

PUBLIC POWER CONNECTIONS

MANY FACTORS PLAY A ROLE IN DRIVING PRICES

Generation resources impact the environment and complying with regulations can raise costs

There are three major factors that drive the price of power: consumer demand, generation prices, and environmental and regulatory issues. This article, the final of a three-part series, will focus on how environmental and regulatory issues affect the costs of power.

All generation resources have some impact, large or small, on the environment and there are regulatory compliance rules no matter what type of generation it may be: Issues are raised with nuclear regarding its fuel, wind can affect flight patterns for birds, coal and gas have emissions, and solar and hydro need to ensure native wildlife is not negatively impacted by the facility. Complying with the regulations affecting a unit can raise costs over the long term and play a role in the increasing price of power.

Environmental and regulatory issues are determined both on the state and federal level. With so many agencies issuing new regulations, and with no requirement that they all coordinate, money must be spent to meet the layers of compliance.

Mechanisms for meeting the requirements typically fall to the utility that owns the facility. This means the utility faces required and sometimes unexpected increases in costs, which at times can only be offset by raising rates to customers. Municipal electric systems work to have their voice heard in influencing regulations, but there are many factors outside the control of a utility.

Policies put in place have an impact on decisions that your local utility has to make. Many municipal electric systems are



working with American Municipal Power, Inc. (AMP) to create a diverse energy portfolio – with power coming from several types of generation to help offset the risks and costs of regulations.

The electric utility industry has made tremendous strides in the past few decades of reducing emissions. Decreasing them further does come at a cost. Regulations are often needed, and many are intended with positive purpose to reduce emissions or increase safety, but meeting these guidelines takes monetary investment and does increase the costs of delivering power.

Moving power, taxes on power, regulations on power plants (whether in your community or not), and keeping the power grid secure all have costs too. Recent threats and concerns regarding cyber and physical infrastructure security are another example of how regulatory policies affect the price of power.

The uncertainty of what may come next in environmental regulations also is having an impact on power and prices. The ability to generate or build generation depends on upcoming regulations, which are currently being heavily debated. This uncertainty has generally led to a pause in building new generation and some regulations are causing existing plants to retire earlier than planned. As a result, simple supply and demand may cause higher prices.

From controversy to safety, regulations have to come with a balance.



Consider washing your clothes in cold water to reduce your energy bill. As an added bonus, cold water will also prevent shrinking and fading of your clothes.

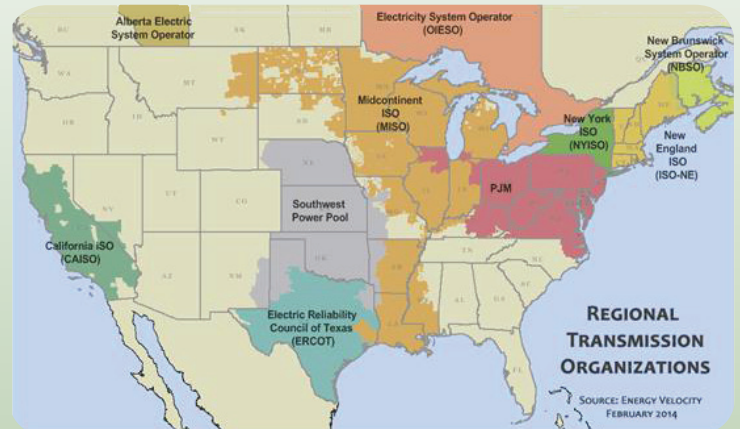
WHAT IS AN RTO? HERE'S HOW IT WORKS

Regional Transmission Organizations (RTOs) were established to control and manage the transmission of electricity over a large area. RTOs were originally intended to provide more efficient and better-coordinated transmission system operations and reliability functions. They were also designed to provide non-discriminatory, open-access transmission service for electric generation transactions. In short, RTOs were formed to be transmission traffic cops.

To carry out their “traffic cop” responsibilities, RTOs have assumed functional control, but not ownership, of the high-voltage transmission system. An RTO tells generating plants what they should do, but does not physically control them. It’s like when you are first learning to drive and you’re in the car with your driving instructor – you have to legally do what the instructor says, but you are the one who physically turns the wheel and hits the brakes.

RTOs have seen a lot of expansion in the past 10 years due to deregulation. They do not own generation or transmission lines and are revenue neutral, but their original objectives have evolved. Today, RTOs essentially determine which electric generation units operate, when they operate, and the price that the power from those units should command as a commodity in the wholesale power market. These electric markets play a significant role in the ability of municipal electric systems to continue to deliver cost-effective, reliable service to their customers.

Rules for these markets are made internally through a stakeholder process. Stakeholders include entities such as investor-owned utilities, banks, municipalities, coalitions, etc. – all those who interact in an RTO market have a voice. Ultimately, the rules are approved



on the federal level by the Federal Energy Regulatory Commission (FERC) and an independent market monitor makes sure the rules are followed.

This complex process can be broken down by thinking of it as a music class. Instead of all the students playing their instruments by themselves, their music teacher gets them together to play as a group. While the class has some input on the music they choose and each student is responsible for playing their own instrument, it’s the teacher who comes up with the rules and the teacher is the one leading/facilitating rehearsals. The teacher’s rules are then monitored by the principal and school board to make sure they are just and reasonable.

There are many concerns surrounding the role and control RTOs have over the markets and utilities are tasked with navigating the ever-changing rules in an effort to find some harmony, and to ensure a balance between reliability and consumer costs.

CALL BEFORE YOU DIG

Spring means yard work for many people, but before you get started on a project, there’s an important call you need to make. Calling before you dig is critical for your safety. The following are some examples of when you need to call:

- Landscaping
- Planting trees
- Removing tree roots
- Installing a retainer wall

- Digging holes for fence posts or a mailbox
- Anchoring supports for decks and swings sets
- Driving landscaping stakes into the ground

Calling before you dig is the only way to know the exact location of utility lines or underground structures. It is recommended to allow at least an 18-inch “tolerance” zone on either side of the marked utility line.



Help protect yourself and your neighbors by calling your local utility or state underground protection service before you dig this spring.