



Dupont Summit 2016

Science, Technology, and Environmental Policy

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Panel

“Utilizing Natural Gas Generators to Reduce Emissions and Flared Gas”

Natural gas generators are becoming increasingly more popular as a technology that provides on-site power generation to oil and gas sites. The three major technologies that provide power to oil and gas sites are natural gas generators, diesel generators, and line power. Line power represents the largest share of power provided to oil and gas sites. For on-site power generation, industry estimates indicate that diesel generators comprise 85% of power generation and natural gas generators comprise the remaining 15%.¹ Historically, the natural gas generator sector has primarily focused on competing with diesel generators. Due to the fact that natural gas generators operate on untreated wellhead gas, they have competitive advantages of reducing flared gas, reducing regulated emissions by 99% (in comparison to diesel generators), and reducing costs (since operators generally pay no fee to use untreated wellhead gas for power generation). Nevertheless, federal and state regulations treat diesel generators the same as natural gas generators-- even facilitating easier operation of diesel generators in certain circumstances.¹ Moreover, natural gas generators have the ability to generate electricity from gas that would otherwise be flared and transmit that electricity back to the utility grid. However, certain regulatory barriers make energy conversion to utility distribution systems uneconomical or virtually impossible to implement.

To better understand the regulatory frameworks that largely determine the viability for market development and market penetration of natural gas generators, this abstract proposes to develop a paper that will: (1) provide an overview of laws and regulations affecting the commercialization of diesel and natural gas generators; (2) provide an overview of laws and regulations that inhibit or facilitate generated electricity from flared gas to be sold back to utility distribution systems; (3) discuss and analyze the costs and benefits of using different power generation technology; and (4) propose policy recommendations that will facilitate the expansion of natural gas generators in situations that allow these power systems to reduce emissions and to reduce flared gas.

Moderator

Tara K. Righetti, *University of Wyoming, College of Law*

Panelists

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