

NATIONAL GRID COMPANY OF PAKISTAN LIMITED (NGC)

Formerly NTDC

Job Description				
Job title	Health, Safety and Environment Consultant	Function	Health, Safety & Environment	
Reporting line	Board Restructuring and Technical Committee, National Grid Company (NGC)			
Project	Loan 4382: Pakistan Power Transmission Strengthening Project			

Job Overview

The National Transmission & Despatch Company (NTDC) has undergone strategic restructuring leading to the transition of key operational functions into three distinct corporate entities: The National Grid Company (NGC), the Energy Infrastructure Development and Management Company (EIDMC), and the Independent System and Market Operator (ISMO). With the system operation function vested in the ISMO, NGC will focus exclusively on providing world-class grid operation and management services while project development and implementation will be assigned to EIDMC. However, to ensure continuity in transmission infrastructure development, NGC will provide transitional support to EIDMC until the new company achieves full operational independence.

To support corporate restructuring during its transition period, the National Grid Company (NGC) intends to engage a qualified Health, Safety, and Environment (HSE) Consultant to lead the development of a fully integrated, future-ready HSE function across all operational areas. The Consultant will assess existing organizational capacity, perform a comprehensive workload assessment, and formulate an enterprise-wide HSE Policy that aligns with national regulations and international best practices. This engagement is a critical component of NGC's strategic transformation into a modern grid company, with a focus on embedding safety and environmental stewardship across its core functions.

The HSE Consultant will be responsible for designing and implementing internationally aligned HSE management systems, monitoring frameworks, and targeted capacity-building programs to drive continuous improvement and risk mitigation. The role will require close collaboration with internal departments and relevant external stakeholders to ensure NGC's HSE protocols are proactive, data-driven, and adaptable to evolving operational and regulatory environments. Through these efforts, the Consultant will contribute to enhancing NGC's operational resilience, regulatory compliance, and long-term sustainability during the transition period.

Key Responsibilities

1. Detailed Tasks

a. Regulatory Compliance, Gap Analysis & Strategic HSE Alignment

- i. Conduct a comprehensive audit of NGC's existing HSE policies, organizational structures, and practices.
- ii. Benchmark against international standards such as ISO 45001, ISO 14001, OSHA, and global grid operator practices.
- iii. Assess compliance with Pakistan's labor laws, NEPRA regulations, and national environmental statutes.
- iv. Provide technical inputs on regulatory audits and ESG reporting obligations.
- v. Support coordination with NEPRA, Power Division, provincial labor/environment departments, and community representatives.
- vi. Recommend voluntary sustainability disclosures such as GRI or CDP.

b. HSE Organizational Design, Policy Development & Cultural Integration

- i. Conduct a workload assessment of the HSE function across all operational sites (transmission lines, substations, control centers, etc.).
- ii. Recommend an optimal organizational structure, staffing ratios, and competency requirements in alignment with global best practices.
- iii. Draft a comprehensive enterprise-level HSE Policy aligned with UN SDGs, ESG



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- frameworks, and modern utility principles.
- iv. Develop leadership toolkits and cultural programs to embed HSE values into decision-making, accountability structures, and performance appraisals.
- v. Recommend tools such as Safety Climate Surveys and Visible Felt Leadership practices used by leading grid operators.

c. HSE Management System Development & Capacity Building

- i. Design and implement a comprehensive company-wide HSE Management System (HSE-MS), covering:
 - Risk Assessment and Hazard Control
 - Permit-to-Work and Isolation Procedures
 - Incident Investigation & Corrective Action
 - Emergency Response and Crisis Preparedness
 - Contractor Safety Management
 - Environmental Protection and Pollution Control
 - Energy and Resource Efficiency Programs
 - Culture, Behavior & Leadership Integration
- ii. Design and deliver role-specific training modules (induction, refresher, and specialized courses) for NGC staff, third-party contractors, and site visitors.
- iii. Develop a competency framework and propose certification tracks for internal HSE officers.

d. Performance Monitoring, Environmental Stewardship & Sustainability

- i. Design a digital HSE Performance Dashboard with lagging and leading indicators (e.g., LTIFR, TRIR, near-miss reporting, safety observations, audit scores).
- ii. Recommend IT tools for field-level reporting and integration with ERP systems.
- iii. Provide guidelines for environmental impact assessments, biodiversity management, noise/dust control, waste management, and climate adaptation.

2. Deliverables

The consultant will provide:

- a. HSE Gap Analysis and Regulatory Benchmarking Report: A diagnostic assessment of NGC's HSE policies, structures, and site practices, benchmarked against ISO 45001, ISO 14001, OSHA, and leading grid operator standards. Identifies compliance gaps with NEPRA, national labor/environment laws, and provides prioritized recommendations for regulatory alignment.
- b. **HSE Governance and Organizational Optimization Plan:** A roadmap to optimize NGC's HSE organizational structure, staffing ratios, and role definitions. Includes recommendations on governance, accountability frameworks, and integration of behavior-based safety and leadership practices such as Safety Climate Surveys and Visible Felt Leadership.
- c. Enterprise HSE Policy and Management System Framework: Development of an enterprise-level HSE Policy aligned with UN SDGs and ESG principles. Accompanied by a comprehensive HSE Management System (HSE-MS) covering hazard control, incident investigation, emergency response, contractor safety, and culture integration tools embedded into appraisals and decision-making.
- d. **ERP-Linked HSE Performance Monitoring Framework:** A digital framework for monitoring leading and lagging HSE indicators (e.g., LTIFR, TRIR, safety observations). Includes KPI definitions, reporting templates, and dashboard specifications for integration with ERP systems and field-level tools to enable real-time visibility and data-driven decisions.
- e. **HSE Training and Capacity Building Program:** A structured program to build internal HSE capabilities, including role-based training modules, contractor orientations, and certification tracks. Supported by a competency framework aligned with global standards and designed to embed sustainable HSE practices across NGC operations.
- **f. Stakeholder Engagement and Compliance Alignment Plan:** A plan to facilitate structured engagement with NEPRA, EPA, Power Division, provincial departments, and local communities.



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3. Reporting and Communication

The consultant will report directly to the Board Restructuring and Technical Committee of NGC and will coordinate closely with Asset Management Department and the relevant technical operations teams to ensure alignment of recommendations with organizational objectives.

4. Confidentiality and Intellectual Property

The consultant shall maintain strict confidentiality regarding all NGC data and insights gathered. NGC shall retain ownership of all reports, frameworks, and intellectual property resulting from this engagement.

Qualification and Experience

The candidate should have the following qualifications and experience:

- A degree in Occupational Health and Safety, Environmental Engineering, Industrial Hygiene, or a related field. Advanced qualifications in Safety Engineering, Environmental Management, Public Health, or Risk Management will be an added advantage.
- ii. Professional certifications such as NEBOSH IGC, Certified Safety Professional (CSP), Lead Auditor for ISO 45001/14001, or equivalent from recognized international institutions will be preferred. Academic credentials from high-ranking international universities will be given additional weight.
- iii. At least twenty [20] years of proven professional experience in the energy, utility, or infrastructure sector, including a minimum of ten [10] years in HSE leadership roles focusing on utility-scale operations, transmission infrastructure, or large engineering projects.
- iv. Experience working with grid operators, utilities, regulatory bodies, or multinational consulting firms, with demonstrated application of international HSE standards and best practices such as ISO 45001, ISO 14001, OSHA, IFC Performance Standards, and ESG frameworks, is preferred.
- v. Familiarity with NEPRA regulations, EPA compliance frameworks, and national labor/environmental statutes. Experience in conducting organizational HSE diagnostics, workload assessments, and designing HSE governance models across multi-site utility operations will be an edge.
- vi. Proven experience in developing and implementing HSE Management Systems, digital safety dashboards, incident investigation protocols, and behavior-based safety programs in regulated or complex stakeholder environments is essential.
- vii. Additional training or qualifications in digital HSE platforms, data analytics, emergency response planning, or sustainability and environmental compliance will be given preference.

Professional Skills & Competencies

- In-depth knowledge of local and international HSE standards and regulations, including ISO 45001, ISO 14001, OSHA, NEPRA, EPA, and relevant labor laws.
- Proven ability to assess and improve HSE management systems, policies, SOPs, emergency response plans, and compliance frameworks in utility-scale operations.
- Expertise in hazard identification, risk assessment, and implementation of preventive and corrective controls in high-voltage transmission environments.
- Strong skills in incident investigation, root cause analysis, and producing actionable reports aligned with best practices.
- Experience conducting HSE audits to ensure regulatory compliance and implementing corrective actions.
- Practical knowledge of environmental management, pollution control, waste management, and environmental impact assessments.
- Skilled in emergency preparedness, drills, evacuation planning, and crisis response management.



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	 Familiarity with digital HSE tools, dashboards, ERP integration, and real-time safety performance monitoring. Excellent communication and stakeholder engagement skills, with ability to influence and build consensus across teams and regulators. High professionalism, integrity, and adaptability in complex, multi-stakeholder settings, promoting a strong HSE culture and leadership. 	
Remuneration & Tenure	Daily rate is a maximum of \$800 for an international consultant and \$400 for a local consultant. Contract duration: 132 person-days to be charged over a maximum of 9 months. The initial contract may be extended for additional period based on the performance of the contract and through mutual consent of NGC and the consultant. Payment: Monthly upon submission of timesheets and approved deliverables. Travel, communication, and other reimbursable expenses, if applicable, shall be covered as per ADB Loan policy.	
Performance Management Clause	The contract is subject to performance evaluation review. The review shall be based on achievement of assignment specific outputs on time and on budget. Any changes in stated outputs need to be approved by NGC. NGC reserves the right to terminate the contract i) if outputs are not achieved on time and at quality level acceptable to NGC; ii) services are no longer required or iii) for any other reasons in the interest of the company. Pre-termination of the contract is subject to 2-weeks' notice.	
Evaluation Criteria for Selection	 The selection will be based on: Proven experience in developing and implementing HSE management systems within regulated utility or energy sectors. Relevant degree in Occupational Health and Safety or related fields, plus professional certifications (e.g., NEBOSH, CSP). Minimum 20 years' experience, with 10+ years in senior HSE roles. Strong expertise in risk assessment, incident investigation, emergency response, and compliance with ISO 45001, ISO 14001, OSHA, NEPRA, and EPA regulations. Experience integrating HSE processes with digital tools like ERP and safety dashboards for real-time monitoring and improvement. Knowledge of environmental management, pollution control, and sustainability practices, including environmental impact assessments. Skilled in conducting HSE organizational assessments and delivering targeted training to build capacity. Excellent communication and stakeholder engagement skills to promote a safety driven culture and ensure regulatory alignment. 	