

**STATE OF NEW HAMPSHIRE
BEFORE THE
PUBLIC UTILITIES COMMISSION**

CONCORD STEAM CORPORATION

Docket DG 12-242

**Direct Testimony
of
Stephen P. Frink**

**Permanent Rate Proposal and
Rate Design**

March 15, 2013

1 **Q. Please state your name and business addresses.**

2 A. My name is Stephen P. Frink. I am employed by the New Hampshire Public
3 Utilities Commission as Assistant Director of the Gas & Water Division. My
4 business address is 21 S. Fruit Street, Suite 10, Concord, New Hampshire 03301.

5 **Q. Please summarize your educational and professional experience.**

6 A. See *Attachment SPF-2*.

7 **Q. What is the purpose of your testimony?**

8 A. My testimony explains and supports the settlement agreement (settlement)
9 between Staff and the Concord Steam Corporation (CSC or Company) on
10 permanent rates. The settlement provides for a \$732,000 increase in the annual
11 revenue requirement, to be recovered through increases in the COE rate, meter
12 charge and usage rates. The settlement also provides for a change in how meter
13 charges are billed, a change in the costs to be allocated to the cost of energy
14 (COE) and recovery of rate case expenses over a one year period. The settlement
15 forecloses the Company's recovery of any under recovery due to the temporary
16 and permanent rate differential.

17 **Q. What level of permanent rates did the Company propose?**

18 A. The Company requested an increase in rates on both a temporary and permanent
19 basis designed to produce an additional \$862,584 in annual gross operating
20 revenue, a 17.8% increase over 2011 test year revenue of \$4,853,437.

21 **Q. Are temporary rates currently in effect in this docket?**

22 A. Yes. On October 23, 2012 the Commission issued Order No. 25,432 authorizing
23 the temporary rates effective November 1, 2012. The approved temporary rates
24 are designed to produce an additional \$582,412 in annual gross revenue,
25 approximately two thirds of that requested by the Company.

1 **Q. Briefly describe Concord Steam's filing.**

2 A. The test year utilized by Concord Steam is the twelve months ending December
3 31, 2011, a year in which the Company reported an overall rate of return of
4 negative six percent. Test year revenues and expenses were adjusted to reflect
5 normal weather, an expected decrease in sales due to losses in the customer base
6 and increases in operation and maintenance expenses due to inflation. The
7 Company proposed a 6.00% rate of return on pro formed average test year rate
8 base of \$4,542,272. Concord Steam testified that the requested return is lower
9 than it believes is justifiable under standard rate making methodology but reflects
10 the Company's expectation of lower costs and increased sales once it is able to
11 purchase its steam requirements from the Concord Power and Steam plant
12 expected to come on line in 2014.

13 **Q. Please describe Staff's review of the filing.**

14 A. Staff issued three rounds of discovery, held two technical sessions and performed
15 a comprehensive audit. In performing its audit the Commission Audit Staff
16 issued numerous audit requests and completed a final report on February 14,
17 2013. Responses to data requests reference in this testimony are provided in
18 numerical order at the end of the testimony.

19

20 **Revenue Requirement**

21 **Q. Please summarize revenue requirement increase.**

22 A. The settlement provides for a 5.70 percent rate of return and a \$732,000 (15.1%)
23 increase over test year revenue. Although the recommended increase is less than
24 the \$862,584 (17.8%) requested by the Company and the \$876,506 (18.1%) as
25 determined by Staff using traditional rate making methods, the settlement is

1 appropriate given competitive concerns and an expected decrease in operating
 2 costs in 2014. The revenue deficiency and increase under each scenario are
 3 summarized below in Table 1.

Revenue Requirement			
	CSC	Traditional	
	<u>Proposed</u>	<u>Rate Making</u>	<u>Settlement</u>
Rate Base Proposed	4,542,272	5,273,417	5,273,417
Rate of Return	6.00%	7.35%	5.70%
Income Required	272,536	387,768	300,501
Net Operating Income	(411,290)	(234,399)	(234,399)
Revenue Deficiency before Taxes	683,826	622,167	534,900
Income Tax	178,757	254,338	197,100
Revenue Deficiency	<u>862,584</u>	<u>876,506</u>	<u>732,000</u>
Increase in Annual Revenue			
Percent Increase - Total Revenues			
Revenue Deficiency	862,584	876,506	732,000
Test Year Revenues	<u>4,853,437</u>	<u>4,853,437</u>	<u>4,853,437</u>
Percent Increase	<u>17.77%</u>	<u>18.06%</u>	<u>15.08%</u>

4 **Table 1**

5 A detailed explanation of the calculation and supporting schedules are provided in
 6 *Attachment SPF-1.*

7 **Q. Is there a precedent for setting a low rate of return relative to allowed**
 8 **returns for other utilities?**

9 **A.** Yes, this has been done in instances where traditional returns could lead to
 10 uncompetitive rates and potentially trigger a death spiral, whereby higher rates
 11 cause customer migration precipitating further rate increases in an unsustainable

1 cycle. In fact, lower returns were requested and approved for Concord Steam in
2 its last two rate filings, returns of 3.22% in 2008 and 3.91 in 2010.¹

3 **Q. Will limiting the revenue increase have an adverse effect on the Company's**
4 **ability to provide safe and reliable service?**

5 A. No, a \$732,000 increase over test year revenue should be adequate to fund
6 operating and maintenance costs over the short term and in the near future
7 Concord Steam expects to file for a rate decrease when the new plant commences
8 service. During the hearing on temporary rates Mr. Bloomfield testified that the
9 temporary rate increase of \$582,412 would allow the Company to meet its capital
10 and operating requirements for 2013.² The permanent rate increase provides a
11 cushion in the event of a delay in the opening of the new plant.

12 **Q. Why are Concord Steam's rates expected to decrease when the new plant**
13 **commences operations?**

14 A. Concord Steam's operating costs are expected to be much lower and customer
15 sales to remain constant or increase.

16 **Q. How will the rate increase impact sales?**

17 A. Increasing current rates increases the risk of further customer losses and increased
18 conservation, which would lead to reduced sales and make it more difficult for the
19 Company to achieve its projected rate decrease of 30% when the new plant begins
20 commercial service.

21 **Q. Is the rate increase the minimum necessary to enable CSC to provide safe**
22 **and reliable service?**

¹ Order 24,866 (June 27, 2008) and Order 25,100 (May 6, 2010). Although Order 25,100 does not cite a rate of return, the imputed return of 3.91% can be found in the Direct Testimony of Stephen P. Frink filed in that docket (DG 09-139), p. 2 of 16.

² October 23, 2012 Temporary Rate Hearing, transcript at 19, 18-21.

1 A. Considering the uncertainty of the opening of the new steam plant and cash flow
2 constraints related to prior year losses, the increase is likely the minimum
3 necessary to see CSC through to the new plant opening. CSC has communicated
4 to its customers that the higher rates are only expected to be in place for a
5 relatively short period of time.

6

7 **Meter Charge**

8 **Q. What changes are being made to the meter charges?**

9 A. Meter charges will increase and the rates will be seasonal, winter rates will be in
10 effect for eight months, October through May, and summer rates will be in effect for
11 four months, June through September. See Table 2 for the current and proposed
12 metering charges:

Meter Charge			
	Current	Winter	Summer
		(8 Months)	(4 Months)
Small	\$10	\$20	\$16
Medium	\$25	\$50	\$16
Large	\$40	\$110	\$16

13

Table 2

14 **Q. What is the basis for the increase in the meter charges?**

15 A. The current metering charges are well below the annual cost of the meters and have
16 not been adjusted since 2003. Based on annual depreciation and labor costs for on-
17 going maintenance, repairs and meter reading, the small, medium and large meter
18 charges should be \$43, \$57 and \$113, respectively (revised DR 3-17). The
19 proposed charges will recover less than associated costs in order to limit the rate
20 impact.

21 **Q. What is the basis for the change in the recovery period?**

1 **A.** The meter charge is a monthly charge intended to recover annual fixed metering
2 costs. Because the majority of Concord Steam customers terminate service during
3 the summer months the revenue recovered through the meter charge falls well short
4 of the related costs. Only 24 out of a total of 179 meters are in service during the
5 summer. Consequently, customers that remain on the system throughout the
6 summer pay a disproportionate share of Concord Steam’s fixed costs and the
7 balance of the fixed costs not recovered through the meter charge are shifted to the
8 usage rate. Recovery of fixed costs through a volumetric charge can lead to
9 subsidies between the customer classes and fluctuations in company earnings due to
10 weather and other variables that impact sales. The proposed rate design will help
11 rectify that situation, as the majority of costs will be recovered during the eight
12 months when almost all customers are taking service.

13 **Q.** **How were the winter and summer meter charges determined?**

14 **A.** The winter charge is designed to recover both capital costs and labor costs, whereas
15 the summer charge is designed to recover incremental labor costs related to meter
16 reading during the summer period. The cost related to meter reading is the same
17 regardless of meter size; therefore the summer meter charge is the same for all three
18 customer classes. Capital costs do vary by meter size; with larger meters costing
19 more than smaller meters, therefore the winter meter charges reflect that cost
20 differential.

21 **Q.** **Do the proposed meter charges fully recover the related fixed costs?**

22 **A.** No. As is often the case when moving to recover more of the fixed costs through
23 fixed rates, the move is done gradually to lessen the customer rate impact. The
24 proposed increase in the meter charge accomplishes both of those goals, allowing for

1 the recovery of more fixed costs through a fixed charge and limiting the customer
2 rate impact.

3

4 **Usage Rates**

5 **Q. Please compare the current and settlement usage rates.**

6 **A. The three tier declining block rate structure is unchanged but the rates will increase.**

7 See Table 3 for the current and proposed usage rates and percent increase:

Usage Rates				
Tier	Volume	Current	Proposed	% Increase
1	0-500	\$18.54	\$21.50	16%
2	501-2000	\$16.27	\$20.34	25%
3	> 2000	\$13.48	\$16.85	25%

8

Table 3

9 **Q. Please explain how the usage rates were determined.**

10 **A. The Company and Staff agreed that the overall rate increase should be spread evenly**
11 **between the three customer classes and usage rates were set accordingly. Starting**
12 **with the overall revenue requirement and factoring in agreed upon changes in the**
13 **COE rate and meter charge, the usage rates were adjusted to levelize the bill impact**
14 **on each of the customer classes. A pro rata increase in the current usage rates would**
15 **have disproportionately impacted the small customer class, as they have limited**
16 **usage in the discounted tiers. To spread the increase more evenly between the small,**
17 **medium and large classes, the usage rate for the first tier was increased less than the**
18 **second and third tiers. The resulting bill impact on the small, medium and large**
19 **average customer classes is an increase of 18.2%, 18.9% and 18.7%, respectively.**
20 **See DR 3-23 revised 3/8/13.**

21

1 **Temporary and Permanent Rates Reconciliation & Rate Case Expense**

2 **Q. Please explain how the difference between temporary and permanent rates is to**
3 **be treated.**

4 **A.** Although the proposed permanent rates are higher than the approved temporary
5 rates, with the agreement of the Company, there will be no reconciliation to
6 determine what the Company would have earned if the permanent rates had been
7 effect since November 1, 2012, the date on which temporary rates became effective,
8 and Concord Steam will forego recovery of any related under recovery.

9 **Q. Please explain how rate case expenses are to be treated.**

10 **A.** Rate case expense incurred to date will be recovered over one year, commencing
11 May 1, 2013, through a rate case expense surcharge. The Company will not recover
12 rate case expenses beyond those reflected in the settlement, which should be limited
13 as the settlement has resolved all outstanding issues.

14 **Q. What is the amount of rate case expense to be recovered and the surcharge?**

15 **A.** Rate case expenses of \$19,536 are to be recovered through a \$0.16 per Mlb rate case
16 expense surcharge. Staff has reviewed the supporting invoices and found the costs
17 to be both accurate and reasonable.

18

19 **Costs to be Recovered through COE Mechanism**

20 **Q. What costs previously recovered through delivery rates are now being**
21 **recovered through the Cost of Energy?**

22 **A.** Effective November 1, 2012, pursuant to Order No. 25,436 in Docket No. DG 12-
23 270, the 2012-2013 COE rate calculation included the following costs for the first
24 time; water and sewer charges, boiler water treatment chemicals, ash disposal and

1 Sate air permit fees. The approval of these shifted costs was subject to reconciliation
2 and adjustment resulting from Staff review as part of this permanent rate proceeding.

3 **Q. Are there other costs being recovered through delivery rates directly**
4 **attributable to steam production?**

5 **A.** Yes. A significant amount of Concord Steam's electric usage is directly related to
6 steam production, used to run conveyors, water pumps and boiler fans. See DR 1-
7 20. In response to DR 3-2, Concord Steam calculated 2011 electric costs to generate
8 steam totaled \$61,564.

9 **Q. Are there costs being recovered through COE rates attributable to distribution**
10 **operations and maintenance?**

11 **A.** Yes. There are sections of the distribution system that are not in use during the
12 summer period but must be kept hot with steam to maintain system integrity. Pipes
13 allowed to cool and then reheated can lead to steam leaks and expansion joint
14 failures and keeping steam in the pipes keeps oxygen out which would otherwise
15 lead to corrosion. In response to DR 3-13 Concord Steam calculated the annual
16 maintenance cost to be \$32,759.

17 **Q. Should the costs currently being recovered through the COE be adjusted?**

18 **A.** No. As explained above, there are costs directly related to steam production that are
19 not currently charged to the COE and there is a small percentage of steam
20 production related to distribution maintenance that is currently included in the COE,
21 these offsetting costs would not have a material impact on the COE or delivery rates,
22 as the net impact in 2011 was less than \$30,000. By way of comparison, the 2012-
23 2013 projected energy costs are approximately \$2.5 million.

24 **Q. Should the costs recovered though the COE be adjusted in a future**
25 **proceeding?**

1 A. Those costs should be re-evaluated based on a cost of service study and, if
2 warranted, adjusted accordingly at that time.

3

4 **Conclusion**

5 **Q. Please summarize the settlement.**

6 **A.** The settlement provides for the following:

7 a) \$732,000 increase in the annual revenue requirement;

8 b) \$27,851 of the increase to be recovered through the meter charge;

9 c) Winter and summer meter charges, with a single summer charge;

10 d) \$312,984 of the increase to be recovered through the COE;

11 e) Implement a one year surcharge to recovery rate case expenses of \$19,536.

12 **Q. What are the key points to consider regarding the settlement?**

13 **A.** The most important point to keep in mind is that this increase in permanent rates
14 is only expected to be in effect for a relatively short time, as the Company intends
15 to file for a substantial rate decrease when the new power and steam plant is
16 operational and CSC is purchasing steam from the plant through a steam purchase
17 agreement. This is currently expected to transpire in 2014. The anticipated rate
18 decrease is largely dependent on retaining the existing customer base and limiting
19 the immediate increase to the minimum necessary for the Company's continued
20 operations until that time reduces the risk of further customer losses. The
21 recommended increase is sufficient for Concord Steam to meet its capital
22 requirements and operating and maintenance requirements over the near term.
23 The changes in the meter charge will better match what a customer pays with the
24 utility's costs to serve that customer. The costs be transferred to the COE are, in
25 fact, energy costs.

1 **Q. Any other comments or suggestions?**

2 **A.** Yes. Although the changes in the meter charges and the transfer of certain costs
3 to the COE should better match customer charges with the cost to serve, a
4 comprehensive cost of service study should be undertake once the new plant
5 comes on line. Such a study will assist in determining the most fair and equitable
6 rate design possible.

7 **Q. Does this conclude your testimony?**

8 **A.** Yes.

9