HV MFG STAFF

NEW YORK'S CLEAN ENERGY STANDARD:

UNDERSTANDING IT'S IMPACT ON COMMERCIAL ELECTRICITY CONSUMERS

New York's Clean Energy Standard (CES) is a comprehensive and ambitious clean energy program. The CES is designed to fight climate change, reduce harmful air pollution, and ensure a diverse and reliable low carbon energy supply for New Yorkers. To help achieve these goals, the CES requires that 50 percent of New York's electricity come from renewable energy sources such as solar and wind by 2030. Phase one of the so called "50 by 30" plan began in 2017. It has not been without controversy or cost.

LSE's ZEC's and REC's

To achieve its ambitious goals the CES creates two mechanisms, the renewable energy standard (RES) and the zero-emissions credit (ZEC) requirement. The RES requires every load serving entity (LSE) in New York State to procure renewable energy credits (REC's) associated with new renewable energy resources—known as Tier 1—for their retail customers. (Load Serving Entities include all the investor-owned distribution utilities, energy service companies (ESCO's) Community Choice Aggregation programs (CCA's), jurisdictional municipal utilities, and self-supplying customers through NYISO. Micro-grids and CHP generators are not considered to be LSE's). The ZEC requirement mandates the LSE's procure ZEC's from NYSERDA. The number of ZEC's is based on each LSE's proportionate amount of statewide load, or energy demanded, in a given compliance year.

While the name "Zero Emissions," seems to hint at a renewable-energy requirement of some kind, ZEC's are actually subsidies paid to non-economic nuclear generation plants. Though the State insists they are needed for both environmental and reliability reasons, this ratepayer funded program is controversial for several reasons.

The rationale behind the creation of ZEC's lies in the view that we are in a transitional period of energy generation. It is easy to see that we create less carbon per generated megawatt today than we did even ten years ago and empirically this year-on-year decline is showing no signs of slowing. Additionally, real and significant advances are being made regularly in wind and solar generation

> We create less carbon per generated megawatt today than we did ten years ago.

The adoption of ZEC subsidies have been sudden and startling, but ultimately reflect long term changes in how power is generated and served in the region.

technologies. Taken together, it seems natural that we are currently on our way from high-carbon to carbon-neutral generation in the State. Competitive generation markets like natural gas are responsible for eliminating numerous coal-fired power plants thus lowering carbon emissions. However, they also taking their toll on many nuclear facilities, a zero carbon source, thus putting potentially increasing carbon emissions.

The Market Forces

In our system where power prices are set by the marginal cost to produce one more megawatt, subsidized wind and solar generation, which require no input fuels, drives down prices in periods when they are active. As nuclear generation is the only current technology capable of base-load generation in a carbon-free manner, this creates a problem. On one hand, low cost, carbon-free energy is preferable to most people. On the other, the mechanism that initially cut carbon production (competitive markets) is now rendering the bulk of carbonless base-load generation (nuclear) uneconomical. If we believe that we are on an inevitable path of carbon reduction, the thinking by some is to subsidize failing nuclear plants until such a time as they are either unneeded or once again profitable.

Thus ZEC's were created. ZEC's are superficially similar to Renewable Energy Credits (REC's) paid by utilities in many states in that they are assessed based on consumption. However, there are three key differences between ZEC's and REC's. First, ZEC's are assigned, not earned. Second, unlike REC's, there is no market for ZEC's. Lastly, ZEC's serve a closed market while REC's serve an open market.

Traditional renewable portfolio standards work as follows: utilities are told through legislation that they must buy renewable credits equal to a percentage of their load served. They then shop different options for how to get those credits. Utilities are thus rewarded for a) encouraging energy efficiency through cutting demand, and b) adding renewable generation to their energy mix. Additionally, as REC's are sold on an open market, this creates an additional profit stream for investors looking to build out more renewable merchant generation while also keeping REC prices low.

ZEC's work differently. Because their goal is not to incentivize buildout, but rather to provide for a stable income to certain nuclear plants, ZEC's exist in a set number at a set price. Utilities are told how many ZEC's they must purchase based off their proportion to the total load served in the state. So, if Con Edison in New York City serves 30% of the total load for the state, they must buy 30% of the ZEC's. This money is then distributed directly to certain nuclear plants deemed uneconomic by the legislature.

The Politics

ZEC programs have drawn fire from many quarters. Ratepayers and utilities have, expectedly, objected to the additional costs that will be incurred from the programs. Existing wind and solar operators have objected to the credits on the basis of the name, insisting that they should be included in ZEC programs as they produce zero emissions. Companies owning both non-nuclear and economically operating nuclear generation object to the favoritism being shown to individual plants.

The adoption of ZEC subsidies have been sudden and startling, but ultimately reflect long term changes in how power is generated and served in the region. As more states contemplate creating these programs, they will likely get more, not less, contentious since they represent states picking winners rather than setting priorities.

In 2016, after the Clean Energy Standard passed, four big electricity providers – Con Edison, Orange & Rockland Utilities, National Grid, and Central Hudson Gas & Electric – asked the state's Public Service Commission for permission to add one or two lines to ratepayers' bills that would explain the surcharges being added to cover REC's and ZEC's charges. But the commission rejected the utilities' request, saying that it was important to "maintain general consistency" and "limit customer confusion resulting from the addition of new lines on customers' bills." The agency said that it is "preferable to recover the costs" for the renewable- and nuclear-energy subsidies "through existing supply mechanisms and bill lines."

The Bottom Line

This means that the cost is folded into the supply charge listed on your electricity bill and for most commercial consumers both charges amount to about $3.50 per Megawatt Hour. That amount is adjusted every Spring. If you get your power from a third party supplier it is included in some way into the price they charge you. If your firm was under contract when the charges began your supplier would likely have added the charge under a contract clause that allows them to alter the price due to regulatory or legislative changes. Going forward customers should expect this charge to be included in any fixed price offer or in the "retail adder" on a variable price offer. Not all suppliers will handle the charges this way, however, some may "pass through" the charges rather than include them in the offer price and customers should be sure they are seeing apples to apples pricing when it comes to ZEC's and REC's (and capacity and line loss and other charges as well).