Subject: Letter of Development Policy for the First Programmatic Energy and Water Sector Reforms Development Policy Loan

Dear Dr. Kim,

Over the past few years, Jordan has suffered two successive external shocks of significant importance: the 2008 global financial crisis and the ensuing global recession and regional turbulences that started in early 2011 with the onset of the Arab Spring events. The impact of these shocks was exacerbated in Jordan by the disruption in critical natural gas supplies from Egypt and spillovers from the neighboring Syrian conflict, including hosting about 1.4 million Syrians in the Country. As a result, the Jordanian economy experienced wider fiscal deficits and loss of reserves in addition to persistent sluggish growth rates. Domestic revenues shrank from an average of 27 percent of GDP during 2000-2008 to about 24 percent of GDP in 2014. Government expenditures increased to 38 percent of GDP in 2014 to accommodate social demands through larger transfers and wage increases. This has resulted in an accumulation of a large net public debt, amounting about 81 percent of GDP as of end of December 2014, whose servicing exacerbates fiscal pressures. In particular, interruptions of Egyptian natural gas supply caused the National Electric Power Company (NEPCO) to run deficits equivalent to 4-5 percent of GDP per year since 2011 and accumulation of a total debt of about JD 4.7 billion by December 2014, the debt servicing of which has until recently been managed directly by the budget. Further budgetary losses equivalent to 1.2 percent of GDP were added in 2013 by the water sector. The water sector is not able to recover its operation and maintenance costs due to the increased dependence on high-cost (and increasingly more energy-intensive) technologies to make water available.

Consequently, the Government of Jordan has embarked on a major program aimed at strengthening its macroeconomic framework supported by a three-year International Monetary Fund (IMF) Stand-By-Arrangement (SBA) that started in August 2012 and will successfully conclude in August 2015. The IMF SBA supported a large fiscal consolidation program and a bold and progressive elimination in November 2012 of retail petroleum product subsidies, including reinstating a monthly automatic price adjustment mechanism to prevent recurrence of petroleum subsidy. Furthermore, a medium-term Electricity/Energy Strategy was announced in October 2013, of which electricity tariff increases and energy sources diversification are key elements. The first electricity tariff increases

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occurred in August 2013, with subsequent increases every January until cost recovery at NEPCO is attained by end 2017. A new Liquified Natural Gas (LNG) terminal in Aqaba Port on the Red Sea started operation in early July 2015. The completion of renewable energy projects will further enable Jordan to reduce the cost of supply by reducing dependency on expensive fuels for power generation. The Government is also moving forward with the implementation of the Reinforcement of the Jordanian Electric Transmission Lines project (Green Corridor), including the construction of two new transmission lines, an electricity substation and the extension of two existing substations in order to integrate more renewable generation capacity and improve reliability of supply in Jordan to be implemented by NEPCO. In addition, the Government is implementing a Structural Benchmark Plan in the Water Sector, which aims to achieve operation and maintenance cost recovery in the water sector by 2017 through a combination of revenue increases and efficiency gains that will enable cost reductions.

The IMF SBA program has provided external financing, motivated structural reforms and addressed fiscal pressures caused by the energy and water sectors. As a result, the GDP growth rates increased from 2.7 percent in 2012 to 3.1 percent in 2014. However, because of the volatility and unpredictability of the regional crisis and the significant downside fiscal and development impact that the large influx of Syrian refugees is imposing on Jordan’s economy, the Government believes it is critical to implement broader policy and structural reforms to sustain economic growth, despite the temporary relief arising from the fall of crude oil prices. In particular, expansion of medium-term reforms in the electricity and water sectors will be necessary for addressing public finance weaknesses and will help to structurally improve Jordan’s macroeconomic framework. The reform programs in the energy and water sectors will be supported by the Programmatic Energy and Water Sectors Reform Development Policy Loan (DPL), for which the Government requested the World Bank support through an official letter dated 2 December 2014.

The Government’s reform program supported by the DPL will be structured around two key policy areas: (a) improving the financial viability of the electricity and water sectors; and (b) increasing efficiency gains in the energy and water sectors. Key measures of the reform program focus on restoring the financial viability of sector utilities, in particular the National Electric Power Company (NEPCO); the backbone of the electricity sector, and on improving the operational performance of the energy and water sectors through efficiency gains. These policy areas are aligned with the Government’s objectives and support achievement of the medium-term targets of the recently launched ‘Jordan 2025: A National Vision and Strategy’, which seeks to achieve self-reliance and stability based on financial sustainability, enhanced productivity, increased competitiveness, and the gradual removal of indiscriminate subsidies. Reducing the fiscal burden of the electricity and water subsidies would also provide the Government with the fiscal space to invest in pro-poor programs and more inclusive and productive economic and social sectors to improve the standard of living of the population in Jordan.
The Government has already taken concrete steps towards implementation of the policy program supported under this Programmatic DPL, including implementation of the prior actions required for the presentation of the first DPL for approval by the World Bank's Board of Executive Directors, as follows.

1. Improving the Financial Viability of the Electricity and Water Sectors

**Achieving Electricity Tariff Cost Recovery**: The increased cost of electricity due to the sharp increase in imported fuel costs following the disruption of Egyptian natural gas supply to Jordan incurred significant financial losses for NEPCO. The Government is implementing its five-year tariff adjustment plan (2013–2017), and as a consequence of electricity tariff increases of up to 15 percent each in 2013 and 2014, NEPCO's revenues increased by US$670 million. On 22 February 2015, the Cabinet of Ministers approved another tariff increase of up to 7.5 percent, implemented effective 16 February 2015 to 31 December 2015. The Government is committed to continue implementation of future electricity tariff adjustments in 2016 and 2017 in accordance with the cost recovery objectives of its five year tariff adjustment plan. Furthermore, the Government supports efforts by the Energy and Minerals Regulatory Commission (EMRC) to develop and approve an adequate tariff pricing mechanism to improve the electricity tariff structure and sustain cost recovery in the electricity sector after 2017, to maintain the sector's financial viability and strengthen its resilience in coping with any future external fuel price shocks.

**Resolving NEPCO's Debt**: NEPCO's accumulated debt had increased to JD4.7 billion by December 2014. The Government's priority has been to focus on restoring the cost recovery of NEPCO by 2017 through a combination of tariff increases and fuel and generation diversification. While the Government has until recently provided guarantees for NEPCO's outstanding debt, the Government also acknowledges that the financial viability of NEPCO needs to be restored to enable the company to maintain its assets and invest in the expansion of its transmission network. Therefore, on 14 July 2015 the Cabinet of Ministers issued a circular tasking the Inter-Ministerial Debt Committee with developing a multi-year Debt Management Plan for NEPCO, which, when prepared, will be subsequently approved by the Cabinet of Ministers for implementation to ensure that the plan debt reduction targets for 2017 are achieved.

**Enhancing Cost Recovery in the Water Sector**: The water sector puts a significant burden on the budget due to the combination of the high cost of supplying water resulting from Jordan's extreme water scarcity and low revenues from the various water users, especially from agricultural and domestic water users who subsequently receive large water subsidies. The
increase in electricity prices (to put NEPCO on a path of cost recovery) and the large influx of Syrian
refugees have increased the urgency to improve the financial viability of the water sector. The
Government is implementing a Structural Benchmark Government Action Plan to reduce
water losses that aims to improve revenues through a combination of water tariff increases,
increases in connection charges, and improved billing and collection practices while
simultaneously increasing the efficiency of supplying water. The Cabinet of Ministers
approved on 14 September 2014 implementation of a tariff increase for Production
Wells from 100 fils per cubic meter to 250 fils per cubic meter. The Government is
committed to continue the implementation of future water tariff adjustments in 2015 and
beyond in accordance with the Structural Benchmark Plan to improve cost recovery, to
support the sector's financial viability and strengthen its resiliency in coping with any future
external shocks.

2. Increasing Efficiency Gains in the Energy and Water Sectors

In parallel with tariff adjustments, the Government is implementing reform measures to
increase efficiency gains both in the supply and demand for energy and water. These measures will
improve the operational and financial performance of the energy and water sectors and lay the
groundwork for the implementation of medium term efficiency gains to promote the long term
sustainability of these sectors.

Diversification to Cleaner Fuel Supply for Power Generation and Scaling Up Development of Renewable Energy
Resources and Energy Efficiency: The Government's program for the diversification of fuel supply
sources and power generation aims to improve security of the electricity supply and reduce the
cost of electricity generation and hence moderate the level of tariff increases required otherwise to
reach cost recovery in the electricity sector. In particular, the Government has completed the
development of an LNG terminal in Aqaba Port, which started operation in early July 2015.
NEPCO will be responsible for the overall management and operation of the LNG terminal and
has already signed LNG contracts of up to 250 million standard cubic feet per day. Natural gas
supply to power generation will continue to present an economically and environmentally
attractive option for Jordan, and the Government and NEPCO realize that the signed LNG
supply contracts and envisaged LNG purchase from spot markets are the first step of a long-term
fuel supply strategy to restore the share of natural gas supply to power generation to more than 70
percent in 2017. To meet the objective, NEPCO is developing its institutional capacity and
has established a team of 18 staff responsible for the planning and operations of LNG
supply for power generation, and is undertaking a comprehensive training program for its
staff on LNG market and supply.
The Government also recognizes that the development of renewable energy is a key priority for diversification of its energy mix from domestic resources. The Renewable Energy and Energy Efficiency (REEE) Law was adopted in 2012, creating a regulatory and financial framework for renewable energy and energy efficiency and mandating the establishment of the Jordan Renewable Energy and Energy Efficiency Fund (JREEF). A comprehensive regulatory and pricing framework, including indicative pricing schemes for various renewable technologies, grid interconnection, and institutional development was established by the Government, which has enabled the development of a renewable power market and projects in Jordan. To that end, the Ministry of Energy and Mineral Resources has been developing new renewable energy projects and is on track to ensure that renewable energy makes up 10 percent of the power generation mix in 2017. NEPCO is also strengthening its institutional capacity in renewable energy operations and will implement, in its Control and Dispatch Center, operating procedures for integrating the new renewable power resources into the transmission grid. The Government of Jordan also continues to improve the renewable energy regulatory framework and has approved new bylaws for developing renewable energy by direct proposals on 3 May 2015. The Ministry of Energy and Mineral Resources will follow up with issuing new regulations, required by the bylaws, to streamline the investment procedures for direct proposals and will establish a Public Data Room for Renewable Energy Development to improve transparency and increase investors and public confidence in future renewable energy development in Jordan.

Furthermore, the Ministry of Energy and Mineral Resources established the JREEF. The establishment of the JREEF is aimed to raise awareness of potential energy savings among industry, commercial, and household consumers; provide technical and financial support to overcome existing investment barriers; and promote private investments for energy efficiency and renewable energy projects. The Cabinet of Ministers approved the bylaws for the JREEF on 3 May 2015. These bylaws were developed through consultation with energy sector stakeholders and are designed to build the credibility of the JREEF by ensuring the effective and transparent management of the fund. To operationalize the JREEF, its Board of Directors approved on 15 February 2015 the Business Plan for the JREEF operation in 2015 and put in place staff, including the JREEF executive director, project manager, and communication manager. The JREEF is also in the process of setting up financial windows to provide financial support to targeted energy efficiency projects currently under consideration by the JREEF.

**Development of Electricity Distribution Networks Loss Reduction Program:** The Government’s program to improve overall operational efficiency in the electricity sector includes reducing losses in the distribution networks. To that end, the EMRC and the distribution companies are jointly preparing a study that aims to develop accurate baselines and targets for reducing technical and commercial losses in the distribution networks, identify areas in the networks with high losses, and recommend improvement measures to reduce network losses. The study is planned to be...
completed in late 2015 and would provide the technical basis for updating and implementing the Distribution Network Loss Reduction Program, with specific loss reduction targets agreed upon between the EMRC and the Electricity Distribution Companies.

**Scaling Up of Energy Efficiency and Renewable Energy in the Water Sector:** The dismantling of electricity subsidies will have a significant impact on the financial viability of the water sector. Due to its water-scarce environment and with water resources being located at considerable distance from population agglomerations, water needs to increasingly be distributed and often pumped over large distances and lifted to overcome altitude differences. As a result, about 14 percent of the electricity consumption in the country is currently in the water sector, making the sector the largest user of electricity in the country. Hence, the Government recognizes that more efficient electricity consumption is essential to improve the operational and financial performance of the water sector. To generate energy savings in the water sector, the Cabinet of Ministers approved on 2 June 2015 an Energy Efficiency and Renewable Energy Policy for the water sector, prepared by the Ministry of Water and Irrigation. As part of the policy, the Ministry developed an action plan, which will be implemented over the next few years to ensure that the sector will be able to ensure energy savings.

**Optimizing Allocation of Water Resources:** The per capita available renewable water resources are dropping steadily in the country due to population growth. In 2013, the surface water annual yield was about 362 million cubic meter, which is about 40 percent of the total water annual yield. As a result, the country still depends disproportionately on groundwater resources, causing that resource to be over-exploited. The Government is developing policies to achieve a more efficient use of the existing surface water resources and increase reliance on treated wastewater. The Government is also implementing measures to use fresh water for the activities that generates the highest value and aims to reduce the volume of fresh water to the agricultural sector in the long run by increasingly substituting fresh water for treated wastewater to supply farmers and industry. At the same time, the Government seeks to increase the cost of groundwater as a tool to reduce over-pumping. This process was initiated with the increase of groundwater tariffs according to the Structural Benchmark Plan. As a first step in this process of optimizing its water resources allocation, the Minister of Water and Irrigation has approved a Surface Water Utilization policy on 8 July 2015, which aims, among others, to use surface water resources more efficiently through a set of measures to increase water harvesting, land use measures, and improvements in storm water management.

In conclusion, we would like to express again our strong commitment to the energy and water sectors reform programs outlined in this letter and whose execution in the difficult regional context will require significant mobilization of resources from our development partners, including the World
Bank. For this purpose, the Government of Jordan requests the World Bank’s support for our program, as a critical partner in the implementation of Jordan’s development agenda.

We, therefore, look forward to our continued collaboration in developing the energy and water sectors in Jordan.

Please accept my high esteem and consideration.

Sincerely,

Imad Najib Fakhoury
Minister of Planning and International Cooperation

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