Annex-C

BEFORE THE NATIONAL ELECTRIC POWER REGULATORY AUTHORITY

TARIFF MODIFICATION PETITION
UNDER
NEPRA (TARIFF STANDARDS AND PROCEDURE) RULES-1998

In relation to:

Sindh Nooriabad Power Company (Private) Limited at Nooriabad, Sindh Province, Pakistan

Dated 19.11.2024

Table of Contents

Information relating to Forms 1-15 under rule 3(2)(g) of the Tariff Rules:

FORM	FORM DESCRIPTION	REFERENCE
1	General Information of the Power Project	Chapter 2: Project Summary
2	Breakup of Project Cost	Table 2: Total Project after Modification
3	Breakup of capital cost for Coal, RFO, Gas, Bagasse, Biomass, Solid Waste and Nuclear fuel based projects	Table 1: Summary of Cost Claimed in this Petition
4	Detailed Breakup of Non EPC and Project Development Costs	Not Applicable
5	Selection of EPC Contractor / Selection of O&M Contractor	Not Applicable
6	Financing Assumptions	Not Applicable
7	Technical Assumptions	Not Applicable
8	Plant Characteristics for Coal, RFO, Gas, Bagasse, Biomass, Solid Waste and Nuclear fuel based projects	Chapter 2: Project Summary
9	Breakup of Annual O&M Expenses	Not Applicable
10	Calculation of IDC	Chapter 6.5: Cost of IDC
11	Calculation of ROE	Not Applicable
12	Comparison with Similar Technology National and International Plants	Not Applicable
13	Calculation of Working Capital	Chapter 6.6: Financing cost of Working Capital
14	Debt Service Schedule (Typical for Local Currency)	Not Applicable
15	Reference Tariff Table (Fuel, Open Cycle)	Not Applicable

Annexes

No.	Annex Ref.	Annex Title
1.	**Annex A**	PAR Decision
2.	**Annex B**	Review Decision
3.	**Annex C**	Details of Expenditure on Water Tankers
4.	**Annex D**	Details of stoppages of Steam Turbines
5.	**Annex E**	Wartsila, Finland Proposal for Air-Cooled Radiators
6.	**Annex F**	Proposal for Dedicated Water Pipeline from Keenjhar Lake
7.	**Annex G**	Sewerage line Proposal for Cooling Tower Drain Disposal
8.	**Annex H**	Gas Supply curtailments and Plant Availability in 2018-2023
9.	**Annex I**	Reductions in Capacity Payment details 2018-2024

1. The Petitioner

1.1. Name and Address

Petitioner Name	Sindh Nooriabad Power Company-Phase I (Private) Limited (“**Petitioner**”)
Petitioner Address	23-A/II, Mohammad Ali Housing Society, Karachi

1.2. Representatives of the Petitioner

	Name	**Job Title**
Representative 1	Najam ul Hasnain	Chief Executive Officer
Representative 2	Ashfaque Ahmed Laghari	Chief Operating Officer
Representative 3	Syed Nadeem ul Haque	Ag .Chief Financial Officer

1.3. Project Advisors

Advisor	**Name**
Legal Advisors	RIAA Barker Gillette

2. Project Summary

Project Company	Sindh Nooriabad Power Company-Phase I (Private) Limited
Project Sponsor	Government of Sindh (49%) Technomen Kinetics (Pvt.) Limited (51%)
Capacity	52.094 MW (Gross)
Project Type	Power acquisition under IPPR-2005
Applicable Policy	N/A
Applicable Tariff Regulations	NEPRA (Tariff Standards and Procedure) Rules 1998
LOI issued by	K-Electric Limited
Contract Type	Take or Pay, 25 years PPA
Power Purchaser	K-Electric Limited
Basis	Build, Own, Operate
Location	Nooriabad, Sindh Province, Pakistan
Construction Mode	Turnkey EPC
EPC Contractor	Technomen Kinetics LLC FZ
O&M Contractor	Wartsila Pakistan
Technology	Gas-Fired
Transmission/Interconnection	132kV Grid
Annual Energy Generation (NET)	448.10 GWh at 100% load factor, 412.26 GWh at 92% load factor

Project Sponsors – Summary

The Petitioner is jointly sponsored by the GOS (holding 49%) and TKL (holding 51%).

Government of Sindh (GOS):

The GOS entered into a public-private partnership to develop the Project in order to promote the energy self-sustenance of the Province of Sindh.

Technomen Kinetics (Private) Limited (TKL):

Technomen is a multi-dimensional organisation with a focus on engineering activities, headquartered in Karachi, Pakistan. Having started as a construction company, the Technomen group has evolved into a medium-sized unit with numerous technical accomplishments in other disciplines of engineering as well.

Almost 90% of the group's employees are technical, which goes to show their focus on industrial work. The group has acquired equipment to handle different kinds of complex and heavy civil, electrical and mechanical engineering projects. Technomen is fully equipped to handle the toughest and the most complex of engineering projects, and has also acquired one of the heaviest cranes available in the country.

The group has diversified into the field of setting up power plants. It has already set up a few power plants in Pakistan and is now actively working to enter into the field of alternative energy.

2.1. Project Location

The site is in Nooriabad, Sindh Province, Pakistan. A total land area of approximately fifty (50) acres has been earmarked for the Project. The closest airport is in Karachi Airport (approx. 100 km from the site) and the closest highway is 6.5 km from the site.

2.2. Engineering, Procurement and Construction (EPC)

Technomen Kinetics (Private) Limited, which had been selected as the private sponsor of the Projects, carried out the EPC works for the Project.

2.3. Transmission/Interconnection

A 132kV double circuit line has been constructed from the Complex to the KDA Scheme-33 Karachi 132kV Grid Station for the evacuation of power with a transmission/interconnection length of approx. 97km.

2.4. Operations & Maintenance (O&M)

An O&M contract for twelve (12) years has been signed with Wartsila Pakistan Limited, the local office of Wartsila Finland, the OEM of the Plant.

2.5. Annual Generation

The annual generation (NET) of the Project is expected to be 448.10 GWh at 100% load factor, 412.26 GWh at 92% load factor, subject to full availability of natural gas.

2.6. Background

The Petitioner is a special purpose vehicle (under the Companies Act 2017) setup in 2012 in the public-private partnership mode to develop an approximately 50MW (net at Site Conditions) gas-fired electric power generation plant at Nooriabad, Sindh Province, Pakistan ("**Project**").

The Petitioner holds a generation license awarded by the National Electric Power Regulatory Authority ("**NEPRA**" or "**Authority**") on 15 July 2015, which is valid up till 30 January 2041.

3. Brief Facts Of The Case

In July 2015, Karachi Electric Limited ("**K-Electric**") submitted a Power Acquisition Request ("**PAR**") to the Authority, in accordance with NEPRA Interim Power Procurement (Procedures and Standards) Regulations 2005 ("**IPPR-2005**"), for purchase of around 50 MW (net) electrical power from the Petitioner.

The Authority issued a decision in relation to the PAR on 1 June 2016 ("**PAR Decision**"). A copy of the PAR Decision is enclosed as **Annex A** (*PAR Decision*).

Thereafter, the Petitioner filed a motion for leave for review against the PAR Decision. The Authority issued a decision in relation to the aforesaid motion on 4 August 2017 ("**Review Decision**"). A copy of the Review Decision is enclosed as **Annex B** (*Review Decision*).

4. Grounds For The Petition

Pursuant to the relevant provisions of the Tariff Rules, read with the provisions of the NEPRA Act and the rules and regulations made thereunder, the Petitioner submits before the Authority this petition for the Modification of its tariff ("**Petition**") in light of the grounds demonstrated below.

- Having limited scope of review the NEPRA in the Review Decision did not consider certain legitimate costs incurred by the petitioner as these were not part of the PAR. In terms of Tariff Standards & Procedure Rules-1998 all fresh costs are required to be processed through a Tariff Modification Petition. The instant Petition is being filed with NEPRA with a request to modify the tariff making part of the tariff accordingly.
- The depleting gas reserves have resulted in a severe gas supply shortage in the entire country. Consequently, the Petitioner is also adversely affected as it is not being given the committed supply. Based on the gas supply commitment at that time, 92% plant availability was assumed while determining the tariff of the Petitioner. Due to the gas shortage Sui Southern Gas Company Limited ("**SSGC**") has curtailed gas supply to the project thus reducing to average plant availability of 70% in the past Six years. As a result thereof, the petitioner is suffering continuously a huge loss in Capacity Payments and the petitioner has been communicating the impact in this regard to NEPRA on annual basis. In the light of aforesaid the plant availability factor needs to be rationalised linking with the maximum supply guaranteed in the Gas Supply Agreement GSA, signed dated 16 June 2014 between SSGC, GOS, and SNPC and amended thereafter. It would also be prudent to delink fuel supply from the Plant Availability, and the Plant should be considered available when it is declared as "Available" and if it cannot despatch because of non-availability of gas, resulting in reduction in despatch because of gas curtailment, the Plant should not be penalised for that reduced despartch. Alternatively, Petitioner may be allowed to use alternate fuel. The infrastructure required for using alternate fuel may involve additional CAPEX to ensure the availability of alternate fuel.
- All project costs required to be modified in para 5 of this petition which mainly include costs of "interest during construction", "insurance during construction", "gas supply pipeline", and "cost of water supply system" etc. may be approved.
- Due to a change in circumstances, the project requires additional CAPEX in order to remain efficient / financially viable. These CAPEX additions are primarily related to ensuring supply of water for cooling the necessary apparatus and then disposing off the same in the waste water drain.

5. Background

The Project was being developed through a combination of debt and equity funding, based upon a non-recourse or limited recourse financial structure requiring the debt to be repaid from the cash flows of the Project. The Project is uniquely special for the reason that it reflects a success story of a *'Public Private Partnership ("PPP")'* with the 49% equity of GOS in the Project while the remainder 51% equity is held by M/s Technomen Kinetics Private Limited. This is a classic example of commercial joint venture between the private sector and the public sector.

Almost 80% of the project cost was arranged and funded from the consortium of the financial institutions comprising of National Bank of Pakistan, Sindh Bank Limited and the Provincial Pension Fund GOS ("Project Lenders"). The financing from the Project Lenders for the Project relied fundamentally on the support and assurances NEPRA and the government have offered to make the Project viable, *inter alia*, through execution of a PPA (incorporating the tariff) with K-Electric Limited ("KEL") and the regulatory approvals of NEPRA, as well as the technical due diligence of the Project.

Initially, the Project was envisaged to be developed as PPP pursuant to the Policy for Small Independent Power Producer (SIPP) issued by Pakistan Electric Power Company ("PEPCO"). The electricity produced from the two subject companies was supposed to be sold to Hyderabad Electric Supply Company ("HESCO"), but upon refusal KEL was approached and subsequently the Power Purchase Agreement was finalized. On 29.11.2012, the sponsors of the Project were issued a Letter of Intent ("GOS LOI") by the GOS to develop the Project, based on Build, Own and Operate Basis and carry out *inter alia* services for the Design, Build, Finance and Operate the Power Plants, for which the feasibility study was conducted by the private sector.

According to GOS LOI, the power so generated by the Project was to be solely purchased by HESCO, a public sector distribution utility of the Federal Government, however, due to some reasons, HESCO backed out of the arrangement and forced the Petitioner to request NEPRA to change the Petitioner's purchaser to KEL, the current Power Purchaser.

On 11.09.2014, the Petitioner undertook the Initial Environmental Examination Report for the Project ("IEE Report"). The IEE Report presented the results and conclusions of environmental appraisal and assessment for the Project, which was evaluated under the prevailing environmental laws of Pakistan. The Project EIA was submitted on 08.09.2014 to Sindh Environmental Protection Agency ("Sindh EPA"), approval wherefor was granted by the Sindh EPA on 24.03.2015.

As discussed, the introduction of KEL was perforce choice made at a lateral stage, given the unceremonious pull out of HESCO at the reasonably advance stage of the Project development. Another unique and singular aspect of the Project is the grid interconnection arrangement. Being located outside the territorial jurisdiction of KEL, a reliable and unique solution was a dire need for the viability of the Project.

To enable the Project to finance, develop and successfully commission, it was imperative to evolve a robust offtake arrangement whereby the electricity output of the Project could be transported and dispatched to KEL. The Petitioner approached National Transmission and Despatch Company Limited

("NTDC") to undertake the wheeling for the Petitioner's Project. The response of NTDC was a refusal. Consequently, and as a forced choice, a new company i.e., Sindh Transmission & Despatch Company Limited ("STDC") was established by the GOS, with a sole objective to substitute/provide the necessary interconnection arrangement in the territory of *'National Grid Company'* (as defined in the Section 16 of the NEPRA Act, 1997), as a *'Special Purpose Transmission License'* (as defined in the Section 16 of the NEPRA Act, 1997), to wheel the electric power and deliver the same at the interconnection point of KEL. It is worth highlighting that the Petitioner's Project is a lifeline of STDC, which wheels the electricity from the Project and transmits it to the designated interconnection point of KEL pursuant to a tripartite wheeling arrangement between the Petitioner, KEL and STDC, with the approval of NEPRA.

After overcoming numerous development hurdles and obstacles, the Petitioner successfully achieved commercial operations on 18 January 2018. Since then, the Petitioner is providing reliable and cheap electric power to KEL for the benefit of the consumers of Karachi.

6. Proposed Revisions to the Tariff

The Petitioner proposes the revision of the PAR Decision as follows:

6.1. Cost of Gas Pipeline Infrastructure

The petitioner signed a Gas Supply Agreement ("GSA") with Sui Southern Gas Company ("SSGC"). In order to execute the GSA a gas pipeline about 18 km common for two projects, i.e. SNPCL-I and SNPCL-II had to be built from the main gas trunk line located at National Highway-Jhimpir-Nooriabad junction. According to Oil & Gas Regulatory Authority's ("OGRA") decision in the cases of LNG based generation projects the construction of Gas Pipeline Infrastructure was the responsibility of Gas Distribution Company whereas all the costs in this regard were to be borne by the project company. In view thereof, the petitioner entered into contract with SSGC for construction of Gas Pipeline Infrastructure. The agreed scope of work in this regard included Sellers' Metering Station (SMS) comprising of filters, separators, gas metering station, flow computer, instrumentation, civil works, gas pipeline fitting, heat shrinks, excavation, trenching, laying of pipe, right of way for laying the pipeline and acquisition of land. The cost of USD 1.8 million for construction of a gas transmission line by SSGC for each of the project i.e. SNPCL-I & SNPCL-II was estimated.

In order to carry out the gas pipeline construction work the following three contracts amounting to PKR 421.00 million were signed;

1. Contract of PKR 106.840 million between SNPCL & SSGCL for design, construction and installation of the pipeline dated November 15, 2015.
2. Contract of PKR 294.000 million exclusive of taxes between SSGCL & Technomen Kinetics (Pvt) Limited ("TKL") for the supply of equipment/materials required for construction of gas pipeline dated March 05, 2015.
3. Contract of PKR 20.160 million between SNPCL & Akbar & Brothers for the works related to excavation and backfilling.

Half of the overall cost of PKR 421.00 million (since the infrastructure is for two companies, so half of the cost is borne by SNPC Phase I, while the other half would be borne by SNPC Phase II), which works out as PKR 235.70 million pertains to the petitioner. The same in dollar terms works out as 2.245million.

GAS SUPPLY PIPELINE CONTRACTS	USD VALUE	PKR VALUE
SUI SOUTHERN GAS COMPANY LIMITED	609,910	64,015,094
TECHNOMEN KINETICS (PVT.) LTD	1,505,376	158,064,516 (inclusive of taxes)
AKBAR & BROTHERS	130,331	13,619,594

TOTAL GAS PIPELINE COST		
	2,245,618	**235,699,204**

As against the aforesaid cost the actual cost remained higher, which is indicated in comparative form in the following table:

Items	Cost Incurred (USD Million)	Cost Approved (USD Million)	Cost Requested (USD Million)
SSGC	0.6099	1.925	0.1903
TKL	1.5054		
Akbar & Brothers	0.1303	0	0.1303
Total	**2.2456**	**1.925**	**0.3206**

This translates to Rs 0.0751 per kWh as part of tariff

Decision Sought from the Authority:

In view of above it is requested that the prudently incurred additional cost of USD 0.3206 million be allowed and the tariff to be allowed to Rs. 0.0751 per Kwh with effect from COD. In order to substantiate this cost all relevant evidence is attached with the instant petition. The detail of expenditures and exchange rates will be provided if Authority requires the same.

6.2. Villa, Boundary Wall and Architect Fee

In the PAR, the petitioner claimed USD 0.235 million for the construction of residential colony at the project site. The Authority accepted and approved as such stating that it also included landscape cost. In the review decision the same was revised to USD 0.285 million allowing the cost of USD 0.050 million on account of landscape. The Authority in its review decision itself acknowledged that Rs.2400/- per square ft. construction cost was assumed for the assessment as against the range Rs.3000/- to Rs.5000/- square foot.

The Petitioner at the time of review motion claimed additional costs attributable to the villa, boundary wall and Architect Fee, which considering the limited scope of review were not allowed by the Authority. The petitioner considers that the costs being legitimate duly supported with documentary evidence may be allowed.

Summary of costs incurred on Residential Colony, Villa, Boundary Wall and Architect Fee is placed hereunder:

Items	Cost Incurred (USD Million)	Cost Approved (USD Million)	Cost Requested (USD Million)
Labour Lodge	0.3713	0.285	0.0863
Boundary Wall	0.1229	0	0.1229
Villa	0.1135	0	0.1135
Architect Fee	0.0479	0	0.0479
Total	**0.6556**	**0.285**	**0.3706**

This translates to Rs 0.0841 per kWh as part of tariff.

Decision Sought from the Authority:

The Authority is requested that the above mentioned cost of USD 0.3706 million, may kindly be made part of Project Cost resulting in an increase of tariff by Rs. 0.0841 per kWh with effect from COD, which may please be approved. The detail of expenditures and exchange rates will be provided if Authority requires the same.

6.3. Custom Duties & Clearance Charges

The Authority in the Review Decision capped the port clearance charges for the imported EPC equipment at 0.075% without any rationale. These are the charges which are to be paid based on the import documents and are not in the petitioner's control.

IMPORT LIST			CUSTOM DUTIED & TAXES - USD	CUSTOM DUTIED & TAXES – PKR
EURO - S/1862/51/529/14			1,448,417	147,504,715
EURO - S/1862/51/530/14			225,571	23,481,893
USD - SLC/0303/14/0225	-		1,394,145	147,509,151
TOTAL CUSTOM DUTIES & TAXES			**3,068,132**	**318,495,760**

In this regard following is the amount claimed on the basis of documentary evidence for Authority's consideration.

Item	Cost Incurred (USD Million)	Cost Approved (USD Million)	Cost Requested (USD Million)
Custom Duties and Port Charges	**3.0682**	**2.388**	**0.6802**

This translates to Rs 0.1544 per kWh as part of tariff.

Decision Sought from the Authority:

The Authority is requested to approve the Port Clearance Charges as per actual and the tariff to be allowed to Rs. 0.1544 per kWh with effect from COD. The detail of expenditures and exchange rates will be provided if Authority requires the same.

6.4 Mobilisation Fee for O&M Contractor

In the review motion, the petitioner requested to allow USD 0.176 million equal to the claimed fixed O&M cost for one month on account of Mobilisation Fee for O&M Contractor. While deciding the review case the Authority applying the formula / method as proposed by the petitioner assessed USD 0.127 million with respect to Mobilisation Fee for O&M Contractor against the requested USD 0.176 million.

The petitioner understands that the Authority did not consider the circumstances causing delay (as mentioned in the Background) in completion of the project leading to increase in O&M Mobilisation Fee for contractor, while making assessment. The circumstances causing delay in completion of the project included backing out of HESCO from the O & M Agreement, delay in construction of the Transmission Line by newly-formed company i.e. STDC and refusal of NTDC to provide interconnection, were beyond the petitioner's control. In view thereof, the Mobilisation Fee for the O&M Contractor is required to be revised as per the following;

Item	Cost Incurred (USD Million)	Cost Approved (USD Million)	Cost Requested (USD Million)
Mobilisation Fee & O&M Contractor	**0.18052**	**0.127**	**0.05352**

This translates to Rs 0.0121 per kWh with effect from COD as part of tariff.

Decision Sought from the Authority:

The Authority is requested to approve the above mentioned additional cost i.e. USD 0.05352 M and the respective tariff component to be allowed to Rs. 0.0121 per kWh with effect from COD. The detail of expenditures and exchange rates will be provided if Authority requires the same.

6.5 Interest during Construction

The construction period of the project was initially estimated as 18 months. The petitioner however, could not complete the same within the stipulated time period due to the following reasons:

- The project was initially supposed to sell power to HESCO who at a belated stage, after having initialled the draft PPA, refused to purchase power from the Petitioner.
- K-Electric offered to buy power from the petitioner. Accordingly NTDC was requested to provide the interconnection but NTDC refused to do so, on the grounds that it would not be able to meet the Petitioner's timeline.
- The Petitioner had no recourse but to request Government of Sindh ("GOS") to rescue the petitioner. Accordingly, the Government of Sindh (**"GOS"**) established a special purpose transmission company ("STDC") to construct the transmission line for evacuating power from the Petitioner. To carry out the transmission activity STDC obtained license from NEPRA.

From the above mentioned reasons and as mentioned in the Background it is clear that it was not possible for the petitioner to achieve COD within the stipulated period of 18 months. As a result of this delay the Interest During Construction ("IDC") of the loan has increased. The petitioner considers that denying the legitimate interest cost during the delayed period for achieving COD would jeopardise the viability of the project.

In view of aforesaid the Authority considering the above ground is requested to allow the construction period of 36 months. Accordingly, the additional amount of USD 7.005 million on account of IDC duly substantiated with the documentary evidence, may be considered prudent project cost and allowed.

The following is the detail of interest during the construction for consideration of the Authority.

Interest During Construction	**Drawdown Amount PKR**	**Interest Paid PKR**	**Interest Paid USD**
NATIONAL BANK OF PAKISTAN	2,993,768,140	580,647,391	5,563,763
SINDH BANK LIMITED	1,000,000,000	215,749,362	2,067,387

TERM FINANCE CERTIFICATES			1,500,000,000	244,136,350.68	2,324,231
			5,493,768,140	**1,040,533,104**	**9,955,381**

Item	Cost Incurred (USD Million)	Cost Approved (USD Million)	Cost Requested (USD Million)
Interest During Construction	**9.956**	**2.951**	**7.005**

This translates to Rs 1.6337 per kWh with effect from COD as part of tariff.

Decision Sought from the Authority:

In view of the submission in the preceding paragraphs the Authority is requested to approve the above mentioned additional cost of Interest During Construction i.e. USD 7.005 million and the relevant tariff component to be allowed to Rs. 1.6337 per kWh with effect from COD. The detail of expenditures and exchange rates will be provided if Authority requires the same.

6.6 Working Capital Financing Cost

The Petitioner is required to pay the fuel costs 10 days before receiving payment from the power purchaser under the PPA. Accordingly, the Petitioner is required to finance its fuel cost through working capital for a period of 10 days. To overcome this gap between receipts and payments, the petitioner was forced to arrange working capital facility of Rs. 368 million from Sindh Bank Limited. The financing cost of this running finance facility is KIBOR plus three percent. This cost of working capital is a financial burden on the Petitioner affecting the project viability. It is important to note that this cost has been allowed to other IPPs too.

The following table shows that the Petitioner has paid USD 0.9372 million till March 2024 since COD, as financial cost of working capital, whereas the Authority has not allowed any cost on this account. Considering the same as a prudent cost it is requested to be be allowed.

Item	Cost Incurred (USD Million)	Cost Approved (USD Million)	Cost Requested (USD Million)
Working Capital Financing Cost	**0.9372**	**0**	**0.9372**

Decision Sought from the Authority:

The Authority is requested to allow financing cost of Working Capital as Rs. 0.0752 per kWh in the tariff with effect from COD. The detail of expenditures and exchange rates will be provided if Authority requires the same.

6.7 Withholding Tax

The petitioner paid withholding tax to the suppliers for provision of their services. The Petitioner, accordingly, requested the Authority to allow the same as has been allowed to other similar projects. The Authority did not allow these taxes to the petitioner, which the petitioner understands is a clear discrimination. The petitioner requests the Authority that it may be treated similarly on the principle of fairness, equity and justice as the other similar projects were treated.

During the construction period of the plant, the petitioner paid the withholding taxes to the different suppliers as per details given the following table:

Supplier	Job Name	Withholding tax Rs. Mln
Technomen Kinetics Pvt Limited	EPC On Shore	54.770
Sui Southern Gas Company Ltd	Gas Pipeline	4.735
Technomen Kinetics Pvt Limited	Gas Pipeline	11.040
Akbar & Brothers	Gas Pipeline	1.021
Technomen Kinetics Pvt Limited	Boundary Wall	0.875
Technomen Kinetics Pvt Limited	Labour Lodge & Villa	3.680
Coal Colesces	Architect Fee	0.334
Architect Ali & Aun	Architect Fee	0.1033
Technomen Kinetics Pvt Limited	Water Reservoir	3.500
	Total Cost of Withholding Taxes Paid	**80.000**

This translates to Rs 0.1785 per kWh as part of tariff.

Decision sought from the Authority:

The Authority is requested to allow Rs. 80 million on account of Withholding Taxes paid to the Suppliers during construction at par with other IPPs and the relevant tariff component to be allowed to Rs. 0.1785

per kWh accordingly. The detail of expenditures and exchange rates will be provided if Authority requires the same.

6.8 Insurance during Construction

The petitioner has requested the Authority for modification of certain costs including the request for extension in the construction period, which has a financial impact. The petitioner has paid USD 0.8799 million on account of insurance during construction. As against the aforesaid cost the Authority has allowed only USD 0.4742 million under this head.

The following is the detail of actual cost of Insurance during Construction:

Item	Cost Incurred (USD Million)	Cost Approved (USD Million)	Cost Requested (USD Million)
Insurance During Construction	**0.8799**	**0.4742**	**0.4057**

This translates to Rs 0.1785 per kWh as part of tariff.

Decision Sought from the Authority:

The Authority is requested to allow additional cost of USD 0.4057 million, due to the extended construction period and modify the relevant tariff component accordingly with effect from COD. The detail of expenditures and exchange rates will be provided if Authority requires the same.

6.9 Cost incurred on Bulk Water Supply

The Petitioner requires 800,000 gallons)3637 cu. meters) of water every day for the plant. The Petitioner currently obtains water from a public station located 6 km from the project site. A dedicated pipeline was constructed for drawing water from this station. This water supply system comprises a Raw Water Tank and a Six-kilometer pipeline from Ghoghro Pir to the plant site. The cost of construction of the water supply of PKR 50.00 million was paid from the project funds.

Existing Water Supply infrastructure at Nooriabad is very old and unreliable because of power system failures, pumps failures, etc. Although the petitioner made all out efforts to make the system reliable but the breakdowns still occur, which disrupt the water supply. Consequently, the petitioner has to resort to water bowsers from local supplier. To cater for such emergencies an additional smaller tank was constructed, which stores water for three days of consumption by the plant. Cost of this additional tank was PKR 22 million.

Quality of water from the local system (Keenjhar Lake) is not suitable for use as feed water in the boilers, and SNPC has installed an RO Plant for the same. Frequent problems with the RO Plant media filter were experienced and it was decided to construct a "de-silting tank" for de-silting of lake water before supplying to the RO Plant. The cost of this de-silting tank was PKR 1.60 million.

Summary of costs incurred on the Water Supply System is as under:

Supplier Name	Contract Description	Cost Incurred Rs. Mln
Technomen Kinetics (Pvt.) Ltd	Raw Water Tank and Installation of 6KM water pipeline.	50.00
Hussain Engineering	Construction of additional raw water tank.	22.00
NH international	Construction of Desilting Tank.	1.60
	Total Cost	**73.60**

This translates to Rs 0.1642 per kWh as part of tariff.

Decision sought from the Authority:

It is requested that PKR 73.6 million as per the details in the above table may be allowed and the corresponding tariff component be modified accordingly with effect from COD. The detail of expenditures and exchange rates will be provided if Authority requires the same.

6.10 Claim for Extra Metering System and Disconnector Switches

As per the requirements of the PPA, which has been approved by NEPRA, extra Metering System and Disconnection Switches were required to ne installed at SNPC Plant. The Petitioner incurred an additional cost of USD 0.250 M for purchase of the said switches. The Petitioner requested this additional cost in review petition, however, NEPRA stated in the Review Decision that the same does not fall under the scope of review.

Documentary evidence for this expense having been incurred is enclosed.

This translates to Rs 0.0567 per kWh as part of tariff.

Decision Sought from the Authority:

Half of the cost of USD 0.250 M is a prudent cost and should be allowed with effect from COD as per the Tariff Rules. The detail of expenditures and exchange rates will be provided if Authority requires the same.

6.11 Wheeling and Power Line Carrier Tele-protection and Communication System

As per the requirement of PPA, which has been approved by NEPRA, Tele protection Equipment, etc. was to be installed. The Petitioner incurred an additional cost of USD 0.250 M for the subject items, and requested for the same in its review petition, however, NEPRA stated in the Review Decision that the same does not fall under the scope of review.

This translates to Rs 0.0567 per kWh as part of tariff.

Decision Sought from the Authority:

Accordingly, it is requested of the Authority that half of the project cost of USD 0.250 M is a prudent cost and should be allowed with effect from COD as per the Tariff Rules. The detail of expenditures and exchange rates will be provided if Authority requires the same.

6.12 Financing Cost of Safety Spare Parts

The Petitioner requested this additional cost in its review petition, however, NEPRA stated in the Review Decision that the same does not fall under the scope of review. the cost incurred on safety spares of USD 1.113 M (equivalent to Rs 131 M). Accordingly, it is requested that the cost financing to procure the safety spares should be allowed as a prudent cost.

Item	Cost Incurred (USD Million)	Cost Approved (USD Million)	Cost Requested (USD Million)
Cost Of Safety Spare Parts	**1.113**	**0**	**1.113**

This translates to Rs 0.0134 per kWh as part of tariff.

Decision sought from the Authority:

The Authority may kindly approve the financing cost of Safety Spares at Rs. 0.0134 per kWh as part of tariff with effect from COD. The detail of expenditures and exchange rates will be provided if Authority requires the same.

6.13 Request for rescheduling of Debt.

It is submitted that, due to various unfavourable decisions taken by NEPRA, SNPCs have suffered heavy financial losses. These decisions include, but are not limited to:

a. Blockage of ROE / ROEDC since COD (Jan 2018 till June 2022)
b. Disallowing indexation paid by KE, leading to blockage of Capacity Payments by KE for one full year
c. Arbitrary denying indexation on ROE / ROEDC, at the start of financial year – and then allowing after three / four months
d. Delay in allowing Heat Rate Degradation component

It must be appreciated that because of these decisions, and also because of a big discrepancy in the "allowed Project Cost" and the "actual Project Cost", which has yet to be resolved, SNPCs fell short of available funds resulting in delays in servicing its debts in accordance with NEPRA's schedule. This led to accumulation of debts and has caused heavy financial losses due to high prevailing mark-up rates.

The companies have been in operation for more than six years and would have stabilised financially, had these decisions not been put into effect by NEPRA. Under normal circumstances, at this stage, SNPCs should have retired 60 % of the debt, however, the companies have only been able to retire 30 % of their debt. This is a serious financial issue, because the companies are paying higher mark-up to lenders and will be forced to service their debt long after the related debt service component in the tariff is discontinued by NEPRA.

In such a grave scenario the only recourse for the companies would have been to divert its ROE / ROEDC component to service its debt. Unfortunately, the said components were not available to the companies from COD (January 2018) to June 2022, which has caused a large sum of money having been withheld by NEPRA because of blockage of ROE / ROEDC since COD (January 2018) till Jun 2022.

Present financial status of SNPCs, which has solely been caused because of irrational and illegal decisions by NEPRA is presented in the ensuing paragraphs.

Comparison of Debt Servicing, which is allowed by NEPRA and what is actually being serviced by SNPCs is presented below:

Debt Servicing – Allowed vs Actual
(Rupees in Millions)

Debt & Mark-Up	SNPC	SNPC-II	Total	Remarks
Allowed by NEPRA	4,711	4,711	9,422	
Actual Debt	5,494	5,497	10,990	

Excess Borrowing - Net	**783**	**786**	**1,569**	
Excess Mark-Up Charges	**342**	**342**	**684**	
Excess Mark-Up and Principal	**1,125**	**1,128**	**2,252**	

Because of this big gap between debt allowed and actual debt, SNPCs' ability to service its debt has been severely affected. Current position of outstanding debt (Principal Amount) is presented below:

Debt Outstanding (Principal) – Current Position

(Rupees in Millions)

Financial Institution	SNPC	SNPC-II	Total	Remarks
National Bank	**2,619**	**2,622**	**5,240**	
Term Finance Certificates (GoS)	**1,024**	**1,024**	**2,047**	
Accumulated TFC – backlog	**113**	**111**	**224**	
Total	**3,756**	**3,756**	**7,512**	
Debt Service Component to be received	**1,873**	**1,873**	**3746**	
Shortfall	**(1,883)**	**(1,883)**	**(3,776)**	

It will be seen that the total outstanding debt (documentary evidence for which has already been submitted to NEPRA), is Rs 8,558 Million, whereas the total debt service component, which SNPCs will receive in the remaining period will be Rs 5,276 Million, causing a shortfall of Rs 3,282 Million. This shortfall is partly due to NEPRA's grossly illogical decision of blocking ROE and ROEDC Components.

As a corollary to the above, retirement of debt, which has been possible within the constrained financial situation is as follows:

Debt Retired

(Rupees in Millions)

Financial Institution	SNPC	SNPC-II	Total	Remarks
National Bank	**375**	**375**	**750**	
Sindh Bank	**1000**	**1000**	**2000**	**Totally Retired**
Term Finance Certificates (GoS)	**476**	**476**	**953**	

Accumulated TFC	158	158	316	
Total	2,010	2,010	4,019	

In comparison, SNPCs should have retired debt as per the following table:

Debt Retired (if as per NEPRA's schedule)
(Rupees in Millions)

Financial Institution	SNPC	SNPC-II	Total	Remarks
National Bank	1,650	1,650	3,300	
Sindh Bank	700	750	1,450	
Term Finance Certificates (TFC)	801	801	1,603	
Accumulated TFC	158	158	316	
Total	3,310	3,360	6,669	

It has already been highlighted, that because of these unfavourable decisions of NEPRA, SNPCs have paid heavy amounts in excess Mark Ups; details of which are placed below:

Mark Up Paid
(Rupees in Millions)

Financial Institution	SNPC	SNPC-II	Total	Remarks
National Bank	3,058	3,062	6,120	
Sindh Bank	768	752	1,520	
Sindh Bank – Working Capital	278	302	580	
Term Finance Certificates (TFC)	457	457	913	
Total	4,561	4,573	9,134	

It is extremely unfair on the part of NEPRA to have caused such a heavy financial loss to SNPCs, for no fault of SNPCs.

Decision Sought from the Authority.

The Authority may kindly provide proportionate relief to SNPCs to settle / offset the huge amounts paid as mark up.
The Authority may kindly allow rescheduling of SNPCs' debt by allowing the debt servicing component for five more years after the ten-year period.

6.14 Proposed Technical Modifications

6.14.1 Cooling Tower Drain Disposal

In the present water cooling system, the loss of water due to evaporation from the cooling towers amounts to 120 cubic meters per hour (2880 cubic meters per day), with an additional 40 cubic meters per hour (960 cubic meters per day) lost through cooling towers bleed-off.

Initially this water was disposed off in the natural Storm Water drains, which are situated in the plant site land. According to the Chemical Tests the water was found to be safe for plantation, etc. but the same was not safe for drinking or recycling. Despite the fact that the Cooling Tower Drain Water is environmentally safe, but the petitioner feels that it will be more appropriate to dispose it off in the main sewerage line of the Nooriabad Site, which is situated at approx. three km from the plant. For this purpose a dedicated pipeline including related infrastructure has to be constructed for disposing off this water. In this regard the petitioner has obtained a quotation of PKR 112.5 million to construct this pipeline, which is placed at Annex G.

Decision Sought from the Authority:

It is requested that this cost be considered and approved as part of project cost from the date of implementation.

6.14.2 Plant Availability

The Economic Co-ordination Committee ("ECC") allocated 20 MMCFD of Natural Gas for Nooriabad Power Plant. On the basis of ECC decision, the petitioner entered into a Gas Supply Agreement ("GSA") with SSGC. The petitioner, however, was not provided the full volume of gas, throughout any given year. In this regard SSGC, vide letter ASGM (SBU)/SNPC/-12/24 dated 18 May 2024, has indicated further depletion of natural gas reserves and anticipatory gas curtailments in the future. According to the provisions of GSA, SNPC has been lodging LDs on SSGC for not supplying the allocated gas throughout year. However no progress in this regard has been made in addressing this gas curtailment issue by the SSGC. Consequently, SNPC is being penalised unjustly, although the plant remains fully operational / available.

The petitioner has been continuously communicating to the Authority the financial loss incurred by SNPC due to gas curtailments. Data pertaining to the gas curtailments during the last six years (2018 - 2023), which has also been shared regularly with NEPRA placed at Annex H.

Since natural gas is a natural resource and the petitioner has no control over it, therefore, the petitioner should not be held responsible for the shortages / curtailments in this regard. In view thereof the petitioner considers that considering the gas supply situation the Plant Availability of 92% originally approved by

NEPRA is required to be revisited based on the volume of gas guaranteed by SSGC. It is proposed that the Plant Availability should be delinked from natural gas i.e. if the Plant is declared as "Available", but it cannot despatch full power because of curtailment of gas by SSGC, then Plant Availability should not be affected. Furthermore, SNPC may be allowed to use alternate fuel (LNG from SSGC) and the cost (including infrastructure cost, if any), in this regard may be incorporated in its tariff.

Over the past six years, because of gas curtailments, Petitioner has experienced massive reduction in Capacity Payments. Total loss because of this reduction is Rs 1.042 B for SNPC. This has also been communicated to NEPRA regularly.

Since the Power Plant has been available within the capacity factor set by the Authority, therefore, the deductions made on account of less generation due to short supply of gas by SSGC must be reimbursed in order to compensate for the financial losses incurred by the Petitioner over the last six years (data placed at Annex I).

The Authority is requested to allow reimbursement of all financial losses incurred by the Petitioner because of less Capacity Payments experienced over the last six years due to short supply of the gas by SSGC as against the 20 MMCFD gas allocated by the ECC (data placed at Annex I).

The Authority is also requested to rationalise "Availability" by de-linking it from availability of gas, and allowing the Petitioner to claim availability whenever the Plant is technically available.

Further, the Petitioner may be allowed to use RLNG as "Alternate Fuel" whenever Natural Gas is not available, and the Authority is requested to kindly approve the same.

Decisions Sought from the Authority:

In view of the afore-mentioned details, following decisions are sought from the Authority:

a. Total loss because of reduction in Capacity Payments due to gas curtailments i.e. Rs 1.042 B for SNPC , may be reimbursed to the Petitioner.
b. Availability of the Plant be de-linked from the availability of gas supply from SSGC.
c. Petitioner be allowed to use RLNG as alternate fuel to ensure 92 % availability, even when Natural Gas is not available.

6.14.3 Additional Costs for future projects - Bulk Water Supply System

As highlighted above the existing water supply system is highly unreliable and has often forced the Petitioner to shut down its Steam Turbine/s or a few engines or the complete plant, due to shortage of

water. In order to improve the Water Supply System at the Plant the following two options are being proposed;

Option 1

6.14.4.1 Installation of Air-Cooled Radiators

At present the Nooriabad Power Plant comprising 2 x 50 MW plants, are drawing approximately 800,000 gallons (3640 cubic metres approx.) of water daily for cooling purposes when running at full capacity. Out of this volume, 70 % of the water is used for engines cooling while 30 % is used for steam turbine cooling. Loss of water through Cooling Tower due to evaporation is 120 cubic meters per hour (2880 cubic meters per day) and almost 40 cubic meters per hour (960 cubic meters per day) in Cooling Tower bleed-off.

Petitioner feels that considerable volume of water is being wasted because of the existing water-based cooling system. As a result thereof the precious water resource is gradually depleting and if it continues as such the water scarcity may hit the common consumers in the coming years. The petitioner considers it appropriate to bring in the Authority's notice that the water supply from Keenjhar Lake is unreliable, because of frequent electricity faults, equipment breakdowns, damage to infrastructure because of rains, etc. which has forced the Petitioner to use water tankers to meet the water requirement. Expenditure on tankers, etc. in the last six years (2018-2023) is placed at Annex C.

In order to apprise the Authority detailed information regarding the shutdown of steam turbines and/or engines due to shortage/no supply of water during the said six years is provided at Annex D.

In view of above the petitioner considers it extremely important for the national cause that SNPC shifts its cooling system from existing water cooling system to air-cooled radiator-based system. While doing this the petitioner is also conscious about the cost therefore it proposes the radiators be installed only on the engines to keep the cost manageable.

It is expected that the installation of air-cooled radiators will reduce 40% consumption of cooling water for the engines. Although there will be an increase in the project cost and reduction in power output but the advantage would be the preservation and conservation of water from Keenjhar Lake.

This project will be funded through a supplier loan on a Debt to Equity ratio of 80:20.

Copies of quotations from the following suppliers are placed at Annex E.

Supplier	Type of Supply	Cost in Euro (mn)
Wartsila, Finland	Offshore-Equipment	8.032

It is highly desirable that the work is assigned to OEM, which will not only be economical but will be efficient because it will put the pressure on maintenance on it. Alternatively if the contract for the installation of radiators is awarded to any non-OEM Supplier, there will be an additional cost of third party equipment with Wartsila Equipment, which cannot be determined at this stage. The same will be

sought from Wartsila once approval in principle for installation of air-cooled radiators is accorded by NEPRA.

Option 2

6.14.4.2 Construction of a dedicated pipeline from Keenjar Lake to the Plant (30 km approximately.)

The second option available to the petitioner is to improve the water supply system through construction of a dedicated pipeline from Keenjhar Lake to the Nooriabad Power Plant. Although a pipeline from Keenjhar Lake to Ghoghro Pir has already been constructed by the Government of Sindh (for industries at Nooriabad Site) but increased industrial activity in the Nooriabad industrial estate since 2015 has strained the existing infrastructure.

To address this issue, SNPC proposes the construction of a dedicated water pipeline from Keenjhar Lake to the plant site, aiming to alleviate reliance on the overburdened Nooriabad Site water supply. This will also improve continuous power supply to the Power Purchaser and shutting down of Steam Turbines / few engines because of water shortage will be averted.

A quotation for this project is included as Annex F.

Supplier	Type of Supply	Cost in USD (mln)
Najam Associates	Turn Key Project	5.3

Decision sought from the Authority:

The Authority may either allow installation of Air-Cooled Radiators so as to conserve the water resource in the country, provide some relief to the consumer and to make the Petitioner's Water Supply System more trouble-free and approve the related costs of 8.032 million as part of Project Cost from the date of implementation.

Or

May allow construction of a dedicated pipeline from Keenjhar Lake to the Petitioner's Plant at an estimated cost of USD 5.3 million and this cost be approved a Project Cost from the date of implementation.

7. TABLE 1: Summary of Cost Claimed in this Petition:

Description	Already Determined			Revised Project Cost			PC Claimed in Petition	
	US $ (mn)	US/PKR	PKR (mn)	US $ (mn)	US/PKR	PKR (mn)	US $ (mn)	PKR (mn)
Gas Supply Pipeline	1.93	101.72	195.81	2.25	104.96	235.70	0.32	39.89
Residential Colony	0.29	101.72	35.40	0.66	101.72	66.69	0.37	37.70
Custom Duties	2.39	101.72	242.81	3.07	103.81	318.50	0.68	75.69
Insurance	0.47	101.72	48.22	0.88	101.72	89.51	0.41	41.29
Mobilization Advance for O&M	0.13	101.72	12.92	0.18	101.72	18.36	0.05	5.44
Interest During Construction	2.95	101.72	300.18	9.96	104.52	1,040.53	7.00	740.36
Working Capital & Financing Cost	-	101.72	-	0.94	101.72	102.66	0.94	102.66
Cost on Bulk Water Supply System	-	101.72	-	0.72	101.72	73.60	0.72	73.60
Cost on Safety Spares	-	-	-	1.11	117.70	131.00	1.11	131.00
Withholding Taxes	-	-	-	0.79	101.72	80.00	0.79	80.00
Cost of Extra Metering	-	-	-	0.25	101.72	25.43	0.25	25.43
Cost of PLCC Equipment	-	-	-	0.25	101.72	25.43	0.25	25.43
Loss due to Gas Curtailment							3.72	1,042.00
		TOTAL COSTS CLAIMED IN THIS PETITION					**16.62**	**2,420.48**

8. TABEL 2: Total Project Cost after Tariff Modification

Description	Already Determined			Revised Project Cost		
	US $ (mn)	US/PKR	PKR (mn)	US $ (mn)	US/PKR	PKR (mn)
Off shore cost	40.3300	101.72	4,102.37	42.0308	102.67	4,315.16
On shore cost	7.0900	101.72	721.19	7.6234	102.72	783.06
Total EPC cost	47.42	101.72	4,823.56	49.65	102.67	5,098
Gas Supply Pipeline	1.9250	101.72	195.81	2.2456	104.96	235.70
Residential Colony, Land Expenses, Landscaping	0.3480	101.72	35.40	0.7428	101.72	75.56
Custom Duties	2.3870	101.72	242.81	3.0681	103.81	318.50
Fuel for Testing/First Fill	0.4570	101.72	46.49	0.8620	108.96	93.93
Insurance	0.4740	101.72	48.22	0.8799	101.72	89.51
Mobilization Advance for O&M	0.1270	101.72	12.92	0.1805	101.72	18.36
Project Development and Mgmt. Cost, Advisors Cost	0.8060	101.72	81.99	2.1900	101.72	222.76
Financing Fee and LC Charges	0.4810	101.72	48.93	0.8278	101.72	84.20
Other Fee and Charges	0.4810	101.72	48.93	1.7952	101.72	182.60
Interest During Construction	2.9510	101.72	300.18	9.9554	104.52	1,040.53
Working Capital & Financing Cost	-	101.72	-	0.9372	101.72	102.66
Cost on Bulk Water Supply System	-	101.72	-	0.7236	101.72	73.60
Cost on Safety Spares						
Withholding Taxes				0.79	101.72	80.00
Total Non EPC	**10.44**	**101.72**	**1,061.65**	**25.19**	**103.91**	**2,617.91**
Total project cost	**57.86**	**101.72**	**5,885.21**	**74.85**	**103.09**	**7,716.13**

Note: Adjustment of some costs like EPC, etc will be treated at "True Up" i.e. "Adjustment at COD".

Summary of all decisions sought from the Authority

a) Cost of Gas Pipeline Infrastructure: USD 0.3206 million

b) Villa, Boundary Wall and Architect Fee: USD 0.3706 million

c) Custom Duties & Port Clearance Charges: USD 0.6802 million
The Custom Duties and Port Clearance Charges be included in the tariff based on actuals subject to provision of verifiable documentary evidence without any cap on this cost

d) Mobilisation Fee for O&M Contractor: USD 0.0535 million
Additional Cost incurred by the Petitioner.

e) Interest during Construction: USD 7.005 million
Additional cost incurred by the Petitioner.

f) Working Capital Financing Cost: Rs 0.0752 per kWh from COD

g) Withholding Tax: Rs 80.00 M from COD

h) Insurance during construction: USD 0.4057 million
Additional cost incurred by the Petitioner.

i) Cost incurred on Bulk Water Supply: Rs 73.6 million

j) Claim for Extra Metering System and Disconnector Switches: USD 0.250 million

k) Wheeling and Power Line Carrier Tele-protection and Communication System: USD 0.250million

l) Cost of Safety Spare Parts: USD 1.113 million

(m) Cooling Tower Drain Disposal: Rs 112.5 million
From the date of implementation

(n) Plant Availability – reduction because of Gas Curtailments. Reimbursement of costs due to gas curtailment, rationalization of "Availability" by de-linking it from the availability of gas

New Projects

(o) Installation of Air-Cooled Radiators
As per Annex E

(p) Construction of pipeline from Keenjhar Lake to Plant Site (30 km approx): USD 5.3 million

F/A-4

PRAYER:

It is most humbly prayed to the esteemed Authority that:

a. the Authority may kindly approve all components of the tariff modification of the Company, as described above;

b. the Authority may please treat the Company's request for modification of tariff expeditiously and on non-discriminatory basis;

c. allow such other reliefs which are just, fair, proper, better, and necessary in these circumstances.

Dated: 19.11.2024

SINDH NOORIABAD POWER COMPANY (PVT) LTD

PETITIONER

Sindh Nooriabad Power Company (Private) Limited

through

RIAA Barker Gillette
3rd Floor, 65-W, Executive Heights,
Block H, Fazl-ul-Haq Road,
Blue Area, Islamabad
Tel: (051) 111-LAWYER
Fax: (051) 2852427-30
www.riaabarkergillette.com

Annexture C

YEARWISE SUMMARY OF WATER TANKERS

S.NO	Year	TANKER 7000		TANKER 6000		TANKER 5000		TANKER 4000		TANKER 2000		TOTAL Tankers	TANKERS GLN	
		QTY	GLN	QTY	GLN	QTY	GLN	QTY	GLN	QTY	GLN			
1	2018	0	0	602	3612000	4714	23570000	0	0	8797	17594000	14113	44776000	55970000
2	2019	375	2625000	1701	10206000	1302	6510000	165	660000	2438	4876000	5981	24877000	31096250
3	2020	0	0	98	588000	211	1055000	50	200000	2574	5148000	2933	6991000	8738750
4	2021	265	1855000	0	0	1146	5730000	298	1192000	11359	22718000	13068	31495000	39368750
5	2022	0	0	0	0	698	3490000	80	320000	9733	19466000	10511	23276000	29095000
6	2023	0	0	23	138000	191	955000	0	0	3516	7032000	3730	8125000	10156250
7	2024	0	0	7	42000	1135	5675000	0	0	6658	13316000	7800	19033000	23791250
Total		**640**		**2431**		**9397**		**593**		**45075**		**58,136**	**158573000**	
													Total Amount in PKR at Rs 1.25/gln	**198,216,250.00**

F/A-10

Annexture D

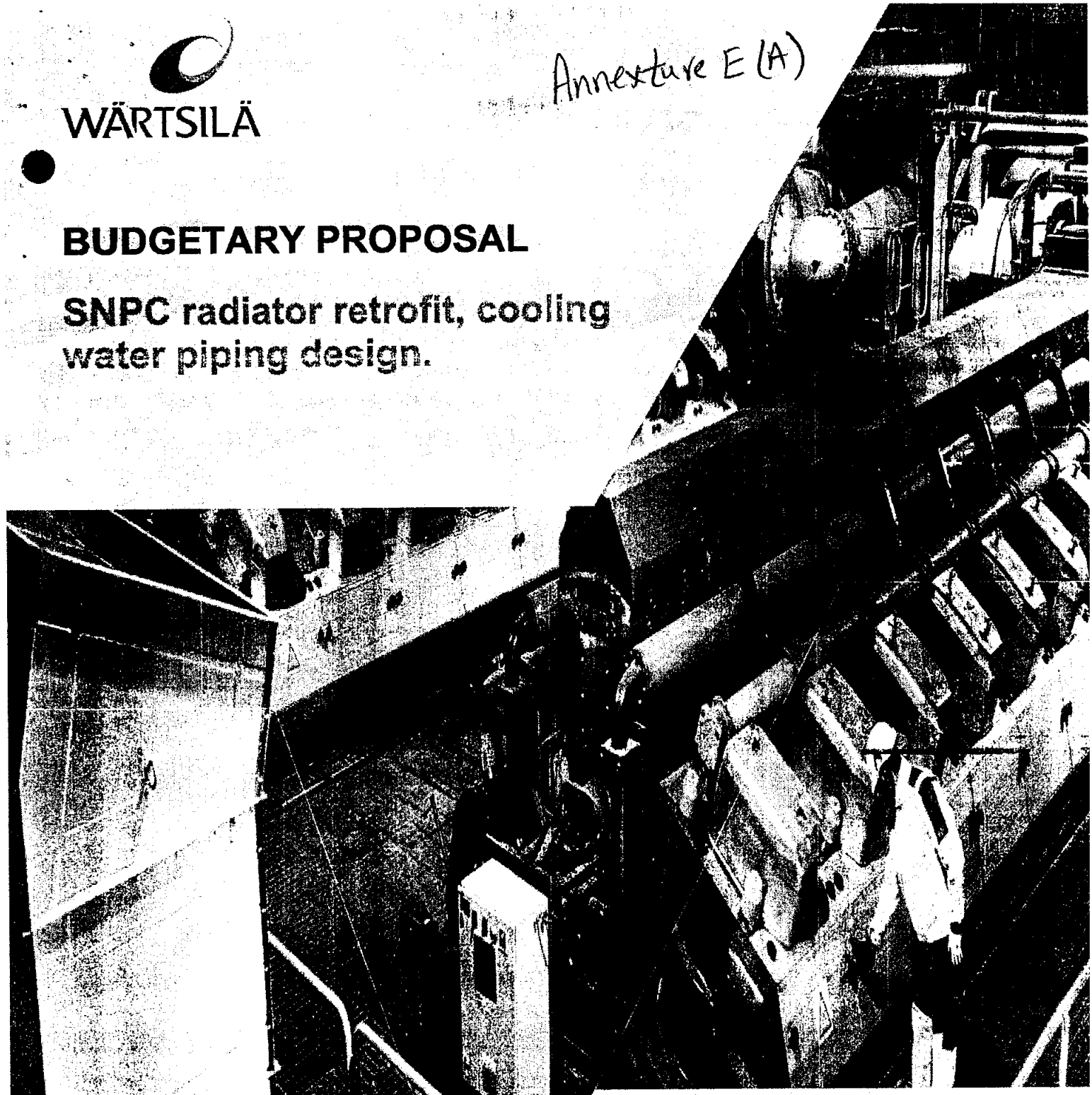
18-Jul-20	STG01	0:13	-	-	Stopped due to Raw water shortage
18-Jul-20	STG02	0:53	15:43	16:00	Stopped due to Raw water shortage
19-Jul-20	STG01	0:00	18:07	18:23	Stopped due to Raw water shortage
6-Jul-22	STG01	12:36	0:00	11:24	Stopped Due to Raw water shortage at Plant.
6-Jul-22	STG02	13:16	0:00	10:44	Stopped Due to Raw water shortage at Plant.
7-Jul-22	STG01	0:00	14:08	14:08	Stopped Due to Raw water shortage at Plant.
7-Jul-22	STG02	0:00	17:29	17:29	Stopped Due to Raw water shortage at Plant.
18-Jul-22	STG01	19:58	0:00	4:02	Stopped due to Raw water Shortage.
18-Jul-22	STG02	20:26	0:00	3:34	Stopped due to Raw water Shortage.
19-Jul-22	STG01	0:00	8:09	8:09	Stopped due to Raw water Shortage.
19-Jul-22	STG02	0:00	9:32	9:32	Stopped due to Raw water Shortage.
6-Sep-22	STG01	17:28	0:00	6:32	Stopped due to Raw water shortage
6-Sep-22	STG02	17:48	24:00:00	6:12	Stopped due to Raw water shortage
7-Sep-22	STG01	0:00	6:13:00	6:13	Stopped due to Raw water shortage
7-Sep-22	STG02	0:00	8:27:00	8:27	Stopped due to Raw water shortage
17-Sep-22	STG01	1:20	24:00:00	22:40	Stopped due to Raw water shortage
17-Sep-22	STG02	1:45	24:00:00	22:15	Stopped due to Raw water shortage
18-Sep-22	STG01	0:00	0:00	0:00	Stopped due to Raw water shortage
18-Sep-22	STG02	0:00	24:00:00	0:00	Stopped due to Raw water shortage
19-Sep-22	STG01	0:00	0:00	0:00	Stopped due to Raw water shortage
19-Sep-22	STG02	0:00	24:00:00	0:00	Stopped due to Raw water shortage
20-Sep-22	STG01	0:00	18:55:00	18:55	Stopped due to Raw water shortage
20-Sep-22	STG02	0:00	13:42:00	13:42	Stopped due to Raw water shortage
3-Apr-24	STG01	4:18	20:17	15:59	Stopped due to Raw water shortage.
3-Apr-24	STG02	5:10	0:00	18:50	Stopped due to Raw water shortage.
4-Apr-24	STG02	0:00	1:35	1:35	Stopped due to Raw water shortage.
25-May-24	STG01	19:22	0:00	4:38	Water shortage
26-May-24	STG01	0:00	0:00	0:00	Water shortage
26-May-24	STG02	18:39	0:00	5:21	Water shortage
27-May-24	STG01	0:00	0:00	0:00	Water shortage
27-May-24	STG02	0:00	0:00	0:00	Water shortage
28-May-24	STG01	0:00	1:07	1:07	Water shortage
28-May-24	STG02	0:00	0:00	0:00	Water shortage
29-May-24	STG02	0:00	0:00	0:00	Water shortage
30-May-24	STG02	0:00	0:00	0:00	Water shortage
31-May-24	STG02	0:00	0:00	0:00	Water shortage
1-Jun-24	STG02	0:00	13:09	13:09	Raw Water shortage
4-Jul-24	STG02	5:48	0:00	18:12	Stopped due to Raw water Shortage at plant due to fault at water intake.
4-Jul-24	STG01	10:14	0:00	13:46	Stopped due to Raw water Shortage at plant due to fault at water intake.
5-Jul-24	STG01	0:00	0:00	0:00	Stopped due to Raw water Shortage at plant due to fault at water intake.
5-Jul-24	STG02	0:00	23:02	23:02	Stopped due to Raw water Shortage at plant due to fault at water intake.
6-Jul-24	STG01	0:00	14:00	14:00	Stopped due to Raw water Shortage at plant due to fault at water intake.
25-Jul-24	STG02	5:54	0:00	18:06	Stopped due to Raw water Shortage at plant due to fault at water intake.
25-Jul-24	STG01	6:20	0:00	17:40	Stopped due to Raw water Shortage at plant due to fault at water intake.
26-Jul-24	STG01	0:00	21:41	21:41	Stopped due to Raw water Shortage at plant due to fault at water intake.
26-Jul-24	STG02	0:00	13:38	13:38	Stopped due to Raw water Shortage at plant due to fault at water intake.
28-Aug-24	STG01	0:00	0:00	0:00	Water shortage
28-Aug-24	STG02	0:00	0:00	0:00	Water shortage
29-Aug-24	STG01	0:00	0:00	0:00	Water shortage
29-Aug-24	STG02	0:00	0:00	0:00	Water shortage
30-Aug-24	STG01	0:00	0:00	0:00	Water shortage
30-Aug-24	STG02	0:00	0:00	0:00	Water shortage
31-Aug-24	STG01	0:00	0:00	0:00	Water shortage
31-Aug-24	STG02	0:00	0:00	0:00	Water shortage
1-Sep-24	STG01	0:00	1:48	1:48	Water shortage
1-Sep-24	STG02	0:00	12:16	12:16	Water shortage

Annexture E (A)

WÄRTSILÄ

BUDGETARY PROPOSAL

SNPC radiator retrofit, cooling water piping design.



ORIABAD POWER COMPANY

Sindh Nooriabad Power Company Pvt LTD

Note: Notwithstanding anything to the contrary contained in the budgetary proposal documents, all information and data included is provided for information purposes only. Performance data, dates and/or prices are indicative and are based on Wärtsilä's assumptions and the limited information available. All information, prices and data provided are subject to change by Wärtsilä without prior notice.

This budgetary proposal is a non-binding offer and is subject to a firm offer and a contract.

TABLE OF CONTENTS

Dear Customer,

We are pleased to be given the opportunity to submit this Budgetary proposal for radiator retrofit, cooling water piping design, for your power plant installation SINDH NOORIABAD POWER COMPANY according to the scope of supply in this proposal.

Yours faithfully,

Wärtsilä Finland Oy

WÄRTSILÄ

1. EXECUTIVE SUMMARY AND SCOPE OF WORK

Wärtsilä is offering cooling water piping design based on following scope.

Process design.

The engineering works including the main items as below.

- Deliverables
  - Process Flow diagrams & Device Lists for Cooling system.
  - Process calculation (sizing, pressure drops)
  - Process descriptions.
- Assumptions
  - Wärtsilä standard symbols and coding system
  - Wärtsilä title block
  - Documentation in English only
- Exclusions
  - Interconnection point list.
  - Piping system design basis incl. design parameters
  - Emergency shutdown logic diagram
  - Customer coding system
  - Updating process flow diagrams or device lists based on customer comments on functioning solutions.
  - Any new component / equipment evaluation, specification

Piping and layout

- Scope
  Modelling of equipment, piping (Cooling system), secondary pipe supporting, pipe bridge input for civil is considered.
- Deliverables
  - 3D Navis model
  - Pipe material list.
  - Secondary pipe support material list and packaging list
  - Pipe isometrics.
- Assumption
  - Piping design according to EN standard
  - Primary supports according to PSK (Wärtsilä standard)
  - Standard Wärtsilä secondary support
  - Confirmed location of the radiator area
  - Available model is correct in the area of interconnection points.
  - Area considered two engine hall, one (1) radiator area, outside area.
  - Pipe stress calculation considered for cooling system and pipe bridge loading.

- Exclusion.
  - Master layout can be offered separately.
  - Pipe layout.
  - Unit location layout.
  - Secondary pipe support location layout.
  - Loose steel layout.
  - Wall penetration.
  - Pipe bridge design and drawings.
  - Official pipe stress analysis report

Project includes:

Cooling water system, 3D piping design

Project Management

2. PRICE

The price for design and services provided by Wärtsilä according is 49 000 EUR (Forty-Nine thousand EUR).

This proposal excludes any other items not specifically described in this proposal under Wärtsilä's responsibility.

3. PRICE CONDITIONS

The prices quoted above are non-binding and of budgetary nature. The prices quoted are based on Wärtsilä's assumptions that need to be confirmed/updated before a firm pricing can be offered. Raw material and component prices and transportation prices are currently affected by high global volatility and customer deliveries may also be adversely affected by the pandemic e.g. through governmental and other restrictions and health and safety measures. Wärtsilä therefore reserves the right to adjust the price or any other term of this proposal.

The final contract will include a price adjustment mechanism based on applicable indices, such as producer price index. The indexation mechanism and applicable indices will be detailed and agreed upon during the negotiation of a potential contract.

The prices do not include VAT, customs duty, taxes or any other charges.

4. PAYMENT TERMS

The payment terms will be described in a firm offer.

All payments except for the advance payment are to be made under an irrevocable Letter of Credit, payable at sight and issued or confirmed through a bank acceptable to Wärtsilä. The Letter of Credit shall be in form and substance satisfactory to Wärtsilä and shall have reached the advising bank, nominated by Wärtsilä, not later than 1 month after signature of the Contract. All charges in connection with the Letter(s) of Credit shall be paid by the customer.

5. DELIVERY TERMS

Delivery of 3D cooling water piping design will be delivered by mail or courier.

6. DELIVERY TIME

The estimated time of delivery is 3 months.

Wärtsilä's delivery of any Works will commence ("Starting Date") only when Wärtsilä has received:

i. a written purchase order in compliance with this Proposal and confirmed by Wärtsilä's written order acknowledgement.

ii. the advance payment; and

iii. an irrevocable letter of credit for the Contract Price (less the advance payment) acceptable to Wärtsilä.

If the Starting Date does not occur within 30 days after the date of Wärtsilä's written order acknowledgment, then Wärtsilä may terminate the Contract. Wärtsilä shall not have any liability to the Customer as a result of such termination.

7. NO RE-EXPORT TO RUSSIA

The Customer explicitly acknowledges that any goods supplied under or in connection with this Contract that fall under the scope of Article 12g of Council Regulation (EU) No 833/2014 and all related technical information, documents and materials may not be re-exported, transhipped, diverted or transferred, directly or indirectly, to, or for use in, Russian Federation.

The Customer shall undertake its best efforts to ensure that the purpose of this paragraph is not frustrated by any third parties further down the commercial chain, including by possible resellers. The Customer shall set up and maintain an adequate monitoring mechanism to detect conduct by any third parties further down the commercial chain, including by possible resellers, that would frustrate the purpose of this paragraph. A violation of this section shall constitute a material breach of an essential element of the Contract, and the Contractor shall be entitled to seek appropriate remedies, including, but not limited to termination of the Contract.

The Customer shall immediately inform the Contractor about any problems in applying the conditions in this paragraph including any relevant activities by third parties that could frustrate the purpose of this section of the Contract. The Customer shall make available to the Contractor information concerning compliance with the obligations under this paragraph within two weeks of the simple request of such information.

8. NEXT STEPS

We are confident that Wärtsilä's team of experts will be able to help you find the optimum solution for your power plant. This Budgetary Proposal provides only preliminary information about the lifecycle upgrades and shall constitute the basis for further discussion and development of an actual partnership. We look forward to meeting you at your earliest convenience!

To discuss this Budgetary Proposal further, please contact:

Christoffer Granskog

Business Development Manager, Energy Services

christoffer.granskog@wartsila.com

+358 50 4000451

9. EXHIBITS

The following documents which are attached hereto or incorporated by reference shall form an integral part of this Budgetary Proposal:

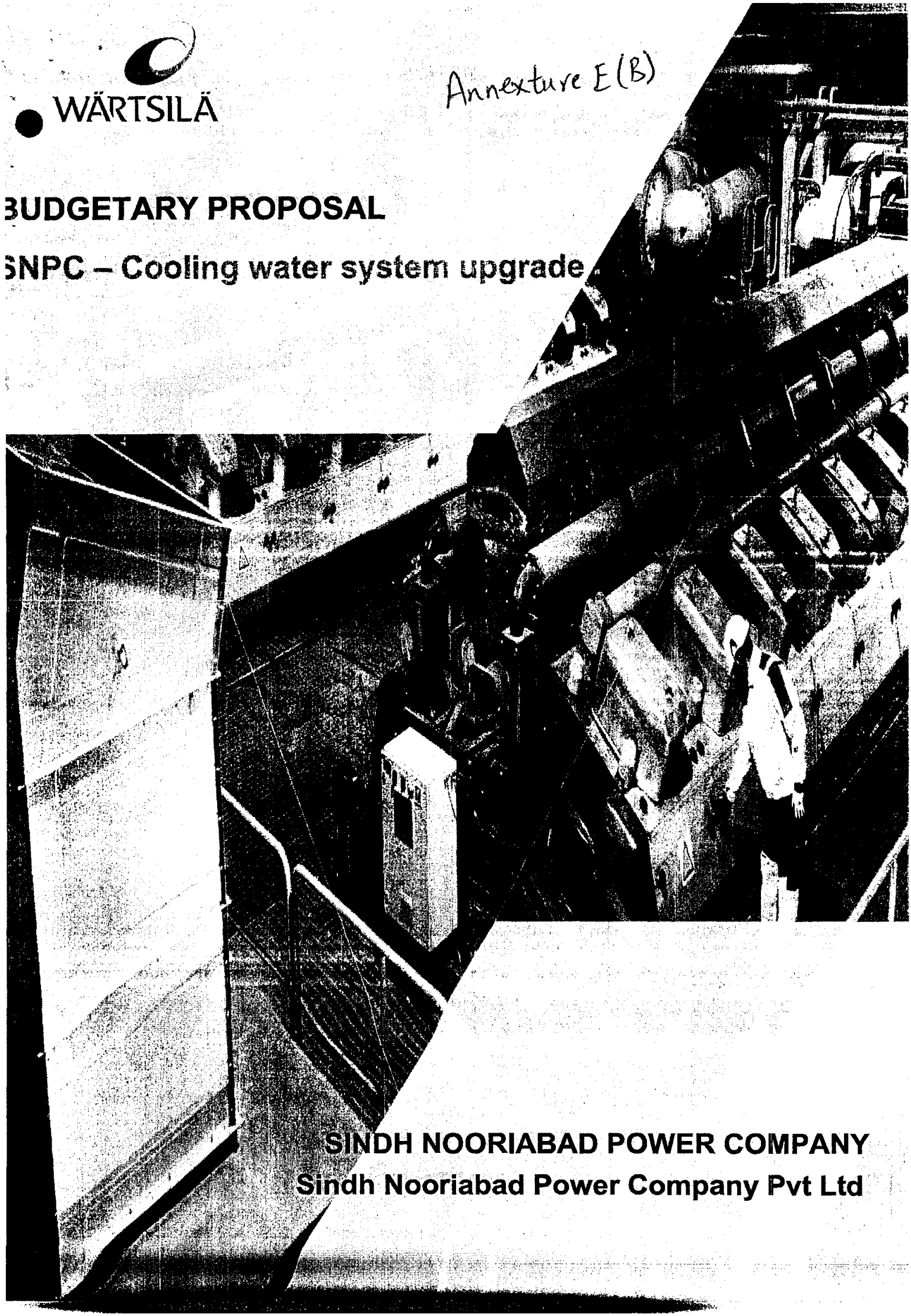
Attachment 1	Wärtsilä General Terms and Conditions - Service Projects for Power Plants (2024)

WÄRTSILÄ

Annexture E(B)

BUDGETARY PROPOSAL

SNPC – Cooling water system upgrade



SINDH NOORIABAD POWER COMPANY

Sindh Nooriabad Power Company Pvt Ltd

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TABLE OF CONTENTS

Dear Customer,

We are pleased to be given the opportunity to submit this Budgetary proposal for cooling water system upgrade, for your power plant installation SINDH NOORIABAD POWER COMPANY according to the scope of supply and technical specification described in Exhibit A1 and Exhibit A1.1 in this proposal.

Yours faithfully,

Wärtsilä Finland Oy

WÄRTSILÄ

1. EXECUTIVE SUMMARY AND SCOPE OF WORK

The cooling water system upgrade consist of installing cooling water radiators which are a closed cooling water circuit and only use existing cooling tower as back up when needed during high ambient condition.

Main Scope delivery

- Cooling radiators with 3mm fin spacing, 3 pcs per engine, including mounting leg, handrails, and ladders.
- 3-way thermostatic valves
- Mechanical BoQ (piping, valves, supports....)
- Radiator panels
- Frequency converters for radiators
- Maintenance water tanks
- LV feeder for radiator
- Electrical BoQ (LV cable, control cable, cable ladder...)

Project includes:

Equipment Delivery

Cooling water system upgrade

Project Management

Transportation in accordance with Incoterms® 2020

Installation and comissioning

Warranty

2. PRICE

The price for equipment and services provided by Wärtsilä according to Exhibit A1 is 7 983 000 EUR (Seven million Nine Hundred and Eighty-Three thousand EUR).

This proposal excludes any other items not specifically described in Exhibit A1 & A1.1 under Wärtsilä's responsibility.

3. PRICE CONDITIONS

The prices quoted above are non-binding and of budgetary nature. The prices quoted are based on Wärtsilä's assumptions that need to be confirmed/updated before a firm pricing can be offered. Raw material and component prices and transportation prices are currently affected by high global volatility and customer deliveries may also be

adversely affected by the pandemic e.g. through governmental and other restrictions and health and safety measures. Wärtsilä therefore reserves the right to adjust the price or any other term of this proposal.

The final contract will include a price adjustment mechanism based on applicable indices, such as producer price index. The indexation mechanism and applicable indices will be detailed and agreed upon during the negotiation of a potential contract.

The prices do not include VAT, customs duty, taxes or any other charges.

4. PAYMENT TERMS

The payment terms will be described in a firm offer.

All payments except for the advance payment are to be made under an irrevocable Letter of Credit, payable at sight and issued or confirmed through a bank acceptable to Wärtsilä. The Letter of Credit shall be in form and substance satisfactory to Wärtsilä and shall have reached the advising bank, nominated by Wärtsilä, not later than 1 month after signature of the Contract. All charges in connection with the Letter(s) of Credit shall be paid by the customer.

5. DELIVERY TERMS

Delivery of all equipment shall be made in accordance with CFR, Port of Karachi, Pakistan according to Incoterms 2020.

6. DELIVERY TIME

The estimated time of delivery is 7 months after the date of receipt of advance payment provided that Wärtsilä has received the Letter of Credit in accordance with the agreed schedule.

The delivery time is subject to availability of production capacity and resources.

The shortage, unavailability and extended lead times of components, raw materials, labor and services affect various industries globally and may impact the delivery time. Notwithstanding anything to the contrary, the delivery time set forth above is a non-binding estimate only and subject to change by Wärtsilä.

7. WARRANTY PERIOD

The warranty period in respect of the Equipment begins on the date of delivery and ends eighteen (18) months from the date of delivery or twelve (12) months from installation, whichever occurs first.

The warranty period for the Services begins on the date of delivery and ends six (6) months from the last day of performance of the applicable Services.

All other conditions as per Attachment 1.

8. NO RE-EXPORT TO RUSSIA

The Customer explicitly acknowledges that any goods supplied under or in connection with this Contract that fall under the scope of Article 12g of Council Regulation (EU) No 833/2014 and all related technical information, documents and

materials may not be re-exported, transhipped, diverted or transferred, directly or indirectly, to, or for use in, Russian Federation.

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To discuss this Budgetary Proposal further, please contact:

Christoffer Granskog

Business Development Manager, Energy Services

christoffer.granskog@wartsila.com

+358 50 4000451

10. EXHIBITS

The following documents which are attached hereto or incorporated by reference shall form an integral part of this Budgetary Proposal:

Attachment 1	Wärtsilä General Terms and Conditions - Service Projects for Power Plants (2024)
Attachment 2	Project Exhibits A
Exhibit A1	Scope of Supply list
Exhibit A1.1	Mechanical & Electrical BoQ
Exhibit B1	Layout drawings

Annexture F

Proposed Budgetary Cost of Laying Water Transportation Line from Kenjhar Lake to Sindh Nooriabad Power Company.

By

NAJAM ASSOCIATES KARACHI

NAJAM ASSOCIATES KARACHI.

SWI Piping System uPVC, PPRC, HDPE, uPVC Spiral Pipe Manufacturer, Importers & Exporters

Ref No. **28163**

Dated: 8th June 2024

M/s. Sindh Nooriabad Power Company

Karachi.

Subject: **Proposed budgetary cost of Laying Water Transportation Line from Kenjhar Lake to Sindh Nooriabad Power Company.**

Dear Sir,

It is with refence to our proposal Ref No. 28148 dated 3rd June 2024 regarding the subject mentioned and your verbal approval on the same. We now hereby submit our working which includes an executive summary and budgetary price.

We hope you find the same in order and look forward to hear from you soon in this regard.

Thanking you.

Yours truly,

For **Najam Associates**

(Najam Ul Islam)

Head Office No.9, Ground Floor, Anum Estate, Shahrah-e-Faisal, Karachi-Pakistan.
Ph # 92 21 34540510, 34321723-4 Email: info@nagroup.co;pool@cyber.net.pk Website:www.nagroup.co;
Facebook: https://www.facebook.com/NA-GROUP-Of-companies-107362500949068/

SINDH NOORIABAD POWER COMPANY

EXECUTIVE SUMMARY

THE PROJECT:

The project is intended to supply 1,200,000 US Gallons of water to Sindh Nooriabad Power Company (SNPC) from the available source which is Kenjhar Lake located approximately 30 Kilometers from the Nooriabad. A connection for the purpose is already obtained fulfilling all necessary requirements and permissions from relevant departments and authorities and needs to be transported to the SNPC premises where it is to be utilized mainly for cooling towers and heat exchangers.

REQUIREMENT:

Keeping in view the heavy need of water for the purpose mentioned above and in the event of its unavailability in the required quantity it was decided to look for an alternate source which was found in the face of Kenjhar Lake. Arrangement were then made to obtain the permissions fulfilling necessary requirements which is now in place and water is to be transported to the SNPC premises. This will be done by providing an adequate infrastructure which will enable a successful mode of transportation of water.

Technical study encompasses the selection of water transport routes, route corridor survey, hydrological study, environmental study and other relevant analysis of all the area along the route. Based on these studies and analysis, consultant will recommend the most effective sustainable system of water transport sections. Furthermore, design and exact cost of the transport system following the standard codes of practices, norms and guidelines will be carried out.

The design work will be done by an expert consultant who will provide all necessary details, sections, specifications and methodology of execution of work. The execution of work will be done by an expert contractor having adequate experience of the work.

METHOD:

The transportation of water from source main to the SNPC premises will be sourced using adequate piping and pumping system which will be completed by providing necessary infrastructure that includes:

1. Topographical Survey of the area to ascertain contours and levels.
2. Physical survey of the area to coordinate with contours.
3. Working out a detailed layout for tendering and execution of work.
4. Excavation of the route of pipeline.
5. Laying of Pipe Line with jointing testing & commissioning
6. Backfilling/levelling and grading of the area.
7. Making of Pumping station at the source main.
8. Installation of Pumping machinery at the source main.
9. Providing Electrical connection at pumping station.
10. Complete and successful testing and commission of the system.

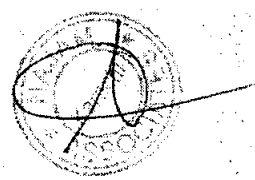
As per our initial working we may consider making delivery In 2 stages by providing pumping station and reservoir in between, however, based on topographical survey we may decide adding another station in between thus making a total number of pumps to 6 (3 duty+3 standby)

FINANCIALS

The entire work will be carried out at a cost of **Rs. 1,468,400,000.00** detail of which is given in attached schedule as Annexure A.

The financial study of proposed water transport systems is carried out on the basis of:

1. Economical data collected during the course of study.
2. Cost of necessary Permissions
3. The cost of infrastructure development,
4. initial price of appropriate vessel,
5. operation and maintenance cost



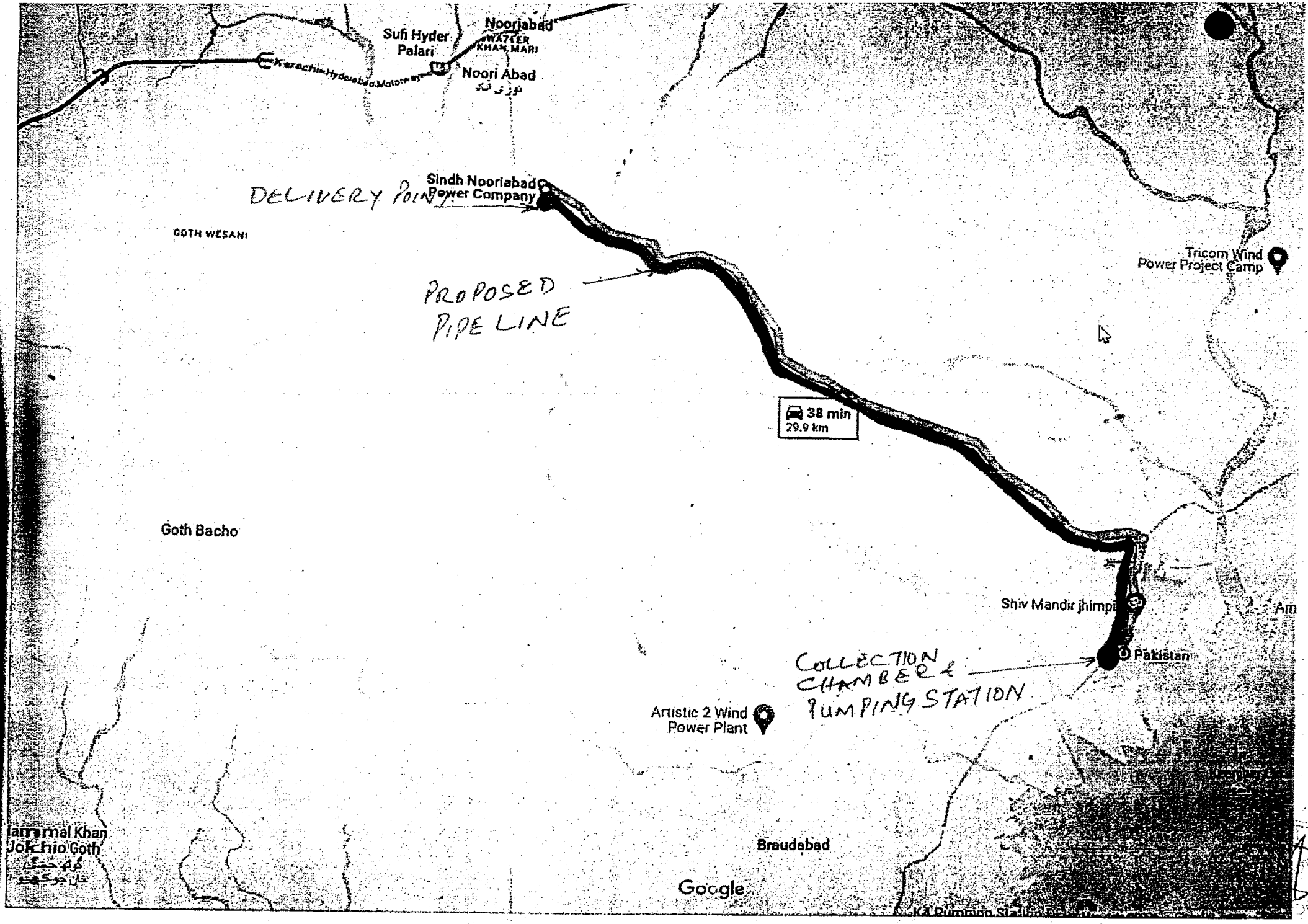
The economic benefit from the investment was considered by the fare collection, revenue generation and over all impact to the company's operations. The Investment and IRR will also be calculated and considered for provision of water transport.

CHALLENGES & CONSTRAINTS

The major challenges will be encountered during the execution of work which will include the cutting of roads for which necessary permissions will be required and will have a considerable impact over price. Another challenge will be the excavation of the route of pipeline laying as a very strong strata is likely to be found in the area making it difficult for workforce and maintaining the time line.

TIMELINE:

The proposed work will be completed in not less than 9 to 10 months time subsequent to completion of design stage which will also take 45 to 60 days for completing the process of design, tender floating, tender evaluation, assigning the contract and mobilization at site to start the work.


Sufi Hyder Palari
Noorjabad
Noori Abad
Sindh Noorlabad Power Company
DELIVERY POINT
GOTH WESANI
PROPOSED PIPE LINE
Tricom Wind Power Project Camp
38 min
29.9 km
Goth Bacho
Shiv Mandir jhimpir
Pakistan
COLLECTION CHAMBER & PUMPING STATION
Artistic 2 Wind Power Plant
Jamal Khan Jokhio Goth
Braudabad
Google

ANNEXURE 'A'

BILL OF QUANTITIES/COST ESTIMATION
SINDH NOORIABAD POWER COMPANY
WATER TRANSPORTATION WORK FROM KENJHAR LAKE

S#:	DESCRIPTION	QTY	UNIT	AMOUNT
1	Design Consultancy and Project management of the works including conceptual drawings, BOQ & Specifications.	1	Job	56,000,000
2	Topographical survey of the area between NPC Premises to Kenjar lake with providing contour and natural ground levels.	1	Job	8,500,000
3	Mobilization at Site	1	Job	10,000,000
4	Excavation, Fill and backfil for pipe trenches and manholes for 30,000 Meters Approx	1	Job	69,500,000
5	Providing and laying PE pipe PN 16. 30,000 Meters Approx	1	Job	1,170,000,000
6	Making of Collection Chamber at Source main for suction of Water in RCC using SR Cement at 8 meters depth complete in all respect	1	Job	3,950,000
7	Making of Pump Room in RCC Structure and Masonary walls for a size to accommodate Pumping Machinery and space for Maintenance equipment, office for relevant staff, guard room etc.	1	Job	16,500,000
8	Supply and installation of required Pumping machinery 6 Nos (3 Duty + 3 Stndby) at 3 locations suiteable for a flow of 1700 USGPM at required head.	1	Job	107,500,000
9	Sundries for approval from relvant aurthorities	1	Job	25,000,000
10	Testing & Commissioning of The System.	1	Job	1,450,000
	TOTAL:			**1,468,400,000.00**

Annexture G

Hussain Engineering

Ref No.

Dated: 1st July 2024

M/s. Sindh Nooriabad Power Company

Karachi.

Subject: **Proposed budgetary cost of Providing Waste Treatment System and Disposal for Nooriabad Power Compnay.**

Dear Sir,

It is with refence to the subject mentioned we hereby submit a budgetary price working for Providing Waste Water Treatment and disposal to nearest available point.

We hope you will find the above in order and look forward to receive your further instructions in this regard.

Thanking you.

Yours truly,

For

HUSSAIN ENGINEERING

(Syed shuja Hussain)

[redacted]

Hussain Engineering

COST ESTIMATION
NOORIABAD POWER COMPANY
WASTE WATER TREATMENT AND DISPOSAL

S #:	DESCRIPTION	QTY	UNIT	AMOUNT
1	Design Consultancy and Project management of the works including conceptual drawings, BOQ & Specifications.	1	Job	8,750,000
2	Topographical survey of the area between NPC Premises to point of disposal with providing contour and natural	1	Job	1,875,000
3	Mobilization at Site	1	Job	3,125,000
4	Excavation, Fill and backfil for pipe trenches and manholes for 3,000 Meters Approx	1	Job	8,687,500
5	Providing and laying UPVC / P.E pipe, 3,000 Meters Approx	1	Job	81,250,000
6	Making of Waste Water Treatment Tank of required size complete in all respect.	1	Job	62,500,000
7	Supply and installation of required Pumping machinery (1 Duty + 1 Stndby) suiteable for a flow of USGPM at required head.	1	Job	12,500,000
8	Misc. Expenses	1	job	12,500,000
9	Sundries for approval from relvant aurthorities	1	Job	31,250,000
10	Testing & Commissioning of The System.	1	Job	1,250,000
	TOTAL:			223,687,500

Postal Address :
B-301, Rufi Lake Drive
Block - 18, Gulistan-e-Jauhar,
Karachi

Factory Address :
Survey No. 32, Gali No. 2,
Near Quba Masjid,
Sherpao Colony Karachi.
Mobile : 0333-3009870
E-mail : henggwk@gmail.com

Annexture H

SNPC-1	REV.Cap	51154
SNPC-2	REV.Cap	51526
SNPC 1,2	Cap	50531
	k=Hours in 1	8760

Total Outages Statement SNPC and SNPC-II - 2018 ,2019, 2020, 2021, 2022, 2023

Statement of Outages Allowances - Allowed vs Incurred - 2023

	Total Outages Incurred				Total Outages Allowed NEPRA		Balance					
	Forced (a)	STDC (b)	SSGC (c)	Scheduled (d)	Forced (e)	Scheduled (f)	Forced g = [(a+b+c+e) - e]	Sched h = (f-d)	Total Available Hours (g - h)	Total Hours Incurred i=(a+b+c+d)	Availability in Hours j = (k-i)	Availability % l = (j/k)
SNPC	263	79	2830	57	168	533	-3004	476	-2528	3229	5531	63.13
SNPC-2	268	76	2775	112	168	533	-2951	421	-2530	3231	5529	63.12

Statement of Outages Allowances - Allowed vs Incurred - 2022

	Total Outages Incurred				Total Outages Allowed NEPRA		Balance					
	Forced (a)	STDC (b)	SSGC (c)	Scheduled (d)	Forced (e)	Scheduled (f)	Forced g = [(a+b+c+e) - e]	Sched h = (f-d)	Total Available Hours (g - h)	Total Hours Incurred i=(a+b+c+d)	Availability in Hours j = (k-i)	Availability % l = (j/k)
SNPC	248	49	1828	101	168	533	-1957	432	-1524	2225	6535	74.60
SNPC-2	265	46	1999	300	168	533	-2142	233	-1909	2610	6150	70.21

Statement of Outages Allowances - Allowed vs Incurred - 2021

	Total Outages Incurred				Total Outages Allowed NEPRA		Balance					
	Forced (a)	STDC (b)	SSGC (c)	Scheduled (d)	Forced (e)	Scheduled (f)	Forced g = [(a+b+c+e) - e]	Sched h = (f-d)	Total Available Hours (g - h)	Total Hours Incurred i=(a+b+c+d)	Availability in Hours j = (k-i)	Availability % l = (j/k)
SNPC	148	19	932	96	168	533	-932	437	-495	1196	7564	86.35
SNPC-2	187	23	1071	116	168	533	-1112	417	-695	1396	7364	84.06

Statement of Outages Allowances - Allowed vs Incurred - 2020

	Total Outages Incurred				Total Outages Allowed NEPRA		Balance					
	Forced (a)	STDC (b)	SSGC (c)	Scheduled (d)	Forced (e)	Scheduled (f)	Forced g = [(a+b+c+e) - e]	Sched h = (f-d)	Total Available Hours (g - h)	Total Hours Incurred i=(a+b+c+d)	Availability in Hours j = (k-i)	Availability % l = (j/k)
SNPC	199	11	468	356	168	533	-509	177	-333	1034	7726	88.20
SNPC-2	200	10	704	433	168	533	-746	100	-646	1347	7413	84.63

Statement of Outages Allowances - Allowed vs Incurred - 2019

	Total Outages Incurred				Total Outages Allowed NEPRA		Balance					
	Forced (a)	STDC (b)	SSGC (c)	Scheduled (d)	Forced (e)	Scheduled (f)	Forced g = [(a+b+c+e) - e]	Sched h = (f-d)	Total Available Hours (g - h)	Total Hours Incurred i=(a+b+c+d)	Availability in Hours j = (k-i)	Availability % l = (j/k)
SNPC	174	26	676	132	168	533	-708	401	-307	1008	7752	88.50
SNPC-2	176	24	720	157	168	533	-752	376	-376	1077	7683	87.71

Statement of Outages Allowances - Allowed vs Incurred - 2018

	Total Outages Incurred				Total Outages Allowed NEPRA		Balance					
	Forced	STDC	SSGC	Scheduled	Forced	Scheduled	Forced	Sched	Total Available Hours	Total Hours Incurred	Availability in Hours	Availability
SNPC	287	62	240	371	168	533	-420	162	-258	959	7801	89.05
SNPC-2	212	60	295	433	168	533	-399	100	-299	1000	7760	88.58

Note: Approximately Average availability in past 6 years operation 81.64 %of SNPC and 79.72 % out of 92% ,only due to gas outages

Initial calculations.

In 2023 year 2528 & 2530 hours are exceeding hours of NEPRA allowed 701 complex hours due to N.GAS shortfall
In 2022 year 1524 &1909 hours are exceeding hours of NEPRA allowed 701 complex hours due to N.GAS shortfall
In 2021 year 495 & 695 hours are exceeding hours of NEPRA allowed 701 complex hours due to N.GAS shortfall
In 2020 year 333 & 646 hours are exceeding hours of NEPRA allowed 701 complex hours due to N.GAS shortfall
In 2019 year 307 & 376 hours are exceeding hours of NEPRA allowed 701 complex hours due to N.GAS shortfall
In 2018 year 258 & 300 hours are exceeding hours of NEPRA allowed 701 complex hours due to N.GAS shortfall
STDC outages included in FO allowed by NEPRA

FO Forced Outage / Partial Forced Outage
SO Scheduled Outage
price need to confirm from finance dept

Annexture I

Sindh Nooriabad Power Company

	SNPC	SNPC II
Total Outages Kwh (SO+FO+GO+STDCO	551,255,014	681,945,921
Total Hours of Outages for 80 months	10,776.38	13,234.99
Total Hours allowed for 80 months	4,673.33	4,673.33
Excess hours outages	6,103.05	8,561.65
STDC Outages in 80 months	301.20	389.39
Total Outage hours due to Gas Curtailment	5,801.85	8,172.27
Total Outages kwh pertaining to SSGC	296,787,672.41	421,084,242.22
Average Capacity Tariff for 80 month	3.5111	3.4997
al loss of capacity due to Gas curtailment in 80 Months	**1,042,040,438.04**	**1,473,665,890.73**

F/A-G

Summary of Evidences

1. Annexure A

Annexure A is the decision of the Authority with respect to PAR of K-Electric Limited ("KE") dated 01.06.2016. In the aforesaid decision, the Authority approved the PAR and granted permission to KE for negotiating PAC for purchase of 50.7957 MW (net) from SNPCL. The decision also incorporated a tariff for the purchase of power by KE from SNPC.

2. Annexure B

Annexure B is the decision of the Authority in the matter of motion for leave for review by SNPCL of the Authority's decision dated 01.06.2016. As a result, the Authority revised the Tariff. As per the decision of the Authority, the revised Tariff was to be incorporated in the PAC.

3. Annexure C

Annexure C is a spreadsheet, which provides year wise summary of the water tankers used for SNPCL's power plant. The summary entails data from 2018 till 2024.

4. Annexure D

Annexure D is a spreadsheet, which provides year wise data of raw water shortage. The spreadsheet provides the data for the year of 2020, 2022 and 2024. This annexure shows the stoppage of the turbine due to shortage of water.

5. Annexure E-1

Annexure E-1 is a proposal, by a Finnish company, for delivery of 3D cooling water-piping design. The Annexure demonstrates the costs to be incurred for the designing and construction of the pipeline.

6. Annexure E-2

Annexure E-2 is a proposal, by a Finnish company, for installation of cooling water radiators. The Annexure demonstrates the costs to be incurred for the aforesaid installation.

7. Annexure F

Annexure F is a report that provides the costs for laying down a water pipeline from Keenjar lake to the SNPC plant.

8. Annexure G

Annexure G is a proposal for providing wastewater treatment and disposal to nearest available point for SNPCL under a specific budget.

9. Annexure H

Annexure H is a spreadsheet, which provides data with respect to Sui Northern Gas Outage.

10. Annexure I

Annexure I is a spreadsheet, which enlists the data for SNPCL with respect to loss of capacity due to gas shortfall.

SINDH NOORIABAD Power Company (Pvt) Limited

F/A-8

EXTRACT OF RESOLUTION PASSED BY THE BOARD OF DIRECTORS OF SINDH NOORIABAD POWER COMPANY (PVT.) LIMITED THROUGH RESOLUTION BY CIRCULATION ON 16 JANUARY 2024

RESOLVED THAT Sindh Nooriabad Power Company (Pvt.) Limited (the "**Company**") be and is hereby authorized to file petition(s) before the National Electric Power Regulatory Authority ("**NEPRA**") in relation to the Revision of Tariff in respect of the Company's Gross Capacity of 52.094 MW Gas-Fired Electric Power Generation Plant located at Nooriabad, Sindh Province, Pakistan.

FURTHER RESOLVED THAT Commodore (Retd.) Najam ul Hasanian , Chief Executive Officer, (the "**Authorised Person**") is duly authorized to file, submit and present the Application(s) (along with all annexes), affidavits, and any documents in support thereof before NEPRA, sign the necessary documentation, pay the necessary filing fees, appear and/or make any oral / written representations on behalf of the Company before NEPRA, and undertake or do any matter(s) / act(s) necessary for the filing, submission, processing, completion and finalization of the Application(s), or incidental thereto.

FURTHER RESOLVED THAT in addition to the Authorised Person, Mr. Nadir Altaf, of RIAA Barker Gillette are Authorised Person(s) and shall also have the afore-stated powers."

Certified True Copy
For and On behalf of
Sindh Nooriabad Power Company
(Pvt.) Limited

CERTIFIED TRUE COPY
Company Secretary
Sindh Nooriabad Power Company (Pvt.) Limited

MUHAMMAD FARAZ AHMED
COMPANY SECRETARY

CERTIFICATION

Certified that, the above resolution was duly passed by the Board of Directors of Sindh Nooriabad Power Company (Pvt.) Limited by Circulation on 16 January 2024.

Further Certified that the said resolution has not been rescinded and is in operation and that this a certified true copy thereof.

For and On behalf of
Sindh Nooriabad Power Company
(Pvt.) Limited

CERTIFIED TRUE COPY
Company Secretary
Sindh Nooriabad Power Company (Pvt.) Limited

MUHAMMAD FARAZ AHMED
COMPANY SECRETARY

23-A/II, Muhammad Ali jauhar Memorial Co-operative Ho[illegible]g Societ[illegible]rachi
Phone: +9221 3454 0225 Fax[illegible]

VAKALATNAMA

F/A-9

We, **Sindh Nooriabad Power Company (Pvt.) Limited,** hereby appoint and constitute **Mr. Nadir Altaf, Mr. Muhammad Fahim Khan, Ms. Noor Tariq, and Ms. Soha Abid of M/S RIAA Barker Gillette** to appear and act for **Sindh Nooriabad Power Company (Pvt.) Limited** as our legal advisors in connection with preparation, filing and follow up of the Petition before the National Electric Power Regulatory Authority for Revision of Tariff in respect of the Company's Gross Capacity of 52.094 MW Gas-Fired Electric Power Generation Plant located at Nooriabad, Sindh Province, Pakistan and represent us in connection therewith.

The above-mentioned legal advisors, or any of them, are also authorized to do all acts and things necessary for the processing, completion, acceptance, and finalization of the Petition for Revision of Tariff with the National Electric Power Regulatory Authority ("**NEPRA**"), under the NEPRA Laws.

Dated: 21 November 2024

For and on behalf of
Sindh Nooriabad Power Company
(Pvt.) Limited

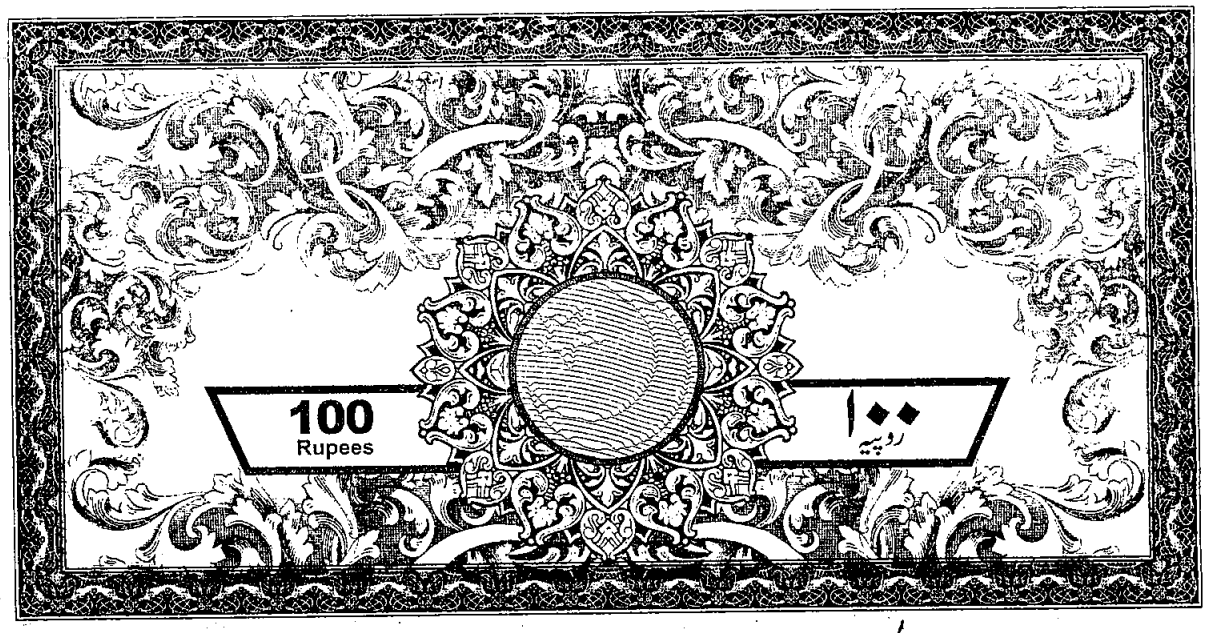
SINDH NOORIABAD POWER COMPANY (PVT) LTD

Commodore (Retd.) Najam ul Hasanain
Chief Executive Officer
Sindh Nooriabad Power Company
(Pvt.) Limited

ACCEPTED

RIAA Barker Gillette
Third Floor 65-W Executive Heights,
Fazal e Haq Rd, G 7/2 Blue Area,
Islamabad
UAN: 111-LAWYER

D146332



C49724

F/A-10

ASGHAR ALI SAQI STAMP VENDOR
Licence # 98, Shop # 86,
City Court, Karachi
S No .....DATE .....
ISSUED WITH ADDRESS .....
THROUGH WITH ADDRESS .....
PURPOSE .....
VALUE RS ..... (ATTACHED)
STAMP VENDOR'S SIGNATURE .....

22 OCT 2024

ABU TALIB MOOSA MEMON
ADVOCATE

BEFORE THE NATIONAL ELECTRIC POWER REGULATORY AUTHORITY

AFFIDAVIT

I, **Commodore (Retd.) Najam ul Hasnain,** bearing CNIC No. **61101-1771217-9, Chief Executive Officer,** being duly authorized by Sindh Nooriabad Power Company (Pvt.) Limited, hereby solemnly affirm and declare on oath that the contents of the accompanying Petition for Revision of Tariff, including all attached documents-in-support, are true and correct to the best of my knowledge and belief and that nothing has been concealed.

SINDH NOORIABAD POWER COMPANY (PVT) LTD

DEPONENT

Commodore (Retd.) Najam ul Hasnain
CNIC No. 61101-1771217-9
Chief Executive Officer
Dated: 07 December 2024

ATTESTED
OATH COMMISSIONER
Abu Talib Moosa Memon
Karachi-Pakistan

National Electric Power Regulatory Authority
Islamic Republic of Pakistan

F/B

Registrar

NEPRA Tower, Attaturk Avenue (East), G-5/1, Islamabad
Ph:+92-51-9206500, Fax: +92-51-2600026
Web: www.nepra.org.pk, E-mail: registrar@nepra.org.pk

No. NEPRA/R/DL/LAG-279/ 10595-10603 July 15, 2015

Mr. Najam Ul Hasnain,
Chief Executive Officer,
Sindh Nooriabad Power Company (Pvt.) Limited,
28, Army Housing Scheme,
National Stadium Colony, Karachi.

Subject: **Generation Licence No. IGSPL/63/2015**
Licence Application No. LAG-279
Sindh Nooriabad Power Company (Pvt.) Limited (SNPCPL)

Reference: Your application vide letter No. Nil, dated Nil, received on August 21, 2014.

Enclosed please find herewith Generation Licence No. IGSPL/63/2015 granted by National Electric Power Regulatory Authority (NEPRA) to Sindh Nooriabad Power Company (Pvt.) Limited, pursuant to Section 15 of the Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997). Further, the determination of the Authority in the subject matter is also attached.

2. Please quote above mentioned Generation Licence No. for future correspondence.

Enclosure: Generation Licence (IGSPL/63/2015)

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY REGISTRAR NEPRA

(Syed Safeer Hussain) 15.07.15

Copy to:

1. Chief Executive Officer, Hyderabad Electric Supply Company Limited (HESCO), Old State Bank Building, G.O.R Colony, Hyderabad.
2. Chief Executive Officer, K-Electric Ltd. KE House 39-B, Sunset Boulevard, Phase-II, DHA, Karachi.
3. Chief Executive Officer, NTDC, 414-WAPDA House, Lahore
4. Chief Operating Officer, CPPA-G, 107-WAPDA House, Lahore
5. Director General, Environment and Alternative Energy Department, Government of Sindh, Plot No ST/2/1, Sector 23, Korangi Industrial Area, Karachi.
6. Secretary, Energy Department, Government of Sindh, Lackson Building 3, 7th Floor, Sarwar Shaheed Road, Opposite Karachi Press Club, Karachi.
7. Chief Secretary, Government of Sindh, Sindh Secretariat, Karachi.
8. Secretary, Ministry of Water and Power, A-Block, Pak Secretariat, Islamabad.

ORDER SHEET

IN THE ISLAMABAD HIGH COURT, ISLAMABAD.

(JUDICIAL DEPARTMENT)

F/H

W.P no. 2331/2020

Sindh Nooriabad Power Company (Private) Limited.

versus

NEPRA and others

S. No. of order/ proceedings	Date of order/ Proceedings	Order with signature of Judge and that of parties or counsel where necessary.
	~~23.02.2022~~ 17.05.2022	M/s Nadir Altaf, Malik Omair Saleem and Abdullah Alim, Advocates for the petitioner. Barrister Umer Aslam for respondent NEPRA respondent no.1. Ch. Muhammad Tahir Mehmood, learned A.A.G.

After hearing the learned counsels at some length, in view of the previous orders and in view of the Government of Sindh's (GOS) receipt of the recovered amount, impleading the GOS is necessary for a proper adjudication of this petition. Learned counsel for the petitioner is directed to file an amended memo of parties impleading the GOS.

2 With reference to the order dated 25.01.2022, the learned counsels all agree that negotiations amongst the key decision makers of the petitioner and the respondents (including GOS) in the presence of their respective counsels is essential for a workable proposal to emerge that ensures the credibility of the regulator, prevents possible unjust enrichment of the GOS and ensures an overall equitable treatment of the company, its shareholders, lenders and the consumers.

Certified to Be True Copy

30 MAR 202

3 Let the learned counsels inform their respective clients accordingly. NEPRA is to take the lead to arrange the negotiations, the first meeting for which shall be convened no later than 2 weeks from today and thereafter a workable proposal is to be presented by NEPRA to this

Court on or before the next date of hearing. All parties are directed to extend full cooperation to NEPRA.

4 The office is directed to send a copy of this order to the learned Advocate General, Province of Sindh.

5 Relist on 28.04.2022.

CM no.257/ 2022

The injunctive order passed on 25.01.2022 shall continue until the next date of hearing.

(SARDAR EJAZ ISHAQ KHAN)
JUDGE

Annex-II

F/I

ORDER SHEET
IN THE ISLAMABAD HIGH COURT, ISLAMABAD
(JUDICIAL DEPARTMENT)

WP no. 2331/2020

Sindh Nooriabad Power Company (Private) Limited
versus
National Electric Power Regulatory Authority and others

S No. of order/ proceedings	Date of order/ Proceedings	Order with signature of Judge and that of parties or counsel where necessary.
11	14.12.2022	M/s Yousaf Khosa and Muhammad Fahim, Advocate proxy counsel for petitioner in instant as well as connected petitions. Barrister Umer Aslam Khan, for respondent no.1. Barrister Asghar Khan, Advocate for respondent (K-Electric) in relevant petitions. Barrister Ahsan Hameed Dogar, for Government of Sindh. Irfan Munawar Gill, Legal Advisor. Hassan Waseem, Legal Advisor. Muhammad Yousaf, Director Tariff. Mr. Ali Feroz Khan, Additional Director Tariff. Dr. Shahnawaz Farhan, Director, Energy Department, Government of Sindh.

The order of the Authority placed before me depicts conscious avoidance of the decision-making power vested in the Authority. The statutory power given to the Authority qua regulator is a sacred trust that they have to exercise when the occasion to exercise it arises - this is the law. Para 7 of the order of the Authority placed on record throws the ball in NAB's court, when NAB has no longer anything to do with this case; the money has already been recovered by NAB and given to GOS. To me this appears a plain case of dereliction of statutory duty of action by an impartial regulator to arrive at a fair decision, which strikes a balance between the interests of the consumers and the entities providing electric power services as is mandatory under the NEPRA Act.

2 The Authority is given one more chance to muster the intellectual honesty and the courage to make the right decision in exercise of its statutory powers, failing which the members of the Authority will be summoned to appear in Court in person to explain the rationale for their indecision on the key question: how come the GOS is entitled to have it both ways. The

decision of the Authority should be placed on record positively before the next date of hearing.

3 Relist on **19.01.2023**. On the said date, the matter shall be taken up on priority amongst the first three cases called after the urgent list.

4 The parties are directed to file their statements of costs of litigation before the next date of hearing.

Sd-

(Sardar Ejaz Ishaq Khan)
Judge

TRUE COPY

19 DEC 2022