

February 2, 2021

Ms. Debra Howland
Executive Director & Secretary
NH PUC
21 S. Fruit Street, Suite 10
Concord, NH 03301-2429

Subject: The Hampstead Area Water Company, Inc. DW 20-117 Petition to Approve Approval of Permanent Rates and Proposed Tariff Revisions.

Dear Ms. Howland,

The Hampstead Water Resource Committee is a committee appointed by the Selectmen of the Town of Hampstead, NH with a mission to support the provision of safe, adequate, affordable and sustainable water sources for Hampstead and its residents. As such, the Hampstead Area Water Company (HAWC) request for a rate increase will impact the residents of Hampstead and we have some questions and concerns about the details contained in docket DW 20-117.

We wish to call attention to the following issues, and provide cursory analysis in the provided attachments:

Petition to approve rates and tariff amendments (see Attachment 1)

- An increase of 65.51% will result in an exorbitant and burdensome cost increase levied upon individual residents and the Town as a whole. Schedule 5 shows the large increases specifically to residential customers who get hit with a 63.3% increase for the piping and volumetric charges of roughly 23% (based on HAWC's assertion that their typical residential customer uses 5 ccf/month).
- Why are the HAWC customers and Towns of Atkinson and Hampstead having to bear the cost burden for projects HAWC has undertaken which do not seem to directly aid the towns?
- Should existing Hampstead customers have to pay significantly more to support infrastructure for future extensive building projects planned by HAWC's sister company (Lewis Builders) in other towns because those projects would exceed the available water supplies¹?
- DW 19-147 outlines several large capital improvement projects, all tied to the SNHRWP. Given the rate increase is for all HAWC customers (including those outside the ATK-HAMP core)², why would they have to pay to supplement HAWCs SNHRWP costs?
- If the ATK-HAMP core is self-sufficient, meaning it can pump an adequate supply of water for the core, then were these capital projects to aid the core, or to serve HAWC in expansion?
- None of the water provided by the first phase of SNHRWP is being provided to Hampstead, and to date, the State of NH and HAWC have made no commitment to allot water supplied by future phases to the Town of Hampstead.
- Permanent rate increase for:
 - Fire protection rate increase for Atkinson & Hampstead from \$200 to \$1419 per year, with elimination of the \$2,000 availability fee. This is a large hit for the towns of Atkinson and Hampstead. **For Hampstead, the annual cost would increase from \$9,400 to \$66,693 for existing hydrants.**

¹ <https://www.lewisbuilders.com/atkinson-heights>

² The docket is clear that the number of customers to see rate hikes is 3,857; which is Atkinson=1,299, Hampstead=1,338, other towns=1,220 (from HAWC 2019 annual report)

- “The Company further requests a change in its permanent rate tariff to include the Manchester Water Works Merrimack Source Development Charge (MSDC), in effect at the time of the **new** service request, to all new customers in water systems served with water purchased from Manchester Water Works, as of January 1, 2018.”
 - Why does it say “time of the new service request” but use an effective date of 1/1/2018?
- “That request includes a 0.25 percent adder reflective of “exemplary performance,” stemming from HAWC’s participation in Docket No. IR 20-089 and “continued water loss mitigation efforts.” Petition at 28-29.”
 - How has the company participated in IR 20-089? How many customers have been impacted and how?
 - Does every public utility that signed on to IR 20-089 get a .25% adder for signing on?
 - Looking at the 2020-12-30 HAWC response in 20-089, HAWC states that its accounts receivable (AR) for Nov 2020 are lower than in 2019, 2018 and 2017. However looking at other water utilities, Abenaki, Aquarion, Lakes Region and PWW, it seems notable that HAWC and AAWW do not include any detailed numeric breakdowns like the other companies do. The PUC requests “information regarding changes in payment behavior”.. This lack of transparency makes it difficult to examine the veracity of a claim of exemplary performance. Clearly the other utilities are more forthcoming in sharing information. How will PUC evaluate the “data” supplied?
- “HAWC has made strides since its last rate case in response to its customers’ and system needs, and the Company’s goals in conjunction with the Public Utilities Commission (PUC) and the Department of Environmental Services (DES)”
 - What are the customer & system needs? Can they be made part of the public record?
 - What are the company’s goals in conjunction with the PUC and DES?
 - How do we know these “strides” have been made/met?

HAWC’s performance: continued water loss mitigation efforts (See Attachment 2)

- HAWC’s annual reporting of water losses does not appear to comply with DES requirements; See document “Water Balance and Water Audit Information”³ and Env-Wq 2101.09⁴. The reported water loss percentages appear to be understated.
- Has the PUC reviewed HAWC ongoing compliance reports, or response plans to the water losses?
- The average HAWC customer uses approximately 123 gpd. The ATK-HAMP core requires 2,637 customers * 123 gpd * 365 = 118,388,115 gallons/year. In 2019 core water available for sale was 150,390,676, of which 130,853,454 was consumed by customers.
 - The production exceeds the needs of the current ATK-HAMP core system. The numbers imply the core is self sufficient.
- **On average HAWC loses 60,973 gallons per day in the core. If the core losses had been addressed, HAWC would have saved \$908,948 just in the ATK-HAMP core alone using a rate \$6.11/ccf; Using the requested rate of \$9.31 the savings would be 52.4% greater, or \$1.384,992!**

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<https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/2020-01/water-conservation-water-balance-guidance.pdf>

⁴ <https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/2020-01/Env-Wq%202101.pdf>

Annual Reports (see Attachment 3)

- Water loss percentages appear to be under reported and not in compliance with DES requirements (see above)
- Has the PUC audited the water loss numbers or those from past annual reports?
- Why do these production numbers disagree with the numbers reported in DES' OneStop database?
- How in 2019 could eight of the 23 HAWC systems produce negative losses? Meaning they sold more water than they had available for sale (Note table S-2 shows no water was purchased, so this does not appear to be from purchasing water to supplement the systems).
- Nine⁵ of the 23 systems consumed no water due to treatment. This seems rather odd. On the other hand one system (Autumn Hills) consumed 55% of the pumped water, resulting in less than half of the pumped water being available for sale. Yet this same system managed to sell 67% more water than it had available to sell. Perhaps an entry error in the spreadsheet? If so weren't these numbers audited in any way? Perhaps one entry is a mistake, but 9 systems sold more water than they had available for customer consumption.
- What actions has DES taken with regard to the water losses?
- Would the PUC please make said reports part of the public record, or if such reports were waived by DES, please include the waivers in the public record.
- To summarize the 2019 thru 2015 annual reports:
 - We would ask if basic math errors on a spreadsheet are exemplary performance?
 - Are systems selling more water than they pumped exemplary?
 - Are including virtually unreadable documents exemplary?
 - How can a system have zero loss of water for treatment? Was the water treated?
- The 2015 report is exceptional in that one water system sold 92.6% more water than they pumped (using HAWC data), and one system lost 73.7% of the water pumped.
- Is the data shown in the Annual Reports worthy of an additional .25% return on equity from exemplary performance⁶?

Respectfully,

The Hampstead Water Resource Committee

⁵ Systems 2, 4, 5, 6, 9, 10, 11, 22, 27

⁶

https://www.puc.nh.gov/Regulatory/Docketbk/2020/20-117/INITIAL%20FILING%20-%20PETITION/20-117_2020-11-24_HAWC_TESTIMONY_LANZA.PDF ; bottom of page 3: "Q. Why does the Company believe it qualifies for an additional .25% of return on equity for exemplary performance?

A. The Company believes that it qualifies because of its continued water loss mitigation efforts,"

Comments on DW 20-117

Attachment 1: Petition to Approve Rates and Tariff Amendments⁷

“On November 24, 2020, HAWC submitted its Petition for Approval of Permanent Rates and Proposed Tariff Revisions (Petition). The Company requests a \$1,523,330 increase to its current revenue requirement. That request would raise its current revenue requirement of \$2,325,428 to \$3,848,758, an increase of 65.51 percent.”⁸

Schedule 5
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Hampstead Area Water Company
Current & Proposed Rates

Hampstead Area Water Company
DW 20-117
Schedule DF 5
November 3, 2020
Draft
Page 6 of 8

Rates	Current Rates	Proposed Rates	Percent Change
Water Rates			
<u>Customer Charges (Billed Monthly)</u>			
5/8"	\$ 10.00	\$ 16.33	63.3%
3/4"	20.00	38.17	90.9%
1"	30.00	74.59	148.6%
1 1/2"	60.00	147.41	145.7%
2"	100.00	191.11	91.1%
<u>Volumetric Charges</u>			
Per Ccf	\$ 6.11	\$ 9.31	52.4%
Residential - Tier 1	6.11	6.83	11.8%
Residential - Tier 2	6.11	10.24	67.6%
Non-Residential	6.11	9.31	52.4%
Fire Rates			
<u>Public Fire Protection (Billed Annually)</u>			
Per Hydrant	\$ 200.00	\$ 1,419.00	609.5%
Annual Availability	2,000.00	-	-100.0%
<u>Private Fire Protection (Billed Monthly)</u>			
1 1/2"	\$ 8.33	\$ 2.98	-64.2%
2"	16.67	6.35	-61.9%
3"	33.33	18.46	-44.6%
4"	50.00	39.33	-21.3%
6"	125.00	114.26	-8.6%

“This rate increase covers the increased operating costs since the last general rate case in 2017, plus provides additional revenues in support of HAWC’s infrastructure investment and operations. This includes improvements made by the company to participate in the Southern New Hampshire Regional Water Project (SNHRWP) including the construction of a 1-million-gallon water storage tank and numerous upgrades to the company’s core system to receive additional water from SNHRWP. These infrastructure improvements were necessary to enhance water supply capabilities throughout the core system and provide additional water capacity for our customers.”⁹

⁷

https://www.puc.nh.gov/Regulatory/Docketbk/2020/20-117/INITIAL%20FILING%20-%20PETITION/20-117_2020-11-24_HAWC_PETITION_APPROVE_RATES_TARIFF_AMENDMENTS.PDF

⁸ https://www.puc.nh.gov/Regulatory/Docketbk/2020/20-117/ORDERS/20-117_2020-12-18_ORDER_26437.PDF

⁹

https://www.puc.nh.gov/Regulatory/Docketbk/2020/20-117/INITIAL%20FILING%20-%20PETITION/20-117_2020-11-24_HAWC_CUSTOMER_NOTICE.PDF

Attachment 2: HAWC's Exemplary performance: continued water loss mitigation efforts

DES document "Water Balance and Water Audit Information"¹⁰ outlines the requirements that water systems with water conservation plans incorporating water accounting submit an annual "water balance" to DES by March 1 for the previous year, and water systems are required to carry out a water audit yearly and report the results with a three year ongoing compliance report, unless the unaccounted for water exceeded 15%. If the losses exceeded 15% then a response plan stating the action that would be taken to reduce the unaccounted for water had to be submitted to DES. "Unaccounted for water" is now referred to as "water balance".

Said document defines:

- Water Balance = System Input Volume - (Billed Meter Water + Unbilled Meter Water);
- Percent Water Balance = (Water Balance / System Input Volume) * 100

The system input volume is the volume of water input to the water supply system corrected for known errors, which is equal to the volume of water derived from the water system's own sources, minus water consumed by treatment processes, plus water imported or purchased, plus or minus the net change in water storage where applicable. Also see Env-Wq 2101.09¹¹.

Water Conservation efforts

- RSA 485 states a household equivalent is 300 gpd.
- A typical HAWC customer uses 123 gpd¹².
- The City of Portsmouth, NH publishes a water efficiency timeline, which shows how their residents have declined in water usage since FY11¹³. This shows a decline from 194 gpd to 151 gpd in FY19. Still above what a typical HAWC customer uses.
- According to the 2019 HAWC annual report HAWC has 1338 customers in Hampstead, and 1299 in Atkinson, or 2637 in the ATK-Hamp core. Based on table S-9 roughly 4% of the customers are non-residential, so about 2531 residential customers in ATK-HAMP.
 - If the average customer uses approximately 123 gpd, then the ATK-HAMP core requires 2,637 * 123 gpd * 365 = 118,388,115 gallons/year. In 2019 core water available for sale was 150,390,676, of which 130,853,454 was consumed by customers.
 - The production exceeds the needs of the current atk-hamp core system. The numbers imply the core is self sufficient.
- The HAWC annual reports show the HAMP-ATK core losses as:
 - 2015 was 18,854,311 gallons = 51,656 gpd
 - 2016 was 19,553,876 gallons = 53,572 gpd
 - 2017 was 25,668,696 gallons = 70,325 gpd
 - 2018 was 27,661,302 gallons = 75,784 gpd
 - 2019 was 19,537,222 gallons = 53,527 gpd

¹⁰

<https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/2020-01/water-conservation-water-balance-guidance.pdf>

¹¹ <https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/2020-01/Env-Wq%202101.pdf>

¹² Testimony of David Fox: "A typical HAWC customer uses approximately 5 Ccf per month", 5 ccf * 12 mos = 60 ccf/year * 748 gal/ccf / 365 days = 123 gallons/day;

¹³ <https://www.cityofportsmouth.com/publicworks/water/water-efficiency>

- On average HAWC loses 60,973 gallons per day in the core. If the core losses had been addressed, HAWC would have saved \$908,948 just in the ATK-HAMP core alone using a rate \$6.11/ccf; Using the requested rate of \$9.31 the savings would be 52.4% greater, or \$1.384,992!

Cost of water losses in the ATK-HAMP core

year	gallons lost	ccf lost	\$ lost at \$6.11/ccf	\$ lost at \$9.31/ccf
2015	18,854,311	25,206	\$154,010	\$234,671
2016	19,553,876	26,142	\$159,725	\$243,378
2017	25,668,696	34,316	\$209,673	\$319,486
2018	27,661,302	36,980	\$225,950	\$344,287
2019	19,537,222	26,119	\$159,589	\$243,171
Total:	111,275,407	148,764	\$908,948	\$1,384,992
Avg loss / year:	22,255,081	29,753	\$181,790	\$276,998
Avg loss per day	60,973	82	\$498	\$759
	748 gals / ccf			

Attachment 3: Annual reports

2019 Annual Report

Looking at the HAWC 2019 annual report¹⁴ page “Unaccounted for Water Report - 2019” the ATK-HAMP core water losses are listed as (19,537,222) at -12.3%.

The % loss in the annual report is shown as -12.3%. The water loss % per DES guidelines is calculated as $(\text{water balance} / \text{system input volume}) * 100$. Which gives $150,390,767 / 19,537,313 = -13.0\%$. To get 12.3% it appears that the Produced column was used, not the net available for sale. This results in all the water loss percentages being lower than they actually are. Has the PUC audited these numbers or those from past annual reports? Why do these pumping numbers disagree with the numbers reported in DES' OneStop database?

Looking at the water loss column, it is not clear how eight of the 23 HAWC systems produced negative losses; meaning they sold more water than they had available for sale (Note table S-2 shows no water was purchased, so this does not appear to be from purchasing water to supplement the systems).

Nine¹⁵ of the 23 systems consumed no water due to treatment. This seems rather odd. On the other hand one system (Autumn Hills) consumed 55% of the pumped water, resulting in less than half of the pumped water being available for sale.. Yet this same system managed to sell 67% more water than it had available to sell. Perhaps an entry error in the spreadsheet? If so weren't these numbers audited in any way? Perhaps one entry is a mistake, but 9 systems sold more water than they had available for customer consumption.

Has the PUC reviewed the yearly water audits, and accompanying three year ongoing compliance reports for each of these 23 systems? Has the PUC reviewed the response plans for the two systems that exceed 15% losses in 2019 (Black Rocks, and Bow Lake)? What actions did DES take with regard to the water losses? Would the PUC please make said reports part of the public record, or if such reports were waived by DES, please include the waivers in the public record.

To summarize the 2019 annual report, we would ask if basic math errors on a spreadsheet are exemplary performance? Are systems selling more water than they pumped exemplary? Are including virtually unreadable documents exemplary? How can a system have zero loss of water for treatment? Was the water treated?

¹⁴

<https://www.puc.nh.gov/Water-Sewer/Annual%20Reports/2019/2019-GasWater-AnnualReport-Hampstead-Area-Water-Company.pdf>

¹⁵ Systems 2, 4, 5, 6, 9, 10, 11, 22, 27
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Below is a table generated by entering the 2019 data:

Unaccounted for Water Report 2019

	Produced	Net Available for Sale "System Input Volume"	Customer Consumption	(Loss) Gain = Customer Consumption - net avail for sale "Water Balance"	%(Loss) % Gain = Loss / Produced	% water balance = Loss / water balance	Produced - Net Avail for consumption	% water consumed in treatment
ATK-Hampstead core	158,425,256	150,390,676	130,853,454	-19,537,222	-12.3%	-13.0%	8,034,580	5.1%
002 Dearborn	599,400	599,400	591,488	-7,912	-1.3%	-1.3%	0	0.0%
03 Camelot Court	1,057,910	1,023,260	1,040,034	16,774	1.6%	1.6%	34,650	3.3%
04 Colby Pond	8,352,800	8,352,800	7,997,564	-355,236	-4.3%	-4.3%	0	0.0%
05 Cornerstone	3,967,430	3,967,430	3,842,207	-125,223	-3.2%	-3.2%	0	0.0%
06 Cricket/Maplevale	4,368,579	4,368,579	4,140,240	-228,339	-5.2%	-5.2%	0	0.0%
09 Lamplighter	1,044,460	1,044,460	1,028,814	-15,646	-1.5%	-1.5%	0	0.0%
10 Oakhill	3,190,530	3,190,530	3,112,391	-78,139	-2.4%	-2.4%	0	0.0%
11 Rainbow ridge	882,100	882,100	881,600	-500	-0.1%	-0.1%	0	0.0%
12 Stoneford	3,465,783	3,206,583	3,387,984	181,401	5.2%	5.7%	259,200	7.5%
14 Lancaster	7,154,796	6,938,796	6,976,409	37,613	0.5%	0.5%	216,000	3.0%
16 Millwoods	1,021,400	925,000	965,174	40,174	3.9%	4.3%	96,400	9.4%
17 Waterford Village	2,797,800	2,579,100	2,658,422	79,322	2.8%	3.1%	218,700	7.8%
18 Autum Hills	81,800	36,800	61,336	24,536	30.0%	66.7%	45,000	55.0%
19 Coopers Grove	925,500	871,200	913,233	42,033	4.5%	4.8%	54,300	5.9%
20 Sargent Woods	3,787,000	3,568,600	3,525,735	-42,865	-1.1%	-1.2%	218,400	5.8%
21 Black Rocks	3,781,300	3,613,700	2,967,473	-646,227	-17.1%	-17.9%	167,600	4.4%
22 Fairfield	957,590	957,590	914,131	-43,459	-4.5%	-4.5%	0	0.0%
23 Little River	2,760,290	2,398,610	2,395,298	-3,312	-0.1%	-0.1%	361,680	13.1%
24 Snows Brook	1,920,800	1,820,000	1,595,836	-224,164	-11.7%	-12.3%	100,800	5.2%
25 Kings Landing	1,404,700	1,284,700	1,283,949	-751	-0.1%	-0.1%	120,000	8.5%
26 Wells Village	1,753,800	1,633,800	1,673,912	40,112	2.3%	2.5%	120,000	6.8%
27 Bow Lake	2,386,283	2,386,283	1,534,470	-851,813	-35.7%	-35.7%	0	0.0%
Totals	216,087,307	203,653,714	184,341,154	-21,698,843	-10.0%	-10.7%	12,433,593	5.8%

A few other items on the 2019 annual report:

- "Potable water supply storage tanks and Pump Stations" table has a total of 45? Stations and 69 wells. I believe if you add up the number of wells listed it is not 69. Is this data valid? The PUC should require legible documents.
- The table "Potable Water Supply Wells" is another spreadsheet which is difficult to read, has a number of crossouts/whiteouts? Why have obsolete data shown on the spreadsheet? Why does part of the spreadsheet show "as of 3/25/08"? Have there been no changes to those systems in 13 years?
- If one refers back to prior annual reports you can see basically the same data, but its readability is significantly better.

2018 Annual Report

- Similar comments to 2019 water loss report:
 - Water balance percentage is calculated off Produced value not the System Input Volume, thus they are artificially lower.
 - 9 out of 22 systems used no water in treatment.. Every gallon pumped was available for sale. Was the water treated?
 - 9 out of 22 systems sold more water than they had available for sale. Two with over 12% more water. How is this possible? Table S-2 shows no water purchased. Is it realistic to sell more

water than was pumped? What explains differences between the pumped water values in the annual report and the DES one stop system?

- Potable Water Supply Wells - why is there obvious whiteout and typing on the "spreadsheet"? "As of 3/25/08" -- No changes needed in 12 years?
- Has the PUC reviewed the yearly water audits, and accompanying three year ongoing compliance reports for each of these systems? Has the PUC reviewed the response plans for the three systems that exceed 15% losses? Would the PUC please make said reports part of the public record, or if such reports were waived by DES, please include the waivers in the public record.

2017, 2016, 2015 Annual Report

- Same issues as previous reports.
- 2015 report is exceptional in that one water system sold 92.6% more water than they pumped (using HAWC data), and one system lost 73.7% of the water pumped. Exemplary?

--end--