

Valuing Home Grown Electricity
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Rhode Island is finally going to accurately value locally produced renewable energy. The old view was that renewable energy would only increase our already high electric rates. Our new state energy plan shows that relying on “conventional” generating sources is a money-pit - the least secure and most expensive course for our energy future.¹ Not surprisingly, companies heavily invested in the old model are scared. National Grid recently proposed a new charge - an “access” fee - on renewable energy. Overwhelming opposition to that backward looking approach led to withdrawal of the proposed charge. Rhode Island can and must now move on toward setting a more precise value on a more secure and affordable energy future.

National Grid’s access fee was proposed in a rate review proceeding the General Assembly mandated as part of its adoption of the Renewable Energy Growth program.² The idea was a sound one. As home-grown renewables flourish, we should avoid the mistakes made with traditional energy sources and fully study all the costs and benefits of these new sources. National Grid tried to impose the access fee in earlier drafts of the legislation, without the benefit of careful cost and benefit analysis. Legislators did the right thing, and called for a rate review proceeding in which the Public Utilities Commission would study the value of local renewables and then adjust rates accordingly.

It is not surprising that when the rate review proceeding started, National Grid submitted its access fee for local renewables to “use” the distribution system; but it surprisingly lacked supporting analysis.³ Analysis is critical because local renewables likely provide a net benefit to the entire grid and all customers even when some costs of integration also arise. A thorough evaluation of net value

¹ Rhode Island State Energy Plan, p. 3. <http://www.energy.ri.gov/energyplan/>

² R.I. Gen. Laws §39-26.6-24; PUC Docket #4568 (<http://www.ripuc.org/eventsactions/docket/4568page.html>).

³ Zschokke & Lloyd Testimony, July 31, 2015 (“Company Testimony”), at pp 59-60.

is essential. That is why many parties took issue with National Grid's proposal to charge for costs it could not demonstrate and to ignore benefits it refused to measure.

The access fee proposal did not follow basic ratemaking principles. Under those standards, the utility must demonstrate and fairly allocate its costs, net of benefits. Only then can costs be recovered through fair and efficient rate design. Effective rate design sends a price signal encouraging customers to change behavior that causes the costs. National Grid's proposal just presumed that any time a renewable energy system makes more electricity than they need at the moment, National Grid has a cost caused by the generator who made the extra electricity. That presumption overlooked the fact that the Company sells such excess electricity to neighboring customers at full price. While focused on justifying costs, National Grid refused to consider or measure any benefits that come from generating closer to the point of consumption.

The refusal to account for the benefits of local renewables flew in the face of Rhode Island law.⁴ A line of research going back more than two decades substantiates the benefit of siting generation within the distribution system.⁵ The value of renewables is in the market and operational costs avoided and benefits received. Proper evaluation embraces a full range of avoided costs including savings over the entire life of the generation system. A grid operator must objectively and quantitatively analyze the energy, capacity, transmission, distribution, line loss reduction, operating risk, environmental, and other known and measurable costs that are avoided. National Grid's fee proposal did not assess such values. Intervenors asked the Commission to require the utility to do so because, over the long-term, local renewables can and will defer and/or avoid future fixed cost investments.

⁴ R.I. Gen. Laws in §39-26.6-24(b).

⁵ Direct Testimony of Karl Rábago, p. 20 ([http://www.ripuc.org/eventsactions/docket/4568-WED-Rabago\(11-23-15\).pdf](http://www.ripuc.org/eventsactions/docket/4568-WED-Rabago(11-23-15).pdf)); citing <http://www.environmentamerica.org/reports/amc/shining-rewards>).

The argument that customer generated electricity burdens our electric supply is based on a traditional utility ratemaking system biased toward large, capital-intensive projects and utility-owned infrastructure. Under old system thinking, utilities have strong financial incentives to oppose distributed customer-owned generation, even though such advocacy does not serve the public interest. Today, we are in the midst of a transformative new energy economy. In the old energy economy,

. . . both the technology of the original electricity system and its ownership were large and centralized. Vertically-integrated utility companies owned everything, from the power plant to the meter outside a home or business. In an era when cost-effective power generation came from coal or nuclear – with massive economies of scale – centralized ownership was the key to raising the capital for power generation. Utilities were rewarded with public monopolies and guaranteed rates of return to attract low-cost capital and drive down costs. . .⁶

But, “[t]he new technologies of power generation no longer require the same scale or centralization of ownership.”⁷ Utility sector transformation promises great benefits for customers, and for utilities that adapt to the change. Utilities are entitled to a reasonable opportunity to recover prudently invested capital and a reasonable return on those investments. As distributed energy resources become increasingly cost-effective and market penetrations increase, utilities must accept the reality that customers will seek to manage their own energy generation and use and reduce their energy bills. Increased reliance on local, clean energy resources like wind and solar benefits customers, including those who do not invest in these options.

The opposition to National Grid’s proposed tax on customer-owned generation was based on a lack of the factual and analytical foundation needed to justify it. Days before the scheduled hearing on its proposed charge, National Grid withdrew its rate proposal. The Commission ultimately ordered a more open, collaborative, and transparent stakeholder process to establish, modify and update avoided cost values and rates. Rhode Island is now poised to get the real value of our home-grown renewables.

⁶ *Id.* at p. 6.

⁷ *Id.* at p. 7.