SN	Job Title	Scope of duties	Qualification
6.	Hydropower Engineers/Expert	<ul> <li>Guide NEAEC team on civil, structural and hydraulic calculation a done by NEAEC team</li> <li>Review and comments on civil drawings and specifications, feasibility studies, alternative analysis, design criteria and other overall engineering aspects in accordance with international best practices.</li> <li>Review the reservoir sedimentation study carried out by the hydrological engineer to identify the least cost solution with minimum environmental impacts. Reflect the optimal design in the cost estimates and tender documents.</li> <li>Help to plan a hydraulic model test on sediment flushing facilities</li> <li>Review and prepare any disaster risk management plan including local flood control and early warning systems, with the hydrological engineer.</li> </ul>	<ul> <li>Minimum M.Sc. Degree in civil/water resources/hydropower</li> <li>Engineering or as approved equivalent.</li> <li>15 years experience with Master's degree or 18 years for Bachelor degree in engineering with 10 of those years having experience in hydropower projects in Design of dam, reservoir simulation,</li> <li>Hydraulic design of spillways, gates, bottom outlets, energy dissipater, PH sizing and optimization etc. and other related major civil infrastructure projects in hydropower sector.</li> <li>Experience in hydro projects more than 50 MW during Details</li> <li>Feasibility / Engineering Study.</li> <li>Involvement in large project inside the country with International Consulting / Contractor firms.</li> </ul>
7.	Seismological Expert	<ul> <li>Review of pertinent and establish database of historical earthquakes data near the project site with epicenter(s) and date(s) of occurrence, etc., based on details of seismological data collected from the seismic centers and other available sources.</li> <li>Study and evaluate seismic activity in the project area e.g., seismic status of faults, thrusts and other weak features in the vicinity of the dam sites and within the region, etc.</li> <li>Review and derive seismic design parameters, to ensure earthquake safety of the major hydropower structures based on the available geological and seismological records and reports.</li> <li>Analyze seismic hazard due to the selected design and the failure of the completed structure.</li> </ul>	relevant professional works  Especially minimum of 5 of which shall be in mapping the  Parameters required by earthquake resistant design for the structural engineer.
8.	Hydro-mechanical Engineer/Expert	<ul> <li>Provides support for design review and quality assurance</li> <li>Works closely with other disciplines</li> <li>Review and prepare guidelines for design development and assists in providing technical aspects</li> <li>Design and review of Penstock, Gate and valve</li> <li>Prepare design basis memorandum for hydro-mechanical works</li> <li>Design and review of steel liner and similar components.</li> </ul>	<ul> <li>Minimum Bachelor or higher degree in Mechanical engineering or equivalent.</li> <li>Minimum of 15 years of experience for master degree and 18 years of experience for bachelor degree in engineering project out of which 10 of those years in hydropower project during design stage with capacity more than 50 MW.</li> <li>Involvement in large project inside the country with International Consulting / Contractor firms.</li> </ul>
9.	Electro-mechanical Engineer/ Expert	<ul> <li>Examine methods of electrical/electromechanical equipment installation works, considering the site conditions.</li> <li>Review cost estimates for electrical/electromechanical equipment based on the construction schedule.</li> <li>Review study report and prepare document of actual design including all design criteria, parameters and standards, all major calculations and analysis including all the</li> </ul>	in hydro power projects.  Having worked as an Electrical Engineer expert in various Hydropower Projects

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SN	Job Title	Scope of duties Qualification
		drawings prepared by the NEAEC team.  Review the implementation schedule for installation works of electric equipment.  Review the technical section for the electrical equipment and transmission lines in the tender documents.  hydropower projects with international consultant or company in Nepal.  Experience with International consulting/manufacturer or contractor company or project is a plus.
10.	Transmission line Engineer/Expert	<ul> <li>Check the detail survey report.</li> <li>Prepare tower schedule, sag chart</li> <li>Review the Conductor type, schemes, specifications selection, and accessories and insulators selection and design</li> <li>Prepare bill of materials.</li> <li>Bachelor or higher degree in Electrical Engineering.</li> <li>Minimum of 15 years of experience for bachelor degree and at least 5 years of experience as transmission engineer/expert.</li> <li>Extensive experience in electrical/transmission Engineering.</li> <li>Experience in transmission line for hydropower projects with international consultant or company inside the country or abroad will be a plus.</li> </ul>
11.	EHV Substation Enginee	<ul> <li>Review and guide the design calculations for EHV effects such as Corona and travelling waves and the transient stability due to such phenomenon as switching, power swing etc.</li> <li>Review and design the Protection</li> <li>Preferred experience in Power System transmission line, with international consultant or company inside the country or abroad.</li> <li>Experience with International consulting company or project is a plus.</li> </ul>
12.	Power system Analyst	<ul> <li>Review power study in Nepal, seasonal variation of energy and capacity demand, the system load curves, seasonal variation of energy and capacity demand, and load forecast</li> <li>Review the seasonal variation of energy and capacity demand and ability of the two power systems to meet the energy and capacity demand</li> <li>Review the existing and planned additions and alternative supply options in Nepal. Establish the capital and operating costs for the alternative generation options.</li> <li>Review Load flow analysis at local and regional level.</li> <li>Review short circuit analysis and transient analysis</li> </ul>
13.	Construction Planne	<ul> <li>Assist in establishing and maintaining the project schedule in Primavera P6 or similar software</li> <li>Monitor the critical path and report any issues impacting the critical path</li> <li>Work with the project team to ensure that schedule activities are accurately updated</li> <li>Provide progress reports in accordance with</li> </ul>

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SN	Job Title	Scope of duties	Qualification
2		resource histograms, progress curves and current versus baseline comparisons  Assist in identifying schedule slippage mitigation strategies  Review and finalize construction schedule for civil works prepared by the NEAEC team.  Coordinate with other experts concerned to prepare all the tender documents.	<ul> <li>Proven experience in project control, cost control and scheduling in the field of engineering and construction.</li> <li>Knowledge of creating and developing baseline schedules; prior working experience with scheduling software (Primavera P6 or MS Project or similar).</li> <li>Experience in planning schedule software, Primavera, MS Project, or similar and having key understanding of schedule &amp; cost interfaces.</li> <li>Experience with International consulting company or project.</li> </ul>
14.	Contract Expert	<ul> <li>Review and guide on contractual records and documentation such as receipt and control of all contract correspondence</li> <li>Responsible for review all the contractual analysis required in the light of FIDIC clauses and technical specification.</li> <li>Review and comments on progress and performance to ensure goods and services confirming to the Contractual requirements.</li> <li>Facilitating and negotiating contract variations and amendments in line with approved delegations.</li> <li>Facilitating to identify and resolve disputes with contractor in a timely manner.</li> <li>Review and guidance to work with accuracy of invoices and authorize payments consistent with the contract terms.</li> <li>Review and guides the study reports as EPC level design documents with respect to FIDI clauses and technical specification.</li> <li>Fluent in PPA 2063 with latest amendments and the PPR 2064.</li> </ul>	<ul> <li>Bachelor degree in any engineering discipline/management or equivalent with experience in large project, preferably worked with international team in English speaking environment.</li> <li>At least 18 years of experience.</li> <li>Well Exposed with insurance policy and general context of contract system in Nepal. Well versed in PPA and PPA</li> <li>Candidate should have experience in FIDIC contract system and arbitration of claims or dispute resolution.</li> </ul>
15.	Financial/Economic Analyst/Economist	<ul> <li>Review and finalize all indicators such as Ne Present Value (NPV), Benefit Cost ratio, Internal Rate of return, Debit Service Coverage prepared by the NEAEC team.</li> <li>Review and finalize financial analysis of the projects and the project entity such as, commercial merits of the projects under alternative power market conditions (electricity market and demand), financial packages and fiscal regimes prepared by the NEAEC team.</li> <li>Review and identify risks associated with the project and allocated to the party that is assumed to cover the risk in the most cost efficient way in order to minimize financial costs of the venture, prepared by the NEAEC team.</li> <li>Identify and assess various financial source including public funds from Nepal and oth countries that may benefit from the projects, multilateral/ bilateral organizations, and commercial financial institutions prepared by the NEAEC team.</li> <li>Review sensitivity Analysis prepared by the NEAEC team.</li> </ul>	<ul> <li>Master degree in Finance, Economics, Engineering Economics or chartered accountant or other relevant majors.</li> <li>Minimum 13 years of experience in relevant professional filed.</li> <li>Having worked as a Financial/Economic Analyst for minimum of 5 years, producing indices from various data collection and analysis for at least one large Hydropower Projects (&gt;50 MW).</li> <li>Experience in Financial/Economic Analy with international consultant or contracting company inside the country or abroad .</li> <li>Experience (current) with International consulting company or project is a plus</li> </ul>

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16. Psychologist	<ul> <li>interviews, surveys, and other methods</li> <li>Research and identify behavioral or emotional patterns</li> <li>Test for patterns that will help them better understand and predict behavior</li> </ul>	<ul> <li>Master's degree in psychology.</li> <li>Minimum 10 years of experience in related field.</li> <li>Preference for the involvement in recruitments inside the country for international firms.</li> <li>Preferably to study of clinical psychology</li> </ul>
17. Chartered Acco	<ul> <li>Manage Taxes, provide advice related with accounting &amp; auditing.</li> <li>Organizing meticulously to keep financial documents in order.</li> <li>Problem-solving to determine where errors might be occurring or to suggest ideas that</li> </ul>	<ul> <li>Completion of Chartered Accountancy-CA.</li> <li>Minimum 10 years of experience in field of auditing and accounting.</li> <li>Preference for the involvement in curren hydropower project.</li> <li>Preference for the involvement in curren hydropower project running inside the country with International Consulting/Contractor firms.</li> </ul>
18. Cost Estimato	<ul> <li>Analyze documentation to prepare time, cost, materials, and labor estimates.</li> <li>Assess cost effectiveness of projects or services, tracking actual costs relative to bid as the project develops.</li> <li>Consult with clients, vendors, personnel in other departments or construction professionals to discuss and formulate estimates and resolve issues.</li> <li>Confer with engineers, architects, contractors and subcontractors on changes and adjustments to cost estimates.</li> <li>Prepare estimates used by management for purposes such as planning, organizing, and scheduling work.</li> <li>Prepare estimates for use in selecting vendors or subcontractors.</li> <li>Prepare cost and expenditure statements and other necessary documentation at regular intervals for the duration of the project.</li> <li>Prepare and maintain á directory of suppliers, contractors and subcontractors.</li> <li>Set up cost monitoring and reporting systems and procedures.</li> <li>Establish and maintain tendering process, and conduct negotiations.</li> <li>Calculate, analyze, and adjust estimates</li> <li>Recommend ways to reduce costs</li> </ul>	<ul> <li>Master degree in engineering.</li> <li>A sound knowledge of building materials construction methods and customs prevailing in the trade.</li> <li>Minimum 10 years of experience in</li> </ul>
19. Tax/VAT Exp	Responsible for review all the tax/VAT and analysis as per NFRS and IFRS.  Facilitating and negotiating contract, offici payment, international contractual payments and other relevant like income tax, excise duty, tax deduction on source,	Economics, Management or chartered

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SN	Job Title	Scope of duties	Qualification
		<ul> <li>VAT reimbursement etc.</li> <li>Support on making financial documents related with Tax audit.</li> <li>Verification of tax/VAT calculation as per contract act, VAT act and financial litigation.</li> <li>Review and guidance to work with accuracy of invoices and authorize payments consistent with the contract terms.</li> <li>Responsibility for filing and paying taxes for their employers, fill out the proper paperwork, arrange for payment and stay on top of any changes that would affect what is due or owed.</li> </ul>	Financial/Economic Analysis of hydropower projects with international consultant or contracting company inside the country or abroad will be highly preferred
20.	Administrative Expert	<ul> <li>Organize trainings, client meetings, team meetings and events as needed.</li> <li>Provide operations support and documentation support for Managers.</li> <li>Determine the administration issues and resolve them for smooth office operations.</li> <li>Provide support in preparing company documents, profile and other as per needed.</li> <li>Coordinate the administration activities involved in the employee recruitment, performance evaluation and termination processes.</li> </ul>	<ul> <li>Successfully completed MBA/MBS or Master's degree in Administration or equivalent, preference given to higher degree.</li> <li>Minimum 15 years of experience in administration, out of which 10 of those years having experience in hydropower project/company.</li> <li>Preference for the involvement in current large hydropower project running inside the country with International Consulting/Contractor firms.</li> </ul>
21.	Tower Design Expert	<ul> <li>Review the transmission line routing and alternatives and the tower types and locations</li> <li>Carryout design review of different tower types suitable for 132 kV, 220 kV, 400kV transmission lines.</li> <li>Prepare bill of material</li> <li>Provide inputs for design basis memorandum preparations.</li> <li>Able to work independently in remote area if required.</li> <li>Review the selection of line material</li> <li>Prepare the foundation design for different towers.</li> </ul>	<ul> <li>Master degree in Civil/Mechanical Engineering or other relevant subject.</li> <li>Minimum of 15 years of experience in transmission line, tower design and substations and at least 5 years of experience in transmission line tower designs suitable for 132 kV, 220 kV and 400 kV voltages.</li> </ul>

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## Expert For Environment and social Study

SN	Position	Major Scope of Work	Qualification/ Requirements
1.	Environment Specialist/ EMP Expert	Lead/Guide Environmental     Assessment programs     Contribute to the preparation and approval of Scoping Document,     Terms of Reference, Environmental Management Plan (EMP) and EIA report following national and international standard as required.	<ul> <li>Masters in Environmental Science or related discipline (PhD is preferred)</li> <li>Demonstrated record of excellence in environmental research</li> <li>Minimum 15 years of experience in the related field</li> <li>Work experience in Himalayan region will be added advantage</li> </ul>
2.	Wildlife/Biodiversity Expert	<ul> <li>Lead/Guide baseline survey of wildlife (mammals, birds, herpetofauna etc.)</li> <li>Lead/Guide the preparation of wildlife part of environmental baseline report</li> <li>Contribute to the preparation and approval of Scoping Document, Terms of Reference, Environmental Management Plan and EIA report following national and international standard as required.</li> </ul>	<ul> <li>Masters in Zoology/ Wildlife Science or Equivalent (PhD is preferred)</li> <li>Demonstrated record of excellence in wildlife research</li> <li>Minimum 15 years of experience in the related field</li> <li>Work experience in Himalayan region will be added advantage</li> </ul>
3.	Botanist/ Ecologist	<ul> <li>Lead/Guide baseline survey of plants/ ecosystems</li> <li>Lead/Guide the preparation of botany/ ecology part of environmental baseline report</li> <li>Contribute to the preparation and approval of Scoping Document, Terms of Reference, Environmental Management Plan and EIA report following national and international standard as required.</li> </ul>	<ul> <li>Masters in Botany/ Ecology (PhD is preferred)</li> <li>Demonstrated record of excellence in botanical/ ecological research</li> <li>Minimum 15 years of experience in the related field</li> <li>Work experience in Himalayan region will be added advantage</li> </ul>
4.	Aquatic life/Fish Expert	<ul> <li>Lead/Guide baseline survey of aquatic fauna including fish</li> <li>Lead/Guide the preparation of aquatic life/fish part of environmental baseline report</li> <li>Contribute to the preparation and approval of Scoping Document, Terms of Reference, Environmental Management Plan and EIA report following national and international standard as required.</li> </ul>	<ul> <li>Masters in Zoology/ Aquatic Science/ Fishery or Equivalent (PhD is preferred)</li> <li>Demonstrated record of excellence in aquatic life/fish research</li> <li>Minimum 15 years of experience in the related field</li> <li>Work experience in Himalayan region will be added advantage</li> </ul>
5.	Social Expert/ Sociologist/Public Consultation Expert/ Resettlement Expert	Lead/Guide public consultation     (including public hearing),     participatory environmental     management planning     Design/ conduct socio-economic and     cultural surveys     Contribute to the preparation and     approval of Scoping Document,     Terms of Reference, Environmental     Management Plan, Compensation     Plan, Resettlement Plan, Public     Outreach Plan and EIA report     following national and international	Masters in Sociology (Degree or academic background of Natural Resource Management, Forestry or Environmental Science would be added advantage)     Demonstrated experience of coordination, collaboration and negotiation with different stakeholders     Minimum 15 years of experience in the related field     Work experience with diverse range of communities will be added

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## Expert For Environment and social Study

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6.	Public Health Expert	<ul> <li>Lead/Guide baseline survey of public health</li> <li>Lead/Guide the preparation of public health part of environmental baseline report</li> <li>Contribute to the preparation and approval of Scoping Document, Terms of Reference, Environmental Management Plan and EIA report following national and international standard as required.</li> </ul>	<ul> <li>Masters in Public Health / Environmental Health or equivalent (PhD is preferred)</li> <li>Demonstrated record of excellence in public health research</li> <li>Minimum 5 years of experience in the related field</li> <li>Work experience in Himalayan region will be added advantage</li> </ul>
7.	GIS Expert	<ul> <li>Generate GIS database, geodatabase development, GIS processing and analysis</li> <li>Programming in GIS</li> <li>Spatial and temporal analysis to help make decision related with environmental assessment and planning</li> </ul>	<ul> <li>Masters in GIS or related field</li> <li>Demonstrated record of working with intensive GIS development and/or application</li> <li>Minimum 5 years of experience in the related field</li> <li>Work experience in Himalayan region will be added advantage</li> </ul>
8.	Remote Sensing Expert	<ul> <li>Analyze remotely sensed images (satellite images, drone images, lidar data)</li> <li>Spatial and temporal analysis to help make decision related with environmental assessment and planning</li> </ul>	<ul> <li>Masters in Remote Sensing or related field</li> <li>Demonstrated record of working with intensive remote sensing development and/or application</li> <li>Minimum 5 years of experience in the related field</li> <li>Work experience in Himalayan region will be added advantage</li> </ul>

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Specialists from the Register of TSG shall be appointed by the NEAEC to review and provide guidance to the project team, as per the requirement of the project. Intermittently, on daily or weekly or monthly basis based on the input requirement and the availability of experts: Same TSG resource can provide two or more expert services depending upon the specific case. The International Team Leader will be appointed by NEAEC to lead and facilitate the team member which includes National/International Experts and TSG will provide services on monthly, intermittently or as per requirement.

Interested eligible and competent experts/specialists may obtain further information NEAEC Website; www.neaec.com.np

Interested experts/specialists must submit their Curriculum Vitae along with the expected remuneration (hourly/daily/weekly/monthly) and other conditions of engagement to perform the services within 15 days from the published date by E-mail or hard copy. The notice deadline may be rolled over automatically as per company need.

Address:

5<sup>th</sup> floor of Trade Tower Building, Thapathali; Kathmandu. Mail:md@neaec.com.np and hr@neaec.com.np

Website: www.neaec.com.np, Phone: 01-5111024/25

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