

PROJECT INFORMATION MANUAL (PIM) FOR TRANSMISSION PROJECTS PROCURED UNDER THE PPP ACT, CAP 430 THROUGH A PRIVATELY INITIATED PROPOSAL BY CONSORTIUM OF AFRICA 50 & POWERGRID OF INDIA.

1 Country and Project Sector Overview

From mid-1950s, a 132kV transmission line was constructed from the then newly constructed Owen Falls Dam in Uganda to Juja substation and subsequently extended to Rabai substation. The Country thereafter embarked on increasing the size of the National Grid and by 2008, the total length was 3,400 circuit kilometers (see Figure 1) serving a peak demand of 1,044MW.

NATIONAL GRID NETWORK BY 2008 SOUTH SUDAN TANZANIA Legend SUBSTRICTOR TANZANIA Date: 03/05/2018

Figure 1: Kenya National Transmission Grid as of 2008

Since inception in December 2008, KETRACO has made concerted efforts at strengthening and expanding Kenya's National Transmission Grid and Regional Interconnectors. This has enhanced the quality, reliability, and security of electricity



supply in Kenya, promoted regional power trade and enabled regional integration of power markets.

The power transmission network is currently operating at 132kV, 220kV, 400kV and 500kV DC. The size of the transmission network by circuit length is approximately 9,718 km of which 6,016 (62%) is owned and operated by KETRACO. This includes 1,308 km of 132kV lines, 835 km of 220kV lines, 2,590 km of 400kV and 1,282km of 500kV lines. In addition, KETRACO has completed and commissioned 44 new substations with 6,487 MVA capacity and 26 substations' bay extensions.

However, Kenya's electricity transmission infrastructure is currently inadequate to meet the growing demand for power, particularly in rapidly industrializing regions and underserved rural areas. The existing transmission lines are constrained, leading to inefficiencies and occasional power outages. The lack of sufficient transmission capacity is a barrier to industrial growth, rural electrification, and the integration of Kenya into the regional energy market.

The expansion of the National Grid in the 20 years Electricity sector Least Cost Power Development Plan (LCPDP) and KETRACO's Transmission Master Plan requires expansion growth of a further 9,600 circuit kilometers of transmission lines and 15,891 MVA substation transformation capacity (see Figure 2) to meet the peak demand expected to reach about 10,000MW by 2040. The total investments requirement for this period is estimated at US\$ 5,199 million. This is approximately US\$ 250 million per year for 20 years.

Growth in the High Voltage Grid Graph

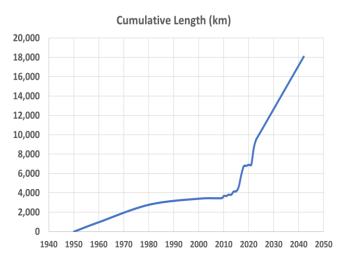


Figure 2: Growth of the National Grid

Since the inception of KETRACO in 2008, The National Treasury has borrowed loans directly from Development Partners for transmission infrastructure capital investment and subsequently on-granted the funds to KETRACO for project development. Most of the loans from The World Bank (IDA), Africa Development Bank, JICA, AFD – French Development Agency, European Investment Bank, Exim Bank of China, Exim Bank of India, The Kingdom of Spain and Belgium KBC Bank.



Typically, the historical project circle turnaround time for the Development Financing Partners and KETRACO has been between 5-8yrs. Thus, the next set of funding from Development Financing Partners is estimated to be in FY 2028/2029.

In this regard, it is imperative for KETRACO to tap into the other financing models, including the private sector's potential to bridge the financing gap. The partnership with private sector should not only limited to mobilizing funding capital but also execution efficiency, cost control, risk mitigation, technological and project management expertise to deliver a grid that can serve the household, industrial and commercial power needs of the country. KETRACO needs to strive to ensure that Kenya has a Reliable Grid free from constraints, ensure that the grid has enough capacity to match the ever-increasing demand, ensure that grid is extended to allow the country to harness its green energy potential and ensure the grid results in reduced transmission losses.

The Government of Kenya has demonstrated its commitment to Public Private Partnerships (PPPs) by establishing the PPP Act, Cap 430 which is expected to foster efficiency and accountability in the governance of PPP projects and lead to higher quality transactions. On the other hand, development partners such as IFC, Power Africa, World Bank and AfDB have equally devoted considerable effort to support institutions such as KETRACO to build their PPP capacity by offering technical assistance, workshops, and training courses, among others.

2 Macroeconomic Outlook of the Country

The Kenyan Economy grew by 5.6% in 2023 up from 4.9% in 2022, and 5.0% in Q1 of 2024 a demonstration of resilience.

Growth momentum is expected to continue with a projection of 5.2% in 2024 and 5.4% in 2025 mainly supported by a robust services sector and a recovery of industry and strong agricultural productivity aided by Government policy interventions, adequate rainfall and improvement in global commodity prices.

At 4.4% in August 2024, inflation remains below 5% in the third month running. This is a drop from 6.7% in August 2023, and a peak of 9.6% in October 2022.

Credit rating - As of January 31, 2025, Kenya's credit rating is B- with a stable outlook, according to Fitch Ratings. S&P Global Ratings lowered Kenya's long-term sovereign credit rating to B- from B on August 23, 2024. Mody's gave Kenya a rating of Caal with positive outlook in January 2025.

Debt sustainability - Debt data include both domestic and external obligations and guarantees. As of September 2024, Kenya's public debt was Kes 10,790 billion which is about 69% of GDP.

This is above debt to GDP ratio target anchor of 55%. The public debt is made of the Kes 5,601 billion domestic debt and Kes 5,189 billion being public and publicly guaranteed external debt. Kenya's debt remains sustainable.



3 Basic Project information

i. Project name and location:

The Project is identified as 400kV Lessos-Loosuk, 220kV Kibos-Kakamega Musaga transmission lines projects with associated substations, LILos and 132kV interties implemented through Privately Initiated proposal (PIP) by a consortium of Africa 50 and PowerGrid of India.

ii. Project Location:

The route for the 400kV Lessos-Loosuk transmission line mainly traverses Samburu and Baringo, Nandi and Elgeyo Marakwet Counties, while the 220kV Kibos-Kakamega-Musaga transmission line mainly covers Kisumu, Vihiga and Kakamega Counties. The substation are expected to be in Samburu county (Loosuk), Nandi County (Lessos), Kisumu County (Kibos), Kakamega county (Kakamega and Musaga).

The Kenyan map with these transmission lines is given in Figure 3.

iii. Sponsoring agency/department.

The sponsoring agency is the Ministry of Energy and Petroleum in coordination with the National Treasury with Kenya Electricity Transmission Company Limited (KETRACO) being the implementing agency or the Contracting Authority as mandated by the provision of the PPP Act 2021

iv. Project Cost:

Project value currently stands at USD 311 million (Kesh.40.4 billion). It is worth noting that the total project cost as presented by the Private Party encompasses EPC cost, taxes and duties, land and right of way cost, project management/independent engineer cost, legal/retainership fees, success fees, project development costs, insurance costs, interest during construction, and financing cost. The cost breakdown (in Kesh. Millions) is given in Table 1.

Table 1: Total Project Cost

Project Name	400kV Lessos-Loosuk	220kV Kisumu-Kakamega -Musaga	Total
Hard Costs	155.71	71.28	226.99
Soft Costs	58.31	26.16	84.47
Total	214.02	97.44	311.46



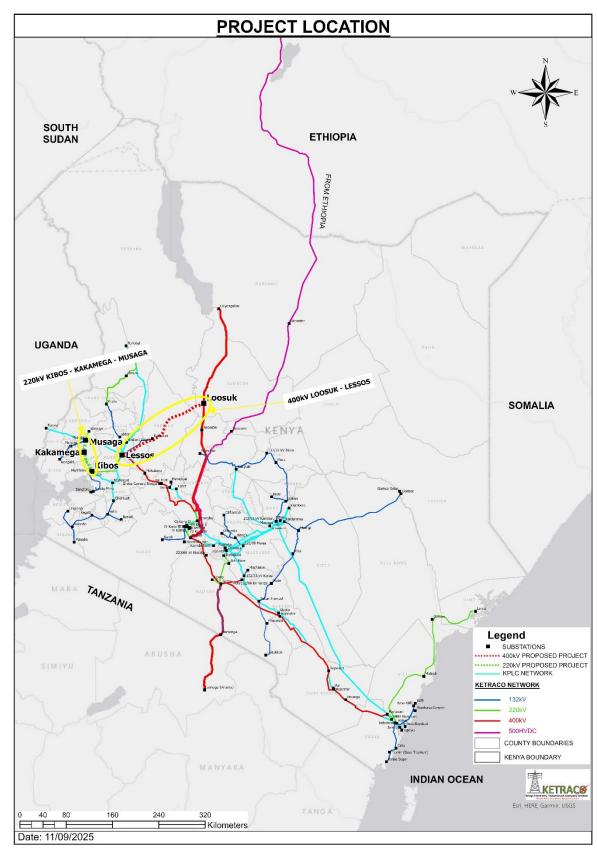


Figure 3: Kenya Map with the Transmission Lines:



4 Project need

The Projects are part of the Grid expansion projects as planned in the sector and Company plans i.e., Least Cost Power development Plan (LCPDP) and KETRCAO Transmission Master plan (TMP). The Projects provide the following benefits:

- i. 400kV Lessos Loosuk This Project will provide and alternative evacuation path for power generated from renewable energy sources in Northern Kenya. The Project will increase system stability by sectioning the long 400kV line (Loiyangalani Suswa) and by creating a 400kV loop that will form part of the backbone for the Kenya's Transmission Grid. The Project will additionally enhance security of supply for West Kenya through Lessos substation. The project will traverse North Rift geothermal complex and shall provide the main evacuation path for power generated in this area.
- ii. 220kV Kibos-Kakamega-Musaga- This Project will extend 220kV Grid and introduce high voltage power supply to Kakamega County thereby reinforce the medium voltage network in the area. This will enhance efficiency, increase system adequacy and reliability in Kakamega County. The Project will reinforce the 132kV network at Musaga.

The implementation of these PPP transmission projects will accrue several social and economic benefits to the citizens of Kenya. These benefits include: -

a) Creation of job opportunities

The Private Party will create job employment opportunities to Kenyan citizens for works, consultancy and non-consultancy services) as outlined below: -

- i. Local consultants to carry out feasibility, Environmental and Social Safeguard studies related to the project;
- ii. Local consultants to implement the Environmental and social safeguards plans;
- iii. Construction work to be undertaken by local contractors and subcontractors;
- iv. Local suppliers of construction materials and other site requirements. goods and services shall be sourced from Kenyan entities owned by women, youth and persons with disabilities;
- v. All unskilled and semi-skilled labour, junior and middle level positions shall be reserved for Kenyans.

b) Capacity building

The Private Party shall transfer technology and know-how to the Kenyan citizens through professional trainings and on-the-job-training.

c) Compensation for affected assets

The Project Affected Persons (PAPs) will be compensated for the loss of their assets i.e. structures and any damage to crops and trees.



They will also be compensated at Market Value for limited loss of use of their parcels of land that will be affected by the transmission lines. In addition, any loss of business and loss of income will be compensated as part of livelihood restoration programs. Compensation shall be full, prompt and just, with all persons displaced by the Project being fully resettled. This is aimed at improving the livelihoods of the PAPs, mitigating the negative impacts of the projects on them and ensuring that the project leaves them in a better state than before.

d) Corporate Social Responsibility

The Private Party will consult the affected communities on the appropriate CSR projects to be implemented. This will depend on the community needs.

e) Reliable power supply

The transmission lines will connect the host Counties to the National Electricity Grid, hence ensuring reliable power supply to the different parts of the respective counties. It is expected that with reliable power supply: -

- Investors will be attracted to invest in these Counties and create job opportunities to Kenyan citizens.
- The standards of education will improve in these Counties as electricity, besides enabling extended learning hours through provision of lighting at night, will support other learning areas relying on power such as woodwork, metalwork, among others.
- Support provision/delivery of Health Care: Health Care workers and facilities need electricity to refrigerate vaccines, sterilize and power equipment, and provide light for emergency procedures that can't wait until daytime,
- Business enterprises need power to run their operations. Depending on the nature of business, electricity is needed for lighting, running machinery, and enabling communications technologies. Residents will start up new businesses, especially those that require power supply. Additionally, existing businesses will benefit from reliable power supply.
- Support Agriculture for food security: The provision of reliable power
 in the project areas will spur growth of the agriculture sector at both
 subsistence and commercial levels. Electricity will power farm
 mechanization, value addition, food processing and storage,
 modernization of livestock farming and support irrigated farming
 resulting in doubling yields from rain-fed agriculture.
- The Contractors to the Projects will source building materials such as sand, ballast, cement etc from suppliers within or outside the project area. This will generate income for the locals resulting in improved livelihoods and quality of life.



5 Technical description of the infrastructure

Project 1: Establishment of approximately 180km 400kV double circuit line between Loosuk and Lessos with associated substations at Loosuk (Switch Station) and new 400/220kV substation at Lessos. The project will also include a implementation of a Line in Line Out on the existing 400kV Loiyangalani-Suswa line at Loosuk.

Project 2: Establishment of approximately 73km of 220kV double circuit line from Kibos to Musaga through Kakamega, new 2x45MVA 220/33kV substation at Kakamega, new 2x110MVA 220/132kV substation at Musaga, 220kV bay extension at Kibos and 132kV intertie to existing network at Musaga.

6 Project additionality

The Project will enhance the evacuation of renewable energy, specifically wind and geothermal resources, from the Lake Turkana Wind Power Plant and the Olkaria Geothermal Complex to Lessos and Kakamega, respectively. This improved transmission capacity will reduce reliance on kerosene-fired generation sources in Western Kenya, thereby lowering carbon emissions and contributing to the country's clean energy and climate change mitigation objectives.

7 Reason for selection of PPP mode and type in brief

The selection of the Public-Private Partnership (PPP) mode and type was informed by the following considerations:

- i. The Projects form an integral part of the Transmission Master Plan and are targeted for implementation by the 2028/29 Financial Year under the PPP framework, in line with national infrastructure priorities.
- ii. Under the PPP arrangement, the Private Party will mobilize project financing comprising both equity and debt through a Special Purpose Vehicle (SPV). The Private Party will be responsible for the design, construction, financing, operation, and maintenance of the Project for a defined concession period not exceeding thirty (30) years. This structure reduces the immediate fiscal burden on Government resources.
- iii. The selected PPP mode and type are consistent with the provisions of the Public Private Partnerships Act, Cap. 430, which provides the legal and institutional framework for private sector participation in the delivery of public infrastructure.

The adoption of the PPP model was therefore guided by both legal provisions and the outcomes of the Public Sector Comparator (PSC) analysis, which demonstrated that the PPP structure offers superior value for money, enhanced efficiency, and timely delivery compared to traditional public financing.



8 Brief description of the other modes analysed and reasons for rejecting these:

Public financing was the alternative mode of funding evaluated. Under this approach, the Government, through the National Treasury, would mobilize resources either from Development Partners or from internal budgetary allocations. However, this option was deemed unsuitable due to several challenges experienced in previous publicly financed projects, including prolonged lead times in securing financing, fiscal constraints limiting additional Government borrowing, and difficulties in wayleave acquisition arising from inadequate funding. These factors have historically contributed to significant delays in project implementation, construction, and commissioning.

In view of the above, public financing was not considered viable for the proposed Projects, as it would hinder the timely achievement of their intended objectives. This conclusion was further validated through the Public Sector Comparator (PSC) analysis, supported by both qualitative and quantitative Value for Money (VfM) assessments, which demonstrated that the PPP approach offers a more efficient and sustainable financing mechanism.

9 Dates of various approvals

The table below details the various approvals so far received for this proposal.

Table 2:Approvals

S/n	Milestone	Submission	Evaluation/	Approval/PS-NT
			Negotiation	Letter
1	Expression of Interest	2018	n/a	July 2021
2	PIP Project Proposal	8 Nov 2022	30 Jan - 3 Feb	15/17 Feb 2023
			2023	
3	PDR submission 1	14 Aug 2023	11 -15 Sep 2023	21 Dec 2023
4	PDR additional	21 Feb 2024	25-30 Mar 2024	3/9 May 2024
5	Project and Financial Risk			
	Assessment Report and Draft	13 th June	n/a	25 th July 2025
	negotiated Project	2025	i i i d	25 July 2025
	Agreement (PA)			

10 Project Milestones (Estimated and Actual)

Table 3:Project Milestones

S/n	Milestone	Estimated	Actual (TBA)
1	Commercial close	Nov 2025	
2	Financial close	Nov 2026	
3	Commencement/contract	Nov 2026	
	effectiveness		
4	Commencement of construction	Nov 2026	
5	Completion of construction	Nov 2028	
6	Commissioning	Mar 2029	
7	Contract expiry	Sept 2055	



11 Parties to the Contract and Financiers with Contact Details

i. Public authority:

Eng. Kipkemoi Kibias,

Ag. Managing Director & CEO

Kenya Electricity Transmission Company Limited,

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Nairobi, Kenya

ii. Private party:

Consortium of Africa 50 and PowerGrid Corporation of India Limited.

a. Mr. Alain Ebobisse,

Chief Executive Officer

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b. Mr.R.K Tyagi

Chairman and Managing Director

Power Grid Corporation of India Limited

"Saudamini"", Plot No. 2 Sectore-29

Gurugra, Haryana, India.

iii. Financiers: TBA

12 Procurement information

The proponent expressed interest to develop the transmission lines projects as privately initiated proposals (PIP) as per the provision of Section 40 of the PPP Act Cap 430. Refer to Table 2 for the project approvals.

i. Brief information on constitution of the evaluation committees

The evaluation committee is comprised of multi-disciplinary members drawn from KETRACO and PPP directorate. The members were nominated by respective organisation and appointed by the Permanent Secretary, National Treasury. The members in the committee have more than 5 years' experience in their respective fields and have completed several trainings and attained PPP professional certification.



ii. **Negotiation parameters:** The negotiation parameters included the following:

- Government support measures
- Payment Terms
- Success Fee
- Performance Security among other guarantees
- Project Scope extents
- Land Requirements and Support from Contracting authority.
- Project and concession period (effective date, completion date, expiry data)
- Hand back procedures
- Termination (procedures, sums and payment due to either party default)
- Project Cost and Finance parameters (Contingency, Cost of Capital, ABT Schedule, O& M Cost Assumptions)

iii. Risk Allocation

The objective is to ensure that risk is efficiently allocated to the entity/party best able to bear it, and that appropriate mitigation measures are adopted to reduce any Project impacts. *Refer to Appendix 1 for the detailed Risk Matrix.*

iv. Evaluation of PPP option: Value for Money or other approach used.

The project performance and achievement of value for money has been monitored continuously over the PIP process. After conclusion of the negotiations, further assessment through the preparation of documentation seeking concurrence from the PPP Committee, a detailed Project and Financial Risk Assessment report was prepared in accordance with the provisions of the PPP Act cap 430, whose main objective is to provide the information and analysis that assess the projects performance such as affordability, value for money and public sector comparator that weigh to support/justify the implementation of the project through PPP. Both qualitative and quantitative value-for-money analysis was carried out and included as a key component of the part of this report.

v. Financial information (TBA)

- Equity-debt ratio TBA
- Share capital ~ TBA
- Shareholders with proportion held and voting rights TBA
- Certain contracts provide for caps on equity transfer in different stages of the contract, especially during the construction stage and for a few years thereafter.
 Give details of any such provisions. - TBA
- Commercial lenders, institutional investors, bilateral or multilateral lenders, public issue of bonds, supplier credit, other TBA
- Categorize senior debt, mezzanine debt, other TBA
- Amount and tenor of each, fixed or floating rate TBA



- Security and step in arrangements TBA
- Forecast IRR TBA

vi. Government support, Payments and Revenue Share

Other support Revenue-share, if any	the Project at the end of the concession period. TBA In case of re-financing gains, the gains shall be shared on 50-50				
Land leases, asset transfers	The land for the project shall be jointly owned. The private party shall have the rights to develop the projects in accordance with the provisions in the negotiated project Agreement. The rights will be automatically handed over to KETRACO upon expiry of				
Availability payments	TBA				
	For the Projects, the GSM proposed is in the form of a letter of support (LoS) that dictates and provides the procedures, in the event of a termination as a result of a political event, how the Projects' assets will be transferred to the Government and the Project Company compensated. This is yet to be finalized. The National Treasury will be required to review and provide guidance and approval prior to finalization and adoption of the LoS.				
Guarantees among other GSM	This shall be guided by the Government Support Measures (GSM) Policy of October 2018. The GSM Policy provides guidance on the issuance of Government support measures in support of investment programmmes with public interest.				

vii. Tariffs

Tariffs and pricing	The Transmission Lines will connect existing & new load centers, eliminate constraints in the grid by providing alternative supply routes, reduce power outages and evacuate additional power to the grid. These benefits will result in an exponential increase in power demand & increase in power consumption, reduction of technical losses, and improved resilience in the grid. These qualitative benefits traditionally lead to improved quality of supply and subsequent tariff reduction.
	One of the conditions precedent in the project agreement is approval of the proposed tariff by EPRA. Annual Revenue Requirement (ARR) is one of the key determinants that EPRA considers in determining the project tariff. The project tariff will cover the following key aspects.



•	Capital service and recovery costs on both debt and equity
	components.

- Operating and maintenance (O&M) costs
- Financial and insurance costs.
- Taxes and other statutory charges

The provisional tariff has been submitted to EPRA for approval. The final tariff shall be firmed up at completion of construction/commissioning and achievement of Commercial Operations Date (COD.

viii. Contract termination

Events of default and	TBA
termination payments	
Handover	Throughout the operation phase the Private Company shall maintain the project facilities in a manner that the availability of the Transmission Lines is not affected by poor maintenance practices. The maintenance shall be guided by the agreed maintenance schedule (discussed and agreed with KETRACO and forming part of part of the Project Agreement). The maintenance schedule includes periodic routine checks, condition maintenance, replacement and overhauling of elements of the Transmission Lines that have reached the end of life. Before the expiry of the concession period, a handover survey will be conducted for each Transmission Line and any maintenance or restoration required will be implemented in accordance with the provision of the schedule of handover requirements and procedures that form part of the negotiated Project Agreement. This will ensure that the quality of the Transmission Lines at handover is satisfactory and can provide service for more years post the concession period.

ix. Renegotiations

There are no renegotiations or changes to the projects at the moment. Any unforeseen instances or need for renegotiation, variation or change to the Project will be treated according to the provisions of the negotiated Project Agreement.

x. Performance information

Performance*	Technical-Commercial Aspects:
	Before Construction: Meeting all the condition precedent to
	contract effectiveness and start of construction.
	Construction Phase: Completion and commissioning of the
	project as per technical specification and within 30months.
	Operations and Maintenance: Performance is availability based.
	The project is required to be available for at least 98.0% annually.



	E&S Aspects: Meets the requirement of the National Environmental Management Authority and the provisions of the EMCA Act and all other national/international regulations, plans and guidelines related to environmental and social management and sustainability requirements of these projects.
	Technical Commercial Aspects:
	Before Construction: Failure shall comprise in a general aspect failure to meet the conditions precedent as laid out in the project
Performance failure	agreement.
	During construction: failure shall comprise delayed commissioning of the projects due to reasons attributed to the Project Company. During operations: Any instance affecting the project elements that makes the entire project unavailable to perform its primary function leading to unavailability thresholds such that the recorded availability is less than 98%. E&S Aspects:
	Any instance where the project company, while undertaking the
	projects, fails (and repeatedly fails to or delays to provide corrective actions) to meet the requirements of the National Environmental Management Authority or the provisions of the EMCA Act and all other national/international regulations, plans and guidelines related to environmental and social management and sustainability requirement of these projects.
Performance	Project Availability shall be assessed on a monthly basis and based
assessments	on system operations data. Other performance shall be monitored with assistance of the independent Engineer to ensure the project implementation aligns to the requirements set forth in the project agreement.

^{*} Performance will include social and environmental aspects of the project.

(TBA) – The information will be availed upon:

- i. Completion of negotiations and execution of the Project Agreement.
- ii. Approval and provision of tariff by EPRA (for all financial and tariff related information)
- iii. Finalisation of the term sheets from the lenders and equity contributors.



Appendix 1: Risk Allocation Matrix

Development of Transmission Lines Project through Privately Initiated Proposals

Risks		llocation		
Category & Description		Shared	Private	Remarks
Land and RoW risk Delays in land acquisition or rights of way for the project in timely and cost-effective manner.			✓	This is not a competitive project, being a PIP, is the responsibility of the proponent to acquire the RoW for the project.
Land Acquisition risk The risks associated with acquiring title/wayleaves to the land to be used for a project.			✓	Key Risk: selection of suitable route; obtaining Land Rights Consequence: time, cost The cost of Land Rights is part of equity financing provided by PP, although KETRACO may also provide resources (in form of staff time) as a benefit in kind to the Project. PP responsible for acquisition activities.
Site risk Risks associated with site selection and the geophysical conditions of that site: Approvals, Security, Archaeological, Latent defects in existing structures & Unforeseeable difficulties			✓	Key risk: site conditions Consequence: time, cost
Permit and Licensing Risk			✓	The CA role is limited to providing assistance upon request. Consequence: delay in achieving financial close and to start of construction
Changes in Laws and Regulations	✓			Key risk: Change to the legal regime compared to that assumed for financial model. Consequence: Increased cost / reduced profit which is not matched by inflationary increases in charges; legal impossibility (in extreme cases)



Construction/ Completion	√	Key risks: Complications arise during construction
Risk/Time and Cost Overruns		process
Risk		Consequence: time, cost. (Proposal to remove completion from this risk)

Risks	Allocation		n		
Category & Description		Shared Private Private		Remarks	
Design Risk The risk that the project has not			✓	Key risk: Design is not fit for purpose Consequence: underperformance/outage risk,	
been designed adequately for the purpose required.				consequential	
Feasibility study, Approval of designs, Changes to design.				damage, payments are not VfM	
Completion (including delay and cost overrun) Risk			✓	Key risks: Failure to pass commissioning tests, delay to timely completion	
The risk of commissioning the asset on time and on budget and the consequences of missing either of those two criteria.				Consequences: costs of late completion, reputational risk, impacts on generation projects to be connected	
Operations Risk [Operational Performance Risk]			✓	Key risk: Failure of the T Line to meet the functional specification. Network expansion / network changes requirement during the operational period for additional works to be carried out in respect of new assets into the power system.	
				Consequence: forced outages, facility damage, cost, reputational risk. stability of facility, impact on revenue stream, controls over changes to be made.	
Maintenance Risk			√	Key Risks: Ability to maintain the assets within the original pricing envelope	
The risk of maintaining the asset to the appropriate standards and specifications for the life of the project. Increased maintenance costs due to increased system usage.				Consequence: Reduced returns for PP, risk of default by PP, risk of poor quality assets upon handback to CA	



Incorrect estimates and cost overruns. Handback requirements		
Financial Risk, difficulty in raising project finances or raising very expensive financing	✓	Key risk: Foreign exchange exposure; interest rate exposure Consequence: Mismatch of project revenues and project costs. Key risk: Cost of finance is unaffordable or not value for money Consequence: Additional support required by GOK; GOK over-pays for project
Inflation Risk The risk that the costs of the Project increase more than expected.		Key risk: Increasing cost of goods or services Consequence: Mismatch between payments out and payments in
Social and Environmental Risks	✓	The PP to separate Social and Environmental Risks. Key risk: Existence of sensitive environmental and social conditions Consequence: time, cost, reputational damage

Risks	Allocation		n	
Category & Description	Public	Shared	Private	Remarks
Political Risk	√			Key risk: unexpected government interference Consequence: delay to construction, increased costs, disruption, loss of revenue during operations period
Off Taker Risk. [Revenue/ Payment Risk]	√			Key risk: non-payment by KETRACO with insufficient GOK backstop. Additional costs due under Project



			Agreement require regulatory approval
			Agreement require regulatory approval
			Consequence: KETRACO default; PP default to its lenders under its finance documents. Mismatch between PP requirements and KETRACO's regulatory settlement
Performance/Default/Termination Risk	√		These are shared and these should be separated
Termination Risk	√		Key risks: Project agreement can no longer be performed due to default by either party, or by external circumstances which render the project impossible
			Consequence: ensuring that payments made to each party (investors, lenders, contractors) for the termination and transfer of the Project are fair in the circumstances
Force Majeure	√		Non Political FM risk is shared.
			Political FM risk is Contracting Authority (CA) risk.
			This need to be categorised as above.
Early Development Risk		✓	Key Risk: Selection and scoping of suitable projects for PPP delivery; risk of selected projects not being taken forward by government despite feasibility being demonstrated.
			Consequence: Wasted costs of project development
Insurance Risk		✓	Key risks: Unavailability of insurance terms, unaffordability of insurance premiums
			Consequences: PP may be unable to operate (without
			Third Party insurance); PP cannot repair damage (without Material Damage insurance); PP cannot service debt (without Business Interruption insurance)



Strategic Risk	✓	Key risk: loss of management expertise, mis-
		aligned incentives
		Consequence: project underperformance
		Key risk: Lack of liquidity of equity investment
		Consequence: inefficiency of equity pricing,
		higher project costs

Risks	Allocation			
Category & Description	Public	Shared	Private	Remarks
New Technology Risk		✓	Key risk: New technology supplants the need for the asset	
				Consequence: Project is no longer VFM or becomes unnecessary
				Key risk: New technology allows for greater performance at the original price
				Consequence: Project is no longer VFM if these opportunities are not taken.