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Testimony on behalf of ARIPPA

Senate Environmental Resources and Energy Committee

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Good morning/afternoon, my name is Vince Brisini, I am the Director of Environmental Affairs for Olympus Power, LLC and I am here today testifying on behalf of ARIPPA. ARIPPA stands for “Anthracite Region Independent Power Producers,” but the membership also includes facilities that burn coal refuse from the mining and processing of bituminous coal. Olympus facilities are members of ARIPPA and we have investments in both anthracite and bituminous facilities.

ARIPPA is the trade association for a very special industry that reclaims coal refuse sites generated from historic mining activities and turns that coal refuse into environmentally beneficial electricity. The electricity produced by this industry is recognized in PA Act 129 of 2008 as an alternative energy source.

ARIPPA member facilities burn coal refuse in a highly controlled and regulated fashion, using a specialized type of technology and convert it into electricity, most of which is sold in the competitive electric market. The main source of the coal refuse that is used for fuel is from old piles that cause environmental, health and

safety problems. ARIPPA member facilities provide a solution to these serious land, water and air pollution problems, as well as the health and safety issues, by removing, remediating and reclaiming coal refuse piles and sites.

By law, Pennsylvania is responsible for mine drainage discharges from coal refuse piles and coal mining activities that ceased operations prior to 1966. . In 2006, Pennsylvania's Bureau of Abandoned Mine Reclamation estimated the cost to eliminate abandoned mine land (AML) problems and complete the cleanup of AML-AMD sites in Pennsylvania, which includes the coal refuse piles and sites, to be approximately \$15 billion dollars and take nearly 500 years to complete. The primary source of monies available for mine reclamation are reclamation fees imposed under the Federal Surface Mining Conservation and Reclamation Act. In 2014, Pennsylvania received \$44 million dollars in federal grant monies from these fees. However, the amount collected and distributed to states via this program has diminished over the past several years and will likely will continue to decrease due to the retirement of coal fired power plants or their conversion to burn only natural gas and the corresponding reductions in the amount of coal mined due to these actions.

Coal refuse-fired plants in Pennsylvania remove, and convert into electricity, almost 11 million tons of coal refuse per year. To date, over 200 million tons of Pennsylvania coal refuse has been removed for use as fuel and millions more tons have been remediated on-site through the beneficial use of the resulting alkaline ash. Through these efforts, thousands of acres of previously affected land has been remediated and reclaimed returning it to productive recreational and commercial uses.

My testimony today will not so much focus on the individual environmental regulations, but instead on the manner in which they are being implemented.

Importantly, ARIPPA supports regulatory requirements which are lawful, achieve necessary environmental improvements, are technically sound, provide adequate time for implementation and represent pragmatic solutions.

Environmental improvement is the fundamental nature of our business.

Currently, there are a number of regulations which require the control of the same pollutants, require the same or similar control technologies but are implemented in a disjointed fashion which, whether intentional or unintentional, have the effect of picking “winners and losers.” This creates an economic environment of great uncertainty which makes it very difficult for industries to make long term

investments in their facilities, to say nothing of investments in new facilities. Quite simply, implementing environmental regulations in a fashion that results in “winners and losers” means every election cycle provides the opportunity for the role of “winner” and “loser” to be reversed and a previously “sound” investments become financial write-offs for a company. In essence, whether or not intentional, we have essentially introduced political risk into the competitive energy industry in Pennsylvania and in our nation.

A good example of a regulation that could have been implemented in a much less costly fashion to industry and the taxpayers is the Mercury and Air Toxics Standards or MATS. What is interesting about MATS and serves to substantiate my point is that in the economic justification for the regulation, there is only one hazardous air pollutant that is identified, mercury, with an economic benefit of \$4 to \$6 million dollars per year. Instead, the vast majority of the benefit is the ancillary reduction of sulfur dioxide as a precursor to fine particulate matter. The monetized benefit of the sulfur dioxide reduction is identified as \$36 to \$89 billion dollars per year out of the total monetized benefits of MATS of \$37 to \$90 billion dollars per year in the final regulation. That is a huge benefit, but sulfur dioxide limits are also established under the Cross State Air Pollution Rule (CSAPR) and the new 2010 sulfur dioxide national ambient air quality standard and best available control technology or BACT

and lowest achievable emission rate or LAER which are required for new or modified sources. Additionally, some agencies and groups are using Regional Haze in their efforts to force implementation of even more stringent sulfur dioxide limitations as quickly as possible even though the date by which these visibility requirements must be achieved is 2064. Consequently, it is a reasonable question to ask, what is the “real” benefit of this over-laying of regulations and their individual requirements when the same control technologies are already being required through another program?

As EPA points out in the proposed and final MATS regulation, and in fact uses as a representation of the reasonability of the costs of the MATS regulation, the control technologies that will be used to control the hazardous air pollutants are the same technologies that will be used to meet the requirements of these other programs and requirements.

It should also be understood and appreciated that for major sources of emissions, every year it is required that a “Plant Responsible Person” submit a compliance certification which identifies whether the facility has met all air quality requirements and if not which have not been met. This is a personal certification, which if found to be inaccurate can result in both criminal and civil penalties.

The costs of implementing individual regulatory programs for the same pollutants, using the same control technologies are simply too great considering that they don't necessarily provide for an additional environmental benefit. They are simply additional costs which add to the price of our product which makes it very difficult to continue to provide the multi-media environmental benefits from the removal and remediation of coal refuse piles because we may not be able to remain competitive in the PJM wholesale electric market.

There were also regulations that were implemented and changed in a fashion that resulted in substantial difficulties to the ability of coal refuse-fired electric generating units and other more traditional generators of electricity to compete in the wholesale competitive electricity market. These regulations related to the operations of uncontrolled diesel generators. Initially, EPA provided for up to 15 hours per year of uncontrolled generation from these source. Traditionally these machines were used in emergency situation to provide power to critical resources. In 2004, EPA provided additional uncontrolled operations for these distributed generators to allow them to supply power to the electric grid in emergency situations. Subsequently EPA reconsidered that change and specified that additional uncontrolled operation could not be used to generate income for the facility where the machine was located.

In 2013, EPA changed the 15 hour rule to permitting up to 100 hours per year of uncontrolled operation justifying the change as being to help prevent grid failure or blackouts.

Importantly, these uncontrolled machines while only being allowed to operate for 100 hours per year received a capacity payment for 8760 hours per year resulting in some traditional generators, which are subject to considerable environmental regulation, not being able to “clear” the “capacity” market price due to those costs as PJM requires that all environmental costs be included in the capacity market bid price.

The capacity payment is a payment received for the ability to produce when needed. This provides the compensation necessary to have a facility come into service when called. Without this payment, the “energy” market price would have to be increased significantly in a speculative fashion to ensure these generating assets can be maintained. For an electric generator to be successful in the competitive electric market, it requires not only successful participation in the energy market, it also requires successful participation in the capacity market.

In testimony presented before the House of Representatives, Environmental Resources & Energy Committee on November 20, 2013 regarding HB 1699,

Regulation of Certain Reciprocal Internal Engines, the PJM Market monitor identified allowing the inclusion of these limited demand response generators, which he identified as “inferior resources,” that do not have the same operational obligations as other wholesale electric generators, such as the coal refuse-fired electric generating units, as an issue which was distorting the PJM capacity market.

This EPA regulation was opposed by Delaware for environmental reasons and was opposed by some traditional electric generators because they alleged it had a distorting impact on the capacity markets in which they participated. The regulation was ultimately remanded to the EPA by the United States Court of Appeals for the District of Columbia Circuit on May 1, 2015.

In that decision, the Court found that EPA’s motivation for the rule was to allow these uncontrolled emergency engines to accommodate PJM’s sixty-hour rule for participation in the capacity market. When coupled with the situation that up to 15% of the demand response in PJM is backed up by these generators, it is hard to imagine that an environmental benefit was being achieved.

The Court found EPA’s action to be arbitrary and capricious and stated in their decision, “...EPA appears to have relied on faulty evidence when justifying the exemption increase from 15 to 100 hours.”

What we do know is that those uncontrolled diesel generators being allowed to be bid into the capacity market resulted in suppressed prices for controlled electric generators with no commensurate benefit to electric system reliability. As stated by the Independent Market Monitor for PJM in August of 2012, “Some have asserted that an exemption for generators participating in demand side response programs provides benefit to the organized wholesale electricity markets.” “Those arguments have no merit.”

Based on the contents of the decision, it appears that the Court was raising questions regarding the “true” motivation of the change from 15 hours to 100 hours.

No one knows if any decisions that were made by the traditional electric generators would have changed based on the apparently suppressed capacity market prices, but we do know that an artificially suppressed price generally favors one person over another.

It’s worth noting here, that PJM has recently changed the capacity market participation requirements to address this and other issues.

Another troubling change in environmental regulation are changes which provide opportunities for environmental regulators to make decisions regarding broader social and economic outcomes.

EPA's proposed Clean Power Plan is a good example of a regulation which is attempting to redefine how an environmental agency can become the "agent of change" by requiring states environmental agencies to prepare and implement comprehensive state energy plans that include not only the soon to be affected existing fossil fuel fired electric generators but also other electric generation and efficiency programs which they are not authorized to regulate. In that proposal they identify a goal for carbon dioxide reductions from existing coal-fired electric generating units that is far beyond what those units can accomplish and then allow "flexibility" in how that can be accomplished. From a practical standpoint there is no real flexibility because all of the available options were used in establishing the goal so those same measures are necessary to achieve those goals. Plainly stated, to achieve the carbon dioxide reduction goals from existing generators, the plan must significantly limit the use of coal and then find ways to provide the necessary electricity to preserve electric grid reliability. This regulation appears to be drafted to target and retire the coal-fired and coal refuse-fired electric generation industry in the United States and in particular states like Pennsylvania where generators

compete in an electric wholesale market. To make matters worse, there is no exception for, nor acknowledgement of, the multi-media environmental benefits of the coal refuse reclamation to energy industry in Pennsylvania. Our industry will suffer, along with other coal-fired generation sources, and perhaps be more adversely affected because our facilities are smaller and the distances to our fuel and the distances to return our beneficial use ash for remediation and reclamation are increasing which considerably increases our cost of doing business.

It is appropriate then to understand the Regional Greenhouse Gas Initiative or RGGI. This has been identified as a possible mechanism to use in the development of Pennsylvania's Clean Power Plan. In that program, a carbon dioxide emissions budget and the base price for carbon dioxide allowances are established. A carbon dioxide allowance must be procured to account for each ton of carbon dioxide emitted. Essentially, what happens is that the higher emitters of carbon dioxide are priced out of the market through what is essentially a tax on electricity that is paid for by electric customers. As the RGGI participating states are proud to advertise, they have considerably reduced carbon dioxide emissions. However, if one peruses the information available on the RGGI website, as I have done, it can be determined that 60% of the carbon dioxide reductions are due to ceasing to generate that corresponding amount of electricity in the RGGI states. So for RGGI

to be working, it is necessary for those participating states to allow and increase the importation of electric power into their region. They debated that considerably in RGGI, but to control prices somewhat and to ensure adequate supplies of electricity they accepted that “leakage” of generation and corresponding emissions. Importantly, the RGGI website also documents considerable reductions in carbon dioxide in the areas from which they import their electricity. Albeit without the implementation of RGGI.

This is sobering information when one considers that Pennsylvania is currently the number two generator of electricity in the nation and the number one exporter.

It is worth noting, there is an unquestionably legal means to include the use of the electric generation and energy efficiency resources which Pennsylvania does not have the authority to regulate under §111(d). It is important to recognize that only fossil fuel-fired electric generating units will actually be affected under 111(d) and not until after the finalization of the new source performance standards or NSPS for carbon dioxide from fossil fuel-fired electric generating units under Section 111(b) of the Clean Air Act. That method is discussed in the “Commonwealth of Pennsylvania, Recommended Framework for the Section 111(d) Emissions Guidelines Addressing Carbon Dioxide Standards for Existing Fossil Fuel Fired-fired

Power Plants,” which was submitted to EPA on April 10, 2014. In that whitepaper it is described how the truly 111(d) affected sources could include other means, like energy efficiency projects for their plant to achieve necessary carbon dioxide reductions. A critical difference between EPA’s Clean Power Plan and DEP’s whitepaper is that in the DEP’s whitepaper the use of those resources would be to the advantage of the affected sources while under the proposed Clean Power Plan those resources are included in a fashion which is to the detriment of the truly 111(d) affected sources.

I mention this to show that there are ways to accomplish goals in an effective, pragmatic fashion if that is actually the desired outcome.

Another change in the proposed Clean Power Plan which is very concerning is the redefining of Best System of Emission Reduction. That has traditionally been defined as the best system of control a particular source can achieve. That is consistent with the historical definition of Best Available Control Technology. That definition of Best Available Control Technology was affirmed in the Supreme Court decision which over-ruled the EPA’s carbon dioxide tailoring rule. As stated in that decision, “... BACT is based on “control technology” for the applicant’s “proposed facility §7475(a)(4); therefore it has long been held that BACT cannot be used to

order fundamental redesign of the facility.” In the proposed Clean Power Plan that is exactly what EPA is proposing to accomplish because they are now proposing to force regulation of the entire electric energy portfolio rather than achieve reductions from the section 111(d) affected existing fossil fuel-fired electric generating units.

To some policy makers and members of the public, that may seem acceptable now because it is being used to achieve their desired outcomes. However, what if political forces change and that concept is being used to achieve measures that are not to their liking?

In the case of business and industry, how can investments be justified when they can turn from a “winner” to a “loser” every political cycle.

Another recent regulation that is raising concerns is the final regulation for “Waters of the United States.” While it is advertised by the EPA as not being any different than the Clean Water Act, various parties are pointing out changes that will increase the applicability of the Clean Water Act. Further, this appears to be regulating and permitting on top of the current authority of Pennsylvania DEP. This would appear to be an attempt at federal extension into areas that have historically

been the under the authority of states, other agencies and other branches of government.

So as you can see, it is not only the requirements and limitations that are concerning to the coal refuse-fired electric generating industry. It is the process of regulation design and implementation, it is the confounding and changing goals of environmental regulators, it is the changing of historic and traditional requirements to serve social goals rather than to achieve environmental outcomes and it is the usurping of social decisions from elected state officials by appointed federal and state regulators.

As part of this testimony I am providing addendums prepared by ARIPPA that discuss the organization and the accomplishments of its members, a coal refuse whitepaper, a map of the Pennsylvania coal refuse-fired plants and their location in the major watersheds of Pennsylvania, coal refuse and RGGI.

ARIPPA appreciates the opportunity to provide this testimony. Specifically, ARIPPA wants to be able to continue to provide the multi-media environmental benefits that make coal refuse fired plants the premier solution to the environmental, health and safety issues created by coal refuse.