Ex-ante Evaluation

1. Name of the Project

Country: The Republic of Iraq
Project: Electricity Sector Reconstruction Project in Kurdistan Region
(Loan Agreement: June 11, 2008; Loan Amount: 14,747 million yen; Borrower: The Government of the Republic of Iraq)

2. Necessity and Relevance of JBIC's Assistance

In the aftermath of many years of economic sanctions and conflicts, which have left deep scars in its economy and society, Iraq has begun to move toward reconstruction with technical and financial assistance from the international community.

In the Iraqi National Development Strategy (adopted in June 2005), despite the fact that the electricity sector is the foundation of all economic and social activities, due to lack of new investment and insufficient operation and maintenance, as well as looting and so on, over the years, functional capacity in all four components of the power sector – power generation, power transmission, substations and distribution – has declined significantly. Therefore rehabilitation of the electricity sector is one of the most important issues facing Iraq as it strives to reconstruct itself.

The Kurdistan region (population of about 4.4 million), consisting of the three northern governorates of Duhok, Erbil and Sulaimaniah, receives electricity supply from two hydropower plants in the region and the national power grid through 132 kV, 33 kV and 11 kV power distribution and transmission networks. However, due to lack of new investment and insufficient operation and maintenance caused by the chronic budget shortfall, electricity supply to the region has gradually decreased from an average of 700 megawatts (MW) in 1991 to 400 MW in 2006. The latter supply meets only 40% of the power demand for household use, and as a result, power outages last more than 12 hours a day on average. Power supply thus remains unreliable and unstable for civic life and basic infrastructure facilities such as hospitals. While other donors are scheduled to provide their assistance mainly for power generation/transmission systems in the Kurdistan region, there still has been lack of support for substations and distribution facilities. Given that significant decline in the capacity of substations and distribution facilities is one of the factors responsible for the deteriorating electricity supply in the region, in addition to the power generation/transmission systems, there is an urgent need to rehabilitate and develop the substations and distribution facilities.

In the International Conference on Reconstruction in Iraq held in Madrid in October 2003, besides grand aid amounting to $1.5 billion for urgent reconstruction of Iraq, the Government of Japan pledged a total of $3.5 billion in yen loans to support medium-term reconstruction after 2005. Additionally, in JBIC's Medium-Term Strategy for Overseas Economic Cooperation Operations (April 2005), one of the sectors is the assistance it provides for efforts being made to solve global problems and build peace. Consequently, the support for Iraq, where social instability continues even after major conflicts have ceased, is consistent with JBIC's assistance policy.

JBIC's support for the project is therefore highly necessary and relevant.

3. Project Objectives

This project aims to stabilize the electricity supply in the Kurdistan region (governorates of Duhok, Erbil and Sulaimaniah) by providing equipment and materials for constructing substations and distributing equipment and other materials; thereby contributing to the economic and social reconstruction of the Kurdistan region.

4. Project Description

(1) Target Area

Kurdistan region (Duhok, Erbil and Sulaimaniah)

(2) Project Outline

(a) Provision of equipment and materials for the transformation and distribution of electrical energy, etc.

(b) Consulting services

(3) Total Project Cost/Loan Amount

19,861 million yen (Yen Loan Amount: 14,747 million yen)

(4) Schedule

September 2008–January 2014 (65 months). Project completion is defined as when equipment and materials are supplied, etc.

(5) Implementation Structure

(a) Borrower: The Government of the Republic of Iraq

(b) Executing Agency: Regional Ministry of Electricity in Kurdistan (RMEK)

(c) Operation and Maintenance System: Same as (b)

(6) Environmental and Social Consideration

(a) Environmental Effects/Land Acquisition and Resident Relocation

(i) Category: B

(ii) Reason for Categorization

This project is not likely to have significant adverse impact on the environment due to the fact that the project sector and project characteristics are not likely to exert impact and the project is not located in a sensitive area under the "Japan Bank for International Cooperation Guidelines for Confirmation of Environmental and Social Consideration" (established in April 2002). Thus, this project is classified as Category B.

(iii) Environmental Permit

The Environmental Impact Assessment (EIA) report concerning this project is not required under the domestic laws of Iraq.

(iv) Anti-Pollution Measures

This project will be implemented mainly on the premises of existing substations, so no significant impact of the project is asssumed

(v) Natural Environment

This project will be implemented mainly on the premises of existing substations, so adverse

impact on the natural environment is assumed to be minimal.

(vi) Social Environment

This project will be implemented mainly on the premises of existing substations, so land acquisition will be kept at a minimum and no resident relocation will be rquired.

(vii) Other/Monitoring

The project will be monitored by the executing agency on the basis of an environment monitoring plan and the like that will be prepared with assistance provided as part of the project's consulting services.

(b) Promotion of Poverty Reduction

None

(c) Promotion of Social Development (e.g. Gender Perspective, Measure for Infectious Diseases Including AIDS, Participatory Development, Consideration for the Handicapped, etc)

None

(7) Other Important Issues

Synergetic effects may be expected with power generation/transmission systems that are being implemented or are scheduled to be implemented by other donors and the like in the Kurdistan region.

5. Outcome Targets

(1) Evaluation Indicators (Operation and Effect Indicator)

In this project, after the Loan Agreement is signed, indicators for determining the effectiveness of the project will be adopted as much as possible. After that, a baseline survey limited to the target areas will be implemented. The project's standard values and target values will be established based on the survey results.

(2) Number of beneficiaries

Although it is not possible to determine the number of people who will benefit directly from this project, the approximately 4.4 million people living in the target areas – the Kurdistan region in northern Iraq consisting of the three governorates – will benefit indirectly from the project.

(3) Internal Rate of Return (Financial and Economic Internal Rate of Return)

In this project, after the Loan Agreement is signed, utmost effort will be made to calculate the Internal Rate of Return so that it will be possible to determine the effectiveness of the project to the greatest extent possible.

6. External Risk Factors

Deteriorating public safety, etc.

7. Lessons Learned from Findings of Similar Projects Undertaken in the Past

A lesson learned from the ex-post evaluations of similar projects in the past is that establishment of an appropriate operation and maintenance system is crucial for smooth operation and maintenance of a project after it is launched. The Ministry of Electricity, the agency responsible for the operation and maintenance of this project, is committed to paying continued close attention to the establishment of an effective operation and maintenance system by including in the project thorough training in

operation and maintenance, and so on.

8. Plans for Future Evaluation

(1) Indicators for Future Evaluation

Indicators that show the water supply's rate of stability

(2) Timing of Next Evaluation

2 years after project completion