

ELECTRIC SUBCOMMITTEE  
Meeting of Wednesday, February 13, 2019  
Ipswich Utilities Department | 272 High Street

A meeting of the Electric Subcommittee was held on Wednesday, February 13, 2019 at 7:00pm at the Ipswich Utilities Department.

With a quorum present, Mr. Engel called the meeting to order at 7:06pm.

Subcommittee Members present: Jon Blair; Jeff Civitarese; James Engel, Chair; Whitney Hatch; Ray Leczynski; Dylan Lewellyn; Michael Schaaf

Also present: Eileen Page, Recording Secretary

Not present: William Craft; Edward Rauscher

Abbreviations Used: MMWEC, Massachusetts Municipal Wholesale Electric Company; ELD, Electric Light Department; ISO, International Organization for Standards; BTM, Behind the Meter; MCAN, Massachusetts Climate Action Network

Handouts: Agenda; ELD Subcommittee Packet; Ipswich Generator Analysis; ELD Generator Transition Pro Forma

**Citizen Queries**

None.

**Approval of Meeting Minutes**

October 2018

*Vote: Mr. Schaaf moved to accept the minutes, and Mr. Hatch seconded. The motion carried unanimously.*

**Power Plant Transition – MMWEC Presentation**

Matthew Ide (Executive Director of Energy & Financial Markets), Alex Chaplin (MMWEC Analyst), and Jason Viadero, P.E. (Power Generation Engineer) presented their analysis and recommendations for the Ipswich Power Plant. MMWEC acts as an extension of ELD staff, addressing specific concerns brought forward by the management team and providing support, research, and strategies for problem solving.

**PURPOSE OF THE STUDY**

The Power Plant no longer serves the purpose of providing “islanding” service to the Town. MMWEC seeks to maximize usage of the Town’s current technology.

**IDENTIFICATION OF ECONOMIC DRIVERS OF GENERATORS**

The Power Plant’s current generators are limited in their economic benefits. In 2019 capacity revenue is estimated to be \$900,000, but MMWEC predicts that this will begin to decline around 2022. Eventually, Power Plant expenses will begin to match the anticipated capacity revenue, resulting in an eventual breakeven or loss. ISO regulations have recently changed, resulting in individual municipalities dispatching resources at their own discretion during a capacity scarcity event. The process is now used to identify plants that can run higher capacity generators, such as 500MW versus a 9.5MW engine. Current economic benefits are derived from capacity, but ISO New England Pay for Performance penalties are a risk that could cost the Town money if the generations are not performing at capacity.

**IDENTIFICATION OF TECHNICAL CAPABILITES & CONSTRAINTS**

Mr. Viadero provided a chart listing the plant’s current generators, the years they were built and installed, and their kilowatt size. MMWEC has concluded that the units are well suited to make the conversion from acting as an ISO asset to running a “Behind the Meter” (BTM) setup. Mr. Ide explained that the risk in making this conversion may be considered in violation of the tariff, but noted that many municipalities have made this conversion assuming that the probability of enforcement is low. MMWEC predicts that this practice will eventually lead to the tariff being

rewritten, and that any enforcement would not come down on Ipswich as an individual entity, but rather result in a system-wide recalculation. Mr. Engel expressed concern at the idea of openly violating a tariff. Discussion followed regarding the pros, cons, and possible implications of adopting a BTM strategy.

#### ALTERNATIVE USE

MMWEC suggested retiring the plant's current units from the capacity market, and reconfiguring the peak hour load, which would reduce generation. This would provide the Town with an operating flexibility to self-dispatch, and serve as a natural gas precursor to potential future initiatives.

#### MMWEC RECOMMENDATIONS

MMWEC recommended adopting their Peak Alert Service System, a daily status report sent to members that communicates the probability of a load turning into a monthly transmission peak, or coincidental capacity peak. On average, MMWEC calls a peak three times a month. Of 37 peaks called in 2018, there were 13 actual peaks.

MMWEC recommended that if the Town were to convert to a BTM strategy, operations would begin in 2020, and result in a net loss for the year. In 2021, the Town would avoid transmission costs, and the cost of fuel would rise. In 2022, the full capacity benefit would be seen for the first time. The Town would avoid transmission and capacity costs, and achieve a net benefit of around \$920,000. These figures were predicted considering an expected inflation of about 2.5%.

The process of converting to a BTM strategy and de-listing the Power Plant would include developing an action retirement plan, and obtaining validations of air permits and operation restrictions. A retirement plan would be submitted to the Select Board. The deadline to submit a retirement de-list bid is March 15, 2019. If the deadline is met, Ipswich would be fully out of the market around July 2023. Mr. Engel and Mr. Blair believe the Subcommittee should meet again before their next scheduled meeting (March 13<sup>th</sup>) if they want to meet a deadline of March 15<sup>th</sup>.

#### Manager's Update

##### RP3

Mr. Lewellyn provided an update on Ipswich's RP3 designation. Mr. Blair complimented Mr. Lewellyn's work on the RP3 application.

##### BERKSHIRE WIND COOPERATIVE – PHASE 2

Mr. Blair shared that he has been elected to the Board of Directors of the Berkshire Wind Cooperative, and recently received an update on Phase 2. The project is behind schedule due to winter conditions, but on budget. General Electric 2.3 turbines have been chosen for the project.

##### GREENHOUSE GAS EMISSIONS STANDARD

The Greenhouse Gas Emissions Standard is a piece of legislature that was recently voted on by several ELD managers from multiple municipalities, and dictates power sourcing. Mr. Schaaf would like to discuss the content further at the next meeting, and believes that the Subcommittee should review legislature before the Town endorses it. Mr. Blair shared that Representative Brad Hill and Senator Bruce Tarr have both expressed intentions to support the bill.

##### IPSWICH WIND INDEPENDENCE

Mr. Blair and Town Manager Anthony Marino have met with the management of Wind 2, and negotiated an agreement to have the tower taken down. The company is hesitant to remove the foundation, but has an obligation to restore the site to its original state. Mr. Blair and Mr. Marino will be working closely to make sure the company removes the foundation.

##### MCAN SCORECARD

The ELD recently participated in a survey conducted by MCAN, which rated the Town on its transparency, public process, commitment to renewable energy, and disavowing of nuclear energy. Ipswich scored high in transparency, but fell short on power supply, as the Town has limited solar resources and does not yet have a clear plan for peak shaving. Mr. Engel would like to see more caution taken in participating in surveys that may project bias, such as an

outlook on nuclear energy. He noted that nuclear energy is carbon free, but because it is in Ipswich's portfolio, this particular survey would issue a penalty.

**New Business**

The Subcommittee discussed tentative dates for their next meeting. February 20<sup>th</sup> and 27<sup>th</sup> were both discussed as possibilities, and a decision will be reached at a later date.

*Vote: Ms. Schaaf moved to adjourn, and Mr. Hatch seconded. The motion carried unanimously.*

*The Electric Subcommittee adjourned at 10:24pm.*

*Respectfully submitted by Eileen G. Page  
02.14.19*