## Joint Statement by Co-Chairs of the Kazakhstan-U.S. Energy Partnership

The Co-Chairs of the Kazakhstan-U.S. Energy Partnership, Kazakhstan Energy Minister Kanat Bozumbayev and United States Deputy Secretary of Energy Dan Brouillette, met today and announced their intention to elevate their partnership and initiate a regular Strategic Energy Dialogue, in recognition of the importance of energy security in the bilateral relationship.

Both countries support universal access to affordable and reliable energy and recognize the importance of open, competitive markets for improving energy security. While fossil fuels will continue to power our economies as we transition to a lower carbon economy, we endeavor to use them more cleanly and efficiently. Kazakhstan and the United States will work together to advance civil nuclear power that is safer and more proliferation resistant, recognizing its importance as a zero-emissions baseload source for electricity. On climate change, both countries support a balanced approach that supports innovation, lowers greenhouse gas emissions, grows our economies, and strengthens our energy security.

To achieve these shared goals, the Strategic Energy Dialogue will focus on civilian nuclear cooperation, carbon capture utilization and storage, grid resiliency, opening and expanding energy markets, and nuclear nonproliferation and security. Deputy Secretary Brouillette invited Minister Bozumbayev to Washington for a formal launch of the Kazakhstan-U.S. Strategic Energy Dialogue with a work plan for enhanced collaboration in 2018 and beyond.

The two energy leaders also recognized the joint ongoing work of experts from both countries. Experts from the U.S. Department of Energy (DOE) and Institute of Nuclear Physics (INP) of the Ministry of Energy of the Republic of Kazakhstan (EM) successfully carried out the conversion of VVR-K research reactor from the use of highly enriched uranium (HEU) to low enriched uranium (LEU) fuel. The remaining spent HEU fuel removal from INP is scheduled for September 2017. In parallel, the operations for testing preparations are being continued in the National Nuclear Center of the Republic of Kazakhstan (NNC RK) for the planned conversion of the IVG.1M and IGR research reactors, if technically and economically feasible.

DOE held training seminars on nuclear reactors' core design technologies at the Idaho National Laboratory with participation of NNC RK scientists to discuss areas of possible future cooperation. The Co-Chairs congratulated NNC on its 25<sup>th</sup> anniversary and INP on the 60<sup>th</sup> anniversary of its founding.

The two countries are also working together to enhance Kazakhstan's proficiency in safeguards and nuclear and radiological material security. DOE conducted training courses for Kazakhstan's specialists in safeguards implementation and in nuclear forensics. By the end of September, in cooperation with Kazakhstan's State Revenue Service and State Border Guard Service, DOE will have equipped five border crossing points with radiation detection systems and is providing five mobile detection systems, and associated training for these systems.

Another accomplishment is the establishment, with DOE support, of the Nuclear Security Training Center. The Center launched in May 2017 and will train personnel in the areas of nuclear security and nonproliferation. Kazakhstan also stood up the new Transportation Control Center in August 2016 to ensure continuous monitoring of radiological materials in transit. The Co-Chairs expressed their continued support and cooperation in these important areas of nuclear and radiation safety and non-proliferation.

The Co-Chairs welcome the opening of the International Atomic Energy Agency LEU Bank in Kazakhstan, encourage broad participation and recognize this as a significant non-proliferation milestone.

The Co-Chairs congratulate the experts involved in decommissioning operations at the BN-350 reactor. Over more than twenty years, great efforts were made, step by step, to strengthen the non-proliferation regime. Joint Kazakhstan-United States work on sodium processing facility (SPF) modernization at the BN-350 reactor was successfully concluded in August 2017.

The Co-Chairs welcome the organization of an expert meeting on Nuclear Security and Nuclear Energy in the format of a videoconference in the first quarter of 2018, to develop new initiatives to expand cooperation in the field of nuclear energy and the use of nuclear technologies.

The Co-Chairs acknowledged that both DOE and EM welcome exploring nuclear energy cooperation initiatives that serve the best interests of the Kazakhstan-United States energy partnership. Both DOE and EM are reviewing the possibility of attracting Kazakhstani investments in the United States and DOE would welcome exploring nuclear industry joint-projects between U.S. and Kazakhstani business entities. In the area of electricity delivery, the Co-Chairs noted a productive study tour for Kazakhstani specialists to the United States to enhance knowledge about the U.S. model of electricity delivery, tariffs, and management and lessons learned from the United States' experience to date in integrating renewable energy into the electric grid. The Co-Chairs commend the specialists from both countries for their exchange of ideas during the tour, which included U.S. regulators, grid operators, and technical specialists.

With regard to carbon capture, utilization and storage (CCUS), the Co-Chairs noted a successful training course hosted by the U.S. National Energy Technology Laboratory for Kazakhstani specialists in the area of carbon capture utilization and storage. Joint work in CCUS included dialogue on best practices and discussions on Kazakhstan's participation in the Carbon Sequestration Leadership Forum.

The Co-Chairs note the importance of the theme of the international exhibition EXPO 2017 "Energy of the Future" and underscore the importance of expanding the market of commercial nuclear reactors through the introduction of small modular reactors.

The Co-Chairs expressed interest in further discussions on clean energy cooperation. The Co-Chairs note the importance of timely and effective realization of joint projects, including projects in oil and gas.

The Co-Chairs also welcome and support the strengthening of regional energy cooperation in Central Asia and implementation of joint projects within the C5+1 initiative.

The parties plan to hold the next meeting of the Co-Chairs of the Strategic Energy Dialogue in Washington (USA) in 2018. The exact date of the meeting will be coordinated through diplomatic channels.

Signed in Astana, Republic of Kazakhstan, on August 28, 2017. The participants intend to sign a duplicate copy of the Joint Statement in Russian within sixty (60) days.

For the Republic of Kazakhstan:

Kanat Bozumbayev

For the United States of America: