United States –Russia Bilateral Presidential Commission ENERGY WORKING GROUP Joint Statement

The Third Plenary Session of the U.S-Russia Bilateral Presidential Commission's Energy Working Group was held on December 6, 2013 co-chaired by the Secretary of Energy of the United States of America Ernest Moniz and the Minister of Energy of the Russian Federation Alexander Novak. The co-Chairs affirmed their commitment to strengthen bilateral cooperation in the energy sphere.

Energy Efficiency

The co-Chairs recognize the critical importance of energy conservation and the need to develop measures to increase energy efficiency. The co-Chairs re-affirmed their support for development of a comprehensive Action Plan for 2014 that will advance cooperation on development of innovative technologies in the area of energy efficiency and shared experiences across a wide spectrum of subjects. The co-Chairs supported efforts in the areas of (1) deployment of smart grid technologies through city-to-city and company-to-company cooperation, (2) increasing grid reliability, (3) increasing energy efficiency in the public sector, (4) improving energy management, (5) facilitating trade and technical exchanges, (6) comparing energy efficiency indicators, (7) developing a Smart Cities network, and (8) reducing black carbon emissions. These efforts would be structured to create replicable, commercially-viable projects implemented by public-private partnerships and aimed to strengthen business-to-business links between the two nations.

City-to-City Smart Grid Pilot Project:

San Diego-Belgorod

• This pilot project to develop smart grid and smart cities technologies links the City of San Diego and the Belgorod Region, as well as San Diego Gas & Electric and OAO Russian Grids (and its subsidiary OAO MRSK Center) in an initiative to share innovative technologies and expertise as each city constructs a municipal energy management strategy. Building upon several exchanges in 2011, 2012 and 2013, the Participants have outlined a scope of work for the next cooperative period that includes sharing expertise and working jointly on the following areas: (1) automatic restoration systems, (2) security and video surveillance systems, (3) infrastructure for electric vehicles, (4) asset management systems, (5) best practices, and (6) smart control over power grid functions.

Next Steps:

• The Participants are to develop and approve a detailed plan for the implementation of each of the areas of cooperation, and consider the implementation of pilot projects in selected areas.

Austin –Kaluga

 The United States Department of Energy (DOE) and the Ministry of Energy of the Russian Federation (MOE) have chosen Austin and Kaluga as a second pair of sister cities.

Next steps:

- A delegation of managers and senior representatives of the administration of the city of Kaluga, OAO Russian Grids, and its subsidiary OAO MRSK Center plan to hold a meeting in the city of Austin with representatives of Austin City administration and Austin Energy and plan to sign a memorandum of cooperation.
- *Grid Reliability:* DOE and MOE are working with OAO Russian Grids to develop a pilot project involving phasor measurement units (PMUs). This project's framework anticipates deployment in Kaluga's regional electric grid of a real-time grid status control system, which would allow for rapid and timely detection and analysis of grid disturbances and apply steps to prevent system failures.

Next Steps:

- OAO Russian Grids, with assistance from Pacific Northwest National Laboratory (PNNL) is to determine sites for possible installation of PMUs in the Kaluga region.
- OAO Russian Grids, with assistance from PNNL, is to select potential equipment providers and software applications.

Increase of Energy Efficiency in the Public Sector:

• Energy Service Performance Contracts: The co-Chairs note that this initiative is designed to assist municipalities and regional administrations in reducing energy usage and costs. Under this initiative, DOE and PNNL have provided to the Ministry of Energy's Russian Energy Agency (REA) and other interested Russian organizations materials and recommendations on the use of energy service performance contracts (ESPC) to improve efficiency of public sector buildings. DOE and PNNL in cooperation with REA's Training Program developed a training unit on the structure and implementation of ESPCs for Russian municipal and regional public sector employees.

Next Steps:

- DOE and MOE are to jointly organize a roundtable in Russia on sharing experience on regulation and implementation models for EPSCs in the United States and Russia.
- *Pilot Project in St. Petersburg*: St. Petersburg City Administration and Honeywell, with support from DOE and MOE, are developing a pilot project in the area of energy efficiency.

Next Steps:

• Honeywell and the City of St. Petersburg are to develop a model energy service contract for educational or health institutions (kindergarten, school, polyclinic).

Heat Supply: Under this initiative, DOE and MOE plan to exchange experience on governmental reforms and modernization of the heat supply system for the district

heating sector. Recent legislation in the Russian Federation established a framework to improve efficiencies in the sector. DOE/PNNL completed a report outlining recommendations for Russia's heat policies, based on U.S. and international experience. In particular, these recommendations are to include ways to attract private sector investment through the introduction of competition in the district heating sector.

Next Steps:

- DOE and MOE plan to jointly organize a roundtable in Russia on sharing experience on U.S. and Russia's heat policies, including a discussion of recommendations from the DOE/ PNNL report.
- Energy Management Systems Pilot Project (ISO50001): The co-Chairs recognize that the implementation of energy management systems is a powerful tool for companies and organizations to effectively reduce costs and energy intensity. DOE and MOE plan to cooperate on developing two pilot projects to implement energy management systems and certification of these enterprises in accordance with ISO 50001 standards.

Next Steps:

- MOE is to identify two potential candidate enterprises -one private, one public, for the implementation of an ISO 50001 system.
- DOE plans to provide technical assistance based on experience in implementation of ISO 50001 energy management systems in the United States, as implemented under the U.S. Superior Energy Performance Program.
- **Business Missions:** The co-Chairs believe that the facilitation of business-to-business links is the essential foundation for realization of collaborative projects in the area of energy efficiency. DOE and MOE plan to work together under the current Action Plan to facilitate trade and technical exchange programs targeted at U.S. and Russian small- and medium-sized companies for 2014. The program would also include possible training workshops, consultations with financial institutions, and site visits.

Next Steps:

• DOE and MOE are to develop a plan for business missions in 2014.

Industrial Energy Efficiency Indicators:

• DOE and MOE plan to develop a cooperative project to conduct a comparative analysis of energy efficiency indicators in the U.S. and Russian economies, which might include a review of such industries as the oil and gas sector, petrochemicals, machine building, agriculture, and metallurgy.

Next Steps:

• DOE is to identify a point of contact responsible for this cooperation.

Smart Cities Network:

• The co-Chairs affirmed that sustainable urban planning is crucial factor for the transition of the U.S. and Russian economies to clean energy. The co-Chairs noted that the aim of this new initiative is the exchange of experience in the field of integrating the principles of energy efficiency and environmental sustainability in urban planning. DOE and MOE, in cooperation with other interested organizations, plan to collaborate on the development of a list of indicators for Smart Cities. DOE and MOE plan to determine candidate municipalities in each country to serve as a basis for the development of this initiative.

Next Steps:

- DOE plans to work with PNNL to develop Smart Cities benchmark indicators by March 2014.
- DOE and MOE plan to select candidate cities where this initiative is to be implemented.

Reduction of Black Carbon Emissions:

The co- Chairs recognize that black carbon emissions in the Arctic represent a significant threat to the region's fragile environment. DOE's Oak Ridge National Laboratory and JSC Scientific Research Institute for Atmospheric Air Protection are jointly studying fuel consumption and black carbon emissions from Combined Heat and Power (CHP) and district heating in the Russian Arctic region, with a focus on the Murmansk region.

Next Steps:

 JSC Scientific Research Institute for Atmospheric Air Protection with participation from the DOE's Oak Ridge National Laboratory will evaluate black carbon emissions from stationary sources in the Murmansk region and will develop recommendations on technologies and pilot demonstration activities to reduce emissions and improve energy efficiency.

Clean Traditional Fuels

The co- Chairs recognize the critical importance of promoting the clean production and use of fossil fuels in each country's energy portfolio. To this end, the co-Chairs have decided to establish a new Sub-Group to be named the "Traditional Fuels Sub-Group". This Sub-Group is to develop cooperative projects to promote natural gas technologies to improve efficiencies and reduce carbon emissions.

Energy Security and Markets

The co- Chairs have resolved to continue discussions on issues of strategic global energy security and investment and determined to convene the next meeting of the Energy Security Sub-Group in February 2014 in Washington, D.C. The Participants note that open discussion on national energy strategies is crucial for greater transparency and stability in global energy markets.

Group Initiatives

The co-Chairs recognize that the work of several cooperative initiatives cuts across the mandates and objectives of various Sub-Groups. For these cases, the co-Chairs decided to consider the possibility of modifying the structure of the Energy Working Group to ensure adequate interaction on these several projects and have asked the Co-Coordinators of the Energy Working Group to oversee and monitor the progress of these initiatives.

- *Critical Grid Infrastructure*: MOE is to consider a DOE proposal on developing a partnership with Los Alamos National Laboratory (LANL) and the National Infrastructure Simulation and Analysis Center (NISAC) on infrastructure modeling and analysis to protect critical infrastructure. Specialists from NISAC and LANL use modeling and simulation tools to monitor critical infrastructure and assess interdependencies, vulnerabilities and complexities. These analyses are used to aid policymakers in developing mitigation planning, education, and training.
- University-to-University Partnerships: The co-Chairs affirm their commitment to continue exchanges between experts in the field of energy law under the framework of the university-to-university partnership led by project leaders from Moscow State University and Tulsa School of Law. This initiative is designed to bring experts together to share views on energy policy issues and to create a forum in which these experts might discuss ways to meet the energy challenges faced by both the United States and Russia. The co-Chairs instruct the Co-Coordinators to expand the initiative in 2014 to enhance contact between experts, scholars and municipal or regional leaders and help both governments address critical energy issues and national energy policies.

Next Steps:

 Articles by U.S. and Russian scholars are planned for publication in specialized energy legal journals.

The co-Chairs express their firm belief that an enhanced strategic energy partnership between the United States of America and the Russian Federation will help to promote both countries' prosperity and energy security. The co-Chairs plan to convene further meetings of this Energy Working Group.

Signed at Washington, in duplicate, this 6th day of December 2013, in the English and Russian languages.

FOR THE DEPARTMENT OF ENERGY OF THE UNITED STATES OF AMERICA:

Ernest Moniz

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