

BEFORE THE
STATE OF NEW YORK
DEPARTMENT OF PUBLIC SERVICE

IN THE MATTER OF A
RATE PROPOSAL FOR ELECTRIC RATES AND CHARGES
SUBMITTED BY TOWN OF MASSENA ELECTRIC DEPARTMENT

PREPARED TESTIMONY OF:

ANDREW J. MCMAHON

SUBMITTED ON BEHALF OF
TOWN OF MASSENA ELECTRIC DEPARTMENT

May 29, 2015

INTRODUCTION

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

2 A. My name is Andrew J. McMahon. I am the superintendent of the Town of
3 Massena Electric Department. My office address is 71 East Hatfield Street,
4 Massena, New York 13662.

5

6 **Q. PLEASE SUMMARIZE YOUR EDUCATION AND BUSINESS**
7 **EXPERIENCE?**

8 A. I received a Bachelor of Science degree in Electrical Engineering from Union
9 College (Schenectady, New York). After college I worked in electrical
10 maintenance and planning for the New York Power Authority from 1990-97. I
11 then worked in operations and electrical distribution at an E.I. DuPont factory in
12 Camden, South Carolina from 1997-2000. I then worked for Duke Energy North
13 America on gas-fired merchant power projects, first in technical support and later
14 in project development in their Houston office. I then became an Asset Manager
15 for Duke on a combined cycle power plant project in Nevada. These roles
16 occurred between 2000 and 2002 and involved interaction with community
17 developers, public service commissions, and FERC and state governments in the
18 various capacities. In October 2002, I was appointed by the Town of Massena
19 Electric Utility Board to serve as their Superintendent. I continue to serve in this
20 capacity.

21

1 **Q. WERE YOUR TESTIMONY AND EXHIBITS PREPARED BY YOU OR**
2 **UNDER YOUR DIRECT SUPERVISION AND CONTROL?**

3 A. Yes, they were.

4

5 **Q. PLEASE DESCRIBE THE TOWN OF MASSENA ELECTRIC**
6 **DEPARTMENT?**

7 A. The Town of Massena Electric Department (MED) is a municipal electric utility
8 owned by the Town of Massena. The Town of Massena is located in St. Lawrence
9 County in the northernmost part of New York State. MED was created by a
10 resolution of the Massena Town Board. The resolution was approved May 30,
11 1974, pursuant to a mandatory voter referendum. After the referendum, the Town
12 actively sought to purchase the electric distribution facilities in the town from the
13 Niagara Mohawk Power Corporation. After years of negotiations and litigation
14 the Town of Massena purchased the electric distribution system and began
15 operation as a full requirements customer of the New York Power Authority
16 (NYPA). MED now serves customers in the Town of Massena and portions of
17 the Towns of Brasher, Louisville, Norfolk and Stockholm which are all in St.
18 Lawrence County, New York.

19

20 MED is governed by a five person administrative board known as the “Massena
21 Electric Utility Board” (MEUB). Members of the MEUB are appointed to five
22 year terms by the Town Board of the Town of Massena. The MEUB appoints a
23 Superintendent to serve as the General Manager of the utility.

1

2 The MED system covers 131 square miles with more than 9,000 customers. Our
3 service reliability is among the highest nationally, as determined by leading
4 indicators such as SAIDI and SAIFI. Our environmental commitment and
5 commitment to the betterment of our community are also unquestioned. In 1981
6 when MED first took over the system it had 21 employees and now has 22 full
7 time employees who are dedicated to providing our customers with the most
8 reliable energy at the lowest possible cost with exceptional customer service.

9

10 **SCOPE OF TESTIMONY**

11 **Q. WHAT IS THE SCOPE OF YOUR TESTIMONY IN THIS**
12 **PROCEEDING?**

13 A. The scope of my testimony is to describe why MED needs to file for a rate change at
14 this time and the reason for the changes in rate design being proposed.

15

16 **BACKGROUND**

17 **Q. COULD YOU FIRST PLEASE DESCRIBE THE RATE HISTORY OF MED**
18 **SINCE 1981?**

19 A. Yes. When MED was formed and became a full requirements customer of NYPA,
20 the lower cost of power purchased from NYPA allowed MED to reduce rates at
21 that time by 25 percent, as compared to Niagara Mohawk Power Corporation's
22 rates. In anticipation of signing a power supply contract with the New York State
23 Electric & Gas Corporation (NYSEG), Massena reduced its rates by another 16

1 percent in 1991. In 1992 Massena began taking power from NYSEG under a 10-
2 year contract for incremental power. At that time, MED came under the
3 ratemaking jurisdiction of the New York State Public Service Commission. In
4 1998, MED reduced its rates again by approximately 3.5 percent. This was made
5 possible by a reduction in Massena's long-term debt balance when the original
6 bonds were paid off.

7
8 **REVENUE REQUIREMENT**

9 **Q. WHY IS IT NECESSARY FOR MED TO FILE FOR INCREASED**
10 **RATES AT THIS TIME?**

11 A. Basic finances have shown that the system has produced very little net income
12 over the last four years -averaging only \$30,000 per year. Our expenses have
13 continued to grow over the years and will not likely go down. These expenses
14 include materials and supplies, maintenance, NERC compliance, pension and
15 health insurance. For 2013, on a non-normalized basis the system had a loss of
16 almost \$224,000. For 2014, before normalization the system had a loss of just
17 over \$85,000. As expenses will only continue to grow in the future, MED
18 believes that the time has come to increase rates.

19
20 **RATE DESIGN**

21 **Q. BESIDES THE RATE INCREASE, ARE THERE ANY OTHER ISSUES**
22 **THAT MED BELIEVES NEED TO BE ADDRESSED AT THIS TIME?**

1 A. Yes. Our usage and particularly our system peak have grown substantially over
2 the past few years. Since 2002 our system peak has grown by over 25% and our
3 load has grown by approximately 10%. We are a winter peaking utility and the
4 aforementioned growth in both peak and system load is primarily seen in these
5 periods. Given the system growth, the MEUB commissioned a load research
6 study and cost of service study to determine which service classifications are
7 contributing to growth in peak demand. Mr. Frank Radigan of the Hudson River
8 Energy Group is also testifying in this proceeding and he will present the results
9 of that study. The summary of his analysis shows that the greatest contributor to
10 peak demand growth is electric heating related to Service Classification No. 1 –
11 Residential Service. This service class represents almost 60% of all sales made
12 on the system. Over 65% of the sales made to this service classification are made
13 during the six month winter period (November – April).

14

15 MED generally peaks in the evening hours with another near peak in the early
16 morning hours. For a winter peaking utility this generally indicates a heating load.
17 An analysis of peak demand versus the most important weather variables
18 (temperature and wind) indicates that the single largest variable on the system
19 which drives demand is heating load. This is not surprising given the price of
20 electricity for MED customers versus other home heating options. During
21 January 2014, MED was selling electricity to residential customers at
22 approximately 5.5 cents per kWh. On a \$/MMBTU basis this equates to \$16.13
23 per MMBTU. During that same month NYSERDA reports that the price of oil in

1 Massena was approximately \$4.00 per Gallon or \$28.37 per MMBTU. This
2 means that MED sells its product at a 43% discount to its alternate fuel.
3 Compared to propane the discount would be 60%.

4
5 At the current time the cost of power to customers is charged on an average basis.
6 However, MED's sources of supply are very different. We obtain approximately
7 72% of our energy from NYPA and 28% of our energy from the New York
8 Municipal Power Agency. Because the NYPA power is from Niagara Falls, a
9 hydroelectric power plant built in the 1950s, the cost is very inexpensive with an
10 all-in cost of approximately 1.6 cents per kWh. The NYMPA power is purchased
11 on the wholesale market and for 2013 it averaged 6.7 cents per kWh. During
12 2013, NYPA power cost \$2.6 million and the NYMPA power cost \$5.4 million.
13 Since the NYMPA power is predominately purchased during the winter to meet
14 our peak power needs we are buying this power for customers that are using it to
15 heat their homes. With our retail cost of service rate at approximately 3.7 cents
16 and incremental power 6.7 cents; it is costing MED 10.4 cents per kWh to serve
17 the next kilowatt of heating load. However, MED is only charging 5.5 cents due
18 to the previously noted "averaging" methodology. If MED charged customers
19 who use electricity for heat on an incremental basis the charge would have been
20 8% more than oil last January, instead of 43% less. This is a more reflective price
21 signal.

22

1 Succinctly then, the current problem that MED faces is that under the current
2 pricing framework MED is not charging prices that are equitable for all customers.
3 Given our resource mix, the average basis methodology artificially depresses the
4 true cost of incremental power. This methodology gives discounts to heating
5 customers when no such discount should exist. This artificial discount thereby
6 further incents customers to use electricity to meet their heating needs which only
7 accentuates our system peaking problem.

8

9 **Q. PLEASE CONTINUE.**

10 A. Mr. Radigan has developed a rate design solution that addresses this problem and
11 he has proposed a solution that will direct the cost of the NYMPA power (i.e. the
12 incremental power) to those who are using it. His solution does result in some
13 rate impacts that are large in some cases (e.g. 45%). While this may seem harsh,
14 one must recognize that these customers who use electricity for heating purposes
15 are being subsidized by all other customers on the system. That means that the
16 majority of our customers are paying a higher rate so that these heating customers
17 can get an artificial discount. As MED serves all of its customers, the MEUB
18 believes it has a responsibility to rectify this situation and make our rates as
19 equitable as possible to all parties. Management at MED and the MEUB is aware
20 of the impacts this may have on heating customers. As such, we propose to phase
21 in the rate design solution over three years to partially ameliorate the rate impacts.

22

23 **RESETORING ENERGY VISION**

1 **Q. WHAT ABOUT RESTORING THE ENERGY VISION (REV)?**

2 All parties involved in the REV proceeding acknowledge that the proposal
3 represents a significant shift in the utility business model. It is important to
4 recognize the long standing distinction between investor owned utilities and
5 municipally owned and operated utilities. Where investor owned utilities
6 primarily serve their shareholder/owners, municipalities have always had
7 customer service as their only business motivation. This difference in motivation
8 has historically created a difference in operations and will likely create a
9 difference going forward no matter how REV is developed. It is evident that
10 customers will want more choice and generally a greater role for renewables in
11 their personal portfolio. Of course power from renewable resources already
12 accounts for upwards of 2/3rds of MED's energy. While MED has had 54 kW of
13 roof-top solar installed in recent years we are prepared to accept more into our
14 system.

15

16 MED also has had a Water Heater Incentive Program (WHIP) since the late
17 1980's. This is the type of program envisioned by REV that was enacted long ago
18 by the MEUB because it already fit our business model. The WHIP system can
19 shave anywhere from 0.5MW to 0.75MW from our monthly peak and improves
20 our overall system load factor.

21

1 We are continuing to examine ways to increase the use of distributed generation
2 but our prices are so much lower than the investor-owned utilities that the same
3 level of customer motivation is not present.

4

5 **Q. WHAT ABOUT ENERGY EFFICIENCY AND SUSTAINABILITY?**

6 The MEUB has long had an interest in the success of our community and
7 environment. In the last 10 years we have invested about \$1,700,000 in energy
8 efficiency and sustainability projects. These projects include 8 solar installations
9 (referenced above), development of a proposed small hydroelectric project,
10 deeply discounted home energy audits, and a geothermal heating system for our
11 offices. MED has also worked with Alcoa and NYPA in recent years on an energy
12 efficiency program centered on trees and LED lights in low/moderate income
13 neighborhoods that will promote energy efficiency and community beautification.
14 It is worth noting that all of these programs have been implemented utilizing
15 reserves without an efficiency adder or other surcharge.

16

17 **Q. ANYTHING ELSE?**

18 Sure. We were one of the first municipalities in New York State to allow solar. As
19 such, we were one of the first municipalities to initiate a net metering tariff. While
20 the labor and legal fees involved in developing this tariff will not be recovered
21 any time soon from the deployment of renewables in our system, the MEUB
22 strongly believes that it is an important option to give our customers.

23

1 One of the more progressive ideas we are working on now is with the local gas
2 distribution company (Saint Lawrence Gas – SLG). We are hoping to encourage
3 customers who have abandoned their gas service in recent years to switch back to
4 gas as their heating source.

5
6 Of course encouraging customers to return to natural gas, or utilize more solar, or
7 simply conserve will erode revenues. That is why it is important to increase our
8 customer charge. Using industry standard rate making principles we believe our
9 customer charge should be at least \$12.50. As part of this proposal we are
10 requesting raising the customer charge to \$8 from \$5 over a 3 year phase in. This
11 is still below St. Lawrence Gas and our neighboring electric providers, National
12 Grid \$17.50 and New York State Electric and Gas. The MEUB believes that
13 increasing the customer charge by at least \$3 per month over the next 3 years is
14 not only proper rate making but prudent given the desired reduction in sales.

15
16 **CONCLUSION**

17 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

18 **A.** Yes, it does.
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20