Two opinions issued from the DC Circuit Court in a span of less than one year could have major implications for the electricity and environmental communities.
On May 1, 2015, the U.S. Circuit Court of Appeals for the DC Circuit issued an opinion in Del. Dep’t of Natural Res. and Env’t Control vs. EPA (DNREC vs. EPA)1 that will eliminate the use of backup generators (BUGs) in demand–response programs nationwide. The ruling vacated portions of the U.S. Environmental Protection Agency’s (EPA) National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines rule (RICE/NESHAP) that allowed BUGs to run under certain circumstances for up to 100 hours per year.2 If the EPA does not act to restore those provisions of the rule in a manner consistent with the DC Circuit opinion, the decision will fundamentally change the way tens of thousands of businesses nationwide manage their plant operations, electricity purchases, and annual electric costs. The net impact on all electricity customers, whether BUG operators or not, will be billions of dollars in increased electricity costs annually.

In its May 2015 order, the DC Circuit held that, “EPA acted arbitrarily and capriciously when it modified the National Emissions Standards and the Performance Standards to allow backup generators to operate without emissions controls for up to 100 hours per year as part of an emergency demand-response program.”3 Importantly, the DC Circuit described all of the flaws in EPA’s actions as procedural flaws. The court did not question the validity or legality of EPA’s policies or of any of the RICE/NESHAP provisions that were vacated.

This is the second opinion issued from the DC Circuit in a span of less than one year that could have major implications for the electricity and environmental communities. In May 2013, the DC Circuit vacated FERC Order 745, which mandated that if certain conditions are met, electricity market operators in Federal Energy Regulatory Commission (FERC)-regulated markets must pay demand–response resources the locational marginal price (LMP) for their reduced energy consumption. FERC and others have appealed that decision to the U.S. Supreme Court. Oral arguments were held on October 14, 2015. A decision from that court is forthcoming.1

Call for Nominations for the 2016 Exceptional Education Contributor Award

The Deadline for Nominations is April 5, 2016.

Nominations are encouraged for individuals from all backgrounds who have contributed to A&WMA’s educational mission as implemented through its Education Council.

Criteria used to evaluate the nominations are:

• A&WMA leadership positions with educational responsibilities (40%)
• Specific initiatives and/or contributions that have supported A&WMA’s educational mission (60%)

The award recipient will be recognized and given a plaque at A&WMA’s 2016 Annual Conference & Exhibition Student Awards Ceremony in New Orleans, LA.

Please submit electronic nominations that describe the candidate’s contact information, professional background, and contributions pertaining to the two award criteria cited above. Self-nominations are also encouraged. The nomination should be no more than 4 pages long with 11 point font.

Nominations should be submitted to Robin Lebovitz, A&WMA Education Programs Associate, at rlebovitz@awma.org by Tuesday, April 5, 2016.

Author’s Note:
Subsequent to this article being written, the Supreme Court issued its decision in FERC v. EP SA (US S.C. Docket No. 14-840, reported at 577 US ____ (2016)). The Supreme Court reversed the DC Circuit Court’s decision. In doing so, it decreed that demand–response in wholesale energy markets is a FERC-jurisdictional service and upheld FERC’s decision to require that demand–response be compensated at the market clearing price for energy. The decision is available online.
If either or both cases stand, customers will be more constrained in their options for procuring electricity. Undoubtedly, electricity costs will increase and the markets will rely more heavily on traditional generation resources, most likely increasing emissions from today’s operations.

In the dawn of the Clean Power Plan era, when traditional power plants will be retired or at a minimum, be more constrained operationally, the DC Circuit, by eliminating the use of valuable reliability resources, seems to be at odds with both the business and policy direction of the country. While one of the DC Circuit decisions is on appeal at the U.S. Supreme Court, the DNREC vs. EPA opinion is not. DNREC vs. EPA has been subject to its own set of legal maneuvers. Despite the efforts of those who support the rule, the DC Circuit mandate to remove BUGs from all demand–response programs will issue on May 1, 2016.

**Electricity Markets**
The business side of electricity is complicated. In the United States, we operate our electricity markets under several different business models. The most commonly known is the traditional state-regulated utility model. Large portions of the Pacific Northwest, Southwest, and Southeast operate under this model. State regulators regulate pricing in these regions.

In other parts of the country, the grid is deregulated and in these regions, independent grid operators dispatch power plants across state lines, at least cost to maintain reliability. Texas, California, the entire Northeast region, and large portions of the Mid-Continental region all operate in restructured markets. The multi-state or interstate markets are regulated by FERC. FERC typically regulates business practices and not prices in these markets. The Texas grid is not interconnected with the rest of the country. As a result, it is not subject to FERC jurisdiction, but rather to Texas Public Utility Commission jurisdiction. It operates similarly to the FERC-regulated markets.

BUGs, of course, are used as demand–response resources for reliability purposes in all of these models. In all cases, someone (likely a regulator) has deemed these resources to be more cost-effective for providing reliability than other resources. In the competitive markets, auctions reveal the most cost-effective clearing prices. The DNREC vs. EPA decision has invalidated all of those decisions made across the country. It should be noted that the RICE/NESHAP rules that were vacated allowed BUGs to operate only under a very narrow set of grid emergencies and for a very limited number of hours each year. That emergency support will soon be gone.

**Cross-Agency Conflict: What Is FERC’s Role?**

How is it that the DC Circuit, while trying to correct EPA’s rule, could have such a profound impact on electricity markets? After all, it is FERC, not EPA, that has primary oversight over electricity markets. EPA has oversight of air emissions, including those from resources overseen by FERC (e.g., power plants). The overarching question then is, which agency should determine whether or not these BUGs can participate in electricity markets and demand–response programs?

FERC has explicitly addressed the issue of BUG use in energy markets on several occasions going back more than a decade. FERC has consistently approved BUG resources as just and reasonable emergency capacity resources. EPA, by virtue of the provisions in the RICE/NESHAP rule, recognized FERC’s decisions and further supplemented FERC’s approval of the use of these resources by explicitly allowing their use in electricity market demand–response programs. Recognizing that BUGs are truly “emergency” resources to be used for a minimal number of hours annually, EPA allowed their participation in demand–response programs. Unfortunately, that is not how the DC Circuit interpreted EPA’s actions.
Absent further action from EPA, the use of BUGs in emergency programs will be prohibited after May 1, 2016, regardless of regulatory model or location.

**Economic Impact of DNREC Opinion**

PJM Interconnection, LLC is the multi-state grid operator in the Mid-Atlantic and Midwest regions. It is well documented that demand–response resources in PJM save electricity consumers in that region upwards of $10 billion annually. BUGs support approximately 20 percent of demand–response in PJM (see Figures 1 and 2). Based on an extrapolation of this publicly available data from the PJM market, it is estimated that the rate impact to customers from eliminating BUGs nationwide will be in range of $5 to $10 billion annually.

---

**Figure 1:** PJM Demand Response Customer Load Reduction Methods  

**Figure 2:** Fuel Types for BUGs in PJM Demand Response  
Regulatory lag may protect customers in regulated electricity market states from price increases in the short-term. Conversely, the price impact will be immediate in the open market (or deregulated) states, where there will be less demand–response offered and these emergency capacity resources will need to be replaced by more expensive resources that didn’t clear prior auctions. Replacement resources for the voided BUGs will be needed as soon as the summer of 2016.

The rate impact will be particularly pronounced on BUG owners who have already made the investment to protect and manage their facilities and operations. This group of customers will no longer be able to use these resources as a hedge to reduce their own capacity and electricity costs and secure reliability for their own facilities.

Conclusion

The U.S. electricity markets have been thrown into a state of disarray as a result of recent decisions by the DC Circuit. Electricity markets are complicated and anything but uniform across the United States. FERC and state regulators have ruled many times that BUG participation in energy markets leads to just and reasonable rates and a more reliable grid. EPA has ruled that the emissions limits on BUGs were acceptable if they are used for only a limited number of hours to support grid reliability. Unfortunately, the DC Circuit Court believed that EPA should have worked more closely with FERC in reaching that determination in the RICE/NESHAP docket at EPA. Now, the burden to undo the damage from the court’s decision falls back to EPA, and not the electricity market experts. If the agency does not act, billions of dollars are at risk for consumers.

Frank Lacey is the Founding Principal of Electric Advisors Consulting, a firm dedicated to helping electricity market participants find business solutions in the maze of regulations impacting them. He has worked in the energy field at the intersection of regulation and business strategy for more than 20 years. E-mail: frank@eacpower.com.

References
1. Del. Dep’t of Natural Res. and Envt’l Control vs. EPA, 785 F.3d 1 (D.C. Cir. 2015).
3. DNREC v EPA at p.2.
4. The PIM Independent Market Monitor analyzes market behavior and publishes an annual “State of the Market” report. As part of this analysis, the IMM runs simulations to determine what the price of capacity would have been in the absence of demand-side resources. For the past several years, the IMM has shown savings of between $9 billion and $14 billion each year that are attributable to the participation of demand-side resources. These analyses can all be found at http://www.monitoringanalytics.com/reports/PIM_State_of_the_Market/2015.shtml.