TERMS OF REFERENCE FOR TECHNICAL ASSISTANCE TO THE MINISTRY OF ENERGY AND MINERAL DEVELOPMENT TO SUPPORT THE IMPLEMENTATION OF THE SECOND – GENERATION POWER SECTOR REFORMS

1.0 Background

The Government of Uganda (GoU) enacted the Electricity Act 1999 which provided for the first power sector reforms in Uganda commencing in 2001. The reforms were also guided by the Public Enterprises Reform and Divestiture (PERD) Act, 1993. Before the reforms, electricity in Uganda was supplied by Uganda Electricity Board (UEB) which was a vertically integrated utility handling; generation, transmission, distribution and supply of electricity including power trade with neighboring countries. The power sector reforms unbundled the UEB into the following 3 successor companies:

(i) Uganda Electricity Generation Company Limited (UEGCL) to own and operate the 180 MW Nalubaale and the 200MW Kiira power stations.
(ii) Uganda Electricity Transmission Company Limited (UETCL) to own and take charge of the transmission network above 33kV, system operation, conduct bulk buying of power including import and export of electricity.
(iii) Uganda Electricity Distribution Company Limited (UEDCL) to own and operate the distribution network at 33kV and below and supply electricity to consumers within the distribution network area.

Although UEB was a parastatal established by an Act of Parliament, the successor companies were created as limited liability companies with shareholders being the Minister of Finance, Planning and Economic Development (MoFPED) and the Minister of State for Finance in charge of Privatisation. Other institutions which emerged from the power sector reforms were:

(i) Electricity Regulatory Authority (ERA) as provided for under the Electricity Act 1999.
(ii) Rural Electrification Agency (REA) which was created by the Minister of Energy and Mineral Development under Statutory Instrument No. 75 of 2001.
(iii) Electricity Disputes Tribunal (EDT) created under the Electricity Act 1999.
(iv) Subsequent emergence of several distribution companies following the definition of authorized territories. The eight distribution companies which are currently in operation are depicted in Table 1 below.
(v) Many private electricity generation companies also emerged. The list of generation companies is provided under Annex 1.

Table 1: Electricity Distribution Companies

Name of Licensee	License Issue date	License Expiry date
Umeme Limited	2004-03-01	2025-03-31
WENRECO (currently off-grid but being connected to the main grid by a 132kV line)	2003-03-12	2028-03-11
Kalangala Infrastructure Services Limited (currently off grid but being connected to the main grid by a 33 kV submarine cable)	2009-11-01	2034 -11-1
Uganda Electricity Distribution Company Limited	2021-07-01	2022-06-30*
Kilembe Investment's Limited	2021-07-01	2024-09-30
PACMECs	2021-01-01	2022-06-30
Hydromax Limited	2007-11-01	2037-10-31

Kyenjojo Rural Electricity Cooperative Society (KRECS)	2014-05-01	2024-04-30

*Submitted application for renewal of Licence

The GoU adopted a strategy of privatizing the operation of generation and distribution segments of the power sector by way of concessions while maintaining transmission as public handling the bulk purchase of electricity from all generation companies and sales in bulk to the various distribution companies including cross-border export/import under the single buyer model. The GoU retained ownership of the whole power system assets (generation assets existing at that time, as well as the transmission and distribution network assets including those added during the concession period). UETCL is also the system operator balancing generation with supply and ensuring power system stability.

1.1 Privatization of Distribution and generation functions.

Following International competitive bidding, the generation segment was leased to Eskom (U) Ltd for 20 years from April 2003 and the distribution segment was leased to Umeme Ltd for 20 years and 30 days starting on March 1, 2005. The Eskom (U) Ltd generation concession thus has under (one) 1 year to termination, while the Umeme concession has less than 3 years to termination as at March 31, 2025. As these concessions approach their terminal dates, the GoU has embarked on second generation power sector reforms.

1.2 Problem Statement and Reference studies

1.2.1 Problem Statement

Following nearly 20 years of implementation of the first power sector reforms, on 22nd February 2021, the Cabinet of the Republic of Uganda took a decision to merge, mainstream and rationalize Government Agencies, Commissions, and Authorities so as to facilitate efficient and effective service delivery. The Cabinet decision affected 157 Government institutions including three electricity companies namely; UEDCL, UETCL and UEGCL that were to be merged into one company. This decision amongst others, is central to the implementation of the second-generation power sector reforms. The proposed reforms will be premised on the need to accelerate universal access to electricity and enhancing efficiency in service delivery in order to achieve better system reliability, affordability, exemplified in lower end-user power tariffs especially for industrialization while keeping the Electricity Supply Industry (ESI) financially sustainable. Therefore, there is need to conduct a detailed analysis of the proposed reforms to establish the extent to which the set objectives can be met through new reforms, address any risks likely to be encountered, perform a comprehensive cost-benefit analysis and provide recommendations on how the reforms can be undertaken while ensuring continuous service delivery with minimal disruptions to the ESI operations.

1.2.2 Reference Studies

In undertaking this exercise, GoU is cognizant of the studies undertaken to examine the different problems, challenges, and policies in the sector. The details and recommendations thereof shall be synthesized to benefit the overall outcome. These include but not limited to; -

In 2017, the World Bank financed a study that reviewed Uganda's Power Sector evolution from 1971 including the Power Sector Reforms of 1999. The report is titled "Review of the Power Sector Reforms in Uganda".

The study recommended changes in the institutional set-up of the sector to enhance service delivery in the power sector.

In December 2019, the World Bank financed a study under the title "Uganda Distribution Sector Diagnostic Review and Directions for long term Sector Development and Acceleration of Electricity Access expansion". This study is commonly referred to as the "distribution diagnostic study". The objective of the distribution diagnostic study was to support the GoU to accelerate electricity access and enhance distribution efficiency and financial sustainability through recommending appropriate institutional reforms. Uganda's access to grid electricity now stands at 24% and remains one of the lowest in the world and the study established quantitatively that supply of electricity in Uganda is very poor even by regional standards (access to off-grid systems is at 18% giving total national access to 42%). The study considered several scenarios and then recommended that to enhance access to electricity in Uganda, improve efficiency and achieve financial sustainability, Uganda needs to reform the distribution sector and defragment the network into one integrated network operated by one company based on a Public Private Partnership (PPP) in which GoU would be a majority shareholder. This model would allow both Government and Private sector investments in the network.

Subsequently, the European Union (EU), financed another study, to review studies done in the energy sector and make recommendation on Uganda's distribution sector. The title of the EU funded study is "Stock taking in the energy sector in Uganda – Electricity Distribution". The Consultant produced a report in January 2021 in which the performance of Umeme was appreciated but agreed with the recommendation of the diagnostic study report to reform the management of the distribution segment and have a new PPP structure in which Umeme could participate.

A National Electrification Strategy (NES) has been developed with the support of the World Bank under the Grid Expansion and Reinforcement Project (GERP). The NES (2022) targets to implement 10.4 million new connections using both grid and off-grid interventions in order for Uganda to achieve universal access to modern energy service by 2030. This study amongst others, underscored the need for clarity in policy, industry structure and institutional framework so as to efficiently and sustainably pursue the laid-out universal access agenda.

1.3 Decision of Government of Uganda (GoU)

In light of the impeding end of the two major concessions (Umeme/Distribution and Eskom/Generation), the contemplation of second-generation power sector reforms is an important response by GoU. The decision to merge UEDCL, UETCL and UEGCL into one entity came at the backdrop of GoU mainstreaming the Rural Electrification Agency (REA) as a department of the Ministry of Energy and Mineral Development (MEMD).

The process of the merger of the said electricity companies is on-going, being led by the Ministry of Public Service, with participation of the MEMD, ERA, and consultations with the affected companies (UETCL, UEGCL and UEDCL), from which a new structure will be developed. The merger is intended to consolidate under one entity the key sector functions with generation (for GoU owned plants), transmission, and distribution, bulk electricity trade with neighboring countries including participation in the East African Power Pool. Therefore, the assets operated under the current Generation and Distribution concessions will revert to the new entity.

2.0 Key Objectives

The overall objective of this Technical Assistance is to support the GoU in carrying out the second-generation reforms in Uganda's power sector.

2.1 Specific Objectives

This Technical Assistance ("the Consultant") will;

a) Review of the performance of the ESI in Uganda including existing studies. The Consultant shall also review and synthesize the recommendations from existing technical studies on performance of first power sector reforms in Uganda. Some of the studies include those mentioned in section 1.2.2 above.

b) Prepare an Impact analysis report of the proposed merger of GoU utilities of UEGCL, UETCL and UEDCL to improve efficiency and make recommendations on the suitability of the proposed ESI structuring under the proposed merged company to achieve set targets (universal access to electricity by 2030, loss reduction targets, financial sustainability, improved system reliability and tariff affordability) and sustain the gains of the first reforms, taking into consideration the Electricity (Amendment) Act, 2022. The Consultant shall propose a strategy, roadmap and action plans for implementing the reforms.

c) Support GoU in the implementation of the second-generation power sector reforms by providing the necessary technical assistance to GoU to ensure a seamless transition of Uganda's ESI as the existing concessions draw to an end, considering industry best practices and developing the required frameworks through which possible future Public Private Partnerships (PPPs) can be deployed in the different segments of the power sector. The Consultant shall also provide technical guidance on how to manage the recently developed GoU generation plants (Isimba HPP and Karuma HPP).

3.0 Scope

The Technical Assistance has been broken down into two phases:

Phase One:

- **Task 1:** Review of the performance of the ESI in Uganda including existing studies regarding the electricity sector development and progress since the last reforms and provide appropriate conclusions with respect to the performance outcomes of the reforms.

- **Task 2:** Review the proposed power sector reforms/merger and generate merger scenarios and corresponding impacts on the power sector taking into consideration the Electricity Amendment Act (2022). The Consultant shall propose a strategy, roadmap and action plans for implementing the reforms.

- **Task 3:** Review agreements of all existing concessions in the ESI, Privatization Agreements, Escrow Agreements, and Licenses, to determine the transition issues, propose forward-looking recommendations on any future concessions and actions for GOU before the natural end of the existing concessions. Recommend best industry practice for the management of GoU's generation plants of Isimba HPP, Karuma HPP and others that are nearing the end of their

concessions. The Consultant shall advise on the nature and form for Public-Private Partnerships (PPP) or an appropriate framework for structuring of the ESI, including the obligations of the parties, the risk allocation and drafting the requisite agreements to operationalize the proposed framework.

- **Task 4**: Prepare Final Report covering all deliverables under Phase 1 of the assignment.

Phase Two:

- **Task 5:** Support towards the implementation of the second-generation power sector reforms including support towards the closure of the existing concessions in the ESI where applicable based on the recommendations approved by GoU.

3.1 Phase One

The detailed scope and outputs/deliverables for Task 1-4 are described below.

3.1.1 Task 1: Review of the electricity sector development and progress since last reforms

The Consultant will review the performance of the ESI including existing studies (by MEMD and Development Partners) on Uganda's electricity sector and carry out a stock take on its growth, successes, and shortfalls since the last reforms in 1999. This work shall take into consideration the Electricity (Amendment) Act, 2022 and will include consultations with key stakeholders. The Consultant will prepare a report of the review that will provide a baseline analysis on the performance of the ESI including the present concessionaires in generation, and distribution while highlighting the industry gains realised and shortfalls for comparison and evaluation of merits for various scenarios for the second-generation power sector reforms. The review should also draw on international experience and lessons learned from other countries that are relevant to the Uganda context.

Outputs/Deliverables of 3.1.1

(i) A comprehensive report on the electricity sector developments, performance and progress since the last reforms in 1999, including a synthesis of the recommendations from existing technical studies on performance of first power sector reforms in Uganda. The Consultant shall present the report at a stakeholders' workshop.

3.1.2 Task 2: Review the proposed sector reforms/merger and generate merger scenarios and corresponding impacts on the power sector taking into consideration the Electricity (Amendment) Act, 2022.

The Consultant will review the proposed sector reforms/merger and structure of the new company to be formed out of the merger and advise on its suitability to improve integrated planning project execution to deliver an efficient electricity service to the people of Uganda to achieve set targets (universal access to electricity by 2030, loss reduction, financial sustainability, improved system reliability, tariff affordability and open trade allowing generation companies to sell electricity directly to large power consumers). This analysis must take into consideration the Electricity (Amendment) Act, 2022 that has initiated the implementation of the second-generation power sector reforms by dismantling the single buyer model and allowing for direct purchase of electricity by Industries from generators, among other changes. The output of this task will be an impact assessment (positive and adverse) including arising liabilities of the proposed merger of state

agencies and other proposed sector reforms and where applicable provide brief case studies support the envisaged pros and cons of a vertically integrated utility such as TANESCO and others elsewhere. The specific tasks will include the following activities:

(i) Review of all existing legal agreements and instruments in the ESI. These among others, include; generation licenses and Power Purchase Agreements (PPAs), transmission licenses, distribution licenses, retail sales agreements and any other related domestic/international contractual agreements. The review should also include agreements signed with the small grid connected electricity distribution companies and measures required to terminate their services after doing a socio-economic and local political impact and any new roles they could play to allow for the integration of the electricity distribution network as recommended under the distribution diagnostic study report.

- Advise Government on required actions to ensure that these reforms will not adversely affect the undertakings of Government under the PPAs and other sector agreements.
- The financial requirement based on the various obligations of the Parties shall be included.
- All risks identified must be costed.

(ii) Comprehensive review of the performance, structures, and processes of entities to be merged (UEGCL, UETCL and UEDCL). This will include:

- A review of the asset registers to identify the intricacies of accounts maintenance, accounts merger modalities; inventory management, and prepare a suite of viable measures on financial treatment in terms of transfer of assets and liabilities from the three companies to the new entity,
- A review of the present structures, functions, policies and processes of the utilities to be merged and recommend efficient and effective structural, functional and process configurations that will drive a consolidated and performance-oriented entity.
- A review of the cultures and current HR polices being followed in the target merger companies and compare the same with ESKOM and UMEME for avoiding incompatibilities in the possible merger of human resources.
- A review of the pay, service conditions, performance management policies, training, advancement, skill development/upgradation, career progression, retrenchment and other aspects for seamless amalgamation if found suitable.
- A review of the relevant laws, policies and liabilities arising out of man-power retirement benefits and settlement and summarize findings in HR exception reports.
- Prepare appropriate of recommendations with respect to the requisite process automation, Information technology solutions, tools and services that can be considered to accompany the new entity into being driven and ably enabled by new technologies to support integrated strategic, tactical and operational processes and decisions to avoid continued fragmentation after the proposed consolidation.
- Estimate the net funding requirements to meet the implementation costs (net of any tangible savings) required for the complete merger process, its impact on the present tariffs and other options for funding the execution of merger.
- Review the sustainability of the proposed merger, the efficiency gains, cost saving, and make recommendation regarding O&M practices of the new company.
- Recommend best industry practice for the management of GoU's generation plants of Isimba HPP, Karuma HPP and others that are nearing the end of their concessions.
- Conduct extensive research to support the new structural proposals of the integrated utility highlighting the latest mergers, acquisitions that happened globally with examples that demonstrate maintenance of equilibrium and higher rated performances in the aftermath.

- Assess and cost the risks involved in the merger process like retrospective complications, legacy liabilities, contractual complexities, investor sentiments, additional costs involved, technical costs and upgradations for integration, public perceptions and prepare a risk matrix, impacts and possible mitigations pointing out the pros and cons providing an objective and independent view of how GOU should proceed on the subject.
- Evaluate the ability of the new company to raise the required financing investment in ESI.
- Recommend a robust mechanism for redressal of consumer grievances in the new proposed institutional set-up.

(iii) Review of the current power sector structure and regulatory process taking into consideration the Electricity (Amendment) Act, 2022. Focus will be on the role and structuring of the system operator to ensure efficiency gains and to introduce uniformity and competitiveness among generators, to encourage adoption of Merit order dispatch of electricity in the interests of the consumers. The Consultant will also review the new market structure to be achieved following the merger and recommend on any required modification in the existing law/policy and other legal instruments to allow for generation companies sell electricity directly to large consumers as per market dynamics of demand and supply. This will include the possibility of the creation of open access, wheeling tariffs payable to the company in the business of wheeling electricity from generators to large consumers. This activity will require direct coordination with ERA on the plans to develop a Regulatory Framework for Direct Purchase of Electricity by Large Industrial Consumers.

(iv) Carrying out time-bound stakeholder consultations including domestic consumers, industrial consumers, commercial consumers, local public representatives, staff/employee associations, civil society, academia, journalists, development partners, through seminars, workshops, and/or online interactions/surveys and then summarize the findings to be reflected in this complete exercise.

(v) Evaluate the proposed model's international marketability for areas of future participation by the private sector in Public Private Partnership (PPP) arrangements. The Consultant shall define and recommend a conducive framework and conditions for the participation of the private sector through public private partnership and how the relationship between the new utility and the private sector will be structured in terms of operations and management. This will include a review of **ALL** ongoing concession agreements and the role the private sector could play in the new structure.

(vi) Review the existing off-grid ecosphere and provide appropriate recommendations for streamlining it to be compatible with the new sector strategy and structure in light of the importance of off-grid interventions in the realisation of optimal universal access for the ESI in Uganda and the roles otherwise to be played by the new entity in the off-grid space.

(vii) Prepare a report covering second generation power sector reforms including the impact of the merger and costs required for its implementation. The report will also include a SWOT analysis of alternative approaches and reflect the findings including the optimal scenario. In addition, the report will also provide an outline of possible future PPPs based on the PPP Act for Government decision. This report will be presented at a stakeholders' workshop.

Outputs/Deliverables of 3.1.2

(i) A draft report on the impact assessment and recommendations on the strategy, roadmap, and action plans for implementing the second-generation power sector reforms and proposed merger of state agencies.

(ii) Report to be presented at a stakeholders' workshop.

3.1.3 Task 3: Review the Concession Privatization Agreements, Company Escrow Agreement, Escrow Agreement, and Licenses to determine the transitional implications before natural end of the concession (Revisit for ALL Concessions in the ESI including the Eskom and Umeme Limited)

Outputs/Deliverables of 3.1.3

(i) Report covering:

a) the performance review of all concession agreements signed since 2001 in respect to the Privatization Agreement, Company Escrow Agreement, Escrow Agreement, and Licenses; The report to include risk assessment and risk allocation including the basis and impact of the return on investment (ROI) enshrined within the agreements.

b) recommended action /activities to be undertaken by the parties during the concession transition [For all Concessions] highlighting any significant implications for GOU and the most appropriate strategies for managing them.

c) the nature and form for Public-Private Partnerships (PPP) or any framework that shall be recommended and approved by GOU in the structuring of the ESI, including the obligations of the parties, the risk allocation and drafts of the requisite agreements to operationalize the proposed framework.

3.1.4 Task 4: Preparation of a Final Report covering all deliverables under Phase 1 of the assignment.

(i) A draft final consolidated report covering the deliverables under Task 1, Task 2 and Task 3 of the assignment. This report will be presented at a stakeholder's workshop.

(ii) Final consolidated report covering the deliverables under Task 1, Task 2 and Task 3 of the assignment.

3.2 Phase Two

The detailed scope and outputs/deliverables for Phase 2 are described below.

3.2.1 Task 5: Implementation Support towards the Implementation of the Second-Generation Power Sector Reforms Including Support Towards the Closure of the Existing Concessions in the ESI where Applicable.

In this task, the Consultant will provide support to the GoU in the implementation of the agreed recommendations / structuring of the second generation power sector reforms arising from Phase 1 for the smooth transition of the generation, transmission and distribution sector into the proposed defragmentation and consolidated industry structure (including transfer of assets and liabilities including the possible termination/conversion of the agreements of small distribution service providers and management of the

natural end of concessions in the Electricity Supply Industry while minimizing any liabilities that could arise from court action and litigation. The implementation support could include but not be necessarily limited to (i) support the Government in discussions and negotiations on the nature and content of contractual arrangements between the public and private sector partners, (ii) the formalisation of contractual arrangements and transitional measures alongside with necessary changes to the legal, regulatory, and policy framework, and (iii) communication and engagement campaigns before and during the implementation of the second generation power sector reforms.

Outputs/Deliverables of 3.2.1

(i) Based on the recommendations approved by GOU, draw up a power sector second-generation reform action plan outlining key activities, responsible actors and time bound milestones for approval by the GOU Implementation Steering Committee to be set up and Chaired by the PS MEMD.

(ii) Monthly progress reports covering agreed milestones on the implementation of the second-generation power sector reforms, including the merger of the three electricity companies and recommendations on subsuming the small distribution territories into one consolidated distribution segment, as well as future PPPs in Uganda's power sector. The report(s) shall also detail transition issues indicating the actions expected by either party in the concession agreements during the transition period, and advise to Government of Uganda and its agencies regarding its actions during the transition period. The monthly reports will be presented to the Steering Committee.

(iii) Final completion report and forward-looking follow-up recommendations to be implemented by the respective sector actors. This final report will be prepared in a consultive manner with key sector actors and workshopped in draft with relevant stakeholders prior to producing a final report.

4.0 Required qualifications of the firm and personnel.

4.1 Team composition

The Consultant (firm) should have at least ten years of experience related to management and/or sector/institutional reforms of utilities, preferably electrical power systems in emerging markets (non-OECD countries). Experience in Uganda's power sector will be an advantage. The Consultant shall provide all personnel necessary for the execution of the assignment and the list below is only a minimum requirement, but the Consultant may propose and or provide other personnel with the appropriate expertise necessary to perform the tasks.

The Consultant shall submit CVs for all the Key Staff in their proposed team. All CVs must meet the minimum requirements as indicated in the Request for Proposal.
The Consultant's proposal should include the following key personnel as minimum:

i) Team Leader
ii) Financial Management /Tariff Analyst
iii) Power Sector Planning and Investment Expert
iv) Legal Expert
v) Power Systems/ Electrical Engineer
vi) PPP Specialist

vii) Human Resource Management Specialist
viii) Power Regulatory Specialist
ix) Energy Policy Specialist
x) Risk Assessment and Management Specialist

4.2 Person-month allocation

The Consultant shall indicate in the proposal sufficient person-months for adequate execution of the assignment. The minimum personnel requirements for Phase One and Phase Two are listed in Table 2 below.

Table 2: Minimum personnel requirements

#	Key personnel	Phase One	Phase Two
1	Team Leader	1	1
2	Financial Management Expert/Tariff Analyst	1	1
3	Power Sector Planning and Investment Expert	1	1
4	Legal Expert	1	1
5	Power Systems Electrical Engineer	1	1
6	PPP Specialist	1	1
7	Human Resource Management Specialist	1	1
8	Power Regulatory Specialist	1	1
9	Energy Policy Specialist	1	1
10	Risk Assessment and Management Specialist	1	1

Table 3 below details the minimum person-months requirements per expert. For Phase One activities, about forty-three (43) person-months of consulting services are envisaged. For Phase Two, about fifty (50) person-months of advisory services may be required. The Consultant should indicate in their proposal the proposed total level of effort broken down according to phases, tasks, and location (inside and outside Uganda). The total minimum estimate of person-months by the Consultant shall not be less than the MEMD's estimated person-months. However, the Consultant shall propose an adequate person-months above the MEMD's cap required person-months for any of the key personnel and the total person-months based on the complexity of each activity and understanding of the required consultancy services to be rendered.

Table 3: **Minimum person-months requirements per expert**

#	Key personnel	Minimum Person Months	
		Phase One	Phase Two
1	Team Leader	4	5
2	Financial Management Expert/Tariff Analyst	4.5	5
3	Power Sector Planning and Investment Expert	5	5
4	Legal Expert	4	5.5
5	Power Systems Electrical Engineer	5	5
6	PPP Specialist	4.5	5
7	Human Resource Management Specialist	4	5
8	Power Regulatory Specialist	4.5	5
9	Energy Policy Specialist	3.5	5
10	Risk Assessment and Management Specialist	4	4.5
	Total Man-months	**43**	**50**

Phase one of the assignment is expected to take about six (6) months while Phase (2) is expected to last about seven (7) months. This includes time for review of reports by the Client and for the Consultant to address the comments raised.

4.3 Qualification requirements of Key Personnel

The Consultant will deploy a team of well qualified personnel/experts to undertake the consultancy services. All the key personnel shall be highly skilled and experienced and shall score a minimum of 75%. Key personnel with scores of less than 75% shall have to be replaced if the Consultant progresses to negotiations stage.

The Consultant's proposal shall be set out in detail showing the list of experts required for each Phase and the duration person-months for which the services are required. The Consultant shall present the staffing schedule in a manner that makes it clear as to which personnel will be involved in a specific activity. A staff organogram reflecting the envisioned activities should therefore be presented.

The Consultant shall provide all staff necessary to execute the assignment successfully including key personnel, non-key personnel, and support staff. The Consultant shall provide the following key personnel as minimum:

(i) **Team Leader** should be a Utility Management expert with minimum post graduate degree qualification of master's degree in engineering / energy policy and management / energy law or economics with at least 15 years' relevant experience in utility/power systems management including utility reforms. Experience in implementing organizational development, change management, capacity needs assessment, strategic and business planning, and human resources optimization in Sub-Sharan Region will be an advantage. Demonstrated, successful experience in working collaboratively with a broad array of stakeholders; a strong strategic orientation at policy and institutional level with demonstrable capacity to support institutional systems development and capacity building, strong communication (both verbally and in writing) and change facilitation skills in a cross-cultural setting are essential; and proven competence in the use of standard software (Word, Excel, and PowerPoint) is a key requirement.

(ii) **Financial Management Expert /Tariff Analyst.** The Power systems Financial Expert shall have a financial specialty at Degree level or Professional Qualifications like full ACCA, CIMA, CPA and CFA. Relevant post graduate training will be an added advantage. Must demonstrate at least 10 years' relevant professional experience in Financial Management, related to electricity utilities and energy projects. A good knowledge and understanding of the funding needs for electricity generation, transmission utilities, and distribution including operational budgeting, revenue management, bulk power trading, and regional power trading is required. He or she should have experience in translating financial budgets and forecasts into tariffs and capacity to assess the overall tariff implications for the ESI of the financial affairs of the companies and agencies operating in the sector.

(iii) **Power Sector Planning and Investment Expert**. Must have at least a post-graduate training in Economics with a bias of Quantitative aspects at Bachelors or Postgraduate level, Statistics, Infrastructure finance, Planning, and related fields with at least 10 years' relevant professional experience in power sector planning and investment at strategic level in a power sector institution of national or regional repute.

(iv) **Legal Expert**. Power systems Legal Expert with a relevant degree in Law with post graduate training in public policy or energy law or institutional development with at least 10 years' relevant experience in energy policy issues and regulation. Experience with the design and implementation of public-private partnerships (PPP). Experience in Sub-Saharan Region would be an advantage. A good knowledge and understanding of legal framework for Land Acquisition in Uganda is essential.

(v) **Power Systems Electrical Engineer**. A power systems electrical engineer with a relevant postgraduate degree and at least 10 years' relevant experience in operation of large power systems (over 1000 MW capacity portfolio) at management level.

(vi) **PPP Specialist.** A Public Private Partnership (PPP) Specialist with a master's degree in business, finance, engineering or related field, and at least 10 years' relevant experience in the design and implementation of PPP modalities in the power sector. Experience in Sub-Saharan Region would be an advantage.

(vii) **Human Resource Management Specialist.** A Human Resource Management (HRM) specialist with at least 10 years' experience in implementing organizational development, capacity needs assessment, and human resources optimization with a postgraduate degree in Human Resource Management, Business Administration, Public Sector Management, or Organizational Development or other relevant fields. Relevant professional experience in conducting similar assignments in the Sub-Sharan Region will be an added advantage;

(viii) **Power Regulatory Specialist.** A Power Regulatory Specialist with postgraduate qualification in Economics, Electrical Engineering, relevant energy studies, Finance, Law and other related fields. She/He must demonstrate at least 10 years regulatory experience with identifiable significant success exemplified in regulatory achievements/interventions in the area of engagement in Sub-Saharan Africa or Emerging Markets.

(ix) **Energy Policy Specialist.** An Energy Policy Specialist with postgraduate qualification in Economics, Economic Policy and Planning, Energy Policy, Energy Law or relevant energy-related fields. She/He must demonstrate at least 10 years' relevant experience with identifiable significant success exemplified in roles / achievements/interventions in the area of transitional policy formulation in the energy/power sectors in Sub-Saharan Africa or Emerging Markets.

(x) **Risk Assessment and Management Specialist.** A Risk Assessment and Management Specialist with postgraduate qualification in degree in Risk Management, Finance, Business Administration, Law, or Energy / electricity industry-related field. She/He must demonstrate at least 10 years relevant experience in risk assessment and management in the electricity supply industry preferably in executing utility reforms in Sub-Saharan Africa or Emerging Markets.

5.0 Client inputs to the assignment

The Client shall be responsible for:

i) Appointing a Contract Manager for the assignment.
ii) Setting up a Steering Committee headed by the Permanent Secretary - MEMD which will be responsible for the approval of the deliverables and making relevant recommendations for the adoption of the outcomes to GOU.

iii) Will facilitate the Consultant in form of introduction letters to key stakeholders relevant to the consultancy assignment.
iv) Will provide the Consultant with previous relevant studies conducted within the power sector.
v) Will be responsible for the organization of the consultative Workshops including provision of all necessary logistics.
vi) Will arrange and facilitate timely access to relevant information and data to the Consultant creating a virtual data room where relevant information can be obtained.
vii) Time wise, a calendar would be prepared by the client in consultation with the Consultant for monitoring the deliverables and activities. The calendar will have specific roles to be played by the client as well as the Consultant with reference to achieving the targets as decided mutually at the onset of finalizing the calendar.

6.0 Consultant's inputs to the assignment

The Consultant shall be responsible for:

i) Collection of all data necessary for the implementation of the assignment, undertake the required analysis and preparation of all required reports.
ii) Conduct a documentary review of all relevant power sector laws, regulations, policies and strategies including those from similar institutions in Africa and beyond as case studies.
iii) Conduct effective stakeholder consultations with key stakeholders including but not limited to MEMD and affiliated entities, Ministry of Public Service, the Office of Attorney General and Ministry of Finance, Planning and Economic Development.
iv) Preparation of all materials to be used in the workshops.
v) Presentation of findings during the workshops.
vi) Preparation of all Study Reports and distribution as shall be required from time to time

7.0 Reporting requirements

The Consultant shall be supervised on a day-to-day basis by a Contract Manager at the MEMD.

All reports shall be submitted in three (3) hard copies and one (1) electronic copy to the PS-MEMD with a copy to the Contract Manager. The Consultant will allow for 2 weeks for MEMD to review the reports, except for the monthly progress reports which will be reviewed within one week. The Consultant will have up to one week to address any comments.

Table 4: Reporting requirements

#	Report	Timing	Contents of the Report
1	Inception report	1 week after contract signature	An Inception Report outlining the final agreed work plan, milestones, and deliverables
2	Task 1 report (Phase One)	Draft – 4 weeks after contract signature Final – 6 weeks after contract signature	A report on the electricity sector developments and emerging performance outcomes of the reforms since 1999. Report to be presented at a stakeholder workshop.
3	Task 2 report (Phase One)	Draft – 12 weeks after contract signature	A draft report on impact assessment and recommendations on the strategy, roadmap, and

#	Report	Timing	Contents of the Report
		Final – 15 weeks after contract signature	action plans for implementing the second-generation power sector reforms and proposed merger of state agencies.
4	Task 3 reports (Phase One)	Draft – 17 weeks after contract signature	Report covering a) performance of all concession agreements signed since 2005 in respect to the Privatization Agreement, Company Escrow Agreement, Escrow Agreement, and Licenses; b) recommended action /activities to be undertaken by the parties during the transition period for the current concessions [Umeme and ESKOM]. c) technical guidance on how to manage the Government Generation Plants (Isimba HPP, Karuma HPP and others that are nearing the end of their concessions) considering industry best practices.
5	Task 4 (Phase One)	20 Weeks after Contract signature	Draft final consolidated report covering all deliverables for Task1, Task 2 and Task 3.
		24 Weeks after Contract Signature	Final consolidated Report covering deliverables indicated under Phase 1 (Tasks 1 to 3)
6.	Task 5 Reports (Phase Two)	2 weeks after commencement of Phase 2	Report on power sector second-generation reform action plan outlining key activities, responsible actors and time bound milestones. This will be based on the recommendations (from Phase 1) approved by GOU.
		6 weeks after commencement of phase 2	Report detailing nature and form for Public-Private Partnerships (PPP) or any framework for structuring the ESI that shall be recommended and approved by GOU. Report shall include the obligations of the parties, the risk allocation and drafts of the requisite legal documentation / agreements to operationalize the proposed framework.
7.	Monthly progress reports (Phase Two)	Monthly	Reports outlining the work performed for the different tasks during each month
8.	Completion Report (Phase Two)	Draft – 2 weeks prior to contract end	Comprehensive report covering the work done in Phase One and Phase Two, taking into consideration the comments from the GoU on the draft report.
		Final – at contract end	

8.0 Location and Duration of the Assignment

The assignment will be mainly based in Kampala, Uganda with occasional travels to upcountry project sites. The Phase One of the assignment will have a duration of about 6 months. The overall duration of Phase 2 will be determined after the completion of Phase One.

Table 5: **Duration of the Assignment**

Phase	Task	Duration	Type of Contract
Phase 1	Task 1	1.5 months	Lumpsum
	Task 2	2.5 months	
	Task 3	1 month	
	Task 4	1 month	
Phase 2	Task 5	Estimated at 7 months	Time-based

9.0 Confidentiality Statement.

The Consultant will share all technical, environmental, and social studies conducted, and any additional data and information required to conduct the study. All data and information received from the GoU, including the utilities for the purpose of this assignment are to be treated confidentially and are only to be used in connection with the execution of these Terms of Reference. All intellectual property rights arising from the execution of these Terms of Reference are assigned to GoU. The contents of written materials obtained and used in this assignment may not be disclosed to any third parties using any media, without the expressed advance written authorization of the GoU. The award-winning Consultant shall sign a Non-Disclosure Agreement (NDA) to buttress the confidentiality provision in the contract.

Annex 1: List of Generation Companies / Plants

No.	Name	Licensed Capacity [MW]	Type	Grid or not
1	Absolute - Bukasa	0.1	Solar PV	Off-Grid
2	Absolute-Kitobo	0.2	Solar PV	Off-Grid
3	Access Uganda Solar Limited	10.0	Solar PV	Grid
4	Achwa 1	42.0	Hydro	Grid
5	Achwa 2	41.0	Hydro	Grid
6	Africa EMS Mpanga	18.0	Hydro	Grid
7	Bugoye Hydro Limited- Mubuku II	13.0	Hydro	Grid
8	Bujagali Energy Limited	250.0	Hydro	Grid
9	Bukinda	6.5	Hydro	Grid
10	Bunjako	0.1	Solar PV	Off-Grid
11	Busitema Solar PV	4.0	Solar PV	Own Use
12	Bwindi	0.1	Hydro	Off-Grid
13	Eco Power Uganda Limited- Ishasha	6.4	Hydro	Grid
14	Electromaxx Uganda Limited - ARUA	8.0	Thermal (HFO)	Off-Grid
15	Electromaxx Uganda Limited - Tororo	42.0	Thermal (HFO)	Grid
16	Emerging Solar - Mayuge	10.0	Solar PV	Grid
17	GM Sugar	7.4	Cogeneration	Own Use
18	Gotngur	0.4	Biomass	Off-Grid
19	Hoima Sugar	12.0	Cogeneration	Own Use
20	Hydromax Limited – Buseruka	9.0	Hydro	Grid
21	Igassa HPP	0.3	Hydro	Grid
22	Isimba HPP	183	Hydro	Grid
23	Jacobsen Thermal Plant	50.0	Thermal (HFO)	Grid
24	Kabasanja HPP	0.4	Hydro	Grid
25	Kabeywa 1 HPP	6.5	Hydro	Grid
26	Kabeywa 2 HPP	2.0	Hydro	Grid
27	Kakaka	4.6	Hydro	Grid
28	Kakira Sugar Limited	51.1	Cogeneration	Own use & Grid
29	Kalangala Infrastructure Services	0.6	Solar PV	Off-Grid
30	Kalangala Infrastructure Services	1.0	Thermal (Diesel)	Off-Grid
31	Kamuli Sugar	3.0	Cogeneration	Own Use
32	Kamuli Sugar Cogeneration power plant	3.0	cogeneration	Grid
33	Kasese Cobalt Company Limited- Mubuku III	9.9	Hydro	Grid
34	Katooke HPP	0.3	Hydro	Grid
35	Kigwabya HPP	4.2	Hydro	Grid
36	Kikagati	14.0	Hydro	Grid
37	Kilembe Mines Limited – Mubuku I	5.0	Hydro	Own use & Grid
38	Kinyara Sugar Limited	14.5	Cogeneration	Own use & Grid
39	Kisiizi	0.4	Hydro	Off-Grid

No.	Name	Licensed Capacity [MW]	Type	Grid or not
40	Kisiizi	0.1	Thermal (Diesel)	Off-Grid
41	Kyambura	7.6	Hydro	Grid
42	Lolwe	0.6	Solar PV	Off-Grid
43	Lubilia	5.4	Hydro	Grid
44	Mahoma Hydro	2.7	Hydro	Grid
45	Mayuge Sugar Limited	9.2	Cogeneration	Own use
46	Mukoki HPP	3.4	Hydro	Grid
47	Muvumbe hydro Limited	6.5	Hydro	Grid
48	Nalubaale Power Station	180.0	Hydro	Grid
49	Nchwera HPP	0.5	Hydro	Grid
50	Ndugutu	5.9	Hydro	Grid
51	Nkusi Hydro	9.6	Hydro	Grid
52	Nsongya HPP	0.7	Hydro	Grid
53	Nyabuhuka-Mujunju HPP	3.2	Hydro	Grid
54	Nyagak 1 – WENRECo	3.5	Hydro	Off-Grid
55	Nyagak 111	6.6	Hydro	Grid
56	Nyahuka HPP	0.7	Hydro	Grid
57	Nyamabuye HPP	7.0	Hydro	Grid
58	Nyamagasani I	15.5	Hydro	Grid
59	Nyamagasani II	6.0	Hydro	Grid
60	Nyamwamba I	9.2	Hydro	Grid
61	Nyamwamba II	7.8	Hydro	Grid
62	Rupa Wind Power Project	20.0	Wind	Grid
63	Rwimi Hydro	5.5	Hydro	Grid
64	Sagewood	0.2	Solar PV	Off-Grid
65	Senok Atari 1 HPP	3.3	Hydro	Grid
66	Simu HPP	9.5	Hydro	Grid
67	Sindila	5.3	Hydro	Grid
68	Sironko HPP	7.0	Hydro	Grid
69	Sisi HPP	7.0	Hydro	Grid
70	Siti 2	16.5	Hydro	Grid
71	Siti I Small Hydro Power	5.0	Hydro	Grid
72	Sugar and Allied Industries Limited	11.9	Cogeneration	Own use & Grid
73	Sugar Corporation of Uganda Limited	26.0	Cogeneration	Own use & Grid
74	Tokwe HPP	0.3	Hydro	Grid
75	Tororo PV Solar Plant	10.0	Solar PV	Grid
76	Tororo Solar North	10.0	Solar PV	Grid
77	Ulepi Solar project by Ituka Westnile	10.0	Soar	Grid
78	Waki	4.8	Hydro	Grid
79	Warugo HPP	0.5	hydro	Grid
80	Xsabo Solar	20.0	Solar PV	Grid