Summary of the DOER Municipal Utility Report by proponents of bills H3087 & S1527

Bills H3087 and S1527 (the legislation, filed by 47 legislators) are supported by over 120 Massachusetts organizations (including MMA, MASSPIRG, Environment Massachusetts), cities and towns and by over 2,000 residents who signed a petition asking the Legislature to enact this legislation[1].

The legislation gives cities and towns the option to replace an investor-owned utility (IOU) with a municipal electric utility (or muni). DOER issued its report on January 28, 2010[2] pursuant to section 107 of the Green Communities Act (the Report).

We are in full agreement with DOER that forming a new muni will require in-depth, costly, location-specific economic and technical feasibility studies to determine its viability[3]. Therefore, data about Massachusetts' 4 IOUs and 41 munis, that distribute respectively 84% and 16% of the electricity used in the State, cannot predict the performance and rates of any particular future new muni. But (i) cities and towns should have the option to form a muni – the purpose of this legislation, and (ii) while very few, if any, new munis will be formed as a result of this legislation, all IOU customers will benefit because IOUs will for the first time feel "competition" from the possibility that a muni can be formed, leading IOUs to work harder to reduce their rates and improve their service[4].

Here are the report's key findings about existing munis and IOUs, and about barriers to the formation of new munis, as well as answers to questions that have been asked about this legislation.

Existing munis and IOUs

1. Munis charge residents, public facilities and businesses less than IOUs for the same electricity

"Over the 2004-2008 period, municipal utility rates in Massachusetts have been substantially lower, on average, than IOU rates. […] In 2008, the average system rate for municipal utilities was […] about 21% lower [than for IOUs]." (Report, p. 4) Systemwide rates at munis were lower than at IOUs by 14%, 18%, 30%, 28% and 21% respectively in each of the years 2004-2008 (Report, exhibit 11, p.34).

Here are specifics, by type of customer:

In 2009, a residential customer using 500 kWh paid on average per month $102 to Unitil, $97 to NStar, $82 to National Grid and $70 to the average muni. In other words, the average muni charged $32 less than Unitil, $27 less than NStar and $12 less than National Grid per month for the same electricity[5].

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[1] www.gopetition.com/petitions/municipal-choice/signatures.html
[2] www.mass.gov/Eoeea/docs/doer/publications/doer-municipal-utility-rpt.pdf
[3] Report, pp. 1, 14, last paragraph
[4] The Governor said, "I see [...] municipal electric utility companies adding competition and lowering consumer prices" (www.massmunichoice.org/Documents/Deval Patrick on municipal utilities.pdf) when he was running for office in 2006.
[5] Rates for 500 kWh per month since 2003 are at www.massmunichoice.org; unlike for munis, IOU rates include 0.3 ¢/kWh for energy efficiency and renewables charges, or $1.50 of the $32, $27 and $12 monthly rate difference, a small, perhaps

Exhibit 25 of the Report shows that the average muni bill for standard residential customers using 500 kWh/month, before any low-income discounts, was lower than the IOU discounted bill for low-income customers, by as much as $6 for NStar and $17 for Unitil. (Report, p. 34)

Average muni residential rates have been lower than IOUs since at least 2003. Residents are angry about the IOUs' high rates, particularly Unitil and NStar[6].

Public facilities also pay less to munis than to NStar. In 2006-07, similar size high schools in greater Boston had total[7] electricity costs of 9.2 ¢/kWh if served by munis and 18.0 ¢/kWh if served by NStar[8].

Businesses also pay less to munis than to IOUs. In 2007, a chain of supermarkets had total electricity costs[9] of 11.3 ¢/kWh from munis, 13.0 ¢/kWh from National Grid and 14.5 ¢/kWh from NStar[10].

We estimate[11] that if NStar charged like the average muni, residents served by NStar would collectively save each year in the order of $400 million on their electric bills, and businesses and public facilities (schools, public buildings, etc) would save about $300 million. Compared with muni rates, NStar's higher rates effectively impose a "drag" of about $700 million per year on our economy.

Low electric rates foster economic development, as the *Boston Globe* reported: "Devens [has] the capacity to host industrial companies and offer cheap utility rates. Its electric rates, for example, are almost half those of other private utilities."[12]

In summary, munis charge less than IOUs because their power *and* non-power costs are both lower than at IOUs: "Generation costs are generally lower for municipal utilities than for IOUs: 9.88 cents versus 11.55 cents [per kWh] in 2008" (Report, p. 4) and "The non-power costs, as estimated in this study, have stayed fairly constant [during 2004-2008] at around 6¢/kWh for the IOUs and a little over 3¢/kWh for the municipal utilities." (Report, p. 39) result in "[…] an average difference of approximately 4.0 cents per kWh between IOU rates and municipal rates […]" (Report, p. 47).

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negligible, amount since "most [munis] offer some measure of energy efficiency programs [most commonly] free residential energy audits and residential appliance rebates. All municipal utilities offer free energy audits to residential customers, and 25 utilities offer appliance rebates. […] Funding for these municipal energy efficiency programs is paid by the municipal utility's customers through charges on their electric bills. (Report, p.53)

[6] From comments posted by petition signers at www.gopetition.com/petitions/municipal-choice/signatures.html

[7] Including generation, purchased on the competitive market or from NStar when served by NStar, and from the muni when served by a muni.

[8] www.massmunichoice.org/Documents/highschools.pdf

[9] Including generation, purchased on the competitive market for stores served by IOUs, and from the muni for stores served by a muni.

[10] www.massmunichoice.org/Documents/supermarkets.pdf

[11] www.massmunichoice.org/Documents/supermarkets.pdf

[12] www.boston.com/news/local/massachusetts/articles/2006/06/09/devens_thriving_as_old_forts_leaders_put_businesses_at_ease/

2. Munis offer comparable or better service reliability than IOUs

"Though the data reviewed for this study are a small sample of the 41 existing municipal utilities, almost all the data points tend to support the position that existing municipal utilities provide reliable service at comparable levels to the IOUs." (Report, p. 6) "there is no reason to expect that a new municipal utility would provide anything less than comparable service over the long term to its customers." (Report, p. 49)

Not all munis report service quality data in the same form as IOUs, but statistics from Shrewsbury[13] and Groton[14] confirm the widely heard anecdotal reports from people who have lived in a muni and IOU service area: munis have fewer power outages and restore power faster than IOUs.

It took Unitil up to two weeks to restore power to all its customers after the Dec 2008 ice storm, but neighboring munis had power back to all their customers in days[15].

APPA and RKS surveys show better performance by munis than IOUs[16].

3. Local control: munis respond to local needs

"A significant attribute of municipal utilities that is difficult to quantify is the attribute of greater local control. A new municipal utility will allow for greater control and input by residents into utility investment and policy decisions. Unlike IOUs, the utility is owned and controlled by the municipality, over which residents can exercise a much greater level of control. [… However,] creation of new municipal electric utilities under the same rules and regulations that apply to existing municipal electric utilities may dilute the effects of many of the Commonwealth's initiatives under the Electricity Restructuring Act, the renewable energy portfolio standards, and the Green Communities Act. It is certainly possible, however, to create a set of rules and regulations for new municipal electric systems that would not have these dilutive effects." (Report, p. 7)

Consistent with the Commonwealth's priorities, under the legislation a new muni must (a) participate in the MTC energy efficiency and renewables program, or have its own, more robust, program, and (b) allow customers to purchase generation services on the open market (retail choice).

Residents now served by an IOU (e.g. Unitil in Fitchburg and surrounding towns) that suffer frequent outages, slow restoration after outages and poor service (e.g. billing errors) want the option to replace such an underperforming IOU with a muni, with the expectation that a muni would be more responsive (or that the existence of such an option would get the incumbent IOU to more actively improve its service, to avoid being replaced by a new muni).

[13] www.massmunichoice.org/Documents/Shrewsbury muni reliability.pdf
[14] www.massmunichoice.org /Documents/Groton muni reliability.pdf
[15] www.boston.com/bostonglobe/editorial_opinion/editorials/articles/2008/12/29/the_power_of_municipal_power and www.massmunichoice.org/wt_122308.aspx
[16] www.massmunichoice.org/Reliability.aspx

Munis actively promote renewable electricity sources (wind[17], solar[18], etc) and can procure as much electricity from "green" sources as the community desires.

NStar requires a 2% surcharge on electric bills to move wires underground[19] (pursuant to MGL Chapter 166, sections 22D and 22E) but munis like Concord move wires underground without surcharge[20]. NStar does not answer requests by Lexington to remove a substation in the center of town by moving the equipment underground.

Muni can and do coordinate well with their municipalities on such issues as undergrounding of lines, location of facilities, economic development, and aesthetic issues. The Committee has received comments from many communities regarding their frustrations in getting cooperation and even information from IOUs.

Some communities may be willing to pay higher rates in order to have more control over such matters.

4. Low-income customers pay less to munis than to IOUs

"Though not many municipal utilities have low-income programs, what ultimately matters is the rate that low-income customers pay in the municipal utility service territories. […] The data show that for 2008, [muni] low-income customers that would pay the same rate as [muni] non-low income residential customers still had lower rates even without rate discounts than low-income customers with IOU discounted rates." (Report, p. 54)

Exhibit 25 shows that in 2008, a low-income customer paying the standard muni rate – $66.70 – paid less than low-income customers on the IOUs' low-income discounted rate – $72.77, $67.71, $83.22, $69.67 respectively for NStar, National Grid, Unitil and WMECO.

Language could be added to the legislation to give the DPU authority to require a new muni to offer any necessary low-income discounts.

5. Taxes and PILOTs

"Municipal utilities are exempt from state and federal income and municipal property taxes. Most municipal utilities do provide payments in lieu of taxes ("PILOTs") to the town or towns they serve. Though the amounts of the PILOTs vary by municipal utility, taken as a whole the PILOTs are similar to what IOUs paid in municipal taxes in 2008." (Report, p. 5)

[17] www.massmunichoice.org/mr_091508.aspx, www.massmunichoice.org/wt_121309.aspx
[18] www.massmunichoice.org/wt_061709.aspx
[19] www.boston.com/yourtown/dedham/articles/2010/01/21/dedham_other_communities_weigh_costs_benefits_of_burying_utility_wires
[20] www.boston.com/news/local/articles/2010/01/28/more_municipal_utilities_would_send_wires_underground

Exhibit 10 shows that IOUs pay State taxes in the amount of $0.0007/kWh. A new muni in Lexington or in Fitchburg and surrounding towns (each with sales of about 400-450 million kWh per year) would result in a decrease in State tax revenues of about $300,000 per year.

Exhibit 24 shows that virtually all existing munis pay a PILOT (payment in lieu of taxes) averaging 0.231¢/kWh, while IOUs pay local taxes averaging 0.233¢/kWh. If a new muni is formed, the city or town can ensure that the new muni will pay a PILOT in the same amount the IOU paid in local taxes, so that the new muni is neutral or favorable for the municipal budget.

In addition to the PILOT payments, various munis increase municipal revenues through transfers of capital, gifts of services, sharing of services (such as combining electric bills with water and sewer bills), and reduced rates for municipal buildings.

6. Munis have lower distribution losses than IOUs

"The data show that electricity losses for municipal utilities are lower than for IOUs" (Report, p. 40), by about a percentage point: distribution losses at muni are 3.5%-4%, and at IOUs 4.6%-5.2% (exhibit 17).

IOU losses are high in part because IOUs have not modernized their distribution circuits as vigorously as munis: Unitil, with losses of over 7% for residential customers[21], still has 4.16 kV circuits.

If IOU losses had been 1% lower in 2008 to match muni losses, customers in the Commonwealth would have paid $25–$30 million less for power supply.

7. Energy Efficiency Programs

IOUs participate in MTC's energy efficiency and renewables programs funded by mandatory charges of 0.25 and 0.05 ¢/kWh and "most [munis] offer some measure of energy efficiency programs [most commonly] free residential energy audits and residential appliance rebates. All municipal utilities offer free energy audits to residential customers, and 25 utilities offer appliance rebates. […] Funding for these municipal energy efficiency programs is paid by the municipal utility's customers through charges on their electric bills." (Report, p.53)

While not mentioned in the Report, munis have also been active in promoting renewable energy, e.g., Princeton's wind project (which will provide 40% of the muni's energy) and the fourteen munis that are building Berkshire Wind Power.

The legislation could be amended to place additional requirements on new munis, for example to offer net metering in the manner required for IOUs under the Green Communities Act. Alternatively, the Legislature could delegate to the DPU responsibility for determining which GCA requirements should be applied to each new muni formed under the legislation.

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21 www.unitil.com/rfp/download.asp?saveas=FGE%255FDefault%255FRFP%255F2009%252D09.doc&file=FGE%255FDefault%255FRFP%255F2009%252D09.doc, p. 4

8. The impact of a new muni on the IOU's remaining customers is negligible

"The illustration shows that bill impacts [from a new muni] on remaining [IOU] customers are small if the level of unavoidable costs remains low relative to the revenues associated with the customers migrating to a new municipal utility" (Report, p. 56).

Exhibit 26 considers an IOU with 1 million residential customers, from which 3%, 5%, 10% or 20% – 30,000, 50,000, 100,000 or 200,000 residential customers – would depart to a new muni. The process of forming a new muni will remain so challenging even under this legislation that only a handful of – maybe 3 to 5 – new munis are likely to be formed. Lexington has about 10,000 residential customers and Fitchburg and its surrounding towns have about 24,000: therefore, only the 3% or 5% cases are plausible, and they have negligible impacts on the bills of the IOU's remaining customers.

Exhibit 26 considers the possibility that 10%, 20%, 30%, or 40% of the costs previously paid by the departing municipality's customers might remain the responsibility of the IOU. The report does not provide any examples or analysis to explain how, if the municipality pays for the cost of its distribution equipment and the DPU determines the coordination arrangements between the IOU and muni, 40% or even 20% of the costs covered by the IOU distribution rates in the municipality could be shifted to the IOU. In fact, our analyses[22] suggest that if a suburban, less densely populated town, leaves an IOU's service area, the IOU's remaining service area becomes less costly to serve (because distribution costs are higher in areas with lower load per mile of circuit), providing the IOU with an opportunity to slightly reduce its rates for its remaining customers. Furthermore, the loss of the muni will reduce the IOU's need to purchase expensive new debt, and the DPU may set the purchase price above book value. Each of these considerations could result in the "unavoidable costs" in Exhibit 26 being negative.

Even under the worst of these very extreme assumptions, the rate effect for remaining IOU customers is very small: 1.9% of the total bill. As explained above, this outcome is very unlikely.

9. Munis create jobs

NStar, National Grid and Unitil have respectively 2.81, 2.56 and 2.88 linemen on staff per 10,000 residents in their service area according to filings with DPU. Data from 9 munis[23] shows that those munis have 3.94 linemen on staff per 10,000 residents, or 47% more linemen than IOUs.

This may explain in part why munis offer better service and faster restoration after outages than IOUs. A preliminary analysis[24] using the Hudson and Groton munis staffing levels shows that a new muni in Fitchburg and surrounding towns would have 31 linemen; Unitil now has only 18 to serve that area.

This legislation will promote job creation, directly when new munis are formed, and indirectly because IOUs will feel pressure to add staff to improve service to avoid losing customers to a new muni.

[22] www.massmunichoice.org/Documents/Electricity distribution costs urban vs suburban areas.doc
[23] www.massmunichoice.org/Documents/Linemen.pdf
[24] A preliminary feasibility study of a Fitchburg, Lunenburg, Townsend and Ashby muni to replace Unitil is at www.massmunichoice.org/Documents/munis to replace Unitil.pdf

Barriers to formation of new munis

1. Willing Seller

"M.G.L. Chapter 164, Section 43 describes the process by which a new municipal light plant can be formed. As noted, incumbent utilities (whether an IOU or an existing municipal light plant) essentially have to agree on both the assets to be included and the price to be paid in order for the municipality to acquire the relevant assets of the incumbent electric distribution company. In the event that agreement is not achieved, the municipality has the option of petitioning the DPU to resolve issues related to either the assets to be included in the purchase or the price of those assets. […] Once the DPU renders its decision, however, there is no requirement that the incumbent utility accept the DPU's decision or it tender those assets for sale to the municipality. […] In order for a transaction to occur, both buyer and seller must agree on the terms and conditions of the sale, based either on the DPU's ruling or on other mutually agreeable terms and conditions. If no agreement is reached, the only option this section of the law offers the municipality is to construct a new and completely separate electric distribution system. This option, however, is not a practical one." (Report, pp. 28-29)

Constructing a second electric distribution network, separate from the incumbent utility's, was feasible when the statute was written almost a century ago – electric networks at the time consisted of a handful of poles – but has since become a physical and economic impossibility: "no new municipal electric utility has been formed in Massachusetts since 1927 when the Town of Chester acquired the Chester Electric Light Company." (Report, p. 2)

No new muni is possible under the current statute because (i) a municipality will not initiate the costly technical and economic studies necessary to determine the feasibility of a new muni since the IOU can block any new muni, and (ii) even if a municipality proceeded under M.G.L. Chapter 164, Section 43 after having conducted such studies, the IOU would opt not to sell its assets at the DPU-determined price, making the new muni impossible. "More than one person [on the DOER muni study Commission] commented that the current law is a clear barrier that should be removed or altered to allow the possibility of municipalization and the study of its potential impacts." (Report, p. 32)

The main purpose of this legislation is to remove this barrier by stipulating that once DPU has determined the assets to be purchased and their price, the municipality must pay the price set by DPU and the IOU must sell its assets at that price.

2. Service territories

"Section 1B. (a) of Chapter 164 […] grants exclusive, perpetual franchise rights to the incumbent utility based on its service territory as it existed on July 1, 1997. As such, it appears to eliminate the single, albeit impractical, option available to municipalities under Section 43 of Chapter 164." (Report, pp. 29-30)

The legislation eliminates this barrier to new munis by amending M.G.L. Chapter 164, Section 1B (a) to clarify that a municipality purchasing IOU assets also acquires the franchise rights within its boundaries.

3. Financing

"[T]he Omnibus Budget Reconciliation Act of 1987 effectively precludes a municipality from utilizing tax-exempt financing to acquire the assets of an IOU[25]. Utilizing taxable bonds to finance an acquisition will bring the municipality's cost of capital significantly closer to that of the IOU. In addition, a new municipality will need to finance start-up costs in addition to the asset purchase, and may also incur additional capital costs to reconfigure either its distribution system and/or portions of the distribution system of the IOU. These factors will significantly influence the price a municipality can pay for the distribution assets and still show a distribution cost benefit." (Report, p. 28)

"The 1987 tax law does allow a number of exceptions to its general rule. From the perspective of a municipality seeking to acquire IOU assets, the law does allow the municipality to issue tax exempt "private activity bonds" or "PABs", as long as a number of tests are met. These PABs essentially have the same tax advantages as tax-exempt GO [general obligation] bonds." (Report, p. 21)

The Executive Office for Administration and Finance ("ANF") manages the Massachusetts volume cap on PABs allocated annually to three agencies, including the Massachusetts Development Financing Agency ("MDFA").

Additional language in the legislation could address this barrier by instructing ANF and the MDFA to prioritize new munis in the allocation and use of PABs.

4. Shareholder approval

"Chapter 164, Section 96 […] requires, in part, that for a utility company to sell or convey their properties to another such company, it must acquire the consent of at least two-thirds of the holders of each class of stock outstanding and entitled to vote on the question of each of the contracting companies. The language in this section is quite broad and does not specifically require that all the property be the subject of a sale. It appears to defer to the legal or regulatory requirements of the seller in determining when it would require approval of two-thirds of its shareholders. Obviously, it is unlikely that a sale of a truck or even a building would require such approval by its shareholders. The sales of streetlights to municipalities have not required such approval. It is not clear whether the sale of a geographic segment of its distribution assets may require such approval." (Report, p.30)

If this ambiguity indeed constitutes a potential barrier to formation of new munis, it can be addressed by including in the legislation language to amend M.G.L. Chapter 164, Section 96 to clarify that the term "sell and convey their properties" means most, or a majority, or a substantial portion of that property, or to otherwise limit the term. In the alternative, the legislation could allow DPU to determine whether the sale is substantial enough to require IOU shareholder approval.

[25] A clause referred to as the "Rostenkowski rule" (www.appanet.org/files/PDFs/z_fedtax.pdf)

Questions about this legislation

A. Can DPU determine the value of an IOU's assets?

Yes. DPU's determination in the 1994 Hudson/Stow case was upheld by the SJC in 1997 (Report, pp. 2-3 and 17-18).

B. Will the IOU be fairly compensated?

Yes.

C. Can an IOU be required to sell its assets to a city or town?

Yes. Article X of the Massachusetts constitution states:

> "[…] no part of the property of any individual can […] be taken from him, or applied to public uses, without his own consent, or that of the representative body of the people. […] And whenever the public exigencies require that the property of any individual should be appropriated to public uses, he shall receive a reasonable compensation therefor."

Federal standards are similar. The Commonwealth allows municipalities to take a wide range of private property for public uses, such as under eminent domain. The legislation would simply add another category of such property, with the reasonable compensation being determined by the agency that currently sets the rates the IOU is allowed to charge for use of that property.

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We urge the Joint Committee on Telecommunications, Utilities and Energy to recommend to the Legislature that this legislation be enacted, with additional language to address the various issues highlighted here.

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