

STATE OF NEW HAMPSHIRE

CHAIRWOMAN  
Dianne Martin

COMMISSIONER  
Kathryn M. Bailey

EXECUTIVE DIRECTOR  
Debra A. Howland



TDD Access: Relay NH  
1-800-735-2964

Tel. (603) 271-2431

Website:  
[www.puc.nh.gov](http://www.puc.nh.gov)

**PUBLIC UTILITIES COMMISSION**

21 S. Fruit St., Suite 10  
Concord, N.H. 03301-2429

March 12, 2021

Debra A. Howland  
Executive Director  
New Hampshire Public Utilities Commission  
21 South Fruit Street, Suite 10  
Concord, NH 03301

RE: DW 20-088 Abenaki Water Company, Inc. - White Rock  
Petition for Approval of DWSRF Financing  
Staff Recommendation for Approval of Petition

Dear Ms. Howland:

Commission Staff submits the following recommendation regarding Abenaki Water Company, Inc.'s petition for approval of a Drinking Water State Revolving Fund loan in the amount of \$125,000 for improvements to its White Rock system.

**Summary**

Abenaki Water Company, Inc. (Abenaki or the Company) is a New Hampshire public utility comprised of five drinking water systems and one sewer system, including the White Rock drinking water system located in the Town of Bow (Bow or the Town). White Rock has 95 year-round customers that are tariffed and billed on a stand-alone basis.

On June 2, 2020, pursuant to RSA 369:1, Abenaki filed a petition seeking authorization to obtain a \$400,000 loan from the Drinking Water State Revolving Fund (DWSRF) to finance improvements to White Rock. On August 27, 2020, the Company revised its filing by reducing the amount requested to \$125,000, primarily because it had withdrawn its plan to establish a new well.<sup>1</sup> Abenaki states that the loan will fund the cost to reline two water tanks, install new distribution valves, and replace two pressure-reduction valves (PRVs).

In the opinion of Commission Staff (Staff), the projects and the terms of the loan are reasonable, and the proposed capital expenditures are in the public good. Staff therefore recommends that the Commission approve the financing. Staff does not believe a hearing or additional process is necessary before the Commission issues an order on Abenaki's request. Staff has not done a prudence review, which would be premature at this time.

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<sup>1</sup> See Abenaki's August 27, 2020 revised filing cover letter and Abenaki response to Staff 3-2.

## **Procedural Background**

On June 2, 2020, Abenaki filed a petition for approval of a \$400,000 loan from the DWSRF, a federal-state program to help ensure safe drinking water.<sup>2</sup> The petition, filed pursuant to RSA 369:1, stated that the loan would finance improvements to the White Rock system. Abenaki supported the petition with the testimonies of Nicholas A. LaChance, vice president and treasurer of New England Service Company (NESC),<sup>3</sup> Robert Joseph Gallo, NESC's vice president of engineering, and Stephen P. St. Cyr, regulatory consultant for Abenaki. The filing included a letter from DES supporting "PUC approval,"<sup>4</sup> an inspection report regarding Abenaki's two storage tanks, and financial schedules. Thereafter, Abenaki responded to two sets of Staff data requests.

On August 27, 2020, Abenaki revised its filing by reducing the requested DWSRF loan amount to \$125,000 because of a "reduction in the scope of the project[s]."<sup>5</sup> The Company explained that, "[t]he change is due to delaying the search for a new source of supply" and that "[a]fter further review, the 3 existing wells have been able to sustain demand throughout the peak season and during this year's summer drought."<sup>6</sup> Under the revised filing, Abenaki proposes using the loan funds to invest in two of its initially proposed projects, to reline two existing tanks (\$50,000) and install distribution valves (\$45,000), and to fund an additional project, to replace two PRVs (\$30,000). The Company stated that "[t]he NHDES continues to support this project and has assured the Company that [DW]SRF at the previously provided terms and conditions (except for the lower amount) will continue to be available for the project."<sup>7</sup> The revised filing was accompanied by financial schedules and a test report of White Rock's PRVs. Subsequently, Abenaki responded to a third set of Staff data requests.

On September 1, 2020, Abenaki submitted an updated Corrective Action Plan (CAP) for White Rock to DES<sup>8</sup> and, on October 13, 2020, DES approved the revised CAP.<sup>9,10</sup> On March 5, 2021, DES approved new extended completion dates<sup>11</sup> and the replacement of two PRVs.<sup>12</sup> On March 9, 2021, Abenaki accepted DES's approval of the revised CAP with extended completion dates.<sup>13</sup>

<sup>2</sup> The New Hampshire Department of Environmental Services (DES) administers the DWSRF.

<sup>3</sup> New England Service Company provides management and other operational services to Abenaki. *See* Petition (June 2, 2020) Testimony of Nicholas A. LaChance, p. 1.

<sup>4</sup> *See* Petition (June 2, 2020), Testimony of Mr. Nicholas LaChance, Attachment (DES letter dated May 14, 2020).

<sup>5</sup> *See* Abenaki's August 27, 2020 revised filing cover letter, p. 2.

<sup>6</sup> *Ibid*, p. 1.

<sup>7</sup> *See* Abenaki response to Staff 3-2 and 3-3.

<sup>8</sup> *See* Abenaki's August 27, 2020 cover letter; Abenaki response to Staff 3-2 (referencing, among other things, Abenaki's updated Corrective Action Plan for the White Rock system dated September 1, 2020); and Abenaki email dated 9/1/20.

<sup>9</sup> *See* DES email dated 10/13/20.

<sup>10</sup> DES approved Abenaki's initial CAP on February 21, 2020. *See* DES email dated 2/21/20.

<sup>11</sup> DES initially approved completion of the tank lining by spring 2021 and isolation valves within 90 days of funding approval from the DWSRF. DES's March 5, 2021 approval extended the completion dates for both of those projects to November 2021. *See* DES emails dated 10/13/20 and 3/5/21.

<sup>12</sup> *See* DES email dated 3/5/21.

<sup>13</sup> *See* Abenaki email dated 3/9/21.

Shortly after the Company filed its initial petition, Staff engaged the services of engineering consultant Douglas W. Brogan, P.E., to review the engineering and operational aspects of the Company’s proposed improvements and assist Staff with discovery. When the Company filed its revised petition in August, Mr. Brogan adjusted the scope of his review. Mr. Brogan’s conclusions are summarized in his September 17, 2020 Report,<sup>14</sup> and are discussed below. Staff also did independent research, including communicating with DES and attending a meeting to discuss the White Rock system. That meeting was held at the Bow town office in late November 2019, and was attended by representatives of the Company and the Town and residents of Village Shore Estates, which is served by White Rock.

**Staff Comparison of Abenaki’s Initial and Revised Filing**

In its initial filing, Abenaki stated that it had been purchasing water in bulk because supply had been inadequate due to low-producing wells and leaks in the distribution system.<sup>15</sup> In that filing Abenaki requested approval for a DWSRF loan of \$400,000 from which the proceeds would fund establishing a new well, \$315,000 (developing a new water source, \$100,000, constructing new treatment facilities, \$150,000, purchasing and installing new water supply mains, \$25,000, and instrumentation and equipment, \$40,000), tank relining, \$45,000, and installing distribution valves, \$40,000.

In the revised filing, the Company withdrew its proposal to establish a new well, maintained proposed spending on tank relining, increased proposed spending on distribution valves, and added a proposal to replace two PRVs. The table below compares the expenditures proposed in the initial filing with those in the revised filing.

	Original Filing June 2, 2020	Revised Filing August 27, 2020
Additional Source of Supply (\$100,000) and Associated Infrastructure (\$215,000)	\$315,000	(withdrawn)
Tank Relining	45,000	\$50,000
Distribution Valves	40,000	45,000
Pressure Reduction Valves	<u>(not included)</u>	<u>30,000</u>
Total	\$400,000	\$125,000

<sup>14</sup> See Brogan Report to Staff dated 9/17/20.

<sup>15</sup> See Petition (June 2, 2020) Testimony of Mr. Robert Gallo.

On October 13, 2020, DES Small System Section Manager Cynthia M. Klevens, P.E., notified Abenaki that DES approved the Company's revised CAP with the condition that relining of the storage tanks be completed by Spring 2021 and the design, approval, and installation of isolation valves be completed within 90 days after Commission approval of the financing.<sup>16</sup> On March 4, 2021, Ms. Klevens informed Staff that DES approves extending the time, to November 2021, for relining the tanks and adding isolation valves, and approves replacement of the PRVs, all subject to the Company's acceptance of the new deadlines.<sup>17</sup> Abenaki accepted the new deadlines on March 9, 2021.<sup>18</sup>

### **Abenaki's Proposed Projects**

The projects Abenaki seeks approval to fund, in the total amount of \$125,000, are described in greater detail as follows.<sup>19</sup>

#### *Reline Existing Tanks, \$50,000*

In his testimony and attachment,<sup>20</sup> Mr. Gallo discussed the system's two 15,000 gallon buried steel atmospheric storage tanks. He said that a report of an inspection of the tanks, dated March 2, 2020, indicated that the current tank liners have deteriorated and there is active corrosion.<sup>21</sup> Mr. Gallo added, however, that ultrasonic testing performed during the inspection indicated that the thickness of the tank walls is within acceptable ranges for relining the tanks. Mr. Gallo stated that the storage tanks were cleaned at the time of the inspection, in February 2020, and that Abenaki plans to reline the tanks to extend their useful life and avoid the costs of total replacement.<sup>22</sup> In its revised filing, Abenaki added a contingency of \$5,000 to its original \$45,000 estimate to reline the tanks, for a total project cost of \$50,000. Staff notes that the tank inspection report did not indicate that the tanks were leaking or otherwise directly contributing to water loss.

#### *Purchase and Install Distribution Valves, \$45,000*

In his testimony and attachment,<sup>23</sup> Mr. Gallo described the distribution system as leak-prone and fragile. He noted that barbed fittings join the PVC and polyethylene pipes and that such fittings have long been considered substandard, even during the 1970s when the system was installed. Mr. Gallo explained that barbed fittings crack and can potentially leak.<sup>24</sup> He said

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<sup>16</sup> See DES email dated 10/13/21.

<sup>17</sup> See DES email dated 3/4/21.

<sup>18</sup> See Abenaki email dated 3/9/21.

<sup>19</sup> See Petition (June 2, 2020); Revised Filing (August 27, 2020); Testimony of Nicholas A. LaChance; Testimony of Mr. Gallo; Testimony of Stephen St. Cyr; Mr. Douglas Brogan, P.E.'s September 17, 2020 Report; Abenaki's responses to three sets of Staff data requests.

<sup>20</sup> See Petition (June 2, 2020) Gallo Testimony, Gallo Attachment Exhibit 2 (White Rock System Narrative).

<sup>21</sup> See Petition (June 2, 2020), Testimony of Mr. Nicholas LaChance, Attachment (Mass Tank Inspection Services, LLC March 2, 2020 Inspection report).

<sup>22</sup> See Petition (June 2, 2020), Attachment to Testimony of Mr. Nicholas LaChance, (DES's May 14, 2020 Letter of Support (indicating that the Company and DES believed that the tanks had leaks. Mass Tank Report (March 2, 2020); Company's DR to Staff 2-1 and 3-5 (d).

<sup>23</sup> See Petition (June 2, 2020) Gallo Testimony, Gallo Attachment Exhibit 2 (White Rock system Narrative).

<sup>24</sup> See Petition (June 2, 2020), Attachment-R. Gallo, Exhibit 1 photo of cracked fitting from White Rock system)

“[t]he issue of leaks at White Rock is so pronounced that the unaccounted-for water (UAW) in the system is typically in the range of 40%.”<sup>25</sup>

The proposed financing will cover the cost to install additional valves in strategic locations in the distribution system. Mr. Gallo stated that distribution valves “will better isolate portions of the system in the event of a break” and “will also be a benefit during leak detection surveys.”<sup>26</sup> Mr. LaChance added that if there is a leak, “the ability to isolate areas of the system will impact fewer customers than the present configuration allows.”<sup>27</sup> Abenaki anticipates installing four valves at an estimated cost of \$10,000 per valve.<sup>28</sup> As indicated in the revised filing, because the Company added a contingency of \$5,000 to its original estimate, the total amount proposed for distribution valves is \$45,000.

*Purchase and Install Pressure Reduction Valves \$ 30,000*

In its revised filing submitted on August 27, Abenaki added a proposal to replace two of White Rock’s PRVs. Staff notes that this expenditure was not included in the Company’s initial filing submitted on June 2. The Company explained that pressure tests it had conducted in July and August suggested that two PRVs at higher elevations in the system did not appear to be working. Abenaki noted that some locations within the system had up to 120 pounds per square inch of pressure. NESC water system engineer Josh Davis recommended replacing the two failed PRVs and monitoring the system’s three other PRVs annually.<sup>29</sup> The Company stated that replacing the two PRVs will provide relief to the affected locations and that, otherwise, high pressure puts undue stress onto an already fragile distribution system. The Company indicated that replacing the PRVs would cost \$30,000 and that this amount includes a \$5,000 contingency fee.<sup>30</sup>

*Customer Notifications during Proposed Improvements*

Abenaki attested that it will notify customers at least one week in advance of planned shutoff events that are required when new distribution valves are installed or prior to repairs to the system. A water shutoff of potentially four to six hours will be needed during the installation of a new valve. Abenaki said it will communicate through its emergency alert system by text message, pre-recorded voice message, and email, to alert customers about construction work and shutoffs. In addition, Abenaki will provide real-time updates to customers of construction progress through its website. Abenaki said that it would also notify customers of upcoming construction dates in bill inserts accompanying monthly invoices.<sup>31</sup>

**Abenaki’s Proposed Financing Terms and Estimated Impact**

<sup>25</sup> See Petition (June 2, 2020) Gallo Testimony p. 3.

<sup>26</sup> See Petition (June 2, 2020), Attachment-R. Gallo, Exhibit 2 p. 2.

<sup>27</sup> See Petition (June 2, 2020) LaChance Testimony p. 4.

<sup>28</sup> Abenaki response to Staff 1-11.

<sup>29</sup> See Revised filing, August 14, 2020 White Rock Pressure Reduction Valve Test report (PRV Test Report) by Josh Davis.

<sup>30</sup> Abenaki’s August 27, 2020 revised filing cover letter.

<sup>31</sup> Abenaki response to Staff 1-14.

### Proposed Financing Terms, Capital Structure, and Financial Affect

In its revised filing, Abenaki submitted that the proposed \$125,000 DWSRF loan would have the same terms and conditions as indicated in its initial filing, with a fixed interest rate and a term of twenty years. On March 3, 2021, Staff noted from DES's website and received confirmation from Ms. Klevens<sup>32</sup> that the rate on a DWSRF loan with those terms is 1.296%.<sup>33</sup>

Mr. St. Cyr indicated in his testimony that Abenaki's current capital structure is weighted more towards equity than debt, and that the addition of debt from the proposed financing would move the Company towards a more balanced capital structure. He pointed out that debt financing is less expensive to service than equity financing. According to Mr. St. Cyr's revised SPS 3 schedule, the financing would improve Abenaki's debt to equity ratio from 32% (debt)/68% (equity) to 36% (debt)/64% (equity).

The Company's revised SPS 8 schedule provides a calculation of the additional property taxes on the capital additions, which the Company projects will increase annually by \$3,177. The revised SPS 10 schedule shows that the Company's estimated cost to obtain the financing is \$10,000 and that those costs will be amortized over the twenty-year term of the loan.

The Company stated that the financing is consistent with the public good because it will provide funds to reline the tanks, add distribution valves, and replace PRVs, all of which will improve the White Rock system's reliability. Abenaki asserted that the improvements funded by the financing will reduce the risk of an emergency outage in the future. Abenaki's initial filing included the previously referenced letter of support from DES,<sup>34</sup> though it should be noted that the letter, dated May 14, 2020, was prepared when the Company believed the tanks were leaking and when it contemplated a larger loan to address source capacity.

Mr. St. Cyr stated that the fixed asset additions and the twenty-year financing obligation would have a significant impact on the Company's financial statements. According to the Company's revised SPS 5 schedule, the additions to fixed assets and operating expenses associated with the financing will increase the annual revenue requirement from metered sales by an estimated \$8,483, or 10.67%.<sup>35</sup> Staff notes, however, that this calculation assumed an interest rate of 1.700%, which was valid at the time of Abenaki's initially filing. Based on the old rate, the additional revenue requirement would have increased an average White Rock system customer's charges by an estimated \$88.83 annually,<sup>36</sup> or \$7.44 per month.

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<sup>32</sup> See DES email dated 3/3/21.

<sup>33</sup> Current DWSRF loan rates are posted on the DES website at the following link:  
<https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/2020-01/srf-loan-charge-rates.pdf>.

<sup>34</sup> See Petition (June 2, 2020), Testimony of Mr. Nicholas LaChance, Attachment (DES letter dated May 14, 2020).

<sup>35</sup> Note that Mr. St. Cyr's calculation is based on a loan with an interest rate of 1.70%, which was the DWSRF rate when Abenaki submitted its initial filing. Because the rate on such a loan has decreased to 1.292% (as of March 3, 2021), the bill impact will be less than that indicated in Mr. St. Cyr's schedule.

<sup>36</sup> \$89.30 = \$8,483 / 95 customers.

## **Staff's Review of Reasonableness of Proposed Projects**

### *DES Supports Projects*

In the letter from DES included with the initial filing, Ms. Klevens expressed support for PUC approval of DWSRF funding so that Abenaki could proceed with "...urgent system improvements."<sup>37</sup> Ms. Klevens stated that White Rock was given priority to receive a low-interest DWSRF loan because its acute water shortages necessitated twice-weekly bulk water deliveries during the fall of 2019.<sup>38</sup> The letter affirmed that White Rock's storage tanks were thought to be leaking and, as such, Abenaki had been awarded a DES tank inspection grant match in February 2020. Ms. Klevens added that "tank repairs must be completed as soon as possible to avoid the need for new bulk water hauling." The letter cited ongoing water system leakage and inadequate source of supply as significant deficiencies. DES accepted Abenaki's revised CAP, which included the repair of the tanks, incorporation of isolation valves, and replacement of PRVs.<sup>39</sup>

### *Mr. Brogan's Report*

In regards to the tanks, Mr. Brogan explained that the Company's estimate for the remaining life of the tanks if relined, 35 years, is based on an average that was computed using the total number of years the tanks have been in use, which includes earlier years when the original linings were still intact. Based on this observation, Mr. Brogan stated, "...it would appear beneficial to reline the tanks as soon as possible."<sup>40</sup> Mr. Brogan pointed out that extending the lives of the tanks will not resolve the water shortage issue, but it will be less costly than full tank replacement, which he notes would exceed \$150,000.<sup>41</sup> Regarding the PRVs, Mr. Brogan said that even though it appears that some customers have individual PRVs in their home, higher pressure in the distribution system only exacerbates leaks.

Mr. Brogan stated that, "except for the tank repairs, each of the proposed improvements ...has been on the company's radar since at least 2015,"<sup>42</sup> and cited a White Rock 2015 budget plan titled, "5 Year Capital Program"<sup>43</sup> as confirmation of this. Of significant benefit, Mr. Brogan said, "is the use of low interest emergency funding from NHDES, especially given the system's very high [customer water] rates."<sup>44</sup> Mr. Brogan expressed his overall opinion of the financing with the statement, "In all these regards I believe the requested financing is reasonable."<sup>45</sup>

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<sup>37</sup> See Petition (June 2, 2020) Attachment-N. LaChance, Exhibit 2.

<sup>38</sup> LaChance Testimony, page 3, line 20, states that bulk water purchases have exceeded \$59,000.

<sup>39</sup> The revised CAP (1) suspends the search for a new source unless existing sources prove inadequate, otherwise adds a two-year extension to establish a new source, and (2) extends until spring of 2021 the completion date for relining of the tanks if approval of the financing occurs too late in 2020. Attachment to Abenaki response to Staff 3-2.

<sup>40</sup> See Brogan Report p. 3.

<sup>41</sup> Abenaki response to Staff 1-2.

<sup>42</sup> See Brogan Report p. 5.

<sup>43</sup> See Docket No. DW 15-199 Petition for Permanent Rate Increase (July 24, 2015) Attachments of D. Vaughan (Attachment A, White Rock's "5 Year Capital Program").

<sup>44</sup> See Brogan Report p. 5.

<sup>45</sup> Id.

### **Staff's Financial Analysis and Conclusions**

The capital investments and repairs proposed by Abenaki appear to Staff to be necessary, based on DES's statement that the investments are for "...urgent system improvements."<sup>46</sup> The need for the proposed projects is supported DES's letter supporting PUC approval and its acceptance of Abenaki's revised CAP, Mr. Brogan's report to Staff, the testimonies of Mr. Gallo and Mr. LaChance, and the inspection reports included with Abenaki's initial petition.

The financing improves Abenaki's equity-heavy rate structure, from one that is 32% debt and 68% equity, towards a somewhat more balanced structure with 36% debt and 64% equity. Because the required return on debt is less than that of equity, the shift to a greater proportion of debt in the capital structure should reduce Abenaki's overall cost of capital. In addition, the rate on the DWSRF loan, posted currently at 1.296% on DES's website, is extremely low, and is likely the lowest rate that Abenaki could obtain from a bank or other financial institution on a loan with similar terms. In addition, because the current interest rate on the loan has declined since the time of the initial filing, the estimated additional annual revenue required has also decreased, and, based on Staff's calculation, will total an estimated \$7,991 or 10.053%. On a per customer basis, the increase would be \$84.12 annually or \$7.01 monthly.<sup>47</sup> This annual amount is a portion of the rate increase Abenaki has requested in Docket DW 21-012, which is currently pending before the Commission. In summary, Staff believes that the proposed financing, including the proposed terms and conditions, and the proposed use of those funds are consistent with the public good.

Under RSA 369:1, public utilities engaged in business in this state may issue evidence of indebtedness payable more than 12 months after the date thereof only if the Commission finds the proposed issuance to be "consistent with the public good." The Commission after such "hearing or investigation as it may deem proper" shall authorize the financing "if in its judgment the issue of such securities upon the terms proposed is consistent with the public good." RSA 369:1, :4. The Commission's review of the public good involves looking beyond the actual terms of the proposed financing to the use of the funds and the effect on rates to insure the public good is protected. *See RSA 369; Hampstead Area Water Company, Inc.* Order 26,407(September 28, 2020); *Appeal of Easton*, 125, N.H. 205, 211 (1984). The rigor of an *Easton* inquiry varies depending on the circumstances of the request. The Commission engages in a more limited review for routine financing requests. *Hampstead Area Water Company, Inc.* Order No. 26,381 at 9 (July 21, 2020).

Staff acknowledges that the Company's financing request would increase the Company's revenue requirement for the White Rock system by approximately 11%. Yet increased revenue requirements of this nature may be required in small systems for necessary and reasonable infrastructure improvements, particularly where diminished pressure and concerns regarding supply are at issue. Staff gives significant weight to the necessity of the proposed projects (reline tanks; install distribution valves, and replace PRVs). The proposed improvements appear to be investments made in the ordinary course of utility operations, pursuant to the Company's

<sup>46</sup> See Petition (June 2, 2020) Attachment-N. LaChance, Exhibit 2.

<sup>47</sup> \$84.12 = \$7,991 / 95 customers.

duty to provide safe, adequate, and reliable water service to its customers under RSA 374:1 (subject to future prudency review prior to any approval for rate recovery).

The procurement of the DWSRF loan ensures that the Company will finance the projects at favorable terms, thereby mitigating the cost of such ultimately borne by its customers. As proposed, the rate of interest on the proposed DWSRF loan, 1.292%, is low. In addition, the financing will result in a more balanced capitalization structure.

The purpose of the financing --to reline two tanks, to purchase and install distribution valves, and replace PRVs – is necessary to enable Abenaki to provide safe, adequate, and reliable water service to its customers.

In Staff’s opinion, the financing is consistent with Abenaki’s duty to provide “reasonably safe and adequate and in all other respects just and reasonable” service to its customers, pursuant to RSA 374:1.

For the reasons above, following its investigation, Staff concludes that Abenaki has demonstrated that the proposed use of funds, including proposed terms, is appropriate and the financing, and the purposes to which the financing will be put, are consistent with the public good and should be authorized pursuant to RSA 369:1 and :4. Staff does not believe a hearing or additional process is necessary before the Commission issues an order on Abenaki’s request.

Thank you for your attention to this matter.

Sincerely,

*/s/ David Goyette*

David Goyette

Utility Analyst III, Gas-Water Division

cc: Service List

Attachments: DES emails with attachments, Abenaki email, Brogan report to Staff, Abenaki data responses to Staff sets 1-3