

RISK ASSESSMENT AND RISK MANAGEMENT PLAN

Risk Description	Risk Assessment	Mitigation Measures or Risk Management Plan
<p>Cost and reliability of CSP Costs and reliability of CSP plants do not meet investors and policy makers' requirements.</p>	Medium	<p>The government is committed to CSP technology deployment by setting a target of 1 GW by 2015 and 3 GW by 2020.</p> <p>The government endorses the four first generation CSP projects for construction. All these projects are led by large SOEs.</p> <p>The CSP technology is on a cost-reduction trajectory, as CSP plants with GW capacities have set up in many countries and technology performance has improved.</p> <p>The project will procure reliable equipment from reputed manufacturers through international competitive bidding.</p>
<p>Quality assurance Poor performance of key equipment or contractors causing plant to operate at less than designed capacity</p>	Medium	<p>The experienced owner's engineer will assist in engineering design, tender document and bid evaluation, construction supervision, and test run to ensure quality of design and construction.</p> <p>The performance-based O&M contract will be implemented for the first two critical years of operation, to ensure long-term satisfactory performance of the project.</p>
<p>Solar resource The plant does not reach the projected electricity yield because of uncertainty over DNI.</p>	Medium	<p>The estimated DNI was rigorously reviewed during the due diligence process. Continuous assessment at the site by the implementing agency will improve the accuracy of hourly and daily data.</p>
<p>Project management Weak capacity of the executing agency and implementing agency</p>	Low	<p>CGN is a major SOE with extensive experience in large-scale renewable energy power plant management. CGN-SEDC has an impressive record of managing similar projects. Capacity training in procurement, disbursement, and safeguard compliance with ADB requirements is being carried out under the ongoing PPTA.^a</p>
Overall	Medium	

ADB = Asian Development Bank, CSP = concentrated solar thermal power, CGN = China General Nuclear Power Corporation, CGN-SEDC = CGN Solar Energy Development Co. Ltd., DNI = direct normal irradiation, GW = gigawatt, O&M = operation and maintenance, PPTA = project preparatory technical assistance, PRC = People's Republic of China, SOE = state-owned enterprise.

^a ADB. 2012. *Technical Assistance to the People's Republic of China for Preparing the Qinghai Delingha Concentrated Solar Thermal Plant Project*. Manila.

Source: Asian Development Bank.