



## Marblehead Municipal Electric Light Department (MMLD)

### MMLD's Position on Article 45 for Town Meeting, Monday, May 7, 2018

Article 45 is a citizen-sponsored Article proposed by the Sustainable Marblehead group. The MMLD Board identified issues with Article 45 as originally written by Sustainable Marblehead that could adversely affect Marblehead electric customers. The MMLD Board shared those differences with Sustainable Marblehead. The two groups openly discussed our different points of view. With MMLD input, Sustainable Marblehead, at our April 24th Board meeting, agreed to revise Article 45, **BEFORE** a vote is taken at Town Meeting. The MMLD Board has agreed to support the **revised version** of Article 45, as written here:

*"To see if the Town will go on record supporting a goal of using 100% **Carbon-Free Energy** in Marblehead, including in electricity production, building energy use, and transportation, and moving **with fiscal responsibility and all deliberate speed** to achieve this goal."*

Note: The bold text indicates the words added to create the revised version.

The original version reads: *"To see if the Town will go on record supporting a goal of using 100% **clean, renewable energy** in Marblehead, including in electricity production, building energy use and transportation, and moving **as quickly as possible** to achieve this goal."*

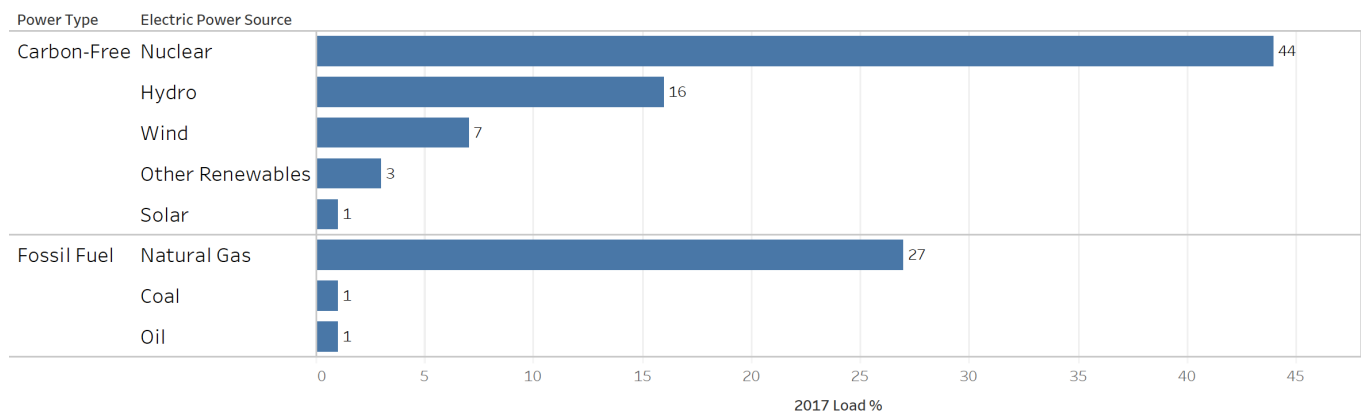
Note: The bold text indicates the words deleted from the original version.

In 2017 MMLD delivered 100,000 megawatt-hours of electricity to 10,000 customers.  
**71% was Carbon-Free.**

In 2018 our power-planning objective remains clear:

**Continue to go Green, while ensuring our customers don't go in the Red.**

Marblehead 2017 Energy Sources - 100,000 megawatt hours delivered



\* 49% of the power was sourced by pre-existing power purchase agreements  
 51% of the power was purchased in open ISO energy markets

Here are the reasons why the MMLD Board opposed the original version of Article 45:

- **Economic Impact to Rate Payers.** The original version ignores the economic impact of potentially higher-priced electric power to Marblehead residents—with potentially significantly higher prices. We should not ignore the economic hardship that any price increase brings to the 2,100 Marblehead households with income under \$50,000, which represents 26% of Marblehead's 8,100 households. (Data source: 2016 US Census - American Community Surveys (ACS))
- **Expensive Penalties for Modifying Electric Power Contracts Currently in Place.** The proposal ignores the reality of the 15+ signed contracts MMLD now has in place, including multi-year power supply and power purchase agreements. Any attempt to prematurely limit or end these agreements would include: (1) the considerable expense of early-exit penalty and legal fees, (2) a new timing risk, created by the uncertainty of when any negotiations would be completed, and (3) a new power supply reliability risk, caused by the timing risks, likely resulting in the need to purchase more power capacity at additional expense.
- **Unnecessarily Limiting our Power Source Options.** The term “**Renewable Energy**” is typically used to describe only Solar and Wind Power technologies, needlessly narrowing potential power source solutions for Marblehead electric customers. “**Carbon-Free**” is a more inclusive term—one that includes Renewable Energy Options AND adds reliable, cost-effective and carbon-free Hydroelectric Power and Nuclear Power.
- **Nuclear Power is Carbon-Free Too.** In 2017, New England-based nuclear power plants generated 44% of Marblehead's electricity. While nuclear power does have real risks, in the Greenhouse Gas/Carbon-Free energy debate, **nuclear power is recognized as a carbon-free source of electricity**. The highly respected, science-in-the-public-interest organization, Union of Concerned Scientists (UCS) states on their website that “...limiting the worst effects of climate change may also require other low- or no-carbon energy solutions, including nuclear power.” **MMLD agrees with the UCS's policy position: include nuclear power as a viable option in the effort to control climate change.** Keeping nuclear power in our municipal power mix gives us more pricing flexibility and power source reliability as we evaluate the addition of new renewable energy sources for Marblehead.
- **Potentially Costly Timeline Issues.** The phrase “as quickly as possible” may be well intended, but can also trigger negative consequences when milestones aren't met. For example, Germany's ambitious, \$220 Billion Renewable Energy strategy has resulted in a 13% drop in greenhouse gases from 2000-2015, but doubled the price of consumer energy prices over that period. In hindsight it was acknowledged that lower-income residents were effectively forced to subsidize the solar investments of higher-income residents.

Simultaneously, the premature closing of Germany's nuclear power plants forced the restart of older, carbon-based coal fired plants. This unanticipated power source mix contributed to a slight increase in 2016 greenhouse gas emissions across Germany.

In addition, the unusual power portfolio mix of clean but unpredictable renewable power with slow-start-and-stop coal plants triggered 100 occasions in 2017 when the wholesale spot energy market dropped into negative power prices, meaning wholesale electricity buyers were paid to consume more energy.

Germany's timing missteps can provide all Massachusetts' communities important lessons in our power portfolio planning. MMLD's renewable energy power sourcing and retail power pricing policies will include a test of “fair and equitable implementation” for all electricity customers. (German energy market info source: Stanley Reed, New York Times, 10/7/2017 and 12/25/2017)