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USAID ENERGY POLICY PROGRAM

SCOPE OF WORK

TECHNICAL ASSISTANCE ON REA OF
TRANSMISSION SYSTEM FOR WIND POWER
PROJECTS AND PATRIND HYDRO POWER PROJECT

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Scope of Work

Technical Assistance on Rapid Environmental Analysis (REA) of Transmission System for Wind Power Projects and Patrind Hydro Power Project

1.0 Background

Pakistan is facing acute electricity shortages and requires the addition of new power sources on a fast track basis. Pakistan is endowed with abundant renewable resources such as wind, hydro, solar and biomass. Tapping this vast potential of renewable energy through private sector investment is of critical urgency to support peak demand and diversify Pakistan's skewed fuel mix, hence ensuring energy security.

The National Transmission and Dispatch Company (NTDC) is responsible for the planning, construction, operation and maintenance of Pakistan's national electric power grid. As per Pakistan's Power Policy 2002 and Pakistan's Renewable Energy Policy 2006 the provision of power transmission systems is the responsibility of the power purchaser (NTDC). An extensive transmission network consisting of 500 kV and 220 kV transmission lines and substations have been built by NTDC for the dispersal of power generated by Generation Companies (GENCOs), Water & Power Development Authority (WAPDA) & Independent Power Producers (IPPs) to the respective Distribution Companies (DISCOs). Currently NTDC is under severe funding constraints and is unable to construct the power transmission systems needed to connect several planned power projects under private sector development to the national electric power grid. Thus, NTDC is seeking USAID support to fund these power transmission systems.

2.0 Project Brief

2.1 Transmission System for Wind Projects

The Government of Pakistan is presently developing the Gharo-Keti Bandar wind corridor that stretches 60 km along the Arabian Sea coast of Sindh Province to more than 170 km inland. NTDC has requested that USAID fund the transmission lines for wind power projects to connect 730 MW of wind power projects (including several Overseas Private Investment Corporation (OPIC)-supported projects) with a total estimated cost of \$46 million. USAID is planning to provide funding in the amount of \$43 million (FY 13) for these transmission lines. Two projects of 50MW each are operational and another three of the same capacity are under construction. In addition to these, there are around 15 projects at different stages of development out of which five are being considered by OPIC for financing. OPIC has closed the deal with the Sapphire Wind power project and is in the process of negotiating deals with the remaining four and is subject to the transmission offtake commitment by NTDC¹.

¹ Each project is required to carry out the project specific EIAs as part of feasibility study to be approved by respective provincial EPA. (links to one such EIA for the project in Jhimpir and EIAs for wind projects done in other countries is provided in the reference section)

NTDC has developed a transmission expansion scheme² through a planning process involving grid load flow studies to provide reliable grid connections to wind projects being developed in the Sindh Wind Corridor. The grid connection to the existing wind projects was provided using existing transmission networks whereas a new 132 KV line is being constructed by NTDC and an existing 132 KV line is being rehabilitated by Hyderabad Electric Supply Company (HESCO) to connect the under construction projects to be commissioned by the end of year 2014.

Another fifteen wind projects with the cumulative capacity of 730 MW are at different stages of development and are expected to be commissioned by the mid of 2016. NTDC has requested USAID funding for the transmission system for these projects which include construction of (a) a new 220/132 KV grid station at Jhimpir, (b) 70 km of 220 KV Double circuit (D/C) transmission line to connect this new grid station to the existing 220 KV Tando Mohammad Khan grid station, (c) an 82 km long, 132 kV D/C transmission line from Jhimpir New grid station to the existing 132 kV TM Khan grid station, and (d) an extension to the existing 132 KV TM Khan grid station, 220 KV TM Khan grid station and 500 KV Jamshoro grid station. The total estimated cost of the proposed transmission system is \$ 43 million. The Performa Contracting (PC-1) for the project has been approved by Executive Committee of National Economic Council (ECNEC) during its meeting held on 4 July, 2014.

Transmission System for Patrind Hydro Power Project: The 147 MW Patrind run-of-river hydro project is being developed by Star Hydro Power Limited as an Independent Power Producer (IPP) under the Government of Pakistan's Policy for Power Generation Projects and is the first Clean Development Mechanism registered project of Pakistan. This project will generate on average of 632.6 GWh of clean electricity annually at a low cost, thus reducing the overall rate of power generation. The project will generate electricity by using indigenous water resources, and the tariff for electricity supplied will be lower than that for plants that use imported fuel. The project will also save greenhouse gas emissions in the amount of 269,278 tons of carbon dioxide per year³. This generation facility is to be integrated into the national grid and is expected to start commercial operation by early 2017. The nearest available 132 kV transmission networks are in Mansehra, Abbottabad and Muzaffarabad, and are the best choices for interconnection with the northern area transmission grid⁴.

NTDC has planned the interconnection scheme for dispersal of power from Patrind Hydropower Project in two phases. Phase I consists of a 45 km, 132 kV Transmission line from Patrind to the Mansehra grid station with 10 kms in/out at the Balakot grid station to be commissioned by the year 2016. Phase II, which is planned to be implemented in 2018, consists of an in/out from the 132 kV Patrind to Mansehra Transmission line at the Muzaffarabad grid station, proposed for commissioning in 2018. NTDC has requested USAID financing for the Transmission line project to be implemented under Phase I. The estimated cost for Phase I is \$7.63 million. The implementation time for Phase I is two years. The PC-1 for the project is presently with Planning Commission for approval.

3.0 Evaluation of Project Issues with respect to Environmental Impact Potential

All such transmission projects are expected to cause potential environmental and social impacts mostly during design and construction phase and limited during operational phase.

² Final report on "Grid integration of wind power projects with NTDC/HESCO networks

³ Clean Development Mechanism Project Design Document Version 3 (link provided in reference section)

⁴ EIA for the Patrind hydro project was done by ADB (link provided in the reference section)

Due consideration on route selection and study of alternatives at design stage is imperative. The construction stage has potential negative impacts in the form of dust, smoke and noise on account of employment of vehicles, machinery and equipment. The generation of construction waste, solid waste and oil spills/seepage have negative impacts on land and air resources. Further, the stringing process may involve traffic congestion.

Land required for the construction of grid stations and right of way (ROW) required for the construction of transmission lines are normally acquired from the private landowners for which they have to be appropriately compensated for the loss of crops/assets and livelihood in accordance with World Bank OP 4.12. Private and forest owned trees are removed which also require compensation. The project operation phase may cause issues such as clearance of ROW, movement of vehicles for maintenance and repairing of transmission line, interference in birds flight paths, electromagnetic waves, etc.

Some of the positive impacts of such projects are a) significant improvement in reliability and stability of electric supply system; b) improvement in voltage profile; c) less dependence on fossil fuel power plants; d) reduction in load shedding, and; e) insignificant environmental damage to local land, water and biological resources.

However, NTDC states that it endeavors to mitigate all possible environmental and social hazards during the construction of the project. NTDC plans to start the work on the project in a manner so that the impact is minimal on natural landscape, forests, crops, wildlife, livestock, both private and public buildings, archaeological centers and buildings of historical significance. NTDC plans to have effective coordination with the concerned local authorities to ensure that the route of the new transmission lines has minimum environmental impact on ecosystems as well as urban and rural areas. NTDC plans to use construction equipment having acceptable noise limits and follow adequate safety standards to minimize hazards to human life and property. NTDC's design and protective specifications provide reliable and safety by specifying suitable clearances for transmission lines. NTDC also plans to adopt proper occupational health safety practices in the installation and maintenance of the project facilities.

4.0 Objectives of Conducting Rapid Environmental Assessment (REA)

This REA is being conducted in accordance with section (5.3) of the Initial Environmental Examination (IEE) (Tracking #: OAPA-14-Jun-Pak-0024 – copy attached) in order to determine potential adverse environmental and social impacts during design & planning, construction and operation & maintenance phases of the transmission line projects and enlighten the Environmental Assessment (EA) process.

5.0 Period of Performance

In the above context, USAID through its contractor, Advanced Engineering Associates International (AEAI), is seeking quick assistance from local engineering/environmental firms to carry out a Rapid Environmental Assessment (REA) to determine the environmental and social compliance issues of the transmission projects.

The duration of the assignment is 30-45 Calendar Days (1-1.5 months) from the signing of the Contract / Purchase Order. The anticipated start date is the first week of November 2014. Contractor staff is authorized to work a six-day work week.

6.0 Specific Technical Requirements:

The Contractor shall undertake the following:

- Complete review of the PC-1s as revised and/or amended, feasibility studies, technical designs, environmental impact assessment reports and other relevant project documents. Collect secondary data from relevant sources to compare with the information available in current project documents.
- Review of the projects, its objectives, and a statement of economic and social benefits.
- Review of the requirements of the IEE (Tracking #: OAPA-14-Jun-Pak-0024) and 22 CFR 216 as well as identification of new significant environmental effects detected during the Rapid Assessment.
- Review of the safety requirements for the project including worker operational health and safety, and other provisions related to safety.
- Site / Field visits along proposed routes for all the stated requirements, meetings with stakeholders, collection of environmental and social data, and other relevant documents from NTDC.
- Review project routing/design impacts and identify any additional environmental and social impacts associated with project siting/design.
- Analyze alternative routes in view of potential sensitive environmental and social receptors as well as geology, topography etc.
- Carry out an environmental and social review/survey to verify environmental and social compliance issues.
- Examine details of the security situation and identification of local community leaders who could serve as contact points for ensuring security arrangements.
- Describe the areas as they currently exist with the ongoing construction of transmission lines projects. This task will require onsite assessment in the field and should cover different areas impacting the environment such as physical, biological, climate, geology and socio-economic; including any issues related to resettlement and land acquisition, cultural heritage, indigenous people, informal religious groups etc.
- Review of all available Environmental Impact Assessments (EIAs)/Environmental Assessments (EAs), Environmental Mitigation & Monitoring Plans (EMMPs), and other environmental documents, including compliance and performance monitoring reports, prepared and approved for other similar projects⁵ and conduct an independent rapid environmental due diligence analysis to determine:
 - “Notion of significance” used or to be used.
 - The main environmental and social effects of the projects, adverse and beneficial, both in the project area and in the area of influence and the timescale of the impacts, the defined mitigation and monitoring measures and compliance.
 - Environmental mitigations and monitoring required and the inspection and reporting already done to determine compliance with existing requirements established in the approved EIAs and signed contracts.

⁵ links for some projects are provided in the reference section

- Evaluating understanding of environmental mitigation and monitoring requirements by the project implementation and construction staff.
- Evaluation of existing environmental and social problems associated with the development of the transmission line projects that should be resolved because they are resulting in adverse environmental and social impacts.
- The significance, size and extent of the impacts, both adverse and beneficial, (the effectiveness of the mitigation measures should be based as much as possible on quantitative data rather than qualitative assessments).
- Any potential impact on human health, social fabric of communities, etc.
- The impact on natural habitats, any rare species of flora and fauna in the area, with particular attention paid to bird and bat flyways.
- Appropriateness of construction and operation practices, on-going supervision as well as implementation of environmental mitigation and monitoring measures and contractor's capabilities.
- The significance of existing and potential adverse environmental and social impacts due to construction and operation of the transmission line project and associated infrastructure, and formulate scope for subsequent EA if warranted based on the significance of environmental and social impacts in order to prepare an Environmental Monitoring and Mitigation Plan (EMMP) for each project.
- Based on above, prepare a summary for each project of the environmental and social issues and positive or negative impacts for the scope of activities under both projects in their area of influence.
- Conduct an independent social assessment to determine:
 - Those groups that will benefit and those that will be left disadvantaged by the project, with a particular focus on women.
 - Identify any pending resettlement / land-take / legal claims / compensation issues.
- Review and report the on-going compliance with the environmental monitoring requirements of the existing regulations.
- Identify further environmental actions (such as a Scoping Study or EA) that may be necessary in order to determine project impact and viability.
- Review the comments of USAID Environmental Officers and address all concerns.

6.0 Deliverables

The Contractor shall produce and submit the following:

- 6.1 Within ten days after signing the Purchase Order, the contractor will be required to submit an inception report including work plan. The inception report shall include but not limited to provision of detailed explanation of the available relevant environmental reports, literature, methodology and tools to be used, and findings. The work plan section shall include but not be limited to provision of field visits' schedule for all the stated requirements, meetings with stakeholders, collection of environmental and social data, desk analysis and submission of draft and final reports. This inception report including the Work Plan shall be written in a range of 15-20 pages.
- 6.2 Biweekly reports and progress briefing that provide detailed explanation of the work progress against the approved work plan, issues and corrective measures. The report shall be organized separately by projects (Transmission System for Wind Projects and

Transmission System for Patrind Project), and where applicable, include photos of activities. The biweekly report shall be in the range of 8-12 pages.

6.3 Draft REA Report for Transmission System for Wind Projects including Scope of Work (SOW) for EA if warranted (Two hard and two soft copies on CD). The REA report, except annexures, shall not exceed 100 pages.

6.4 Draft REA Report for Transmission System for Patrind Project including SOW for EA if warranted (Two hard and two soft copies on CD). The REA report, except annexures, shall not exceed 100 pages.

6.5 Final Reports (two separate reports) of REA for: 1) Transmission System for Wind Projects and 2) Transmission System for Patrind Project: The reports (two hard copies and a soft copy on CD for each) should include at a minimum the following:

1. Executive Summary including findings and recommendations
2. List of Acronyms
3. Conversion Table
4. Introduction
 - 4.1. Background
 - 4.2. Objective and Scope of Assignment
 - 4.3. Project Overview
 - 4.4. Review of the Past Environmental Assessments
 - 4.5. Document Structure
5. Legislative, Regulatory, and Institutional Frameworks
 - 5.1. National Legislative and Regulatory Framework
 - 5.2. Provincial Environmental Legislation
 - 5.3. Environment Guidelines
 - 5.4. Institutional Framework
 - 5.5. USAID Environmental Procedures
6. Project Description
 - 6.1. Project History
 - 6.2. Project Justification
 - 6.3. Project Objectives
 - 6.4. Project Location
 - 6.5. Project Components
 - 6.6. Implementation Arrangements
 - 6.7. Project Alternatives

7. Overview of Baseline Conditions
 - 7.1. An Overview of Geographical Area (Respective Area of influence i.e. District(s) / Division(s) of respective provinces)
 - 7.2. Physical Environment
 - 7.3. Biological Environment
 - 7.4. Socioeconomic Environment
 - 7.5. Notion of Significance
8. Rapid Environmental and Social Assessment
 - 8.1. Impact Assessment Methodology
 - 8.2. Project Siting/Design Impacts
 - 8.3. Additional Impacts Associated with Project Siting/Design
 - 8.4. Impacts Related to Construction Activities
 - 8.5. Impacts Related to Operation and Maintenance Activities
 - 8.6. Beneficial Environmental and Social Impacts
 - 8.7. Current Mitigation and Monitoring, and Supervision on Site
9. Scope for subsequent EA if warranted
10. Multiple Project Maps, Design etc.
 - 10.1. Maps: Location, Salient design features, Construction material sources, topographic maps, etc.
 - 10.2. Annexures: List of participants, Public consultations list, Entitlement and compensation matrix, Location of sensitive receptors and their distances from proposed project, NEQs, Construction Noise Modeling etc.
 - 10.3. Tables: Salient Features of project, average monthly temperature, precipitation and relative humidity, floral species, herbs shrubs, grasses mammals, reptiles, birds reported in project area etc. that are affected by the project.
11. Bibliography and References
12. Appendices

Each REA report except annexures shall not exceed 100 pages.

7.0 Timeline for deliverables

The following table summarizes the deliverables along with its timeframe.

Table 1: List of Deliverables and Timeline

S. No.	Name of deliverable	Timeline
1	Inception Report and Work Plan	Within 10 days of contract / Purchase Order signature

2	Bi-weekly Progress Report	Every alternate Monday
3	Draft Final Reports of REA for Transmission System for Wind Projects including SOW for EA if warranted (Two hard and two soft copies on CD)	Within 30 days of contract / purchase order signature
4	Draft Final Reports of REA for Transmission System for Patrind Hydro Project including SOW for EA if warranted (Two hard and two soft copies on CD)	Within 30 days of contract / purchase order signature
5	Final Reports of REA including SOW for EA if warranted for Transmission System for Wind Projects (Two hard and a soft copy on CD for each)	Within 45 days of contract / purchase order signature
6	Final Reports of REA including SOW for EA if warranted for Transmission System for Patrind Hydro Project (Two hard and a soft copy on CD for each)	Within 45 days of contract / purchase order signature

8.0 Consultant's Qualifications

Consultant shall demonstrate relevant experience, education, qualifications and capability of the proposed key personnel to carry out the Statement of Work in accordance with the following:

- 8.1 Team Leader:** Relevant qualifications, education, experience working in similar studies and assessments, and the ability to manage multidisciplinary team of experts in politically and security sensitive complex environment.
- 8.2 Technical Experts:** Technical advisors (Construction, Transmission Lines, Environment, and Sociology) with similar experience in Transmission Lines related environmental issues including impact on the local population.
- 8.3 Sociologists and Anthropologists** (Socioeconomics, sociology, land and resettlement, gender and sustainable development) relevant qualifications, education, experience and professional background working in similar projects in Pakistan and abroad.

9.0 Payment Schedule

Payment is linked to the completion of contract deliverables according to the schedule below:

Table 2: Payment Schedule

Approval of Inception Report and Work Plan	10% of total cost
Submission and acceptance of Draft Final Reports of REA for Transmission System for Wind Projects including SOW for EA if warranted (Two hard and two soft copies on CD)	35% of total cost
Submission and acceptance of Draft Final Reports of REA for Transmission System for Patrind Hydro Project including SOW for EA if warranted (Two hard and two soft copies on CD)	35% of total cost
Submission and acceptance of Final Reports of REA including SOW for EA if warranted for Transmission System for Wind Projects (Two hard and a soft copy on CD for each)	10% of total cost

Submission and acceptance of Final Reports of REA including SOW for EA if warranted for Transmission System for Patrind Hydro Project (Two hard and a soft copy on CD for each)	10% of total cost
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A deliverable will be considered completed once written acknowledgement of completion is provided by the COR.

10.0 References (Official Documents & Reports)

10.1 Required Readings

- USAID 22 CFR Part 216 and USAID ADS 204
- Relevant Government of Pakistan laws, regulations and policies
- USAID Initial Environmental Examination (Tracking #: OAPA-14-Jun-Pak-0024)
- Respective Project IEE, EIA, EA, EMMP, Engineering Design Documents/Drawings, Feasibility Studies

10.2 References

- Biological Diversity and tropical forestry Analysis at:
http://pdf.usaid.gov/pdf_docs/PNACU858.pdf
- Pakistan Infrastructure Implementation Capacity Assessment (PIICA) World Bank Report No. 41630-PK at:
<http://siteresources.worldbank.org/SOUTHASIAEXT/Resources/Publications/448813-1202436185914/PIICfull.pdf> and
<http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/SOUTHASIAEXT/0,,contentMDK:21642194~pagePK:146736~piPK:146830~theSitePK:223547,00.html>
- Pakistan Promoting Rural Growth and Poverty Reduction at:
<http://siteresources.worldbank.org/PAKISTANEXTN/Resources/293051-1177200597243/ruralgrowthandpovertyreduction.pdf>
- Land Cover Assessment and Monitoring at:
<http://www.rrcap.ait.asia/lc/cd/html/pakistan.html>
- Islamic Republic of Pakistan 2008 Country Environmental Analysis ADB Report at:
<http://www.adb.org/sites/default/files/pub/2008/Country-Environment-Analysis.pdf>
- Evaluation of the Agriculture and Natural Resources Management Sector ADB Report at: <http://www.adb.org/sites/default/files/agriculture-management-pak.pdf>
- Review and Evaluation of Environmental impact Assessment Process in Pakistan at:
http://www2.lwr.kth.se/Publikationer/PDF_Files/LWR_EX_06_24.PDF
- National Operational Strategy on Clean Development mechanism at:
<http://www.environment.gov.pk/NEP/PakCDM-NatOpelStrgy.pdf>

- Climate Change, Poverty and Environmental Crises in the Disaster Prone Areas of Pakistan at: <http://policy-practice.oxfam.org.uk/publications/climate-change-poverty-and-environmental-crisis-in-the-disaster-prone-areas-of-111982>
- Environmental Stress and Human Security in Northern Pakistan at: <http://www.wilsoncenter.org/sites/default/files/ECSP7-featurearticles-2.pdf>
- Building Resilience, Integrating Climate and Disaster Risk into Development, http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2013/11/14/000456286_20131114153130/Rendered/PDF/826480WP0v10Bu0130Box37986200OU0090.pdf
- <http://www.epa.gov/epawaste/hazard/tsd/pcbs/index.htm>
- http://chm.pops.int/Portals/0/flash/popswastetrainingtool/eng/All_technical_guidelines_on_POPs_4.pdf
- <http://chm.pops.int/Implementation/TechnicalAssistance/GuidanceandPublications/tabid/2333/Default.aspx>
- <http://www.chem.unep.ch/Publications/pdf/GuidIdPCB.pdf>
- <http://www.basel.int/Portals/4/Basel%20Convention/docs/pub/techguid/tg-PCBs.pdf>
- http://www.chem.unep.ch/Pops/pcb_activities/PCB_proceeding/pcb_proceeding.htm
- http://www.ifc.org/wps/wcm/connect/Topics_Ext_Content/IFC_External_Corporate_Site/IFC+Sustainability/Sustainability+Framework/Environmental,+Health,+and+Safety+Guidelines/
- <http://www.epa.gov/wastes/homeland/docs/pcb-disposal.pdf>
- http://www.epa.gov/compliance/resources/publications/assistance/sectors/constructmyer/myer1c_pcb.pdf
- <http://www.gpo.gov/fdsys/pkg/CFR-2013-title40-vol32/pdf/CFR-2013-title40-vol32-sec761-61.pdf>
- <http://www.clu-in.org/download/contaminantfocus/pcb/PCBs-in-bldgs-lit-review.pdf>
- <http://www.pesco.gov.pk/docs/p1.pdf>
- <http://www.afghaneic.org/library/feasibility%20studies/4%20Feasibility%20study%20of%20Development%20of%20a%20Gas%20Fired%20Thermal%20Power%20Facility%20in%20Sheberghan%20Volume%204.pdf>
- http://www.lesco.gov.pk/images/esa_report/IEE%20Report%20-%20Full.pdf
- <http://energy.punjab.gov.pk/downloads/ERF%20Advertisement.pdf>
- <http://www.epa.gov/tribalcompliance/wmanagement/wmwastedrill.html>
- <http://www.adb.org/sites/default/files/pub/2013/indus-basin-floods.pdf>
- http://www.stimson.org/images/uploads/research-pdfs/connecting_the_drops_stimson.pdf
- Power Transmission Enhancement Investment Program - Tranche 3: 220 KV Transmission Line (Uch-II to Sibi), Balochistan Resettlement Planning Document. <http://www.adb.org/projects/documents/power-transmission-enhancement-investment-program-tranche-3-uch-2-sibi-balochistan-rp>

- [Power Distribution Enhancement Investment Program - Tranche 3: 132 KV Burhan– New Wah Double Circuit Transmission Line; Environmental Assessment and Measures. http://www.adb.org/projects/documents/132-kv-burhan%E2%80%93new-wah-double-circuit-iee](http://www.adb.org/projects/documents/132-kv-burhan%E2%80%93new-wah-double-circuit-iee)
- http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2000/11/10/000009265_3980429110250/Rendered/PDF/multi_page.pdf
- [Regional Environmental Assessment Study Gharo – Pakistan and Guidelines for Environmental Assessment of Wind Farms in the Gharo Wind Corridor- Pakistan http://www.aedb.org/downloads.htm](http://www.aedb.org/downloads.htm)
- <http://www.adb.org/documents/IEES/PAK/43937/43937-01-PAK-IEE.pdf> + <http://www.adb.org/Documents/RRPs/PAK/43937-01-pak-rrp.pdf>
- <http://www.adb.org/Documents/Environment/PRC/41926/41926-PRC-SIEE.pdf>
- http://www.verveenergy.com.au/documents/Milyeannup_Wind_Farm/1B_Milyeannup_Wind_Farm_EIA.pdf + <http://www.verveenergy.com.au/mainContent/sustainableEnergy/Projects%20in%20progress/projectsProgress.html>.
- <http://www.adb.org/projects/44914-014/documents>
- [Clean Development Mechanism Project Design Document Version 3 \(CDM PDD\) \(https://www.pdfFiller.com/en/project/21175197.htm?form_id=38974545&utm_exp_id=2952066-142.EzvEMEsAQ3-Wj23uLTZrrQ.0&utm_referrer=http%3A%2F%2Fwww.pdfFiller.com%2F38974545-pdd_patrind_revisedpdf-PDD--Patrind-Hydro-Power-Project---CDM-Pakistan-Various-Fillable-Forms\)](https://www.pdfFiller.com/en/project/21175197.htm?form_id=38974545&utm_exp_id=2952066-142.EzvEMEsAQ3-Wj23uLTZrrQ.0&utm_referrer=http%3A%2F%2Fwww.pdfFiller.com%2F38974545-pdd_patrind_revisedpdf-PDD--Patrind-Hydro-Power-Project---CDM-Pakistan-Various-Fillable-Forms)



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