INTEGRATED SAFEGUARDS DATASHEET
APPRAISAL STAGE

I. Basic Information

Date prepared/updated: 11/06/2006 Report No.: AC2542

1. Basic Project Data

Country: Egypt, Arab Republic of	Project ID: P050567
Project Name: SOLAR THERMAL HYBRID PROJECT	
Task Team Leader: Anna Maria Bjerde	
GEF Focal Area: Climate change	Global Supplemental ID:
Estimated Appraisal Date: October 30, 2006	Estimated Board Date: February 15, 2007
Managing Unit: MNSIF	Lending Instrument: Specific Investment Loan
Sector: Renewable energy (50%);Power (50%)	
Theme: Other environment and natural resources management (P);Infrastructure services for private sector development (S)	
IBRD Amount (US$m.): 0.00 IDA Amount (US$m.): 0.00 GEF Amount (US$m.): 50.00 PCF Amount (US$m.): 0.00 Other financing amounts by source: BORROWER/RECIPIENT 59.12 JAPAN: JAPAN BANK FOR INTERNATIONAL COOPERATION (JBIC) 92.33 151.45	
Environmental Category: B - Partial Assessment	
Simplified Processing Simple [] Repeater []	
Is this project processed under OP 8.50 (Emergency Recovery) Yes [ ] No [X]	

2. Project Objectives

The primary project development objective is to increase the share of solar-based power in the Egyptian generation mix thereby contributing to the Government aim of diversifying power production.

The global development objective of the project is to reduce greenhouse gas emissions from anthropogenic sources by increasing the market share of low greenhouse gas emitting technologies.

3. Project Description

The project will finance the construction of an Integrated Solar Combined Cycle (ISCC) power plant. The plant will have a capacity of about 150MW, combining a conventional fossil fuel portion of about 120MW and an input from solar sources of about 30MW. The primary fuel for the conventional fossil fuel portion will be natural gas supplied at the site by Egyptian Natural Gas Holding Company.

The project will be implemented through the following components:

Component 1: The design, construction and operation of the proposed Integrated Solar Combined Cycle Plant, which includes:(a) the solar portion of the power plant, for which the contract will include engineering, procurement, construction, testing, commissioning and five years operation and maintenance (O&M); and (b) The Combined Cycle portion of the plant, which will include one contract for the EPC aspect of the power plant to be financed by JBIC, and another 5 year O&M contract to be financed by NREA.

Component 2: Comprises the Consulting Services to provide construction management services during project implementation.

Component 3: Comprises the implementation of the Environmental Management Plan (EMP) which mitigates the potential environmental and social impacts associated with the construction and operation of the power plant.

4. Project Location and salient physical characteristics relevant to the safeguard analysis

The project is located in Kureimat, about 95 km south of Cairo, on the eastern side of the river Nile.

5. Environmental and Social Safeguards Specialists

Mr Knut Opsal (MNSRE)
Ms Dahlia Lotayef (MNSRE)

6. Safeguard Policies Triggered	Yes	No
Environmental Assessment (OP/BP 4.01)	X	
Natural Habitats (OP/BP 4.04)		X
Forests (OP/BP 4.36)		X
Pest Management (OP 4.09)		X
Physical Cultural Resources (OP/BP 4.11)		X
Indigenous Peoples (OP/BP 4.10)		X
Involuntary Resettlement (OP/BP 4.12)		X
Safety of Dams (OP/BP 4.37)		X
Projects on International Waterways (OP/BP 7.50)		X
Projects in Disputed Areas (OP/BP 7.60)		X

II. Key Safeguard Policy Issues and Their Management

A. Summary of Key Safeguard Issues

1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts: There are no significant impacts anticipated. A comprehensive EIA following the EIA guidelines in OP 4.01 and under terms of reference cleared by the Bank has been carried

out. A draft EIA has been completed and disclosed in the InfoShop on September 14, 2006 and in-country disclosure has also taken place.

The EIA includes an assessment of air quality, aquatic environment, noise, flora and fauna, soils and hydrology, traffic and transport, socio-economic, archeological, natural disasters, solid waste management and occupational health and safety. The EIA also establishes a detailed environmental management and monitoring program to be followed by NREA and its contractors during plant construction and operation.

2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:
Assessment using physical and mathematical models revealed that no unacceptable indirect or long term impacts exist assuming proper mitigation and monitoring schemes indicated in the Environmental Management Plan are implemented.

There is no resettlement foreseen and no adverse social impacts are expected. The GEF component will ensure that the poor are not adversely affected, as the project will not impact on the current tariff levels in place.

3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.
Project Configuration (ISCC): Early discussion on how to implement GEF's Operational Policy 7 and the recent assessment of the World Bank/GEF Strategy for the Market Development of Concentrating Solar Thermal Power have raised the question of whether solar electricity generating systems with little fossil co-firing would have been a better configuration for the project rather than the ISCC configuration. The assessment recognizes that there may be an issue in terms of perception with an ISCC plant with a solar contribution of only 6%. However, the assessment also points out that a 30MW solar field in either configuration will still generate approximately the same amount of GWh/year of solar electricity and provide the same level of O&M experience, through having to maintain some 200,000 m2 of solar array. As such, given Egypt?s interest in developing alternative energy solutions to fossil fuel based ones, and recognizing that there is a significant non-technical lead time associated with any new project (permits, authorities, contract administration, etc.) regardless of project capacity, the ISCC choice helps to meet the Egypt?s energy goals, while simultaneously deploying a solar field, a field that could have been deemed too hard for the sake of a 25-30MW plant.

4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.
NREA has not had experience with Bank requirements. However, the construction and operation of recent wind farms are reported to have followed strict environmental discipline. NREA often collaborates and draws on assistance of the Environmental Management and Studies Department at the Egyptian Electricity Holding Company, which will assist NREA in the supervision of the implementation of the Environmental Management Plan, in addition to the international consultant being hired to provide construction management services to NREA. Overall, NREA with the assistance of

EEHC and the construction manager is believed to have the necessary capacity to carry out the task of EMP supervision.

5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people. Consultations with the affected people and the key stakeholders have taken place during the preparation of the EIA. These consultations took place after a first draft Environmental Assessment was available in late 2003/early 2004, and essentially took the form of focused group meetings. A wide range of stakeholders were consulted in the finalization process of the EIA, which included representatives from the Kureimat villages and district, members of Local and People's Councils in Kureimat, as well as the Egyptian Electricity Holding Company, the Egyptian General Authority for Shore Protection the Supreme Council of Antiquities among many others.

In addition, NREA is committed to maintaining an open dialogue with local authorities, industrial and commercial interests, as well as the local population during the plant's construction and operation.

B. Disclosure Requirements Date

Environmental Assessment/Audit/Management Plan/Other:	
Date of receipt by the Bank	07/10/2006
Date of "in-country" disclosure	06/20/2006
Date of submission to InfoShop	07/10/2006
For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors	

*** If the project triggers the Pest Management and/or Physical Cultural Resources, the respective issues are to be addressed and disclosed as part of the Environmental Assessment/Audit/or EMP.**

If in-country disclosure of any of the above documents is not expected, please explain why:

The Environmental Assessment has been disclosed in-country, at the following places: NREA premises and EEAA.

C. Compliance Monitoring Indicators at the Corporate Level (to be filled in when the ISDS is finalized by the project decision meeting)

OP/BP/GP 4.01 - Environment Assessment	
Does the project require a stand-alone EA (including EMP) report?	Yes
If yes, then did the Regional Environment Unit or Sector Manager (SM) review and approve the EA report?	Yes
Are the cost and the accountabilities for the EMP incorporated in the credit/loan?	No

The World Bank Policy on Disclosure of Information

Have relevant safeguard policies documents been sent to the World Bank's Infoshop?	Yes
Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?	Yes
All Safeguard Policies	
Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?	Yes
Have costs related to safeguard policy measures been included in the project cost?	Yes
Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?	Yes
Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?	Yes

D. Approvals

Signed and submitted by:	***Name***	***Date***
Task Team Leader:	Ms Anna Maria Bjerde	11/06/2006
Environmental Specialist:	Ms Dahlia Lotayef	
Social Development Specialist	Mr Knut Opsal	
Additional Environmental and/or Social Development Specialist(s):		
Approved by:		
Sector Manager:	Mr Jonathan D. Walters	
Comments: This project has been transferred to the TTL and therefore does not require clearance from the Regional Environmental and Safeguards Coordinator.		