

STATE OF NEW HAMPSHIRE
PUBLIC UTILITIES COMMISSION

DOCKET NO. DW 20-117

IN THE MATTER OF: HAMPSTEAD AREA WATER COMPANY, INC.
REQUEST FOR CHANGE IN RATES

DIRECT TESTIMONY AND EXHIBITS

OF

HOWARD SOLGANICK
ENERGY TACTICS & SERVICES, INC.

CONSULTANT TO
NEW HAMPSHIRE DEPARTMENT OF ENERGY

May 4, 2022

TABLE OF CONTENTS

Introduction.....	1
Statement of Qualifications.....	1
Purpose of Testimony	5
Class Cost of Services.....	5
Rate Design	7
Intervenor Testimony.....	10
Public Fire Service Rate Impact	11
Enhancements to a Future Cost of Service Study	13

LIST OF EXHIBITS

Exhibit HS-1	Professional Experience, Qualifications and Prior Testimony of Howard Solganick
Exhibit HS-2	HAWC Response to Steele 3-7
Exhibit HS-3	Insurance Services Office, Inc. letter dated December 23, 2019, Atkinson
Exhibit HS-4	Insurance Services Office, Inc. letter dated March 30, 2020, Hampstead
Exhibit HS-5	HAWC Response to Staff TS 1-7
Exhibit HS-6	Ms. Steele Response to DOE 1-1

1 **Introduction**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A. My name is Howard Solganick. My business address is 810 Persimmon Lane, Langhorne,
4 PA 19047.

5 **Q. BY WHOM ARE YOU EMPLOYED?**

6 A. I am employed by Energy Tactics & Services, Inc., as a Principal and President. I am
7 performing this work as a subcontractor to Blue Ridge Consulting Services, Inc (“Blue
8 Ridge”).

9 **Q. ON WHOSE BEHALF ARE YOU TESTIFYING?**

10 A. I am testifying on behalf of the New Hampshire Department of Energy.

11 **Statement of Qualifications**

12 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.**

13 A. I received a Bachelor of Science in Mechanical Engineering (minor in Economics) from
14 Carnegie-Mellon University and a Master of Science in Engineering Management (minor
15 in Law) from Drexel University. I have taken courses on arbitration and mediation
16 presented by the American Arbitration Association, scenario planning presented by the
17 Electric Power Research Institute, and load research presented by the Association of Edison
18 Illuminating Companies. I have also taken courses in zoning and planning theory, practice,
19 and implementation in both New Jersey and Pennsylvania.

1 **Q. PLEASE DESCRIBE YOUR PROFESSIONAL EXPERIENCE.**

2 A. I have been actively engaged in the utility industry for over 45 years, during which I have
3 held utility management positions in generation, rates, planning, operational auditing,
4 facilities permitting, and power procurement. I have delivered expert testimony on utility
5 planning and operations, including rate design and cost of service, tariff administration,
6 generation, transmission, distribution and customer service operations, load forecasting,
7 demand-side management, capacity and system planning, and regulatory issues.

8 As a subcontractor, I have performed management audits for the Connecticut Department
9 of Public Utility Control and ratebase audits for the Public Utilities Commission of Ohio
10 and the Oregon Public Utility Commission. I also provide (as a subcontractor) support for
11 the Staff and Commissioners of the District of Columbia Public Service Commission for
12 electric and gas rate cases.

13 I have also been engaged (as a subcontractor) to review utility performance before, during,
14 and after outages, resulting from major storms in the state of Washington (major
15 windstorm), in the state of Missouri (summer storms and ice storm), in the state of Texas
16 (Hurricane Ike), in Jamaica West Indies (Hurricane Ivan), in the state of New Jersey (two
17 2011 storms—tropical storm Irene and a major snowstorm), and for a New England utility
18 (to review the emergency plan). Some of these assignments were at the request of the
19 utilities involved and others at the request of state utility regulators.

20 I have worked with utilities, intervenors, public service commissions, attorneys general,
21 and public advocates in Arizona, Connecticut, Delaware, District of Columbia, Georgia,
22 Maine, Maryland, Massachusetts, Michigan, Missouri, New Hampshire, New Jersey, Ohio,
23 Oregon, Pennsylvania, Texas, Quebec, and Jamaica West Indies.

1 I have held licenses as a Professional Engineer in Pennsylvania (now inactive) and New
2 Jersey (now inactive). I held a Professional Planner's license (now inactive) in New Jersey.
3 I placed those licenses in inactive status as I no longer need the certification for the type of
4 work I am now performing.

5 I served on the Electric Power Research Institute's Planning Methods Committee and on
6 the Edison Electric Institute Rate Research Committee.

7 I have been appointed as an arbitrator in a case involving a pricing dispute between a
8 municipal entity and an on-site power supplier and in a commercial landlord-tenant case
9 concerning sub-metering and billing.

10 I previously served on two New Jersey Zoning Boards of Adjustment as Chairman and
11 member and a Pennsylvania Township Planning Commission as Chairman and member.

12 **Q. HAVE YOU INCLUDED A MORE DETAILED DESCRIPTION OF YOUR**
13 **QUALIFICATIONS?**

14 A. Yes. A description of my experience and qualifications is included as Exhibit HS-1.

15 **Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY IN REGULATORY**
16 **PROCEEDINGS?**

17 A. Yes. I have testified, presented testimony, and/or made presentations (Exhibit HS-1) before
18 regulatory bodies:

- 19 • Arizona Corporation Commission
- 20 • Delaware Public Service Commission
- 21 • Georgia Public Service Commission
- 22 • Jamaica (West Indies) Electricity Appeals Tribunal
- 23 • Maine Public Utilities Commission

- 1 • Maryland Public Service Commission
- 2 • Michigan Public Service Commission
- 3 • Missouri Public Service Commission
- 4 • Nebraska Public Service Commission
- 5 • New Jersey Board of Public Utilities
- 6 • Public Utilities Commission of Ohio
- 7 • Pennsylvania Public Utility Commission
- 8 • Public Utility Commission of Texas

9 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE NEW HAMPSHIRE**
10 **PUBLIC UTILITIES COMMISSION?**

11 A. No, this is my first testimony in New Hampshire.

12 **Q. WHAT OTHER WORK HAVE YOU PERFORMED THAT HAS COME BEFORE**
13 **THIS COMMISSION?**

14 A. I have supported prior Blue Ridge work for Commission Staff in Docket No. DG 17-048
15 (Liberty Utilities).

16 A. **ARE YOU PERFORMING OTHER WORK IN NEW HAMPSHIRE AT THIS**
17 **TIME?**

18 A. Yes. As a subcontractor to the River Consulting Group, Inc., I am performing a mandated
19 Business Process Audit of Eversource Energy's capital planning process for the New
20 Hampshire Department of Energy in Docket No. DE 19-057. The same team is also
21 assisting the New Hampshire Department of Energy in Docket No. DE 21-004 concerning
22 Liberty's Least Cost Integrated Resource Plan (LCIRP) and in Docket No. DE 20-161
23 concerning Eversource's Least Cost Integrated Resource Plan.

1 **Purpose of Testimony**

2 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

3 A. The purpose of my testimony is to respond to the testimony of Ms. Karen Steele
4 encompassing the following issues:

- 5 • Class Cost of Service Study (CCOSS)
- 6 • Rate Design
 - 7 a. Rates for General Water Service
 - 8 b. Rates for Fire Service
- 9 • Enhancements to a future Class Cost of Service Study
 - 10 a. Plaistow Charges
 - 11 b. Rates for Miscellaneous Services

12 **Class Cost of Service**

13 **Q. PLEASE EXPLAIN WHAT A CLASS COST OF SERVICE STUDY (CCOSS) IS.**

14 A. A CCOSS allocates the costs of the utility across the various customer classes, and the
15 results are used to support cost-based rates for those classes.

16 **Q. HOW CAN A REGULATORY COMMISSION USE THE RESULTS OF A**
17 **CCOSS?**

18 A. While a CCOSS appears to be a calculation of what class rates should be under specific
19 allocation methodologies, a regulatory commission should consider not only the factual
20 study but also the rate design's economic, social, and other impacts on the utility's

1 customers and, to some extent, the general public. Thus, the CCOSS is often used as a
2 guideline or target for a regulatory commission.

3 **Q. IS THERE AN ACCEPTED INDUSTRY STANDARD FOR PERFORMING A**
4 **CCOSS?**

5 A. The “art” of performing a CCOSS for electric, gas, and water utilities has been studied and
6 written about by practitioners such as James C. Bonbright and organizations such as the
7 National Association of Regulatory Utility Commissioners, the American Gas Association,
8 the Water Environment Foundation, and the American Water Works Association. While
9 the utility service being analyzed may be electric, gas, sewer, or water, the underlying
10 principles of performing the CCOSS are consistent. In the case of a water utility, the
11 American Water Works Association’s Principles of Water Rates, Fees, and Charges aka
12 Manual of Water Supply Practices—M1 (“M1 Manual”) is a reasonable guide to preparing
13 a CCOSS for a water utility such as the Company.

14 **Q. PLEASE SUMMARIZE THE HAMPSTEAD AREA WATER COMPANY (HAWC**
15 **or “Company”) PRESENTATION ON CLASS COST OF SERVICE STUDY.**

16 A. The Company provided a CCOSS, including ratebase, depreciation, expenses, and taxes
17 (among other items), all allocated across General Water Service, Fire Service, Billing and
18 Metering.¹
19
20

¹ Hampstead Area Water Company, Inc., Assented-to Motion to Replace Filing to Correct Formatting and Exhibits Misplacement Only, at 155 (March 11, 2021) (Schedule DF-3).

1 **Q. HOW WERE THE RESULTS OF THE COMPANY’S CCOSS USED?**

2 A. The Company used its CCOSS to design rates for General Water Service customers
3 (residential and commercial share the same rates) and Fire Service (public and private).²

4 **Q. ARE THE METHODOLOGIES OF THE CCOSS REASONABLE?**

5 A. After some discussion, data requests, technical conferences, and input and the resulting
6 proposed changes to the Company’s CCOSS, the results are in general agreement with the
7 M1 Manual’s recommendations.

8 **Rate Design**

9 **Q. IS THE COMPANY’S CCOSS A REASONABLE GUIDELINE FOR COST-**
10 **BASED RATES?**

11 A. Yes.

12 **Q. WHAT SERVICES DO GENERAL WATER SERVICE CUSTOMERS**
13 **RECEIVE?**

14 A. General Water Service customers (both residential and commercial) receive the capability
15 of and the actual delivery of water to their homes or businesses respectively at any time
16 day or night in a volume compatible with their meter. These customers also receive a
17 monthly bill and associated customer service along with maintenance of equipment
18 dedicated to their service, such as meters and valves.

² Hampstead Area Water Company, Inc., Assented-to Motion to Replace Filing to Correct Formatting and Exhibits Misplacement Only, at 155 (March 11, 2021) (Schedule DF-4).

Q. WHAT SERVICES DO FIRE SERVICE CUSTOMERS RECEIVE?

A. Fire service customers receive the availability of larger volumes of water delivered through hydrants or through their fire suppression systems (sprinklers). Just as fire insurance provides funds when needed (although the customer hopes never to have to make a claim), fire service provides the availability of larger volumes of water for delivery whether used or not. A utility's transmission and distribution system, including larger mains and water storage facilities, are sized to meet fire service requirements while concurrently serving the needs of General Water Service customers. The equipment that has been oversized compared to the requirements for a General Water Service customer should be allocated jointly to Fire Service and General Water Service customers. While each individual hydrant has a potential flow determined by the underlying distribution system, the utility's water supply, including transmission and storage, needs to be designed for the largest fire system flow that may occur even if that flow is needed at only a few hydrants.

Q. WHAT FIRE FLOW REQUIREMENTS ARE ASSUMED IN THE COMPANY'S CCROSS?

A. As proposed by the Company's cost of service witness Mr. David Fox, the CCROSS assumes fire flows of 2,000 gallons per minute (GPM) for a period of three hours.

Q. IS THE 2,000 GPM FIRE FLOW A REASONABLE ASSUMPTION FOR THE COMPANY?

A. Mr. Fox can speak to the basis of his fire flow assumption, but there is also additional information available within the record that can shed light on the 2,000 GPM assumption.

1 The Company provided two reports from the Insurance Services Office, Inc. (ISO) in
2 response to a data request from intervenor, Ms. Karen Steele. The Company highlights in
3 its reply to Steele 3-7, e, “[n]ote that these flow figures do not reflect the new Atkinson
4 Tank, Westside Dr. Treatment Station, or any other system upgrades since 2019.” *See*
5 Exhibit HS-2.

6 The first report is dated December 23, 2019, and is addressed to Mr. David Cressman,
7 Administrator Atkinson, and includes a table labeled HYDRANT FLOW DATA
8 SUMMARY for the community of Atkinson. This table lists four hydrants with “Needed
9 Flow” of 2,000 GPM or greater. The table shows “Available Flow” of 1,600, 850, 300
10 and 1,100 GPM for those four hydrants. I have included this table as Exhibit HS-3.

11 The second report is dated March 30, 2020, and is addressed to Mr. Chad Bennet,
12 Chairman Hampstead, and includes a table labeled HYDRANT FLOW DATA
13 SUMMARY for the community of Atkinson. This table lists five hydrants with “Needed
14 Flow” of 2,000 GPM or greater. The table shows “Available Flow” of 1,200, 2,400,
15 1,200, 2,000, and 1,900 GPM for those five hydrants. I have included this table as Exhibit
16 HS-4.

17 As there are at least two hydrants with available flow at or above the 2,000 GPM level
18 the CCOSS allocation is reasonable. With the additional facilities installed there may be
19 other hydrants with available flows at or above 2,000 GPM.
20

1 **Q. HAS ANY OTHER PARTY FORMALLY SUGGESTED AN ALTERNATE OR**
2 **LOWER FIRE FLOW ASSUMPTION FOR THE CCROSS?**

3 A. Not to my knowledge.

4 **Intervenor Testimony**

5 **Q. HAVE YOU REVIEWED THE TESTIMONY AND DATA RESPONSES**
6 **PROVIDED BY MS. KAREN STEELE?**

7 A. Yes. Ms. Steele suggests that the use of the concepts embedded in the M1 Manual is
8 inappropriate for a utility that does not serve a town or municipality completely: “These
9 guidelines are written for a water company servicing a singular, entire town and all its
10 residents.”³

11 The M1 Manual itself refutes this suggestion:

12 Hydrant Charges. The most common method to recover costs is to assess
13 the total public fire protection cost to the municipality. Often, the cost is
14 divided by the number of public fire hydrants to determine a per hydrant
15 cost. This method is especially useful in situations where the utility *serves*
16 *more than one municipality*, because it provides a mechanism to divide
17 costs among the *various communities* [emphasis added]. It also provides
18 the utility with increased revenue to meet fire protection costs as the
19 number of hydrants increases with growth.⁴

20 **Q. HAVE YOU PREPARED OR REVIEWED CCROSS THAT DID NOT COVER A**
21 **COMPLETE JURISDICTION?**

22 A. In my tenure with the Atlantic City Electric Company (which served southern New Jersey)
23 our CCROSS spanned all or portions of counties and portions of townships and even
24 recognized the division of the City of Vineland into a service territory served by ACE and

³ Karen Steele, Direct Testimony, December 15, 2021 at 9.

⁴ AWWA Manual M1 page 225

1 the remainder served by the City of Vineland Electric Utility (CVEU). Rates were
2 developed, approved by the New Jersey Board of Public Utilities, and charged to
3 governmental customers, such as those counties, townships, and cities. Some of those
4 counties and townships purchased service from ACE and purchased service from adjacent
5 utilities, such as PSE&G, JCP&L, and CVEU. There are probably many other utilities
6 serving a portion of state, a portion of a county, or a portion of a city or township whose
7 governmental customers manage to deal successfully with the situation. The
8 methodologies used to prepare CCROSS are well suited to dealing with partial jurisdictions
9 and multiple jurisdictions.

10 **Public Fire Service Rate Impact**

11 **Q. ARE THERE ANY OFFSETS TO THE INCREASES PROPOSED FOR PUBLIC**
12 **FIRE PROTECTION?**

13 A. Yes. The same new equipment installed by the Company (rate base) will generate increased
14 tax revenue for Atkinson and Hampstead and to some extent offset the increased costs of
15 the increased fire protection afforded by the new equipment. This item was addressed by
16 the Company⁵ and Ms. Steele.⁶

17 **Q. PLEASE EXPLAIN THE VARIOUS LIMITING FACTORS THAT APPLY**
18 **UNIQUELY TO PUBLIC FIRE SERVICE RATES IN THIS CASE.**

19 A. The factors include:
20 • Public Fire Service customers, unlike the other customer subclasses, receive an
21 increase in revenues (property taxes) due to the additional facilities installed by the

⁵ Exhibit HS-5

⁶ Exhibit HS-6

1 Company. The increased tax revenues will offset a portion of the increase in hydrant
2 rates.

3 • Public Fire Service customers have previously not been charged a cost-based rate for
4 hydrants because the Company had not performed a CCOS prior to this case. Thus,
5 the municipalities have benefitted for a number of years by paying a lower municipal
6 fire protection rate.

7 • The magnitude of the increase should be gauged against the net impact (increase in
8 hydrant costs less the increase in tax revenues from the Company). When this
9 “taxpayer” level measure is evaluated the net increase to the citizens of Atkinson is
10 low.

11 **Q. HOW DO YOU ESTIMATE THE INCREASE AT THE TAXPAYER LEVEL TO**
12 **BE LOW?**

13 A. I have formed my opinion as follows:

14 • Atkinson has 81 hydrants and the change in revenue will be the difference between
15 the present rate of \$200 and the proposed rate of \$1,419 less the \$2,000 Annual
16 Availability Fee for a total revenue change of \$96,739.

17 • The Company has estimated that Atkinson will receive an additional \$60,252 of tax
18 revenues based upon the improvements and investments it has made.

19 • The net impact to the Town of Atkinson would be \$36,487 (the difference of the total
20 revenue change less the increased tax revenue received).

21 • According to city-data.com in 2019 there were 2,885 homes in Atkinson. Assuming
22 3,000 properties to allow for some commercial uses, the per property average impact

would be \$12.16 per year or \$1.01 per month for the proposed increased costs of public fire protection service.

Enhancements to a Future Cost of Service Study

Q. CAN THE COMPANY'S CLASS COST OF SERVICE STUDY BE ENHANCED TO PROVIDE BETTER COST INFORMATION FOR ALL PARTIES?

A. Yes. The Company's future CCOSS could be enhanced:

- Create a separate class for the Resale of Water to Plaistow.
- Treat (within the CCOSS) the Miscellaneous Charges as the tariffed rates they are.

Q. WHEN SHOULD THE ENHANCEMENTS BE MADE BY THE COMPANY?

A. Creating a CCOSS is not an insignificant cost, and for a medium-sized utility, I do not recommend requiring a new CCOSS with every filed rate case. The agreement for serving Plaistow does not allow rates to be updated and renegotiated before 2035, and therefore, the Company should perform a new CCOSS, including the recommended enhancements in time for those negotiations. This timing might suggest a new CCOSS be prepared for a rate case filed in or after 2031.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.