

**STATE OF NEW HAMPSHIRE  
PUBLIC UTILITIES COMMISSION**

**DG 09-169**

**CONCORD STEAM CORPORATION**

**2009-2010 Cost of Energy Adjustment**

**Order Approving Cost of Energy Rate**

**ORDER NO. 25,036**

**October 29, 2009**

**APPEARANCES:** Sarah B. Knowlton, Esq., of McLane, Graf, Raulerson and Middleton, P.A., for Concord Steam Corporation; and Matthew J. Fossum, Esq. for the Staff of the Public Utilities Commission.

**I. PROCEDURAL HISTORY**

On September 17, 2009, Concord Steam Corporation (Concord Steam or Company) , a public utility supplying steam service primarily to commercial and institutional customers in Concord, filed its annual cost of energy (COE) rate adjustment for the period November 1, 2009 through October 31, 2010. Included in the filing was the pre-filed testimony of Peter G. Bloomfield, president of the Company. The Commission issued an order of notice on September 18, 2009, scheduling a hearing on October 27, 2009. There were no intervenors and the hearing was held on October 27, 2009 as scheduled.

**II. POSITIONS OF THE PARTIES AND STAFF**

**A. Concord Steam**

Concord Steam, through Mr. Bloomfield, addressed: (1) the Company's proposed COE rate and the resulting bill impacts; (2) fuel purchase strategy and reasons for the decrease in costs; (3) sales forecast and unaccounted-for steam; (4) co-generation operations; and (5) status of the Company's new plant.

### **1. Proposed COE Rate and Bill Impacts**

The Company's filing indicates that the COE rate for the coming year will be \$17.36 per Mlb. of steam. This represents a decrease of \$3.08 per Mlb. over last year's projected weighted average rate of \$20.44 per Mlb. The rate is proposed to be subject to a "collar" that permits Concord Steam to move the COE rate up or down by 20 percent without requiring further Commission action, as allowed by the Commission in prior COE filings. *See, e.g., Concord Steam Corp., Order No. 24,911 (October 31, 2008).*

The estimated total bill impact for a small steam customer is an approximate 10.6 percent decrease compared to last year. For a medium size steam customer, the estimated total bill impact is an approximate 11 percent decrease over last year and, for a large steam customer, the total bill impact is projected to be an approximate 11.3 percent decrease over last year. The bill impacts reflect delivery rates at the level proposed in the Company's pending petition for a rate increase, Docket No. DG 09-139.

### **2. Fuel Purchase Strategy and Reasons for the Decreased Costs**

Mr. Bloomfield stated that the majority, about 80 percent when measured by BTUs, of the Company's steam is generated through the use of wood chips and shredded wood as a fuel supply. Transcript of October 27, 2009 Hearing (Tr.) at 8. The remaining 20 percent is generated by a mixture of natural gas and oil, including waste oil and "virgin" #6 oil. Tr. at 8. The filing indicates that the projected rate decrease is due primarily to the decrease in diesel fuel costs, which directly impacts the cost of wood used by the Company as its primary fuel source. The costs of fuel needed to harvest, process and transport the wood have fallen since last year.

The Company's filing indicates that it expects a decrease of approximately \$422,000 in its total fuel costs for the coming year.

Partially offsetting the decreases in fuel costs is an under-collection from the prior COE period. Concord Steam estimates that upon completion of the COE period on October 31, 2009, it will have an outstanding under-collection of \$67,714. It attributes the under-collection to normal fluctuations in fuel consumption, steam sales, and fuel costs. According to Mr. Bloomfield, though the Company has not lost customers, overall steam sales are down because of the high rate of vacancies in downtown commercial properties and this has resulted in a decline in steam sales, which was the primary cause of the under-collection. Tr. at 25.

Regarding its fuel supplies, the Company has entered into contracts for its wood supply that will result in an average delivered cost of wood of approximately \$30 per ton. Tr. at 10. Of this amount, approximately \$1 is for the actual cost of the wood, \$15 is for labor and chipping, and \$14 is for transport. According to his pre-filed testimony, Mr. Bloomfield indicates that a ton of wood is approximately equal to a barrel of oil in the amount of energy it produces. He stated that, at the current rate of oil futures, wood was about half the cost of oil and, therefore, the price of wood is still attractive when compared to alternative fuels. At the time of its filing, Concord Steam estimated that the energy savings to its customers from burning wood, including the allowance for additional direct costs associated with it, is over \$1,200,000.

Concord Steam stated in its filing that, at present, it pre-purchases about 25 percent of its wood fuel requirements, and about 90 percent of its fossil fuel requirements, for the upcoming heating season. The Company's filing also indicated that it was pre-buying market wood for offsite storage at its wood yard for reclamation during the heating season. Mr. Bloomfield stated

that the Company has approximately 5,000 tons of wood in the wood yard, down from 10,000 tons at this time last year. Tr. at 12. According to Mr. Bloomfield, the Company over-purchased its wood last year and has decreased the amount in storage to avoid a similar problem this year. Tr. at 12-13. Mr. Bloomfield also stated that the Company purchases wood for direct delivery to the plant, but that it pays a premium for that wood of about \$3 to \$4 per ton, due to the scheduling and transportation issues associated with such deliveries. Tr. at 10-11. The rate of \$30 per ton is a “blended rate,” which accounts for the cost of wood stored in the wood yard as well as that directly delivered to the steam plant. Tr. at 10.

Regarding the wood yard, Mr. Bloomfield stated that there have been no significant changes to the operations of the wood yard and that the Company continues to use the yard to efficiently manage its wood resources. One alteration has been made to the finances of the wood yard, however. Recently, the loader used at the wood yard was involved in an accident and deemed beyond repair by the Company’s insurer. Tr. at 17. As a result, the Company has begun leasing a new loader for use at the wood yard. Tr. at 17. The annual lease payments for the loader are included as part of the wood yard expenses in the COE filing. Tr. at 17-18. The Company stated that it elected to lease the loader rather than buy it, in part, because Concord Steam would be turning the wood yard operations over to the power division of the restructured company once the new steam plant becomes operational, as discussed below. Tr. at 18.

### **3. Sales Forecast and Unaccounted-for Steam**

Mr. Bloomfield indicated that Concord Steam weather normalizes actual steam sales from the prior year using a 30-year normal degree day average. Tr. at 15. The sales forecast takes into account the addition of a new customer, the Rundlett Middle School.

Regarding its unaccounted-for steam, considered as a percentage of steam produced, Concord Steam estimates that the unaccounted-for amount was approximately 30 percent in 2008-2009, which is about the same percentage as the prior year. Tr. at 19. Mr. Bloomfield stated that the Company would provide a schedule with the final reconciliation for the 2008-2009 COE year that would provide monthly steam produced volumes including its unaccounted-for system losses, as well as each of the major “accounted for” steam use components of steam sales, viz., electric generation, boiler water preheat feedstock, and other internal company use. Tr. at 30. Mr. Bloomfield indicated that much of Concord Steam’s unaccounted-for losses have less to do with leaks than with heat loss in the distribution system mains due to the degradation of the insulation and wet ground around the steam lines. Tr. at 31-32. The company continues to upgrade and insulate its underground steam lines to address this problem. Tr. at 33-34. Mr. Bloomfield stated that the Company’s line losses will, generally, remain around 30 percent until some major upgrades can be made. Tr. at 28, 33. According to Mr. Bloomfield, the Company has plans to re-insulate and upgrade some of its pipes in the coming summer and it estimates that, with some work, its losses could be reduced below 20 percent. Tr. at 33. In addition, as was noted in Order No. 24,969 (May 22, 2009), Concord Steam intended to re-insulate approximately 5,500 feet of existing pipes. According to Mr. Bloomfield, some of that work has been done, but the remainder has been deferred by delays relating to the new plant. Tr. at 29.

#### **4. Cogeneration Operations**

The Company reported in its cost-benefit analysis pertaining to its cogeneration operations that approximately 4,600,000 kilowatt-hours of electricity were generated last year. Of that total, it used 2,030,500 kilowatt-hours for steam plant operations and sold 2,643,728

kilowatt-hours to the regional wholesale electricity market operated by ISO New England. Concord Steam received revenues of \$155,903 from the sale of its electricity and avoided costs of electric purchases from Unitil amounting to \$259,884. Concord Steam estimated that it would have had to pay \$339,577 for electricity without self-generation. According to Concord Steam, the benefit-cost analysis demonstrates that the cogeneration operation is cost effective, with a benefit-cost ratio of 1.28.

### **5. Status of the New Steam Plant Project**

Mr. Bloomfield indicated that the new steam plant project has all of its city permits in place and its state and federal permits are well under way. The Company has arranged financing for the project from TD Bank. Tr. at 35. That financing is contingent upon Concord Steam being able to sell the electricity and the renewable energy credits from the new plant. Tr. at 35. The Company hopes to begin construction in the spring of 2010 with the new plant becoming operational approximately two years later. Mr. Bloomfield stated that the Company continues to project that the operation of the new plant will result in steam rates approximately 30 percent lower than current rates. Tr. at 29-30.

#### **B. Staff**

Staff did not testify in this docket. In its closing, Staff stated that it had completed its review of the Concord Steam COE filing for the upcoming period and recommend approval of the proposed rates. Tr. at 37-38. According to Staff, the Company's demand forecast is consistent with forecasts filed for previous winter periods and approved by the Commission. Tr. at 38. Staff also noted that the forecast reflects the addition of the new load from the Rundlett Middle School. Tr. at 38.

Staff noted that when the 2008-2009 COE period ends on October 31, 2009, the Company will submit a final reconciliation to the Commission's audit staff and any discrepancies found in the reconciliation would be addressed through the monthly adjustment mechanism. Tr. at 38. Staff noted it is unlikely there would be a major discrepancy as August, September and October usage is relatively light compared to use during the heating season. Tr. at 38. Furthermore, because fuel costs and revenues are reconciled after the period, any issues that might arise during the upcoming year can be addressed in next years' COE. Tr. at 38-39.

### **III. COMMISSION ANALYSIS**

Based on our review of the record in this docket we approve the proposed COE rate of \$17.36 per Mlb. as being just, reasonable and lawful as required by RSA 378:7. We observe that Concord Steam's use of wood as fuel is expected to produce significant savings during the 2009-2010 COE period as compared to other fuel sources. We recognize that the Company has attempted to improve upon its losses with some success and we expect that the Company will continue its efforts to control line losses in order to improve efficiency. We also anticipate that the inclusion of the Company's analysis of its monthly steam produced volumes will provide a clearer view of the Company's steam production and use, as well as its improvement upon its line losses.

#### **Based upon the foregoing, it is hereby**

**ORDERED**, that Concord Steam's proposed 2009-2010 COE rate of \$17.36 per Mlb. effective November 1, 2009 on a service-rendered basis, is APPROVED; and it is

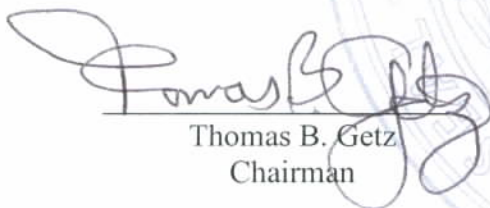
**FURTHER ORDERED**, that Concord Steam may adjust the approved COE rate of \$17.36 per Mlb. upward or downward monthly based on Concord Steam's calculation of the

projected over or under-collection for the period, but the cumulative adjustments shall not exceed 20 percent of the approved COE rate; and it is

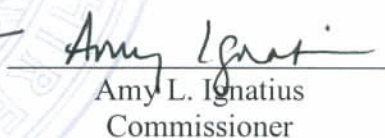
**FURTHER ORDERED**, that Concord Steam shall provide the Commission with its monthly calculation of the projected over- or under-calculation, along with the resulting revised COE rate for the subsequent month, not less than five business days prior to the first day of the subsequent month, and shall include a revised tariff if Concord Steam elects to adjust the COE rate; and it is

**FURTHER ORDERED**, that Concord Steam file properly annotated tariff pages in compliance with this order no later than 15 days from the issuance date of this order, as required by N.H. Code Admin. Rules Puc 1603; and it is


By order of the Public Utilities Commission of New Hampshire this twenty-ninth day of October, 2009.

  
Thomas B. Getz  
Chairman

  
Clinton C. Below  
Commissioner

  
Amy L. Ignatius  
Commissioner

Attested by:

  
Debra A. Howland  
Executive Director