. Id. Purchasing 3 million more RECs than is actually required during the first 10 years of the agreement cannot possibly be interpreted as being consistent with RSA 362-F:9, I. The purchase of RECs in excess of the “reasonably projected” requirement is also incredibly costly to PSNH’s customers. Staff Exhibit 1 at 14. Unlike the Lempster PPA, which provided for the sale of RECs to PSNH at favorable prices, the REC prices under the PPA are substantially above expected future market prices for Class I RECs and therefore PSNH is unlikely to be able to resell those RECs at compensatory prices. Staff Exhibit 1 at 14.

PSNH disputes Staff’s contention that it will purchase more RECs than its needs to meet its RPS obligations by arguing that the parties in the Schiller conversion docket (DE 03-166) provided for the Schiller RECs to be sold to third-parties. While the risk-sharing mechanism approved in that docket does allow the Schiller RECs to be sold, it does not mandate such a sale. In addition to the sale of RECs, the definition of revenue in the risk-sharing mechanism includes “cost avoidances.” Staff interprets this to mean that it would be economically irrational and imprudent for the Company to sell Schiller RECs to a third-party, in or outside New Hampshire, at a price that is less than what it would have to pay Laidlaw to replace the sold RECs. For these

reasons, Staff urges the Commission to require PSNH to include Schiller RECs in its determination of the REC requirement whenever the PPA REC price exceeds the REC market price.

THE CUMULATIVE REDUCTION ACCOUNT DOES NOT ADD VALUE TO THE PPA

In order to distract attention from the fact that customers will pay above market prices for energy, PSNH testified that unlike the QF contracts of another era the PPA provides customers something of value through the Cumulative Reduction account. This is incorrect. The Cumulative Reduction account tracks and aggregates the amount by which the PPA energy price in each hour differs from ISO-NE's energy price in the hour multiplied by the MWhs delivered. These positive or negative amounts will be aggregated over the term of the PPA to determine the cumulative net positive or negative adjustment to the fair market value of the facility. If there is any doubt that the vast majority of these hourly amounts will have positive values, Staff urges an examination of Staff Exhibit 16. That exhibit shows that had the energy pricing formula in the PPA been in effect during the 2007-2010 period, the PPA energy prices would have exceeded the average market energy prices in those years including 2008 when market energy prices reached an all-time high due to sky rocketing natural gas prices. The best that customers can hope to receive after 20 years is the sum of their nominal above-market energy payments, which would actually leave them worse off because the PPA in its present form does not provide for the payment of interest. To make customers indifferent, they would have to receive interest at a rate equal to their time-value of money. This is not on the table. A far greater concern, however, is that customers will actually receive less than the sum of their nominal energy payments if the fair market value of the facility turns out to be below the balance in the Cumulative Reduction account. Staff believes this is a strong possibility, resulting in an even greater loss of value. For these reasons, Staff strongly urges the Commission to reject the Cumulative Reduction account and replace it with energy prices based on hourly ISO-NE spot market energy prices with a floor price to address volatility and financing concerns.

THE COSTS OF THE PPA OUTWEIGH THE ECONOMIC DEVELOPMENT BENEFITS OF THE PPA

The estimated economic benefits of Laidlaw are highly dependent on the project's effect on biomass prices and the amount of biomass purchased regionally. Substituting local biomass purchases with purchases from outside the region or from suppliers now providing biomass fuel

to other biomass facilities is not an economic benefit. PSNH did not assess where those purchases would be made nor is there a guarantee to purchase a specific level of biomass from New Hampshire. Unlike the I/O model's assumptions of unlimited supply of inputs and labor, the real world does indeed operate with constraints.

The Laidlaw project will have local economic benefits, but the Commission should not allow the local benefits to over-ride the costly effects of the over-market payments on the general body of PSNH customers.

CHANGES TO THE PPA (PSNH EXHIBIT 9) FALL WELL SHORT OF ADDRESSING STAFF'S CONCERNS REGARDING THE HIGH COST OF THE PRODUCTS.

Staff testified that the PPA provides for the base fuel price in \$/ton, and any deviation from the base fuel price, shall be converted to a price in \$/MWh through the use of 1.8 tons/MWh conversion factor. Staff asserted that the conversion factor should be 1.55 tons/MWh based on the operating characteristics of the plant as described by Laidlaw's witnesses to the SEC proceeding. Consistent with Staff's assertion, PSNH Exhibit 9 would change the 1.8 conversion factor to 1.6, but only for deviations from the proposed new base fuel price of \$30/ton. PSNH will continue to use the 1.8 conversion factor to convert the new base fuel price to \$/MWh. Since the change in Item 5 relates only to deviations from the new base fuel price, Laidlaw's offer is worth very little to customers. In fact, if fuel prices do not change the offer has no value. In contrast, the proposal in Item 1 to increase the project size to 67.MW would increase total revenue by over \$100 million over the 20-year term and add to Laidlaw's net income.

Regarding Item 2 to add interest equal to prime plus two percentage points to the Cumulative Reduction account, the offer does not resolve the greater concern expressed by Staff of capping recoupment of the above-market energy payments at the plant's fair market-value. Nor does Item 3 resolve the recoupment problem. Item 3 actually exacerbates Staff's concern by adding a second stream of above-market payments to the Cumulative Reduction account without increasing the cap value.

In summary, Staff believes that the combined effect of the changes set forth in PSNH Exhibit 9 will increase rather than decrease the cost of the PPA. For this reason, with the exception of Item 2, Staff recommends that the changes be rejected.