

**STATE OF NEW HAMPSHIRE  
PUBLIC UTILITIES COMMISSION**

**DG 08-107**

**CONCORD STEAM CORPORATION**

**Petition for Approval of Transfer of Utility Assets,  
Distribution System Upgrades and Steam Purchase Agreement**

**Order Approving Settlement Agreement**

**ORDER NO. 24,969**

**May 22, 2009**

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

**I. PROCEDURAL HISTORY**

On August 28, 2008, Concord Steam Corporation (Concord Steam) filed a petition for approval of the transfer of utility assets, distribution system upgrades, and a steam purchase agreement. Concord Steam is a public utility providing retail steam service in Concord while cogenerating electrical power at its plant on Pleasant Street in Concord.

Concord Steam seeks to vacate its current plant on or around August 2010 and cease being a steam generator. Instead of generating steam, Concord Steam intends to purchase its steam from Concord Power and Steam, LLC (Concord Power) pursuant to a long term Steam Purchase Agreement (SPA).<sup>1</sup> Concord Steam will continue to own and operate its steam distribution system and plans to extend its distribution system to interconnect with the new plant and re-insulate portions of the downtown distribution system. Since Concord Steam will no

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<sup>1</sup> The term SPA refers to the revised version of the SPA introduced as Exhibit 3, not the version attached to the Settlement Agreement.

longer operate a steam production plant or generate electricity, it proposes to sell certain utility-owned equipment no longer necessary for utility service to Concord Power.

On September 24, 2008, the Commission issued an order of notice scheduling a prehearing conference, which was held on October 29, 2008. On November 6, 2008, Staff recommended a procedural schedule for this docket, which was approved by secretarial letter dated November 12, 2008. Staff filed the testimony of Stephen P. Frink, Assistant Director of the Gas & Water Division, and Robert J. Wyatt, Senior Utility Analyst, on December 31, 2008. Following several weeks of settlement negotiations, Staff and Concord Steam filed a settlement agreement on February 20, 2009. A hearing on the agreement was held on February 25, 2009. On March 5, 2009, Concord Steam filed three additional exhibits pursuant to record requests, including a revised SPA.

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

### **A. Concord Steam**

As set forth in its petition, Concord Power would construct and own a new biomass-fired cogeneration facility located on land owned by P & M Realty, LLC<sup>2</sup> on South Main Street in Concord at which it would generate steam energy. The new plant would have the capacity to produce up to 17 megawatts (MW) of electricity for sale on the wholesale electric market, subject to Concord Power's obligation to supply steam to Concord Steam under a 30-year steam purchase agreement. The petition stated that the plant would be certified as a Class 1 renewable energy source under New Hampshire's electric renewable portfolio standard. Demolition and site preparation was to begin in the fall of 2008 and Concord Power plans to begin construction of the new plant in the spring of 2009, with the new plant expected to be operational in August

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<sup>2</sup> P & M Realty, LLC, as well as Concord Power, Concord Steam, and BS & Chips, LLC, are owned by Peter Bloomfield and Mark Saltsman.

2010. Until then, Concord Steam would continue to operate its Pleasant Street facility.

According to the petition, one or more third party investors are expected to acquire a substantial interest in Concord Power in exchange for an equity investment.

In order to connect the new steam plant to the existing distribution system, Concord Steam will have to install approximately 6,800 feet of 16 inch steam pipe. In addition, Concord Steam proposed to re-insulate portions of the downtown system. The estimated cost of the interconnection and distribution system upgrades is \$4 million, which would be financed through new debt. Finally, Concord Steam proposed to transfer certain equipment, including wood boiler steam plant support and electric generation equipment, as well as equipment used at Concord Steam's wood yard, to Concord Power for \$1.5 million. According to the petition, this equipment had a book value of \$696,531, and the proposed sale price of the assets is greater than book and market value but less than what Concord Power would pay if it were to purchase the assets new.

Concord Steam stated that it expects its overall steam rates would decrease by approximately 30% based on its proposal. Concord Steam seeks a determination by the Commission that: (i) Concord Steam's decision to enter into the steam purchase agreement would be prudent and in the public interest; (ii) the construction of system upgrades by Concord Steam necessary to interconnect its distribution system to the proposed new plant and the re-insulation of portions of Concord Steam's downtown distribution system would be prudent and in the public interest; and (iii) pursuant to RSA 374:30, Concord Steam may transfer the utility assets to Concord Power. Concord Steam asked the Commission to open a docket akin to an *Easton* review, citing *Pittsfield Aqueduct Company*, Order No. 24,610 (2006) and *Appeal of Easton*, 125 N.H. 205, 211 (1984).

In its petition, Concord Steam also described the restructuring of its workforce and the relationship with an affiliated service company. Concord Steam stated it planned to transfer its employees to a new service company that would provide service both to Concord Power and Concord Steam.

### **B. Staff**

Staff stated that the project contemplated by Concord Steam and its affiliate, Concord Power, represents a major change in how operations have been conducted. Currently, Concord Steam is a steam utility with some incidental electric cogeneration capabilities. When this project is complete, the operation will transform into a merchant electric generating plant with steam operations in a subsidiary role. Staff believes that a 30% reduction in steam rates, if achieved, would go a long way towards solving some of Concord Steam's problems, such as its loss of load experienced in recent times, and its high unaccounted-for steam energy problems. This proceeding is important, in part, because some of the financing of the project is affected by the results of this proceeding.

As set forth in direct testimony, Staff recommended Commission approval of the system upgrades and transfer of assets. Staff stated that Concord Steam's proposal for construction and operation of a new plant under restructured arrangements was competitive when compared with an arrangement in which Concord Steam owned a new plant sized to fit its steam distribution needs. Staff's analysis was based on the estimated capacity charge set forth in the steam purchase agreement and a comparison of the estimated revenue requirements of the two options. Among the advantages of Concord Steam's proposal, Staff cited savings from economies-of-scale and greater system reliability from the production of steam at a new plant, and the proposed distribution system enhancements and improvements. Staff pointed out that Concord Steam

projected decreased losses of approximately 28,000 Mlbs on an annual basis as a result of the re-insulation of distribution steam pipes where needed.

Staff nevertheless expressed several concerns regarding the terms of the steam purchase agreement filed with the petition: (i) Concord Power's ability to sell electricity; (ii) the financial strength of Concord Power; (iii) ownership and management of the new plant and of Concord Steam; (iv) recovery of future plant additions; and (v) plant costs to be recovered through the capacity charge.

Under the terms of the originally filed steam purchase agreement, power plant operating and maintenance (O&M) costs were assigned to Concord Steam based on its steam sales as a percentage of total steam production. Therefore, in large part the O & M charge to Concord Steam would depend on the amount of steam used to produce electricity (i.e., low electricity sales result in higher steam utility costs). Furthermore, low electricity sales could ultimately risk continuation of the business and Staff questioned whether the provisions of the SPA adequately protect Concord Steam's property rights and access in such an event.

Staff stated that Concord Steam had demonstrated the financial and managerial expertise to safely and reliably operate the existing steam utility and generate electricity. Staff recognized that there could be a change in management under the new corporate structure and recommended that the Commission should have the opportunity to evaluate and rule on such a change.

In addition, the originally filed steam purchase agreement included estimated plant costs and a provision for increases in the capacity charge for future plant additions. Staff recommended that: (i) actual plant costs be used to determine the capacity charge; (ii) the provision for future additions be revised to avoid changes to the capacity charge for minor plant additions; and (iii) those charges take into account depreciation and retirements.

### **III. SETTLEMENT AGREEMENT**

#### **A. Revised Steam Purchase Agreement**

Staff and Concord Steam agreed that entering into the SPA is prudent and in the public interest. Pursuant to the settlement agreement, the Company will be entitled to recover, through the cost of energy rate set by the Commission, payment of the Capacity Charge, O & M Charge and Fuel Charge as defined in the SPA, subject to the Commission's review of the prudence of such costs. In addition, the Commission will have the right to review the final costs of the purchase of the back-up boilers prior to the recovery of such costs through Concord Steam's base rates.

The Commission's approval of the SPA is limited to its terms. Any modifications of the SPA are subject to Commission review pursuant to RSA Chapter 366. Finally, all costs incurred under any modified steam purchase agreement for which Concord Steam seeks ratepayer recovery will be subject to review by the Commission.

The SPA defines the relationship between Concord Steam and Concord Power relative to the steam produced at the proposed new plant. The SPA has an initial term of 30 years with Concord Steam having the option to extend it for another 20 years. *See* SPA sections 8.1, and 8.2. Concord Power is to own and operate the plant for the production of both electricity and steam. Concord Steam may, but is not obligated to, purchase all of its steam requirements from Concord Power since it has the right to buy steam from others and generate steam itself. SPA section 2.5.

The SPA does not give any authority for Concord Steam to dictate the manner in which the plant is operated for the production of electricity. The SPA does, however, include provisions relative to the authority of Concord Steam to direct Concord Power in the generation

and delivery of steam to Concord Steam. The primary source of steam generation at the plant will be the wood-fired boiler. The plant will also have two natural gas-fired back-up boilers owned by Concord Steam. Concord Steam may direct Concord Power to produce steam with the back-up boilers, at any time, subject to the complete discretion of Concord Steam. SPA section 2.5. This provision is meant to provide Concord Steam with the greatest flexibility possible in the production of steam for its customers. Under SPA section 2.5, Concord Power is not obligated to actually use the back-up boilers to generate steam when directed by Concord Steam, but in such case the steam price will be the same as if all steam purchased is Excess Steam as set forth in section 7.5, i.e., the Fuel Charge will be the actual cost of the fuel used to produce the steam for the back-up boilers. During scheduled or unscheduled outages of the wood-fired boiler, Concord Steam may require Concord Power to generate Replacement Steam, priced at the normal SPA contract rate. SPA sections 1.16 and 2.4.

As an added measure of protection for Concord Steam, Concord Steam may file Uniform Commercial Code statements reflecting its ownership interest in the back-up boilers, and any liens or financing relating to the plant are to expressly exclude any security or other interest in the back-up boilers. SPA Article 16. Moreover, if requested, Concord Power is to provide Concord Steam with a recordable interest in the property on which the plant is located to ensure Concord Steam's continuing ability to maintain, operate, repair and have access to the back-up boilers. SPA Article 16. Further, any of these rights are to have priority over any liens in connection with financing obtained relative to the land. SPA Article 16. Mr. Bloomfield testified that the term "liens" as used in Article 16 includes leases. Hearing Transcript (Tr.) at 121-125. The settlement agreement confirms that, in the event the SPA is terminated for any reason, Concord Steam will continue to have access to the back-up boilers for steam generation.

The price for the steam generated by Concord Power and sold to Concord Steam consists of three charges: (i) a Capacity Charge; (ii) an Operation and Maintenance Charge; and (iii) a Fuel Charge. Each of the charges is structured so that Concord Steam is obligated to pay only for the portion of plant operations that result in the production of steam sold to it.

According to Mr. Bloomfield, the Capacity Charge is designed to cover the debt service obligations of Concord Power related to the actual debt incurred in the construction of the new plant. *See* SPA section 1.13. Under section 7.2.1.1 of the SPA, for the first 15 years of the agreement, the Capacity Charge is calculated by determining the Debt Service Payment as defined in SPA section 1.13, then multiplying that amount by the Steam Sales Percentage,<sup>3</sup> then multiplying by 150%,<sup>4</sup> and then dividing by the estimated amount of steam forecast to be sold over the Service Year. SPA section 1.17. For the second 15 years, the Capacity Charge is \$1,500,000 multiplied by the Steam Sales Percentage and divided by the estimated amount of steam forecast to be sold over the Service Year. SPA section 7.2.1.2. According to Mr. Bloomfield, this change will result in a significant drop in the Capacity Charge. Tr. at 41. Should the SPA be extended beyond the initial 30 year term, the Capacity Charge will consist of the depreciated value of the plant multiplied by 10%, multiplied by the Steam Sales Percentage, and divided by the estimated amount of steam forecast to be sold over the Service Year. SPA section 7.2.1.3. The SPA also provides for increases to the Capacity Charge for certain capital improvements to the plant of \$100,000 or more. SPA section 7.2.1.4. Such improvements, however, may only be undertaken with the consent of both Concord Steam and Concord Power,

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<sup>3</sup> As defined in SPA section 1.20, the Steam Sales Percentage is composed of (i) the percentage of total wood fired steam sent into the steam distribution system divided by the maximum wood-fired steam production capacity, plus (ii) the steam sales percentage share of the total amount of steam used to generate station service power. *See* also section 7.4.1.

<sup>4</sup> At hearing, Mr. Bloomfield noted that one of the lender's requirements is that a debt service ratio of 1.5 be maintained in respect to the whole project.



and only if they are either needed to meet Concord Steam's steam requirements, or will improve the efficiency or economics of the plant. SPA section 7.2.1.4. According to Mr. Bloomfield, the language regarding the efficiency or economics of the plant does not include efficiencies that primarily benefit power production, such as an improvement in steam turbine efficiency.<sup>5</sup> Tr. at 141-142.

The Operation and Maintenance Charge is designed to account for the non-fuel related operations and maintenance of the plant, including costs for labor, insurance, parts, and other expenses. SPA section 7.3. Only those O&M charges incurred in accordance with Good Utility Practice, defined in SPA section 1.8, may provide a basis for O&M charges passed to Concord Steam. SPA section 7.3. Further, any O&M costs relating to the generation of electricity for sale are specifically excluded from the O&M charge to Concord Steam. SPA section 7.3. The O&M charges are not reconciled with actual costs for past years, but are to be adjusted prospectively only. SPA section 7.3. The only exception to this is in times, such as the initial year, when actual data is not available. SPA section 7.3. In such an instance, the amounts are reconciled when the actual data becomes available. SPA section 7.3.

The Fuel Charge to Concord Steam is based upon the total projected costs of the wood used in operating the plant subject to adjustments to reflect the portion of fuel used to generate steam sold to Concord Steam. SPA section 7.4. There is also a provision for the cost of natural gas used in the operation of the back-up boilers. SPA section 7.4.2. In addition, the Fuel Charge includes any costs incurred in providing Concord Steam with Excess Steam, meaning that should Concord Steam require more steam than provided for in the SPA for a given period, the costs of

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<sup>5</sup> Thus, for example, if the capital improvements will only be to improve electrical generation, the costs of those improvements are not passed to Concord Steam via the Capacity Charge.

providing that steam will be accounted for in the Fuel Charge. SPA section 7.5. The Fuel Charge, unlike the O&M Charge, is reconciled at least annually. SPA section 7.4.3.

The charges will be based, in part, upon the amount of steam delivered to Concord Steam, which will be measured by two meters. SPA section 6.1. The primary meter, over which Concord Power will have custody and control, will be the primary measure of the steam delivered. SPA section 6.1. A secondary meter under the custody and control of Concord Steam will be used to verify the primary meter and ensure its accuracy. SPA section 6.1. In the event of a discrepancy between the meters, the SPA provides a method for reconciling the difference. SPA section 6.2.6.

Records of the costs are to be kept by Concord Power and billed to Concord Steam monthly. SPA section 4.1. Concord Steam will have full access to Concord Power's books and records (SPA section 4.2) and may challenge any charges assigned to it pursuant to the dispute resolution clause in Article 19 of the SPA. SPA section 6.2.6. The Commission retains authority to regulate and set the rates for Concord Steam and, for that purpose, has full access to Concord Power's books and records upon request through Concord Steam. SPA Article 18. Concord Steam, however, retains discretion whether to request or obtain the records of Concord Power for provision to the Commission for its review. SPA Article 18; SPA section 4.2. During the hearing it was made clear that the intent of these recordkeeping and disclosure provisions is to ensure that Concord Steam complies with relevant Commission rules, and to clarify Concord Power's position concerning the extent of the Commission's jurisdiction. Concord Steam agreed that one of the risks of not permitting the Commission to have access to the records of Concord Power would be a potential disallowance of costs in a future rate case.

Concord Power and Concord Steam will indemnify each other for: (i) their breach of the provisions of the SPA; (ii) their acts or omissions related to performance of the SPA constituting negligence or reckless or willful misconduct; and (iii) as to Concord Power, any act or omission relating to steam prior to the passage of title to Concord Steam and, as to Concord Steam, any act or omission relating to steam after to the passage of title to Concord Steam. SPA Article 15. In addition, a liquidated damages provision applies to situations where steam delivered by Concord Power does not meet specifications. SPA Article 20. The SPA may be terminated by either party for the un-remedied material breach of the SPA, and by Concord Steam if Concord Power is unable to perform its obligations because of a Force Majeure event lasting more than 6 months, failure to achieve commercial operation of its plant within 24 months of receiving all governmental permits, or in the event of foreclosure proceedings involving Concord Power. SPA section 8.3. If the SPA is terminated for any reason, Concord Steam shall have complete access to the back-up boilers and may remove them or operate them in place at its own expense. SPA section 8.3.5.

### **B. Transfer of Utility Assets**

Staff and Concord Steam agreed that the transfer of assets of Concord Steam used to generate electricity<sup>6</sup> for a purchase price of \$1.5 million, to be payable in cash by Concord Power to Concord Steam, is consistent with the public good and should be authorized pursuant to RSA 374:30.

### **C. Improvements to Steam Distribution System**

Concord Steam will install approximately 6,800 feet of new 16-inch steam pipe to connect its steam distribution system to the Concord Power steam plant. In addition, Concord Steam will re-insulate portions of steam distribution pipe in its current steam distribution system,

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<sup>6</sup> The assets are listed on Schedule 2 of the settlement agreement.

most of which is located on Pleasant and State Streets in Concord. Finally, the Commission will have the right to review the final costs of Concord Steam's improvements to the steam distribution system prior to the recovery of such costs through Concord Steam's base rates.

#### **IV. HEARING TESTIMONY**

##### **A. Concord Steam**

At the hearing on the settlement agreement, Concord Steam witness Peter Bloomfield testified about: (1) the change of Concord Steam from a generator and distributor of steam to a distributor only; (2) the construction and operation of a new cogeneration plant by a new affiliated entity, Concord Power; (3) the SPA; (4) the transfer of various assets by Concord Steam to Concord Power; and (5) customer impact.

##### **1. Change to Concord Steam's Function**

Mr. Bloomfield, the President and majority owner of Concord Steam, testified that Concord Steam has been in the business of generating and distributing steam at its plant on Pleasant Street. Federal, state and local government buildings in the area account for approximately 65% of Concord Steam's current customer load; the remaining load is primarily commercial space in downtown Concord.

Mr. Bloomfield stated that because the lease for the land upon which the current plant sits is due to expire on August 30, 2010, Concord Steam has been reviewing alternatives relative to its continuing operations.<sup>7</sup> One option Concord Steam has considered is remaining at the current plant and continuing to operate more or less as it is operating now. According to an analysis provided by Concord Steam, continuing to use the current plant would require approximately \$39 million in upgrades and repairs. *See* Hearing Exhibit 5. Mr. Bloomfield stated that the costs

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<sup>7</sup> See e.g., *Concord Steam Corporation*, Order No. 24,538, 90 NH PUC 479 (2005) and *Concord Steam Corporation*, Order No. 24,866 (2008).

of remaining are substantial because of the need to install newer and more efficient boilers, and other items, to meet new pollution control guidelines. The Concord Steam analysis indicates that the majority of costs associated with the upgrade would come from the installation of two new wood-fired boilers at the Pleasant Street plant. If Concord Steam were to remain at its existing location, the estimated base rates would be \$48.65 per Mlb and the estimated energy rate would be \$14.38 per Mlb, or a total estimated rate of \$63.02 per Mlb. *See* Hearing Exhibit 5.

Mr. Bloomfield testified that another option was to construct a new plant in Concord. This new plant would be owned by another entity, and would supply Concord Steam's steam needs via the distribution system Concord Steam would continue to own and operate. Mr. Bloomfield and his partner, Mark Saltsman, created Concord Power to carry out this option. Because the two entities are affiliates and because Concord Steam will seek to recover its costs under the new arrangement, Mr. Bloomfield sought the Commission's approval before consummating the relevant transactions.

## **2. New Plant and Entity**

The proposed new plant is to be built near South Main Street in Concord. It is designed to be a base loaded cogeneration plant with a central wood-fired boiler capable of producing 180,000 pounds of steam per hour, enough to supply Concord Steam with all, or nearly all, of its steam requirements and produce up to 17 MW of electrical power for sale to the wholesale market. (By comparison, at present Concord Steam can cogenerate up to approximately 2 MW of electricity.) On an annual basis, the current total cogeneration of electricity of about 6 million kilowatt hours (kWh) per year would increase to 150 million kWh. Tr. at 21. About 85% of the plant's output would be electricity and the remaining 15% would be steam. Mr. Bloomfield testified that given the limited growth potential of the steam heat market, it is unlikely that

Concord Steam's steam needs would ever exceed the steam production capabilities of the new plant.

The primary fuel source for the plant would be biomass in the form of wood chips, which would be consumed at a rate of about 250,000 tons annually. The wood for the new plant, as with the current one, would be supplied from a wood yard in Pembroke presently owned by BS & Chips, the principals of which are Messrs. Bloomfield and Saltsman, and leased to Concord Steam. Mr. Bloomfield stated that the wood yard had more than enough space to accommodate the fuel storage needs of the new plant. Under the restructured arrangement, Concord Steam's lease would terminate, and Concord Power would take control of the wood yard under a new lease similar to the lease currently in effect, though for a longer term. Tr. at 25, 91.

In addition to the wood-fired boiler, the new plant would include two natural gas fueled back-up boilers, which would be owned by Concord Steam but operated by Concord Power. The two boilers are expected to cost approximately \$900,000. According to Mr. Bloomfield, these back-up boilers only produce steam, and have no use for, or effect on, electrical power generation. Their primary purpose, he stated, is to provide a source of back-up steam should the wood-fired boiler fail or be taken off line for any reason. The back-up boilers will be large enough to meet Concord Steam's steam requirements. Nevertheless, Concord Steam has the right to increase their capacity and modify them under section 2.7 of the SPA, including converting them to use oil as a fuel source. See Tr. at 51, 131. In addition, Concord Steam may elect to take steam at the cost of natural gas when it is economical to do so, i.e., when that cost would be less than the formula price for steam under Article 7 of the SPA. See Tr. at 152. He stated that using natural gas gave Concord Steam fuel flexibility, in that Concord Steam could obtain steam produced by either wood or natural gas, whichever was cheaper.

In addition to the construction of the new plant itself, the project would require the construction of approximately 6,800 feet of new steam pipes to connect the new plant to the existing steam distribution line. At the same time, Concord Steam plans to repair and re-insulate approximately 5,500 feet of existing steam pipes to improve their performance and decrease line losses.

As for staffing the new plant, Mr. Bloomfield testified that although the initial proposal had been to provide employees to both entities through a new service company, that proposal had been abandoned. The new proposal is that, when Concord Power becomes operational, some of the employees of Concord Steam would be transferred, avoiding lay-offs. By the date of operation, Concord Steam would have 4 or 5 employees and Concord Power approximately 22 employees. If operations employees of one company were needed on a temporary basis by the other, they could be "hired" in the same manner as any outside contractor would be. Tr. at 64-66.

As of the time of the hearing, the purchase of the land for the plant, together with environmental remediation, engineering and permitting activities had cost nearly \$3 million, but no construction had begun apart from some preliminary land clearing. Furthermore, Mr. Bloomfield stated that nearly all of the governmental permits had been obtained for the new plant and he foresaw no difficulties in obtaining the few remaining permits. He stated that he now hoped construction would begin in April or May 2009, and be completed so that the plant would become operational around February 2011. He testified that he has been in talks with the Department of Administrative Services to keep the Pleasant Street plant operational past the expiration of the current lease and until the new plant is online. As of the date of the hearing, Mr. Bloomfield was not certain whether Concord Power would purchase the land for the new plant or lease the land from its current owner, P & M Realty. In either event, Mr. Bloomfield

stated that any costs relative to the land passed on to Concord Steam would be reviewable by the Commission.

Mr. Bloomfield stated that the cost of the new plant is expected to be approximately \$70 million based on a firm price provided by Methuen Construction Company of Salem, New Hampshire, exclusive of the \$3 million already invested.<sup>8</sup> Of the \$70 million cost, approximately \$14 million is to be equity financed and the remaining \$56 million will be debt. As Concord Steam does not have the financial means to support the necessary equity investment, Mr. Bloomfield is currently working to obtain outside investor support for Concord Power. He stated that he is in the final stages of negotiations with an interested party, but the matter has been complicated by the recently passed Federal stimulus package. Assuming equity investor support is obtained, he expects that a bank will be willing to finance the remainder of the transaction provided that a participant lender is found and the SPA and wholesale purchased electrical power agreements are finalized. Tr. at 13-14. Concord Power is currently owned and controlled by Messrs. Bloomfield and Saltsman as equal owners, though ownership and control could change with outside investment. As minority owners of Concord Power, Messrs. Bloomfield and Saltsman expect to be involved for at least the first three to five years of Concord Power's operation under a management services contract. Tr. at 104-105.

No change in the ownership and control of Concord Steam will result from the proposed transaction. However, the capital structure of Concord Steam will change. Concord Steam will be capitalized such that the percentage of debt will exceed the percentage of equity.<sup>9</sup>

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<sup>8</sup> In addition, Concord Stream is expected to spend approximately \$6 million to purchase the back-up boilers, install the interconnecting steam pipes and reinsulated the existing steam lines. Tr. at 84.

<sup>9</sup> Under Concord Steam's current capital structure, the percentage of equity exceeds the percentage of debt.



### 3. Steam Purchase Agreement

A substantial portion of Mr. Bloomfield's testimony concerned the terms of the SPA. Of particular note, Mr. Bloomfield testified that although Concord Power will operate as an unregulated electrical power producer, Concord Steam will remain a regulated steam utility and the Commission will retain authority to review Concord Steam's costs and the basis for those costs. For example, Mr. Bloomfield confirmed that the prudence of fuel purchase decisions, including the reasonableness of the Fuel Charges, would be subject to Commission review under section 5(c) of the settlement agreement. Tr. at 95. To the extent Concord Steam seeks ratepayer recovery of them, Concord Power's personnel costs, any site development construction costs, land lease or acquisition arrangement costs, and management services costs that flow through the SPA, would be similarly reviewable. See Tr. at 96-105.

In addition, any costs associated with development of the site other than for the construction of the steam plant would not be recoverable from ratepayers, but if such costs were included in charges to Concord Steam for which ratepayer recovery was sought, the Commission could disallow them under section 5(a) of the settlement agreement. On the other hand, similar to the treatment of revenues from electric renewable energy certificates, which entirely belong to Concord Power, revenues from the re-lease or sale of part of the land not used for the steam plant would not accrue to Concord Steam. Tr. at 99-101, 102-103. Nevertheless, if the terms of the lease of the land or other ownership arrangement were to be changed to accommodate other development, there would be a reduction in the costs flowed through to Concord Steam. Tr. at 101, 103-104.

Additionally, Mr. Bloomfield stated that, subject to the discretion provided in the SPA, Concord Steam would cooperate with the Commission in obtaining the back-up information

regarding any operational costs sought to be passed on to Concord Steam from Concord Power. He further stated that he understood a lack of cooperation by Concord Steam may risk the disallowance of certain costs it might seek to recover through rates.

#### **4. Transfer of Assets**

As contemplated in the petition, in addition to the construction of a new plant owned by Concord Power, the proposed transaction would involve the transfer of various assets from Concord Steam to Concord Power. According to Mr. Bloomfield, Concord Steam would sell to Concord Power, at a cost of \$1.5 million, various hard assets, including parts and components used in the generation of electricity and steam. Mr. Bloomfield stated that Concord Steam valued the assets by three different methods, the depreciated net value, the estimated equipment market value, and the estimated replacement value. In the end, the decision to value the assets at \$1.5 million, he said, represented what the equipment was worth, and was “overall” a benefit to Concord Steam. Mr. Bloomfield testified that because some of the assets were redundant, they would be transferred to Concord Power earlier than others, but that the total transfer would essentially be complete in the middle to end of 2010, at which time the payment would be made. Tr. at 23-24.

In addition, the transfer would include equipment used at the wood yard. He testified that Concord Steam and Staff had agreed that these asset transfers are in the public good. Moreover, the money from these sales would, Mr. Bloomfield stated, be used to help fund the purchase of the back-up boilers and the improvements to the steam lines. Thus, the payment for these assets would be reinvested in the operation of the steam utility.

#### **5. Customer Impact**

Mr. Bloomfield testified that the proposed changes to Concord Steam and Concord Power would result in positive impacts for customers in the form of reduced rates and better steam service. According to Mr. Bloomfield, the overall cost of steam service is expected to drop by about 30% after the transfer.<sup>10</sup> These savings would be created by a number of factors. First, because the new plant will be a base loaded electrical generation plant, it will operate as a wood burning facility all the time. Thus, Concord Power will be able to enter into more advantageous fuel supply contracts than can Concord Steam currently. This is so because Concord Steam only operates its plant at capacity in the colder months and almost not at all in the summer. Accordingly, Concord Steam's fuel use is subject to high fluctuations that would not affect Concord Power.

Mr. Bloomfield also noted that because the new plant will generate electricity as well as steam, the costs of its operation will be spread across a wider base. Since approximately 15% of the new plant's operation would be directed to the production of steam, Concord Steam would be responsible for paying only about 15% of the cost of operating the new plant, and its customers would only be responsible for that amount, rather than the 100% of the costs they now bear. According to Mr. Bloomfield, although the new plant will be larger and more expensive to operate, the reduced obligations of Concord Steam and its customers will help to lower rates. Also, because the new plant, though larger, will be more efficient, rates would be contained by decreased operational costs generally. Moreover, he noted that, as a biomass user, the new plant may qualify for certain beneficial tax treatment, and the SPA specifically provides that any gas-related credits, such as greenhouse gas credits and thermal renewable energy credits, would be

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<sup>10</sup> Concord Steam expects to file a base rate case in 2010, reflecting the fact that Concord Steam will no longer be generating steam and will have interconnected to the new steam plant and made improvements to the existing steam distribution system. In addition, Concord Steam will have to file a financing request for loans necessary to make the additions and modifications to the steam distribution lines and purchase of back-up boilers.

applied to the price of the steam to reduce the costs to Concord Steam. This would, in turn, lower the costs borne by Concord Steam's customers.

Finally, Mr. Bloomfield stated that substantial portions of the existing steam lines will be repaired and upgraded thus increasing efficient deliveries of steam and decreasing line losses. Mr. Bloomfield said he expected that the increased efficiencies of delivery coupled with the lower costs elsewhere would help Concord Steam regain some of the customers it has lost in the last few years.

### **B. Staff**

Staff members Stephen Frink and Robert Wyatt testified at hearing. Staff testimony generally supported that of Mr. Bloomfield and noted that the parties agreed that the restructuring of Concord Steam and improvements to be obtained in the construction and operation of the new plant were in the public interest. In Staff's pre-filed testimony, several deficiencies had been identified in the previously submitted SPA, but during the hearing it was noted that essentially all of the issues had been addressed. In short, Staff supported the creation of Concord Power and its stated goals of constructing and operating the new electric and steam plant.

In particular, Staff explained that the Capacity Charge to be paid by Concord Steam under the terms of the revised SPA would be based on actual costs, rather than estimated costs, and that the Commission will have the opportunity to review those costs and make a determination as to whether they were prudently incurred, and are used and useful in the provision of utility service.

In addition, under the revised SPA the plant O&M costs will be allocated to Concord Steam based on the amount of steam used by the utility as a percentage of the maximum capacity

of the plant, rather than as a percentage of steam produced. According to Staff, using the maximum capacity to determine the percentage of O&M costs to be charged Concord Steam protects ratepayers from rate increases due to fluctuations in electricity sales.

Staff said that in the future when Concord Steam seeks recovery of Concord Power's plant site costs, it expected the Commission to evaluate those costs under the same framework it uses for Concord Steam's wood yard lease costs.<sup>11</sup> Thus, costs related to property not used and useful in providing utility service (i.e., steam production, distribution, metering, etc.) would be excluded from recovery and cost recovery would reflect revenues from land whose costs Concord Steam's ratepayers were funding. Tr. at 165-166.

## **V. COMMISSION ANALYSIS**

This docket requires us to assess a proposal that effectively restructures the steam industry in New Hampshire. Concord Steam, the only public utility in the state providing steam service, has historically generated and distributed steam energy on a retail basis. It now seeks to purchase steam from an unregulated affiliate and become solely a distribution utility. The change is to be accomplished principally by means of Concord Steam's entry into the SPA with Concord Power, with the assent of P & M Realty of Concord, LLC, the owner of the land on which the proposed new steam plant will be built. Concord Steam must also install new steam pipes connecting the new plant to Concord Steam's existing distribution system. Additional features of the proposal include Concord Steam's transfer of certain equipment to Concord Power for \$1.5 million in connection with the restructured operations, its purchase of the back-up boilers, and its re-insulation of steam pipes in the downtown area.

Since the proposal comes to us by way of a settlement agreement, we apply the customary standard of review applicable to settlements. N.H. Code Admin. Rules Puc 203.20(b)

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<sup>11</sup> See *Concord Steam Corporation*, Order No. 24,740, 92 NH PUC 83 (2007).

provides that the Commission shall approve disposition of any contested case by settlement “if it determines that the result is just and reasonable and serves the public interest.” *See also* RSA 541-A:31, V(a). In general, the Commission encourages parties to attempt to reach a settlement of issues through negotiation and compromise “as it is an opportunity for creative problem-solving, allows the parties to reach a result more in line with their expectations, and is often a more expedient alternative to litigation.” *Unitil Energy Systems, Inc.*, Order No. 24,677, 91 NH PUC 416, 425-426 (2006) (quotation omitted). However, even where all parties enter into a settlement agreement, the Commission cannot approve it “without independently determining that the result comports with applicable standards.” *Id.*

We begin our analysis by considering the feasible alternatives for the future operation of Concord Steam and the impacts of those alternatives on Concord Steam’s operations and its customers. As discussed at hearing, one possibility would be for Concord Steam to continue generating steam at its Pleasant Street plant. The problem, however, is that the plant and the equipment are old and Concord Steam would be obliged to invest a large sum to upgrade the equipment and include newer, more efficient boilers and pollution control equipment. Tr. at 16-17. Concord Steam estimated that approximately \$39 million in upgrades and repairs would be needed. Inevitably, this spending would result in significant rate increases. According to Concord Steam, the result would be a total estimated rate of \$63.02 per Mlb. This compares unfavorably to the estimated total rate with the proposed new plant, i.e., approximately \$24.82, which represents a 30% reduction in the current rate. Especially in light of the decreases in its steam sales and loss of customers in recent years, Concord Steam has been striving very hard to avoid rate increases, even voluntarily accepting low rates of return on equity. *See Concord Steam Corporation*, Order No. 24,866 (2008). Increasing rates would tend to exacerbate the risk

of further decreases in steam sales and loss of customers and in turn would put even more upward pressure on rates, putting the company in an undesirable and possibly untenable position.

In addition, the Pleasant Street location is not well suited to increasing the output of electricity. For example, Concord Steam pointed to increased truck traffic, necessary for delivery of wood chips to the Pleasant Street plant, through downtown Concord and difficulties in connecting a larger power source to the electric grid as complicating factors. Tr. at 16-17. Increasing the output, however, is a prerequisite to achieving economies of scale and realizing the related rate benefits, accomplished by spreading the fixed and variable operating costs over a larger base and having Concord Power carry the lion's share, about 85%, of the cost of operations. Tr. at 15-16.

In theory, a second option would be to purchase steam from another source, but no entity has expressed interest in providing steam and Concord Steam has not been able to identify such a third party source. Tr. at 17. Yet another option would be for Concord Steam to develop and own the cogeneration plant at the new location, instead of involving a new entity such as Concord Power. The problem with that scenario is that the capital requirements are too high for Concord Steam to take on by itself. In addition to the \$3 million invested to date from various investors, additional cash equity of approximately \$10 million would be needed to finance the project – funds that Concord Steam, with a total asset value of around \$5 million, does not have. Such an investment sum could be difficult to raise given the reality of limited regulated returns. Tr. at 137-138. In addition, Staff found that an arrangement in which Concord Steam owned a new plant sized to fit its steam distribution needs would not be more favorable than Concord Steam's proposal for construction and operation of a new and larger plant under restructured arrangements.

By comparison, the proposal before the Commission has a number of distinct advantages. As mentioned above, increasing the output of electricity is expected to achieve economies of scale and lead to rate benefits. This in turn will help stem the loss of load and should provide an incentive for customers to return to, or utilize, steam service. Concord Steam estimates that its overall steam rates will decrease by approximately 30% compared to current rates, based on implementation of its proposal regarding the SPA, transfer of assets, and interconnection and re-insulation. There is reason to suppose that estimated savings of this magnitude can be achieved because a firm price for construction of the new plant has been obtained. In particular, the amounts that Concord Steam now pays to generate or purchase electricity for steam production are expected to be less than the comparable amounts Concord Steam will have to pay in O & M Charge and Fuel Charge costs attributable to the use of electricity to generate steam. Tr. at 128-129. There should also be fuel cost savings. According to Concord Steam, the cost of wood fuel is expected to go down because loggers selling wood to Concord Power will be able to count on delivering wood to the wood yard throughout the year and because the costs of operating the wood yard, while remaining about the same as they are now, will be spread over a much larger base, with Concord Steam paying only about 15% of those costs. Tr. at 48, 129-130.

Moreover, the problems of increased truck traffic through downtown Concord and difficulties in connecting a larger power source to the electric grid are avoided. And the proposal to re-insulate portions of Concord Steam's downtown should help reduce Concord Steam's line loss problem,<sup>12</sup> which is now causing customers to pay for substantial amounts of unaccounted-

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<sup>12</sup> Staff stated that line losses were around 30%. See also *Concord Steam Corporation*, Order No. 24, 800, 92 NH PUC 435, 437 (2007).



for steam, i.e., steam produced but not delivered. Boiler efficiency is expected to improve and safety, reliability and fuel flexibility<sup>13</sup> will be maintained. Tr. at 132-133.

In sizing the new plant, Concord Steam's current steam needs plus expected long term growth were considered, together with the feasibility of interconnecting with the electrical grid and obtaining city permits. According to Mr. Bloomfield, the proposed plant size is optimal in terms of Concord Steam's needs and the potential for lowering steam production costs. Tr. at 136-137.

For these reasons, we find that the proposal to construct the new plant and install approximately 6,800 feet of new steam pipe to connect the new plant to Concord Steam's existing distribution system is reasonable. Similarly, we conclude that Concord Steam's proposed transfer of specified equipment to Concord Power, its purchase of the back-up boilers and re-insulation of steam pipes in the downtown area as described in the petition and at hearing would be appropriate measures for the following reasons. First, since Concord Steam would no longer be in the business of generating electricity or steam after the restructuring of its operations, it would not need the equipment to be sold to Concord Power, while the cash paid for the transfer will be reinvested in Concord Steam's distribution business. Second, the purchase of the back-up boilers would help ensure that reliable and adequate steam service is maintained. Third, the re-insulation of steam pipes is an efficiency measure that would produce savings to ratepayers.

We are asked, among other things, to determine whether Concord Steam's entry into the SPA, Exhibit 3, is prudent and consistent with the public interest. This determination must be

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<sup>13</sup> In addition to using wood as a fuel source, natural gas, or the price of natural gas, can be relied on when economical. Also, oil and, possibly in the future, methane gas produced by the Concord sewage treatment plant, could be used if cost effective. Tr. at 131-132.

made with reference to, among other things, the terms of the SPA and the related provisions of section 5 of the settlement agreement.

Under the SPA and the settlement agreement, Concord Steam would own the back-up boilers. This is reasonable since Concord Power would not have installed the back-up boilers to generate electricity. The back-up boilers are not necessary to generate electrical power and, indeed, their output is such that they could not be used for that purpose. We also note that section 5(b) of the settlement agreement expressly preserves the Commission's authority to review the reasonableness of the final costs of the purchase of the back-up boilers. Moreover, Concord Steam's ownership would help protect Concord Steam's ability to generate steam in the event of any future financial problems experienced by Concord Power. Tr. at 125-126. For example, Concord Steam may file Uniform Commercial Code statements reflecting its ownership interest in the back-up boilers, and any liens or financing relating to the plant are to expressly exclude any security or other interest in the back-up boilers. In addition, upon request Concord Power must provide Concord Steam with a recordable interest in the property on which the plant is located to ensure Concord Steam's continuing ability to maintain, operate, repair and have access to the back-up boilers. Further, these rights would have priority over any liens, including leases, in connection with financing obtained relative to the land. Finally, the SPA provides that, if it is terminated for any reason, Concord Steam would have complete access to the back-up boilers and may remove them or operate them in place at its own expense.<sup>14</sup>

The SPA requires that Concord Power maintain books and records necessary to substantiate that charges and calculations set forth on all invoices to Concord Steam are valid and proper and it provides for the Commission's full access to such books and records and

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<sup>14</sup> Section 5(b) of the settlement agreement also expressly confirms that if the SPA is terminated for any reason, Concord Steam will continue to have access to the back-up boilers for steam generation.

personnel for rate setting purposes. The intent is that the Commission may request, through Concord Steam, to review the books and records of Concord Power. We understand that the reason for Concord Steam's interpretation of the SPA is the sensitivity surrounding Concord Power's "unregulated" status. Although Concord Steam has discretion under the SPA whether to request or obtain the records of Concord Power for provision to the Commission for its review, it recognizes that one of the risks of not permitting the Commission to have access to the records of Concord Power is a potential disallowance of costs in a future rate case. On balance, it appears that the Commission's ability to access information is adequately protected under the SPA. We note, however, that the Commission's ability to access information relevant to the charges flowing to Concord Steam through the SPA is critical to ensuring that the Commission is able to carry out its duty to review costs for which ratepayer recovery is sought. Concord Steam will be expected to obtain all appropriate information in the future and the Commission may disallow costs for ratepayer recovery if the review of those costs should be compromised in any way.

Section 5(a) of the settlement agreement upholds the Commission's authority to review all costs flowing to Concord Steam under the SPA for which ratepayer recovery is sought. A great variety of costs fall in this category, including but not limited to the cost of fuel, personnel and management services costs, site development and plant construction costs (including debt costs incurred for and allocated to the capital costs required to construct the power plant, see Tr. at 164, 169, 173), and land lease or acquisition arrangement costs involving the plant site and the wood yard. See also Tr. at 165-166. In the context of the SPA, this means that, consistent with the Commission's traditional duty to regulate the rates of public utilities, the Commission would determine whether the costs billed to Concord Steam under the SPA are not only properly payable according to the terms of the SPA, but in addition are prudently incurred and reasonable

in amount. With respect to land-related costs, what is prudent and reasonable would depend, in part, on the extent to which the land is used and useful for utility service and the extent to which the costs reasonably reflect revenues earned on land whose costs Concord Steam's ratepayers are funding.

Consistent with section 5(c) of the settlement agreement, any future modifications of the SPA are subject to RSA Chapter 366 so long as Concord Power remains (or might subsequently be determined to be) an affiliate of Concord Steam. In addition, all costs incurred under any modified steam purchase agreement for which Concord Steam seeks ratepayer recovery would be subject to review by the Commission. Accordingly, as in all its activities, Concord Steam would be obligated to act prudently and reasonably in connection with any modifications of or additions to the SPA.

We note that Staff has carefully evaluated the proposal to restructure Concord Steam's operations and the settlement agreement that, in part, implements the proposal. Staff's testimony supporting the terms of the SPA gives us additional assurance that the terms of the SPA are reasonable.

Because important details regarding implementation of the project, including the identity of the equity investor, the arrangements with the equity investor, the terms of the debt financing<sup>15</sup> and lease or ownership arrangements for the wood yard and land for the plant site, are not yet finalized, the cost effectiveness and suitability of the project from Concord Steam's point of view cannot be assessed with sufficient certainty. Since we are not in a position at this time to conclude that Concord Steam's entry into the SPA should be approved, we will defer ruling on whether Concord Steam's entry into the SPA would be in the public interest, pending

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<sup>15</sup> For example, the amount of the actual Debt Service Payment under sections 1.13 and 7.2.1.1 of the SPA is not yet known and therefore the initial Capacity Charge cannot be determined.

receipt of the information described above and pending receipt of an executed copy of the SPA, showing any changes to Exhibit 3 made to that time.

In the meantime, we find the settlement agreement, and in particular the following provisions, to be reasonable. First, we find that there is an adequate basis in the record to find that the proposed price for the electric generating and wood yard equipment, \$1.5 million, is reasonable. Though less than the estimated cost to replace the equipment new, the price substantially exceeds both the depreciated value of the equipment on Concord Steam's books and Concord Steam's estimate of its market value as used equipment. Tr. at 22. In addition, Concord Steam intends to use the proceeds of the transfer to support the loan it will need in order to pay for the back-up boilers, the new steam line and steam line improvements. Tr. at 70. Accordingly, we determine that the transfer would be consistent with the public good pursuant to RSA 374:30.

Concord Steam's installation of new steam pipe to connect the new plant with its existing distribution system is a necessary part of the plan to build a new steam plant on South Main Street and, as we have noted, Concord Steam's re-insulation of the existing steam pipes in the downtown area is a desirable undertaking. Section 7 of the settlement agreement expressly reserves the Commission's authority to review the prudence and reasonableness of the final costs of Concord Steam's improvements to the steam distribution system in connection with a future proceeding to establish base rates.

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

**ORDERED**, that the settlement agreement is approved subject to approval of the SPA;  
and it is

**FURTHER ORDERED**, that the transfer of Concord Steams' utility assets as described herein to Concord power is approved subject to approval of the SPA; and it is

**FURTHER ORDERED**, that the distribution upgrades described herein are approved subject to approval of the SPA; and it is

**FURTHER ORDERED**, that approval of the SPA is held in abeyance pending the filing of additional information as described in this order.

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

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Thomas B. Getz  
Chairman

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Graham J. Morrison  
Commissioner

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Clifton C. Below  
Commissioner

Attested by:

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Debra A. Howland  
Executive Director & Secretary