October 29, 2015

Judith Judson – Commissioner
Massachusetts Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114

Subject: Holyoke Gas & Electric Regulatory Reform Comments

Dear Commissioner Judson,

The City of Holyoke Gas & Electric (HG&E) hereby submits comments on the Massachusetts Department of Energy Resources' (DOER) existing regulations as part of ongoing DOER regulatory review and reform efforts. Thank you for affording me the time to discuss these comments at your Listening Session in Worcester, MA on October 16, 2015.

HG&E is a municipal utility serving approximately 18,000 customers in the City of Holyoke. At an all-in average rate of around $0.12 per kWh, we have some of the lowest retail electricity rates in Massachusetts. Our energy sales are on average, approximately 70% renewable through hydro and solar that is generated directly inside the City. When also accounting for our nuclear entitlements and carbon-free power purchases, our annual retail electricity sales are on average 95% carbon free.

Because of our concentrated efforts to expand and diversify our renewable energy portfolio, as well as our involvement in energy efficiency programs and energy storage, HG&E is affected by several existing DOER regulations. We therefore appreciate the opportunity to provide the below suggestions related to these regulations.

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RGGI/CO_2 Allowances – Use of Funds

Costs associated with DOER CO_2 Allowances are included in the Locational Marginal Price (LMP) of electricity; therefore all utilities or load serving entities contribute to the Regional Greenhouse Gas Initiative (RGGI) fund when they purchase or generate power to serve load. HG&E estimates that it contributes approximately $600,000 to the RGGI fund each year based on its annual retail load. Per 225 CMR 13.06(9), these funds (placed into a Special Reserve Account) shall be used by DOER in the following ways:

1. To reimburse a municipality in which property tax receipts from an electric generating station are reduced;
2. To fund the Green Communities Program;
3. To provide zero interest loans to municipalities, which are not Green Communities for energy efficiency projects;
4. To promote energy efficiency, conservation and demand response; and
5. To reimburse the Commonwealth for costs associated with the Cap and Trade Program.

In general, HG&E believes that DOER has done an excellent job at distributing funds through this program. As a Green Community, the City of Holyoke has received funding to support the development of various energy efficiency projects such as street light and traffic signal upgrades, and has been able to nearly reach its goal through the program for 20% energy reduction from baseline. However, we do believe that there is an opportunity to better include participating municipal utilities in the distribution of funds to "promote energy efficiency, conservation and demand response".

Although such funding is provided for under 225 CMR 13, it often appears to be distributed pursuant to 225 CMR 11, which is applicable only to investor owned utilities. As such, participating municipal utilities are often excluded from funding opportunities to promote energy efficiency programs. HG&E commends DOER on its recent efforts to make funding

more widely available to all RGGI contributors, and HG&E is making good use of a $192,000 grant that became available through these efforts. However, the total funding from this grant (which is provided over a two year period) is just a fraction of HG&E's annual contribution of approximately $600,000 to the RGGI fund each year. Accordingly, HG&E requests that as part of the proposed regulatory reform, DOER consider implementing a procedure to better include municipal utilities in the distribution of RGGI funds for energy efficiency, conservation and demand response type programs.

Hydroelectric Generators Class I and II RECs

225 CMR 14.05(1)(a)6 and 225 CMR 15.05(1)(a)6 set forth Class I and Class II respective Renewable Energy Credit (REC) eligibility criteria for hydroelectric generation units, which currently includes Low Impact Hydro Institute (LIHI) Certification. HG&E believes that this eligibility requirement adds an additional layer of compliance and complexity on an industry that is already very heavily regulated.

The lead permit authority for hydroelectric facilities is the Federal Energy Regulatory Commission (FERC). As part of the licensing process, FERC incorporates feedback from various stakeholders, which include: state, federal and local resource agencies, the general public and non-government organizations. The typical FERC licensing process takes 5 to 5 ½ years and explores a plethora of issues associated with fisheries, rare species, erosion, aquatic habitat, project safety, historic considerations, vegetation, invasive species, project operations, recreation, water quality, etc. For a large hydroelectric facility, just this process alone can include millions of dollars-worth of studies for the Licensee. Once a FERC License is granted, license requirements/conditions often include substantial capital improvements, operational changes, and/or other actions to satisfy stakeholder concerns.

For HG&E's Holyoke Project (FERC Project No. 2004), which includes the Holyoke Dam, Hadley Falls Facility, Canal System and various smaller generation units on the Canal System, License compliance efforts to date have included over $25 million of fish passage

infrastructure enhancements, as well as operational changes, and ongoing studies and monitoring. HG&E's smaller Canal System units outside of FERC Project No. 2004 have also had to go through the FERC Licensing Process (albeit to a more limited extent). Even hydro facilities that are eligible for a FERC exemption still have to go through an initial consultation process (to obtain that exemption) that is similar to the Licensing process. Furthermore, to obtain an exemption, the facility owner must agree to all issues brought forth by applicable regulatory authorities involved in the process, and provide appropriate mitigation.

With this current level of regulation, licensed and exempt hydroelectric facilities are already low impact, and LIHI Certification is a redundant, time-consuming process that implements further compliance requirements and costs on the hydroelectric facility owner. In fact, the LIHI Certification process for HG&E's FERC Project No. 2004 and other Canal System units was extremely protracted and took two years. Once certification was finally granted, HG&E found that the Certificate was backdated to HG&E's original application date (which was two years earlier) and had to further push to change the Certification date to the actual date issued so the full 5 year certification period could be realized.

The governing statute, Mass General Laws chapter 25A section 11F, specifies that such facility "shall meet appropriate and site-specific standards that address adequate and healthy river flows, water quality standards, fish passage and protection measures and mitigation and enhancement opportunities in the impacted watershed". The current LIHI set of criteria includes these 4 criteria (river flows, water quality, fish passage and protection, watershed protection) but also includes 4 additional criteria that goes beyond the governing statute (threatened and endangered species protection, cultural resource protection, recreation, and facilities recommended for removal). While each of these additional criteria are covered within the standard FERC Licensing Process, the inclusion of these additional requirements from LIHI for DOER to certify hydro as Class I or II allows various agencies a '2nd bite at the apple' and allows for subjective, non-governmental processes to delay or prevent valid hydro projects from being certified.

It is noted that LIHI has over the past year developed a new set of criteria that now breaks fish passage into two separate baskets requiring downstream and upstream fish passages as separate criteria (something that is not spelled out in statute and is heavily discussed during FERC Licensing Process). Further, LIHI has taken the facilities recommended for removal from any resource agency criteria and changed it to state that during this condition which if raised by any resource agency (government or non-government) for any reason (validated with science or otherwise) the hydro facility is ineligible to apply for LIHI certification.

Accordingly, as part of the proposed regulatory reform, HG&E requests that DOER consider removing the LIHI Certification from the Class I and II REC eligibility requirement for hydroelectric generators, and instead simply require a FERC License or Exemption.

If DOER still feels that LIHI certification should be continued, then it should be reduced to only the criteria that is specifically addressed within the governing statute – namely the 4 conditions including river flows, water quality, fish passage and protection, watershed protection. To place additional conditions, even indirectly, goes beyond the intent of the state legislature and places undue additional burden on hydro facilities.

Solar Program - Net Metering

DOER should provide assistance to the MassDPU with regards to considering alternatives to increasing the solar net metering caps in private utility territories. This is because the retail rate of electricity includes components such as generation, transmission, distribution, and customer/metering – solar output only makes up the "generation" portion of the retail electricity rate (and even that is only the wholesale energy portion as it does not include additional energy costs that are added to make-up the retail energy piece such as Capacity, Ancillary, and other ISO-NE expenses). This means that net metering at a retail rate causes solar to be offset (and therefore compensated) at a higher rate than the value it actually provides, which in turn, places a burden on rate payers who don't own solar to subsidize through rate increases.

In HG&E's territory, distributed solar generation is compensated at what we refer to as a "wholesale plus" rate *(Distributed Generation Credit per Distributed Generation Purchase Power Clause MassDPU rate #185E)*. This rate accounts for the wholesale price of energy as well as an added peak benefit attributable to a solar system acting as a load reducer. This rate is much lower than what solar developers were previously able to get in private utility territories due to retail net metering practices, therefore until recently, there was limited interest in siting distributed, roof-mounted solar in Holyoke. However, now that solar caps in various communities have been reached, HG&E is starting to get substantial interest from developers again. In fact, a 1 MW roof-mounted facility in downtown Holyoke was just commissioned this month.

It is possible to have a cost-effective solar project that is compensated at a "wholesale plus" rate instead of retail, as shown by current projects in Holyoke (which total over 6.5 MW-dc to date) and in other municipal territories where primary focus is obtaining low-cost energy while ensuring that the balance of costs (system impact studies, electrical interconnection, personal property taxes, etc,) and timing are reasonable and sustainable. To move such projects forward, HG&E conducts significant technical and financial analysis with solar developers that include focus on minimizing losses and increasing efficiency output of the potential system.

Even small residential projects can be sustainable without additional cost subsidy (other than currently available tax credits, accelerated depreciation, and renewable energy certificates that are the major drivers beyond that of the energy price itself) or 'net metering surcharges' between the Haves and the Have Nots. It is noted that this shall reduce paybacks from 4 to 6 years to 9 to 11 years, but can be done in a more sustainable manner over time especially considering that is still less than the life of the solar system (20-25 years). If retail net metering prices of anywhere from 12 to 16 cents per kWh are made available to solar developers over contracting terms, then higher return expectations will continue to be anticipated and less cost-effective large and small-scale projects will be developed. In Holyoke, 4 utility-scale, 2 commercial, and 3 residential projects have all been completed without incurring any additional cost subsidy or net metering surcharge between our customers. Each of these projects are paid for output at or below that of the comparable on-peak market value of electricity (wholesale plus).

Energy Storage

HG&E believes that in the future, energy storage will be an essential component of the electrical grid and part of grid modernization, resiliency, and the overall smart grid. We commend DOER on its current combined efforts with the Massachusetts Clean Energy Center (MassCEC) and Massachusetts Department of Public Utilities (MassDPU) to bring energy storage to the forefront. HG&E requests that as the Commonwealth Energy Storage Initiative moves forward, that all parties keep open all potentially viable forms of energy storage, including less traditional forms such as power to gas, thermal and compressed air.

Thank you in advance for your consideration of these comments. Please feel free to contact me at (413) 536-9352 or by email at bbeauregard@hged.com if you have any questions regarding these comments or related matters at any point during your evaluation of DOER regulations.

Sincerely,

Brian C Beauregard

Brian C. Beauregard
Electric Division Superintendent