

ENERGY AND TECHNOLOGY COMMITTEE
March 17, 2015

SENATE BILL NO. 1049: AN ACT CONCERNING MUNICIPAL CORPORATIONS AND
VIRTUAL NET METERING

TESTIMONY SUBMITTED BY:

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Good morning Senator Doyle, Representative Reed, Senator Formica, Representative Ackert and distinguished members of the Committee, my name is Briony Angus of Tighe & Bond and also with me today is Jim Randazzo, the Manager of Water Treatment at the MDC. On behalf of the MDC, we submit this testimony in strong support of Senate Bill No. 1049, entitled "An Act Concerning Municipal Corporations and Virtual Net Metering."

- The goal of the bill is to allow certain existing hydroelectric facilities owned by municipal non-profit entities to participate in virtual net metering for the benefit to the District member towns and the others served by The MDC. In support of the legislation, we provide the following information:

Metropolitan District Background

- The Metropolitan District is a non-profit municipal corporation chartered by the State of Connecticut in 1929. The District provides critical water supply and sewage treatment services to approximately 400,000 people within the municipalities of Bloomfield, East Hartford, Hartford, Newington, Rocky Hill, West Hartford, Wethersfield and Windsor. Additionally, the District provides drinking water to portions of Farmington, Glastonbury, East Granby, Portland, and South Windsor.
- The water distribution system consists of upland impoundments in the Farmington River watershed, two filtration plants and approximately 1,500 miles of distribution mains. Average treated water use is about 58.94 million gallons per day and all services are metered.
- The sewage collection system consists of almost 1,200 miles of sanitary sewers serving the member municipalities. Four water pollution control plants treat an average of about 65 million gallons per day. This average is projected to increase significantly when certain capital improvement projects are completed as part of the MDC's Clean Water Project.
- Energy use represents a significant expenditure of the District's operating budget. The District's extensive water distribution and sewage collection system consumes approximately 45 million kilowatt-hours (kWh) of electricity per year at its facilities, at an approximate annual cost of \$6 million.
- Furthermore, the District plans to implement several critical capital improvement projects to improve and expand existing water treatment and distribution facilities in order to meet the needs of projected growth within the District's service area and protection of the Connecticut River. The heavy cost of this project in excess of \$2

billion is borne by the member towns and the other municipalities served. As a result of increased expansion of the District's sewage collection and water distribution systems are projected to increase the District's electricity costs and electrical consumption substantially.

- The District is committed to investing in renewable energy projects to curb its dependence on fossil fuel energy sources, helping CT meet renewable energy goals, and reduce energy costs. Stabilizing energy costs will help the District continue to provide critical infrastructure services and improvements at reasonable rates to its customers.
- The District is currently undertaking new renewable energy initiatives including solar PV and new in-conduit hydro. Additionally, the District has significant existing renewable energy assets, including its Goodwin and Colebrook hydroelectric facilities.

Goodwin and Colebrook Hydroelectric Facility Background

- The District owns and operates two hydroelectric power facilities on the West Branch of the Farmington River; the Goodwin and Colebrook Hydroelectric Facilities, which became operational in May 1987. These facilities provide a significant source of clean, renewable energy while maintaining regulated and obligated downstream flows to protect the Farmington River's important fish, wildlife and recreational resources.
- The Goodwin Hydroelectric Facility is located at the Goodwin Dam, a 135-foot high structure that holds back the West Branch Reservoir. This plant is equipped with two Francis style turbine/generator and has a capacity of approximately 3 MW. The Goodwin facility generates 13,600,000 kWh of electricity/ year, enough to serve 2,000 homes.
- The Colebrook Hydroelectric Facility is located at the U.S. Army Corps of Engineers' Colebrook River Dam and Reservoir. The Colebrook Facility is equipped with two sets of three Kaplan style submersible turbine/generators and has a capacity of 3 MW. The Colebrook facility generates enough electricity to serve 1,000 homes, approximately 6,700,000 kWh annually.
- The District currently has Electricity Purchase Agreements with Connecticut Light & Power (CL&P, Eversource) for the Goodwin and Colebrook Facilities that expire February 5, 2016 and May 31, 2017, respectively. Currently, the District receives approximately \$0.049 per kWh at both facilities.
- The District has expended significant effort to evaluate options for sale of electricity generated by these facilities, and has concluded that participation in virtual net metering will provide the greatest benefits to MDC ratepayers and its member towns.

Current Virtual Net Metering Eligibility

- The state's current virtual net metering program was established by Public Act 13-298, as amended by Public Act 13-247.

- As outlined in CL&P's Virtual Net Metering Rider, to qualify for VNM, renewable energy facilities must be a Class I renewable energy technology as defined at Conn. Gen. Stat. Section 16-1(a)(26), be less than 3 MW in capacity, and submit an Interconnection Application to CL&P after July 1, 2013, which is the effective date of the expanded VNM program.
- The Goodwin and Colebrook hydroelectric facilities are not considered Class I renewable resources, as they began operation prior to July 1, 2003.
- The District understands that the legislature limited qualification of Class I renewable energy resources to certain newer hydroelectric facilities to ensure that qualifying facilities meet certain environmental standards. However, the Goodwin and Colebrook hydroelectric facilities are currently operated under strict environmental regulations with regard to flow, aesthetics, wildlife, and recreational requirements established by the Federal Energy Regulatory Commission (FERC) and CT DEEP.

Benefits of Participating in the Virtual Net Metering Program

- Currently, the District sells electricity generated by the hydroelectric facilities to CL&P at a rate of \$0.049 per kWh and purchases electricity to operate its water distribution and treatment facilities from CL&P at a rate of approximately \$0.12 per kWh.
- The current structure whereby the District sells renewable energy at a significantly lower rate than it purchases power back from CL&P presents an inefficient redundancy in which the District could more effectively take advantage of virtual net metering to reduce energy costs and its consumption of fossil fuel derived electricity.
- The proposed bill would expand virtual net metering to hydroelectric generating facilities owned and operated by a municipal corporation responsible for providing potable water and wastewater control services whereby the beneficial accounts are owned by a customer host. The proposed bill also proposes to increase the size of these facilities from 3 MW to 4 MW.
- The District estimates that approximately \$1,460,000 of annual electricity savings could result from allowing the Goodwin and Colebrook hydroelectric facilities to participate in the VNM program. As a non-profit municipal corporation, these benefits will translate into direct benefits for the District towns and their population served.
- Given the critical public service role that the District provides and the cost to the towns for the added electrical expenses resulting from the environmental project to protect the Connecticut River, the District should be able to better capture economic benefits associated with existing renewable energy facilities.
- We understand that virtual net metering is targeted for Class I renewable energy technologies so that the state's goals with respect to clean energy and environmental protection go hand in hand. However, inclusion of certain existing hydroelectric facilities that are already interconnected to the electrical grid, currently producing renewable energy, and doing so in an environmentally friendly manner, is in support

of both of these goals. The participation of these facilities in the VNM program will not require upgrades to existing electrical infrastructure or systems.

Senate Bill No. 1049, as written, allows the MDC to participate in this program. Accordingly, the MDC strongly encourages the Committee to endorse this bill, and we welcome any questions that you may have.