

**STATE OF NEW HAMPSHIRE  
PUBLIC UTILITIES COMMISSION**

**DG 11-209**

**CONCORD STEAM CORPORATION**

**2011-2012 Cost of Energy Adjustment**

**Order Approving Cost of Energy Rate**

**ORDER NO. 25,285**

**October 28, 2011**

**APPEARANCES:** Carol J. Holahan, Esq., of McLane, Graf, Raulerson and Middleton, P.A., for Concord Steam Corporation; and Alexander F. Speidel, Esq. for the Staff of the Public Utilities Commission.

**I. PROCEDURAL HISTORY**

On September 15, 2011, 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, 2011 through October 31, 2012. 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 21, 2011, scheduling a hearing on October 24, 2011. There were no intervenors, and the hearing was held on October 24, 2011 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) ongoing system improvements funded through subsidies received as a result of the

federal government's Biomass Crop Assistance Program (BCAP); (4) sales forecast and unaccounted-for steam; (5) co-generation operations; and (6) 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 \$15.63 per Mlb. of steam. This represents a decrease of \$1.01 per Mlb. from last year's projected weighted average rate of \$16.64 per Mlb. The rate is subject to a "collar" that permits Concord Steam to move the COE rate up or down by 20 percent without requiring further Commission action. *See, e.g., Concord Steam Corp., Order No. 23,822 (November 1, 2001).*

The estimated total bill impact for a small steam customer is an approximate 2.9 percent decrease compared to last year. For a medium-sized steam customer, the estimated total bill impact is an approximate 3 percent decrease over last year and, for a large steam customer, the total bill impact is projected to be an approximate 3.1 percent decrease over last year. The bill impacts reflect delivery rates at the level approved in the Company's petition for a rate increase, Docket No. DG 09-139, *see, Concord Steam Corp., Order No. 25,100 (May 6, 2010).*

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

Mr. Bloomfield, in his pre-filed testimony, stated that the majority, about 70 percent, of the Company's steam is generated through the use of wood chips and shredded wood as a fuel supply. *See* Hearing Exhibit 1, Direct Testimony of Peter Bloomfield at 5. The remaining 30 percent is generated by a mixture of natural gas and oil, including waste oil and number 6 residual oil. The Company, in a continuation of a recent trend in its operations, expects to burn more natural gas in its operations this year, and less oil, due to the lower price of natural gas. *See* Hearing Exhibit 1, Direct Testimony of Peter Bloomfield at 5. The filing indicates that the

projected rate decrease is due to decreases in the cost of all fuels used by the Company (wood, oil, and natural gas) plus a small anticipated over-collection from the prior COE year that is credited to the 2011-2012 COE forecast. Mr. Bloomfield indicated that certain factors such as changes in diesel fuel costs will cause corresponding increases or decreases in the cost of wood used by the Company as its primary fuel source. Mr. Bloomfield also indicated that the cost of wood can also be influenced by weather conditions in forest wood lots, where wet weather patterns can cause production problems in wet forest lots, increasing costs for logging operations. *See* Hearing Exhibit 1, Direct Testimony of Peter Bloomfield at 4-6.

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 \$26 per ton. *See* Hearing Exhibit 1, Direct Testimony of Peter Bloomfield at 5. Of this amount, approximately \$1 is for the actual cost of the wood, \$13 is for labor and chipping, and \$12 is for transport. *Id.* If all ancillary wood handling costs at the Company's steam plant and wood yard are included, the anticipated cost of wood fuel for the Company for the coming year is approximately \$33 per ton. *Id.* 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 and gas futures, wood continues to be an attractive, economical choice. *Id.* 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 \$600,000. *Id.*

Regarding the anticipated prior period over-collection, the Company has factored the projected year end amount into the 2011-2012 COE rate calculation. Mr. Bloomfield also

explained at the hearing that the Company made a small correction to the final 2009-2010 COE reconciliation, related to a recommended adjustment in the final PUC Audit Report issued this past summer. The correction to the 2009-2010 COE reconciliation was filed by the Company on October 12, 2011 and entered as Exhibit 2 at the hearing. This correction impacts the beginning balance of the 2010-2011 COE reconciliation and as a result, had a slight impact on the anticipated 2010-2011 COE ending balance. Because the impact on proposed rates in the instant proceeding was insignificant, Mr. Bloomfield stated the Company will factor the correction into the first monthly over/under report and if necessary, adjust the COE rate effective on December 1, 2011.

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. *See* Hearing Exhibit 1, Direct Testimony of Peter Bloomfield at 6. 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. *Id.*

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. *See* Hearing Exhibit 1, Direct Testimony of Peter Bloomfield at 5-6.

### **3. System Improvements Funded with BCAP Savings**

Mr. Bloomfield discussed, in his pre-filed testimony and at the hearing, the system improvements made possible by a U.S. Department of Agriculture subsidy program, the Biomass Crop Assistance Program (BCAP). BCAP provided the Company, as a qualified biomass

conversion facility (*i.e.*, as an end-user of wood fuel) with \$94,699 in subsidy, in the form of reduced payments to the Company's wood suppliers, from January 19, 2010 to April 30, 2010. *See* Hearing Exhibit 1, Direct Testimony of Peter Bloomfield at 9-10. The Company, in last year's cost of energy filing, requested and received permission to apply these funds towards investments designed to reduce the Company's system steam losses, in lieu of applying the BCAP cost savings towards the cost of energy revenue accounting. *See* Hearing Exhibit 1, Direct Testimony of Peter Bloomfield at 9-10; *see also Concord Steam Corporation*, Order No. 25,163 (Oct. 29, 2010). Mr. Bloomfield discussed the Company's acquisition of a thermal imaging camera with a portion of the BCAP funds, which has been used to catalog heat (steam) losses on the Concord Steam system. The Company has not completed its thermal imaging study thus far, but intends to analyze the entire system to assist it in its efforts to locate, prioritize and repair steam leaks. Mr. Bloomfield also noted that the Company was able to identify four significant steam leaks using the thermal imaging camera, which were all repaired during the summer of 2011. The Company noted less serious system leaks have been located and will be repaired during the summer of 2012. *See* Hearing Exhibit 1, Direct Testimony of Peter Bloomfield at 11.

#### **4. 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. *See* Hearing Exhibit 1, Direct Testimony of Peter Bloomfield at 7-8.

Regarding its unaccounted-for steam (system steam losses), the Company, in addition to its thermal imaging survey project and related repair work, has installed new steam flow meters

on the lines leaving the steam plant to enhance tracking of line losses. Portions of the BCAP funds were also used to cover costs for these steam line repair projects and to purchase the steam flow meters. It is expected that these investments using BCAP funds will reduce the Company's line losses, resulting in lower steam costs to customers. *See* Hearing Exhibit 1, Direct Testimony of Peter Bloomfield at 8-9 and 11-12.

### **5. Cogeneration Operations**

The Company reported in its cost-benefit analysis pertaining to its cogeneration operations that 2,877,600 kilowatt-hours of electricity were generated last year. Of that total, it used 1,349,501 kilowatt-hours for steam plant operations and sold 1,528,099 kilowatt-hours to the regional wholesale electricity market operated by ISO New England. Concord Steam received revenues of \$129,803 from the sale of its electricity and avoided costs of electric purchases from Unitil of \$127,740. Concord Steam estimated that it would have had to pay \$211,046 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 1.98.

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

Mr. Bloomfield indicated that the new steam plant project has all of its city, state and federal permits in place. The Company has also arranged for contractual commitments to purchase the entire output of the facility. The Company hopes to have the new plant in service by the fall of 2013, and is currently in negotiations for financing of the project. *See* Hearing Exhibit 1, Direct Testimony of Peter Bloomfield at 9.

**B. Staff**

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. *See* Transcript of October 24, 2011 Hearing (Tr.) at 23. According to Staff, the Company's demand forecast is consistent with forecasts filed for previous winter periods and approved by the Commission. Tr. at 23-24. Staff noted that when the 2010-2011 COE period ends on October 31, 2011, 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 24. 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 24. Staff also supported the Company's efforts at reducing system steam losses. Tr. at 24.

**III. COMMISSION ANALYSIS**

Based on our review of the record in this docket we approve the proposed COE rate of \$15.63 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 noticeable savings during the 2011-2012 COE period as compared to other fuel sources. We recognize that the Company has made progress in reducing system steam line losses and we expect that the Company will continue its efforts in order to improve efficiency, resulting in lower steam costs.

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

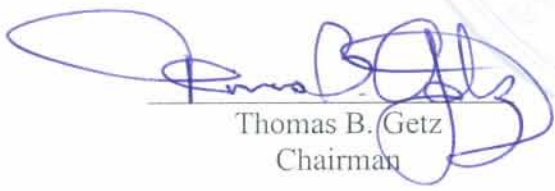
**ORDERED**, that Concord Steam's proposed 2011-2012 COE rate of \$15.63 per Mlb. effective November 1, 2011 on a service-rendered basis, is **APPROVED**; and it is

**FURTHER ORDERED**, that Concord Steam may adjust the approved COE rate of \$15.63 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

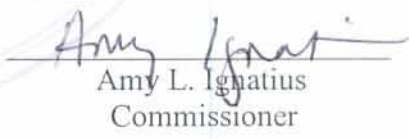
**FURTHER ORDERED**, that Concord Steam shall provide the Commission with its monthly calculation of the projected over- or under-calculation, along with the resulting revised COE rate for the subsequent month, not less than five business days prior to the first day of the subsequent month, and shall 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-eighth day of October, 2011.



Thomas B. Getz  
Chairman



Amy L. Ignatius  
Commissioner

Attested by:



Debra A. Howland  
Executive Director