

**BEFORE THE
STATE OF NEW YORK
PUBLIC SERVICE COMMISSION**

In the Matter of
Proceeding on Motion of the Commission as to the
Rates, Charges, Rules and Regulations of
Suez Water New York, Inc. for Water Service

Case No.16-W-0130

**DIRECT TESTIMONY
of
HARRIET D. CORNELL
on behalf of the
ROCKLAND COUNTY TASK FORCE
ON WATER RESOURCES MANAGEMENT**

September 14, 2016

Harriet D. Cornell, Chair
Rockland County Task Force
on Water Resources Management
11 New Hempstead Road
New City, NY 10956

1 **Q. PLEASE STATE YOUR NAME, OCCUPATION AND BUSINESS ADDRESS.**

2 **A.** My name is Harriet D. Cornell. I am a Rockland County Legislator. My business address is
3 11 New Hempstead Road, New City, NY 10956.

4 **Q. ON WHOSE BEHALF ARE YOU SUBMITTING THIS TESTIMONY?**

5 **A.** I am submitting this testimony before the New York State Public Service Commission
6 (“PSC”) as Chair of the Rockland Task Force on Water Resources Management (“Rockland
7 County Water Task Force” or “Task Force”) and as an elected Rockland County Legislator.

8 **Q. PLEASE DESCRIBE YOUR EXPERIENCE AND EDUCATIONAL BACKGROUND**
9 **WITH PUBLIC SECTOR ISSUES RELEVANT TO WATER CONSERVATION AND**
10 **POLICY.**

11 **A.** I have been an elected Rockland County Legislator for over 32 years, first elected in 1983 and
12 re-elected every four years since. As a public official I am in close touch with the issues and
13 concerns of people of all ages, all races, religions and ethnicities, and all income levels. As Chair
14 of the Legislature for nine years, I initiated the development of Rockland Tomorrow: Rockland
15 County Comprehensive Plan. I also initiated a study of the growing elderly population in
16 Rockland, entitled Aging in Place. As Chair of the Rockland County Water Task Force, signed
17 into law on June 19, 2014, I have been deeply involved in issues of water conservation, water
18 quality, protection of wetlands, woodlands, floodplains and other aspects of the Task Force
19 mission. I have a B.A. from Swarthmore College and an M.P.A. from N.Y.U. Wagner Graduate
20 School of Public Policy. From 2005-2013 I served as Chairwoman of the Legislature. During
21 those years and years following, I have presented at public hearings and submitted formal
22 comments to NYS DEC, NYS DOS, NYS Assembly Committee on the Environment, PSC, and
23 most recently filed testimony in PSC proceedings with SWNY, all containing the contention that
24 a combination of actions to ensure a long-term sustainable water supply would preclude the
25 necessity of a single project which carries with it a number of undesirable and costly results that

1 negatively impact Rockland residents and businesses, and the environment. All of these
2 considerations are important in forging long-term natural resource management plans and policy.
3 As a policy maker, I would like to speak to these matters and make recommendations that are
4 consistent with the State of New York policies, which stress the need for sustainable planning and
5 conservation as a priority.
6 Furthermore, I have led the Rockland County Water Task Force (“Task Force”) in our response to
7 calls from the PSC (see PSC Orders in Case 13-W-0303 in 2014 and 2015) to work with Suez
8 Water New York (“SWNY”, “the Company”) prior to this rate filing to develop an aggressive
9 conservation plan that would be a model for New York State. I have worked with the Task Force
10 and its committees to identify and maximize conservation opportunities through government and
11 community action, and succeeded in securing State funds to develop a Conservation
12 Implementation Plan for Rockland County in the amount of \$250,000. I continue to work with the
13 Task Force, the Legislature, the County Executive, and community and regional partners to
14 solidify and deploy conservation strategies in Rockland County and fulfill the commitments
15 responsive to PSC’s requests.

16 **Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?**

17 **A.** The purpose of my testimony today is to request the PSC to carefully consider the
18 financial benefits of conservation to rate payers over time and to consider the
19 environmental benefits of sound water policy. Accordingly, I urge improvement on the Joint
20 Proposal (“JP”) executed by the Company and the Department of Public Service Staff (“DPS
21 Staff” or “Staff”). The Joint Proposal was filed with the PSC Secretary on September 2, 2016 in
22 the above captioned proceeding. My testimony will introduce and describe in general terms those
23 improvements to conservation related items of the Joint Proposal that I endorse, and which have
24 been produced cooperatively by a coalition of Rockland County Water Task Force community
25 partners (“Task Force Partners” or “Partners”), who are also Parties to this proceeding. The

1 Partners will contemporaneously submit relevant filed comments, testimony and reports to detail
2 specific suggestions for improvements primarily concerning the policy aspects of the Joint
3 Proposal, namely the conservation plan, conservation rates, affordability, and non-revenue water
4 (“NRW”).

5 **Q: WHO ARE THE TASK FORCE PARTNERS THAT WORKED TO PRODUCE THE**
6 **RECOMMENDED IMPROVEMENTS TO THE JOINT PROPOSAL?**

7 The Task Force Partners for purposes of this proceeding are individual and organizational Parties
8 that grouped around aforementioned aspects of the rate case and worked closely together over the
9 past several months toward shared goals. Some of these partners are not traditional environmental
10 organizations, but because they recognize that water conservation is the least costly route to
11 prevent water rates from escalating and to ensure that water rates are affordable for lower income
12 families, they share our goals. Outside of the formal definitions of this proceeding, Partners
13 represent a broader coalition of members and supporters of the Task Force with a long history of
14 demonstrated interest in shared conservation objectives intended to assure sustainable and cost
15 effective management of Rockland County’s most precious water resources and environment.

16 The Task Force Partners are, in a broader sense, also partners to the PSC and its stated interest to
17 promote water conservation policy. My agreement with the Partners on recommended
18 improvements to the Joint Proposal is the result of our continued and ongoing collaboration; it
19 reflects concerted joint effort, pooling of resources among uncompensated interveners, and a
20 significant commitment of time to provide concrete proposals requested by PSC in order to aid
21 the PSC’s decision on the policy matters that concern long-term sustainable water resource
22 management in Rockland County.

23 The Partners are: representatives of Rockland Water Coalition, Sierra Club, Scenic Hudson,
24 Riverkeeper, Public Utility Law Project (PULP), Dan Duthie, and other individual supporters of
25 the Rockland County Water Task Force and its conservation efforts.

26 **Q. HOW IS YOUR TESTIMONY ORGANIZED?**

1 A. First, my testimony contains background information on the Task Force and its involvement in
2 the SWNY conservation planning and the input that PSC sought, followed by an overview of
3 recommended improvements to the JP in a number of areas:

- 4 • Improvement to NRW program
- 5 • Recommended changes to Conservation Program
- 6 • Review of shareholder incentives for water conservation performance
- 7 • Review and recommended actions with regards to the conservation rate structure and
8 affordability

9 After the overview of recommendations, my testimony provides further details of Task Force
10 activities and first instances of responding to PSC's call to collaborate on conservation efforts.

11 **Q. PLEASE DESCRIBE THE ROCKLAND WATER TASK FORCE.**

12 **A.** The Rockland County Task Force on Water Resources Management (Rockland Water Task
13 Force) was created by Resolution #296 of 2014 of the Rockland County Legislature and signed
14 into law by the County Executive on June 19, 2014. It was a response to years of ferment in the
15 community as a result of the Haverstraw Water Project, the desalination plant, which raised
16 concerns that it was an energy-intensive, very costly plan to create a greater water supply using
17 the Hudson River water across from Indian Point.

18 The Rockland Water Task Force mission is to develop a County Water Plan that ensures a safe,
19 long-term water supply for Rockland County that incorporates sustainability, demand-side
20 principles and conservation. It shall assemble, examine, and investigate relevant data, further
21 County goals regarding protection of floodplains, woodlands, and wetlands, increasing
22 groundwater supply, reducing storm water runoff, and preventing flood damages to residents and
23 businesses. The Task Force shall also develop education and outreach programs, seek funding
24 opportunities, and report its findings, conclusions, and recommendations to the Legislative and
25 Executive branches of County government.

1 **Q: DESCRIBE THE TASK FORCE MEMBERSHIP.**

2 The membership of the Rockland Water Task Force is diverse, with representatives from the
3 public and private sectors, large and small water users, local governments, and environmental
4 organizations. As such, the Task Force is the single duly constituted stakeholder spearheading
5 collaborative sustainable water resource management in Rockland County and in the Company’s
6 service area. Notably, the Company had been a named participant in the Task Force, as per
7 the legislation creating the Task Force on June 19, 2014. SWNY had worked
8 productively and harmoniously with the 18 other members of the Task Force and its
9 committees. However, in August 2015 the Company unilaterally withdrew from further
10 participation in the Task Force. The Company was unhappy with an analysis of its
11 system and customer water use done for the Water Task Force by Amy Vickers, a
12 nationally-acclaimed expert who had been recommended to the Task Force by David
13 Stanton, President of Regulated Water for the Company and Acting General Manager.
14 The Vickers Report was filed on July 22, 2015 under case 13-W-0303 in accordance with
15 the request of the PSC to aid the agency’s decision on the question of “need” for the
16 desalination project proposed by SWNY. The Company “resigned” from the Task Force
17 shortly after the consultant’s Vickers Report became public. The Company provides
18 water to approximately 90% of Rockland’s residents and businesses and its collaboration
19 with the Task Force is essential for a unified approach to water conservation and to fulfill
20 the broad mission of the Task Force.

21 **Q. PLEASE DESCRIBE IN MORE DETAIL THE ACTIVITIES OF ROCKLAND**
22 **COUNTY WATER TASK FORCE RELEVANT TO THIS RATE CASE AND CREATION**
23 **OF A WATER CONSERVATION PLAN AS REQUESTED BY THE PSC.**

1 A. I would like to give you a picture of what has been transpiring recently, thanks to
2 collaborative efforts spearheaded by the Rockland Water Task Force, with the great assistance of
3 a wide range of Partner organizations and individuals in Rockland and the Hudson Valley. This
4 includes The Rockland Water Coalition, Sierra Club, Strawtown Studio, AARP, EMC as well as
5 Riverkeeper and Scenic Hudson. We have also enjoyed the confidence displayed by the PSC and
6 Chair Audrey Zibelman, who on several occasions indicated her belief that Rockland can develop
7 a plan of water conservation that will prove to be a model in the State of New York and beyond.
8 Consequently, the first priority of the Task Force—but far from the only one—is to develop a
9 comprehensive conservation plan for the county of Rockland. However, it is essential that in this
10 process, SWNY work collaboratively with the Task Force to develop a truly comprehensive
11 program for water savings in the County, one that maximizes the full potential of conservation
12 that can be achieved as a result of actions taken by the utility, municipalities and the community,
13 in partnership.

14 Last Fall, at the request of PSC Chair Audrey Zibelman, in anticipation of the upcoming rate
15 proposals to be submitted by SWNY, the Task Force was asked to give assistance to SWNY
16 which was required to submit a plan of conservation for the company with its rate filing. Chair
17 Zibelman assigned her Deputy, Judy Lee, to convene small “blended” meetings at Rockland
18 Community College with SWNY and the Task Force, which commenced in November 2015 and
19 concluded in mid- February 2016. In addition, the Task Force was asked specifically that two
20 representatives of the Task Force volunteer additional time to attend separate meetings and web-
21 conferences with SWNY and its conservation contractor—and to offer advice. Those Task Force
22 representatives were Patricie Drake, Task Force Coordinator, and Marguerite Turrin, a scientist at
23 Lamont Doherty Earth Observatory and Chair of the Task Force Conservation Committee.

24 **Q. DO YOU KNOW WHY THE TASK FORCE WAS ASKED TO WORK WITH SWNY**
25 **IN DEVELOPMENT OF A CONSERVATION PLAN FOR THE COMPANY?**

1 A. The County of Rockland legally constituted the Task Force in June 2014 with broad
2 responsibilities ranging from drought avoidance to flood prevention. Accordingly it holds special
3 status. I and other members of the Task Force first met with Chair Zibelman and many members
4 of her staff in August 2014. We were accompanied by regional partners Riverkeeper and Scenic
5 Hudson, as well as our state legislators who had arranged the meeting. We described the Task
6 Force mission and why we knew Rockland was capable of developing and planning its own water
7 future based on conservation, rather than a costly capital project then on the table. On Lincoln’s
8 Birthday, 2015, Chair Zibelman and PSC staff members’ attended an open public meeting of the
9 Task Force in Rockland County and listened carefully to the dialogue and the expertise of Task
10 Force members. At that meeting Chair Zibelman praised the group and said she believed that we
11 could become a model for the State of New York in protection and conservation of our water
12 resources. The Task Force kept Chair Zibelman informed of progress, and we had two
13 subsequent meetings with her in New York City after SWNY resigned from the Task Force. The
14 second meeting included David Stanton of SWNY. It was at that meeting that Chair Zibelman set
15 out the plan of collaboration. I can’t say definitively why she made this request, but I believe that
16 by charging SWNY and the Task Force to work together on a conservation plan for the Company
17 that was tailored to Rockland, it could mesh seamlessly with the conservation planning by
18 Rockland’s municipalities and county that would follow; and that both plans together would
19 constitute a model for the state. Collaboration might also minimize conflict during the rate case.

20 **Q. WHAT WAS THE EXPERIENCE AND THE RESULT OF THE TASK FORCE**
21 **EFFORT TO HELP DESIGN SWNY’S CONSERVATION PLAN?**

22 A. Each of these “blended” meetings was comprised of approximately 20 people, and included
23 officials of the Company and its consultants David Sayers and Andrew Chastain-Howley of
24 Black & Veatch (“B&V”), several members of the Task Force and its Conservation Committee,
25 Judy Lee and her staff. Several meetings also included Settlement Judge Ashley Moreno and her
26 team. Each meeting ran at least 2-1/2 hours, sometimes longer. Many of us prepared in advance

1 of meetings to be able to contribute meaningful ideas. At those focused meetings, discussion and
2 dialogue took place, with Task Force members enlightening B&V consultants about Rockland's
3 population and demographics, how to best to reach people for the survey B&V was planning; and
4 best conservation practices that may be most suitable for diverse Rockland communities and
5 particular water concerns. The additional smaller working sessions with SWNY and B&V
6 included Task Force representatives Patricie Drake and Margie Turrin, Dr. Daniel Miller,
7 Rockland Health Department's hydrologist who helps the Task Force Drought & Flood
8 Committee, and another Task Force member Peggy Kurtz. At all of the meetings B&V utilized
9 slide presentations and received useful feedback from Task Force members, who were
10 particularly concerned about a number of items, such as addressing seasonal discretionary water
11 use, tailored approach to conservation in the commercial sector and its subsectors, appropriate
12 and accessible messaging, and more.

13 B&V is a very reputable firm, and we enjoyed working with Andrew and David, as well as with
14 Donald Distante of SWNY, who sponsored in his initial pre-filed testimony a description of the
15 conservation plan, resulting from the work of B&V. However, B&V never filed the promised
16 final report that it completed for SWNY on April 29, 2016. This full B&V report was only posted
17 on the Company's website and was subsequently submitted into the record by the DPS Staff in its
18 testimony of the Conservation Panel.

19 Task Force members and I conscientiously fulfilled Chair Zibelman's request in order to help
20 SWNY develop a progressive plan of conservation. We knew that Chair Zibelman is hoping for
21 Rockland to be a model for the rest of the state; it was with that commitment in mind that we
22 approached the challenge and devoted volunteer time and resources of the County Task Force.
23 Clearly the time given by the one staff member of Rockland Water Task Force together with the
24 work of Marguerite Turrin and others meant time not spent on other conservation efforts being
25 developed by the Rockland Water Task Force, but we looked forward to an enlightened,
26 progressive Conservation Plan resulting from collaboration with B&V, It was only when the

1 Company filed a description of its Conservation Plan in Mr. Distanté's testimony, not through
2 B&V testimony, that we were shocked to learn that the goals SWNY had set for conservation
3 were minimal and not close to approaching the ambitious goals we believe possible.

4 **Q. IS IT YOUR OPINION THAT THE JOINT PROPOSAL CONTAINS**
5 **SATISFACTORY PLANS FOR CONSERVATION AND FOR DECREASE OF NON-**
6 **REVENUE WATER?**

7 **A.** No. It is not. The Task Force and Partners agree that the way to achieve a sustainable future
8 water supply for Rockland County is through greater efficiency and an effective water
9 conservation program. Rockland County has a tremendous opportunity to be a leader in water
10 system management and conservation. In fact, it may be more accurate to say that we have an
11 opportunity to enhance efforts in the water utility area by learning the lessons and following the
12 examples that were set by the PSC with its visionary energy policies. The PSC has already made
13 the difficult but correct decision in abandoning the unnecessary desalination plan. Suez NY's
14 service territory in Rockland County is the perfect place to serve as a model program for water
15 conservation in New York. We had hoped throughout the process of this proceeding that we
16 would arrive at a truly ambitious plan that we could support in whole or in part. It was very
17 disappointing to see the final Joint Proposal on September 2nd and find it lacking many of the
18 features that would elevate the plan and ensure its successful administration. Many of the Task
19 Force suggestions were ignored and the proposed plan was not of the caliber that we had
20 expected. While the Joint Proposal contains some improvements over the initially filed plan, it
21 does not live up to our expectations for a model plan. The Partners and I propose additional,
22 substantial improvements as reviewed generally in my testimony, and detailed in the Partners'
23 submitted documents. I strongly urge the PSC to carefully review and consider our
24 recommendations presented in good faith in order to realize the benefits of a superior plan of
25 conservation.

1 **Q. WHAT ARE THE AREAS OF IMPROVEMENT TO THE JOINT PROPOSAL AS**
2 **RECOMMENDED BY THE TASK FORCE AND THE PARTNERS?**

3 **A.** The general areas addressed first are: the proposed programs in the Joint Proposal for
4 decreasing non-revenue water (Section X) and increasing water conservation (Section XIX), and
5 the proposed shareholder incentive for the water conservation program (Section XX). Concrete
6 recommendations for improvement are detailed in the testimony and exhibits of Jonathan
7 Kleinman, the President of AIQUEOUS, LLC (“AIQUEOUS”), who submitted testimony on
8 behalf of Sierra Club Atlantic Chapter and the Municipal Consortium.

9 Additionally, Edward Markus and Shan Lin of AMAWALK CONSULTING GROUP PANEL
10 (“AMAWALK”) will testify on behalf of the County of Rockland to offer recommendations with
11 regards to conservation rates (Section XVII) and affordability (Section XXII).

12 **Q. WHAT ARE THE RECOMMENDATIONS FOR REDUCING NON-REVENUE**
13 **WATER?**

14 I strongly urge the PSC to review the specific recommendations presented by AIQUEOUS, some
15 of which are highlighted below:

- 16 • Hire an independent real water loss contractor to identify leaks
- 17 • Increase main replacement rate in the next 5 years in order to catch up to reasonable
18 levels, and remove yearly expenditure cap
- 19 • Provide quarterly NRW reporting with performance incentives and penalties
- 20 • Require AWWA M36 water audit methodology and software as standard
- 21 • Break NRW information in reports into AWWA recommended subcategories
- 22 • Audit reports independently and have both reports and audits subject to review of
23 PSC and filed on DMM

24 The most recent test year indicates unreasonably high NRW levels at 24.55%, which may
25 represent more than 4MGD of real water losses in the system. As Mr. Kleinman points out, such
26 high real water losses have significant economic value to ratepayers and—if stemmed-- could

1 lower SWNY's real losses by more than 1MGD, saving millions in avoided cost benefits to
2 ratepayers in coming years. Real water losses represent a serious problem with system efficiency
3 and are against public interest. In a community where need for conservation is being emphasized,
4 and where municipalities are to consider ordinances that permanently restrict outdoor watering
5 schedules, it is problematic to have a water distribution system with such high percentage of
6 water loss. Other experts, including an expert hired by the Task Force in 2015, agree that the level
7 of NRW losses in SWNY system is too high. This creates an opportunity for SWNY to improve
8 efficiency and show itself a conservation-minded entity on the supply-side. In any case, SWNY is
9 far exceeding the State of New York reporting level of 18%, above which NRW levels are
10 considered excessive and are most certainly against public interest.

11 We recommend that SWNY hire an independent real water loss reduction contractor to identify
12 leaks for repair, increase the main replacement rate to 1% for year one (1) and 1.5% for the
13 following 5 years so as to catch up the current sluggish schedules. These sluggish replacement
14 rates were previously strongly criticized by other experts, including the aforementioned Task
15 Force expert Amy Vickers, who pointed out in 2015 that the NRW levels are not surprising with
16 replacement and repair detection schedules being far behind state recommended standards. In the
17 past few years reviewed by Amy Vickers, and in the most recent test years, the Company has not
18 made sufficient commitment to improving its below-standards maintenance performance. In the
19 meantime, we caution against the proposed annual expenditure cap of \$17.0 million on increased
20 main replacement rate. Increasing the rate of replacement is a move in the right direction and
21 given the excessive NRW levels, it is clear that at least temporarily increased goals are necessary
22 to get SWNY back to reasonable efficiency levels.

23 Yearly NRW reporting has clearly not resulted in greater efforts or efficiencies; therefore, we
24 think it in the public interest that PSC require quarterly NRW reporting with performance
25 incentives and penalties, as per Mr. Kleinman's testimony and prior recommendations of Amy
26 Vickers. These measures would not only assure greater supply-side efficiency and improve

1 transparency, but also demonstrate the Company’s adherence to conservation policy of the State
2 of New York.

3 We agree that SWNY ought to utilize the AWWA M36 water audit methodology and software
4 and provide a copy of those reports to the PSC, and that SWNY should break NRW info into
5 subcategories, so as to establish clearer nomenclature in the areas and make the implications for
6 the report clearer to sophisticated non-experts. As a matter of fact, in the coming months, I will
7 discuss model legislation with State Legislators to require: the use of clear unified nomenclature;
8 that the AWWA methodology and software be used by all water utilities to report NRW; that
9 reports be independently audited; and the AWWA reports, underlying data, and independent
10 audits be submitted to the PSC for its review.

11 **Q. WHAT ARE YOUR CONCERNS WITH THE SWNY CONSERVATION PLANNING**
12 **APPROACH?**

13 A. My concern is that SWNY did not fulfill the intent of PSC Order of November 17, 2014; and
14 that SWNY’s conservation planning process was in first order aimed at satisfaction of the most
15 minimal suggested regulatory requirements.

16 In the *Order Addressing Status of Need and Directing Further Study* (“2014 Order”) in case 13-
17 W-0303 (“Need case”) PSC asked that SWNY complete a study to measure the ability to reduce
18 demand through conservation programs and identify any opportunities to increase water supply
19 with small incremental projects. The Commission made it clear on more than one occasion that an
20 aggressive and detailed plan was expected. In response, SWNY filed a *Report on the Feasibility*
21 *of Incremental Water Supply Projects and Conservation Opportunities in Rockland County, New*
22 *York* (“June 2015 Report”). The June 2015 Report contains only marginal discussion of
23 conservation, but SWNY nevertheless offers a conclusion that limits the scope of its effort to 1
24 MGD through conservation and 1 MGD through reduction of NRW. The DPS Staff’s conclusion
25 that SWNY demonstrated reasonableness of its conservation goal of 1 MGD with *research* and
26 the *June 2015 Report* is mystifying. SWNY was ordered to “... identify the feasibility, cost and

1 estimated demand reductions associated with each identified measure...” (2014 Order, page 66-
2 67), which SWNY clearly did not do in its June 30 Report. In fact, SWNY, in its June 30 Report,
3 does not offer any analysis or supporting documentation to demonstrate the means and method by
4 which it had concluded how much water-savings can be achieved if conservation were
5 maximized in Rockland County. No actual study of potential for conservation is contained in that
6 report, on which the Staff relies as the source of SWNY’S conservation “*research*” and source of
7 its resulting conservation goal. Regrettably, this minimal goal was subsequently utilized in
8 developing the Conservation Plan in this rate case and was somewhat modified in agreement
9 between the Staff and the Company in the JP.

10 A fundamental problem still underlies the conservation plan in the JP; that is, a conclusion about
11 feasible conservation goal is adopted in absence of the actual study of what can be achieved
12 through conservation as a starting point. Such planning approach is flawed in that it does not seek
13 to first identify the maximum conservation potential and only then scale it to economic
14 feasibility; rather it aims first to set a budget that caps conservation potential before such
15 potential is even assessed. In other words, the planning approach is to do the minimum required
16 to please the regulator. During the meetings with the Task Force members, SWNY never
17 articulated the 1 MGD minimal target as the limiting scope of the analysis employed in
18 preparation of the initial Conservation Plan. Once SWNY filed its initial testimony, the Task
19 Force was dismayed to see very little of its input included in the plan which was limited in scope
20 to evaluate only what can be done to achieve 0.68 MGD of savings through active SWNY effort.
21 The remainder, 0.32 MGD, will be saved as the passive result of a trend in demand reduction
22 from existing national, state and local programs, regardless of any Company efforts.

23 DPS Staff remarked in its earlier testimony that the 1 MGD is not a “limit, or cap,” on the water
24 savings potential of the program but rather is used in context of the cost-benefit analysis for
25 “comparison purposes.” However, SWNY expressly admits in an interrogatory response to Sierra
26 Club Atlantic Chapter (SCAC-3) that no cost-benefit analysis was done past the 1 MGD mark,

1 thus making it clear that it was not merely for “comparison purposes,” as Staff understands it, but
2 it was truly a limit or cap on SWNY’S conservation study. The B&V study did not “*estimate the*
3 *potential for water savings*” but rather ascertained how much 1 MGD would cost and what
4 potential savings might be derived from that through the proposed measures. This type of
5 approach is unlikely to herald an ambitious and aggressive conservation model as was required by
6 the PSC and is contrary to the public’s interest in maximizing conservation before resorting to
7 more expensive capital investments with high environmental impacts.

8 **Q. WHAT RECOMMENDATIONS FOR IMPROVEMENT OF THE JOINT PROPOSAL**
9 **CONSERVATION PLAN SHOULD PSC CONSIDER?**

10 A. The following is a general description of recommended changes aimed at enhancing the JP
11 conservation plan. These are further detailed in the testimony and filed comments of our regional
12 Partners, and in particular in the testimony of AIQUEOUS. The PSC should carefully consider
13 the financial benefits of conservation to rate payers over time, as analyzed in the AIQUEOUS
14 testimony and exhibits, and review the specific proposed changes to the conservation plan in the
15 Joint Proposal. Beyond that, the PSC should consider the environmental benefits of sound water
16 conservation policy. We agree with our regional Partners that it is in public interest to promote
17 and maximize conservation before considering additional capital water supply projects.

18 SWNY proposes a 5-year conservation plan that would achieve 0.68 MGD of active water
19 savings. AIQUEOUS recommends shortening the horizon to three years with annual targets and
20 plans, similar to the approach in the energy sector.

21 AIQUEOUS proposes additional programs that will address, inter alia, the lack of attention to the
22 CII sector and the omission of measures geared to reduce outdoor peak water use. We are also in
23 agreement that residential direct installs are an essential component to the rebate program. Direct
24 installs would not only reduce free-ridership, but also assure that the ratepayers get the best bang
25 for their buck in financing the rebates and achieving desired conservation goals.

1 AIQUEOUS recommends replacing some of the rebates with direct installs, but I would urge the
2 PSC to consider increasing both the rebate amounts and the matching direct installs. Other
3 jurisdictions have found that higher rebate amounts are necessary to attract consumers and make
4 them willing to go to the trouble of replacing fixtures when they were not already planning a
5 renovation.

6 Following is an overview of the improvements recommended to the JP:

- 7 • Four major recommended additional programs:
 - 8 ○ CII Incentive and Technical Assistance,
 - 9 ○ Residential Direct Install,
 - 10 ○ Residential Irrigation Consultancy, and
 - 11 ○ Smart Meter Savings
- 12 • Third-party evaluation, measurement and verification (EM&V) of water savings claims
13 and program effectiveness
- 14 • Hire a Water Conservation Manager instead of Water Conservation Coordinator
- 15 • Reduce the single- and multifamily residential toilet rebates in favor of direct installs in
16 order to address high free-ridership risk associated with the currently proposed market-
17 based program
- 18 • Eliminate the CII audit program (in favor of incentives and technical assistance with a
19 more tailored approach)
- 20 • Shorten the program horizon to three-year horizon with annual targets and plans
- 21 • Evaluate the use of Smart Controllers and provide eligibility rules and performance
22 standards that would avoid increasing water use in “under-watering” homes
- 23 • Offer irrigation workshops to reach contractors in early mornings and offer on-line tools
24 to reach residents, along with providing education-oriented materials and DIY videos

- 1 • Shift focus of audits from specific indoor plumbing fixtures to evaluation of what might
- 2 actually use the most water at individual facilities
- 3 • Enhance outdoor watering measures and offer technical assistance
- 4 • Program cost recovery through surcharge, instead of rates to provide more flexibility in
- 5 making necessary adjustments to funding mechanism

6 **Q. WHAT ARE YOUR PARTICULAR CONCERNS WITH REGARDS TO OUTDOOR**
7 **WATER USE?**

8 **A.** Outdoor water use is one of the biggest areas of opportunity and one of the most critical areas
9 that need attention in Rockland. SWNY’s initial plan, and the JP seem primarily focused on
10 indoor use and largely ignore opportunities to reduce seasonal discretionary water use. This is
11 unwise, particularly in light of the seasonal drought conditions in July that warranted a stage II
12 drought alert declared by the County Department of Health, governed by the County Sanitary
13 Code.

14 Various outdoor landscaping and irrigation incentive and technical assistance programs are
15 common in other jurisdictions, as evidenced by examples of programs listed in response to Staff’s
16 interrogatory DPS-19 Attachment A, in which various outdoor landscaping, xeriscaping and
17 irrigation design assistance were provided, as well as coupons and rebates, and/or free irrigation
18 consultations and appropriate irrigation controllers, sprinkler nozzles, rain barrels and soil
19 moisture systems – i.e., measures that are part of virtually every leading conservation program
20 around the country.

21 While watering ordinances are not within the Company’s purview, there is plenty of opportunity
22 to work to curb outdoor seasonal discretionary use by enlisting the cooperation of the public and
23 providing accurate information to prevent over-watering, as well as tools and resources necessary.

24 The Company has not taken advantage of all of those opportunities and has addressed this
25 important element most passively and marginally both in the initially filed plan and in the JP. We
26 are glad to see the effort to remedy this in the JP, which added rebates for Rain Sensors and Smart

1 Controllers and irrigation contractor workshops. However, in order to keep up with leading
2 jurisdictions, SWNY’S plan should aggressively pursue solutions that include free outdoor
3 residential and non-residential audits, technical consultations and installations/replacements, and
4 collaboration with trade professionals and associations. Additionally, as AIQUEOUS points out,
5 we would like to caution that the use of smart controllers might result in increase of water
6 consumption in some situations.

7 **Q. WHAT RECOMMENDED MEASURES SHOULD PSC CONSIDER WITH REGARD**
8 **TO PROGRAM EVALUATION CRITERIA?**

9 It is no secret that SWNY has a long record of mistrust in the Rockland Community. Its
10 withdrawal from the Rockland Water Task Force did not help. Now the Company proposes a
11 Conservation Plan that will require buy-in from Rocklanders. The Company proposes flexibility
12 in the administration of the rebate program to adjust the levels based on interest and water-
13 savings and to reallocate funds from a measure with lesser demand to a measure with higher
14 demand. However, the Company has a poor track record of buy-in from the community and
15 therefore an evaluation criteria based on popularity of the SWNY program and demand alone
16 seems to create a paradoxical situation where the Company may defund measures and blame the
17 customers, instead of being accountable for making the program succeed.

18 I have noted in previous comments that the evaluation, measurement and verification (“EM&V”)
19 of conservation results and performance metrics are problematic. AIQUEOUS recommends a
20 third-party EM&V and the hiring of a Water Conservation Manager to address some of those
21 issues. We ask that the Company demonstrate performance, accountability, transparency and
22 good will by setting specific evaluation criteria, specific annual targets and program plans and
23 that it file public reports on PSC DMM site.

24 **Q. WHAT ARE THE RECOMMENDATIONS WITH REGARDS TO SHAREHOLDER**
25 **INCENTIVES FOR OVERACHIEVING CONSERVATION GOALS?**

1 A. We have previously discussed the fundamental problem of setting a low conservation target
2 with no supporting documentation that it represents the maximized conservation potential. With
3 that in mind, the JP sets 1 MGD as the savings target, without specifying if that solely consists of
4 “active” savings. The JP then proposes financial incentive mechanisms, “carrots and sticks,” for
5 achievement of the target savings.

6 We are glad to see such an incentive mechanism, which we have recommended in prior
7 comments. However, there are some concerns and recommendations that the PSC must consider.
8 AIQUEOUS, in its testimony and report, compares similar programs in the country in the energy
9 sector, as well as those that are used in New York. AIQUEOUS concludes, that the proposed
10 regime does not set appropriate target incentive levels or appropriate incentive amounts. We urge
11 PSC to re-evaluate the overall conservation target, or at the least, align more appropriate
12 incentives with over- or under- achievement of the conservation program.

13 **Q. WHAT RECOMMENDED IMPROVEMENTS SHOULD PSC CONSIDER WITH**
14 **REGARDS TO CONSERVATION RATES AND AFFORDABILITY?**

15 A. The following is a general description of recommended changes aimed at enhancing the JP
16 conservation rates. These are further detailed in the testimony and filed comments of our regional
17 Partners, and in particular in the testimony of Edward Markus and Shan Lin of AMAWALK,
18 testifying on behalf of the County of Rockland.

19 The PSC should carefully review the conservation rate structure which was decidedly a step in
20 the right direction, but which appears to require significant re-examination if the rates are to
21 achieve the required results and remain equitable and affordable. The PSC should order SWNY to
22 perform a detailed review of customer classification within 120 days, especially if the next rate
23 case may not be filed for another 5 years. A problem with customer classification was noted even
24 by SWNY’s own consultant B&V, and was highlighted by AMAWALK.

25 Furthermore, we may have a great opportunity to address discretionary outdoor water use, but the
26 currently proposed rates fail to do so, and instead lower the summer rates for certain classes as

1 compared to previous rates. Simplicity of rate structure ought not be the only driving principle
2 when one of the big issues for Rockland is seasonal water peek use. We may not want to merely
3 wait for a declared drought to address it with a drought surcharge if the rates can control the
4 peeks before that happens.

5 The Task Force is fully cognizant of the measures that can be taken on our end and we are
6 working diligently through our Conservation Committee to lay the groundwork for municipal
7 commitment to WaterSense and gradually to watering ordinances. Task Force volunteer members
8 meet with municipal boards and town engineers and other officials. The work continues, and once
9 the funding from the state is received, we will be engaging a consultant to help create the
10 Comprehensive Plan. In the meantime, we urge the PSC to carefully review the proposed
11 conservation oriented rate structure in the JP and give consideration to the testimony and exhibits
12 of AMAWALK.

13 AMAWALK testimony and exhibit focus on three key issues:

14 **1) Reasonableness of the inclining tier thresholds - are customers appropriately classified so that**
15 **the rate structure sends the appropriate conservation message and are the tier thresholds for the**
16 **proposed rate structure reasonable given customer usage patterns and the urgency to promote**
17 **water conservation through the rate structure?**

18 **2) Alternative rate structures – are there alternative rate structures that can better achieve**
19 **conservation and the equitable recovery of cost among customer classes without unduly**
20 **burdening users in any particular customer class?**

21 **3) What options does SWNY have to assist low income ratepayers given the already high cost of**
22 **water in the County? How do its efforts compare with peer utilities?**

23 Some of the key recommendations detailed in AMAWALK’s testimony and exhibits are:

- 24 • PSC should order the Company to validate the classification of each customer
25 within one hundred twenty (120) days of the date of the JP

- 1 • The Company should provide the results of the classification review to the PSC and to
2 interested parties; the results provided to parties other than the PSC may be in summary
3 form, without reference to specific property names/address
- 4 • The MRF rate structure displays no evidence of tailored approach likely to result on
5 targeted conservation savings. The PSC should order the Company to maintain the
6 existing MFR rate structure until such time that it complies with the previous PSC Order—
7 no later than 180 days of the date of the JP--to: (a) submit a realistic assessment of MFR
8 conservation rate structures more suitable for that class and (b) recommends a specific
9 conservation rate structure suitable to the specific characteristics of the MFR class in
10 Rockland. Alternative rate structures, such as budgets for housing units, use of historical
11 rolling averages per account and other options to tailor the consumption allowances
12 should be considered.
- 13 • The PSC should order the Company to create an affordability assistance program
14 for monthly water bills of low income ratepayers. The program design shall be
15 submitted to the PSC within two hundred seventy (270) days of the date of the JP.
16 Key components of the affordability assistance program must include items
17 detailed in AMAWALK testimony and exhibit.
- 18 • The review period should not wait until next rate case, but must be started immediately
19 and be finished in time for the beginning of Rate Year 2.
- 20 • If the Company’s efforts fall short of expectations in terms of achieving demand
21 reduction, an independent party should be retained to review and routinely monitor the
22 Company’s conservation performance, reporting to the PSC and making reports available
23 to interested stakeholders.
- 24

1 **Q. APART FROM THE TIME LEADING UP TO FILING OF THE RATE CASE,**
2 **DESCRIBE THE FIRST TIME THAT PSC SPECIFICALLY ASKED THAT SWNY**
3 **COLLABORATE WITH ROCKLAND WATER TASK FORCE ON CONSERVATION**
4 **PLANNING FOR ROCKLAND.**

5 **A.** The SWNY now-abandoned desalination project in Haverstraw raised the ire of Rockland
6 residents. The PSC under Chair Zibelman stepped forward and set hearings on “Need” (Case 13-
7 W-0303) for the Haverstraw Desalination Project in October 2013. Pursuant to the PSC order that
8 followed in that case in November 2014, SWNY was ordered to work with Rockland Water Task
9 Force to study conservation opportunities and report back to PSC.

10 **Q. DESCRIBE ROCKLAND WATER TASK FORCE ACTIONS FOLLOWING PSC’S**
11 **FIRST CALLS TO WORK ON CONSERVATION WITH SWNY.**

12 **A.** In March 2015, the Rockland Water Task Force contracted with water analysis expert, Amy
13 Vickers, as a consultant to analyze the water use data for customers of then United Water (now
14 SWNY), known as a demand analysis and systems analysis.

15 It is important to know that Amy Vickers was recommended to Rockland Water Task Force for
16 the task of studying SWNY’s system and customer water use by David Stanton, President of
17 Regulated Water for United Water and the Interim General Manager of SWNY at that time,
18 following the departure of General Manager Michael Pointing. Mr. Stanton was a member of
19 Rockland Water Task Force, representing SWNY. This recommendation of Amy Vickers was
20 met with unanimous approval by Rockland Water Task Force.

21 The Amy Vickers’ analysis and report assessed SWNY customer and system water use data
22 provided to her directly by SWNY. The analysis reviewed current and historical SWNY
23 production and customer use data, the company's reports and filings with the PSC, and an in-
24 depth analysis of the 2012-2014 data including customer meter and billing data. The report
25 identified high indoor or outdoor data use, compared data to benchmarks for water efficiency, and

1 provided an analysis of residential, non-residential (commercial, industrial, public/institutional),
2 and system/utility use including infrastructure leakage and water losses.

3 **Q. IN WHAT WAY WAS THE SYSTEM WATER USE STUDY RESPONSIVE TO THE**
4 **PSC’S CALL TO WORK ON CONSERVATION PLANNING WITH SWNY?**

5 **A.** The PSC must ensure that SWNY is operating as cost-effectively as possible to manage rates.
6 That includes ensuring that SWNY prioritizes conservation and reduce system inefficiencies
7 before proposing costly new supply projects. The purpose of that water use data analysis was to
8 produce analytical findings to influence a future water conservation program strategy. The
9 Vickers Report revealed important information about opportunities for water savings through
10 conservation and leak reduction. Rockland Water Task Force submitted the findings to the PSC at
11 the agency’s request to aid the agency’s decision on the question of “Need” for the desalination
12 project proposed by SWNY. The report was submitted as the “Vickers Report,” on July 22, 2015
13 under Case 13W-0303. In December 2015, the PSC recognized that there is great opportunity for
14 economical water savings through conservation and leak reduction and ordered abandonment of
15 the desalination plan.

16 **Q. EXPLAIN THE SIGNIFICANCE OF THE VICKERS FINDINGS AND STATE HOW**
17 **IT INFORMS CONSERVATION POLICY AND APPROPRIATE CONSERVATION**
18 **PLANNING BY SWNY.**

19 **A.** According to Amy Vickers’ preliminary estimate, 1.9 MGD to 3.6 MGD of potential water
20 demand reductions from customer-oriented conservation measures exists within the SWNY
21 system. This is significant because from policy perspective water conservation should be
22 maximized, as it is not only environmentally sustainable, but also more cost effective, costing far
23 less per MGD saved than alternatives like incremental supply or a major long term supply facility
24 such as the failed desalination plant. Nevertheless, SWNY did not conduct cost-benefit analysis
25 beyond 1MGD to evaluate feasibility of what more could be achieved economically. There is
26 ample indication from various experts and from recent trends in other jurisdictions that more

1 ambitious goals could be achieved in a very cost-effective manner. Among those experts that had
2 previously researched and prepared reports that were submitted in previous proceedings are:

- 3 • Report by Al Appleton, former Commissioner of the New York City Department of
4 Environmental Protection, in which capacity he served as the Director of the New York
5 City Water and Sewer System,
- 6 • The findings of Columbia University Sustainable Development Workshops that
7 specifically focused on conservation in Rockland, led by Dr. Stuart Braman.
- 8 • A copy of Dr. Braman's prior testimony to the PSC in Case #13-W-0303 dated
9 November 7, 2013 and January 5, 2014.

10 As Dr. Braman indicated, the Columbia study estimated that up to 3.15 MGD might be achieved
11 in Rockland from recommended cost effective conservation programs. These findings are similar
12 to those of Amy Vickers and findings of other experts and overview of conservation success in
13 other jurisdictions.

14 As a result of these trends and indications, our main concern is that SWNY's conservation plan
15 does not go far enough. The proposal is the result of limited analysis. SWNY admits that no cost-
16 benefit analysis was conducted for possible water savings beyond a minimum suggested 1MGD.
17 It appears that SWNY interpreted the PSC's minimum required savings of 1MGD, as articulated
18 in its December 2015 Order in Case 13-W-0303, as the total scope for SWNY's conservation plan
19 and specifically tasked B&V with developing a plan only to meet this minimal target in the rate
20 filing case under 16-W-0130.

21 **Q. WHAT IS YOUR RECOMMENDATION FROM A PLANNING AND POLICY**
22 **STANDPOINT WITH REGARDS TO SWNY'S PROPOSED CONSERVATION PLAN**

23 **A.** SWNY's conservation plan does not go far enough. After reviewing SWNY'S conservation
24 proposal filed in the rate case, and examining the company's planning approach, with its
25 limitations as described, we urge SWNY and PSC to revisit the fundamental expectations and

1 address current concerns. I am encouraged to see that SWNY has stepped up to employ at least
2 some of the recommendations received from the collaborative planning process with the
3 Rockland Water Task Force, but we are again frustrated that SWNY has not evaluated potential
4 gains from more ambitious kinds of programs. In addition, less than 3/4 (0.68 MGD) out of the
5 low target of 1MGD of water savings, is actually going to be achieved through SWNY'S direct
6 action – the rest is the passive result of a trend in demand reduction, not of SWNY's proactive
7 doing. As a matter of policy, SWNY should not be allowed to improperly take credit for
8 background conservation that will result from existing national, state and local programs as part
9 of the already low 1MGD goal.

10 **Q. DOES THIS CONCLUDE YOUR TESTIMONY AT THIS TIME?**

11 **A.** Yes.

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