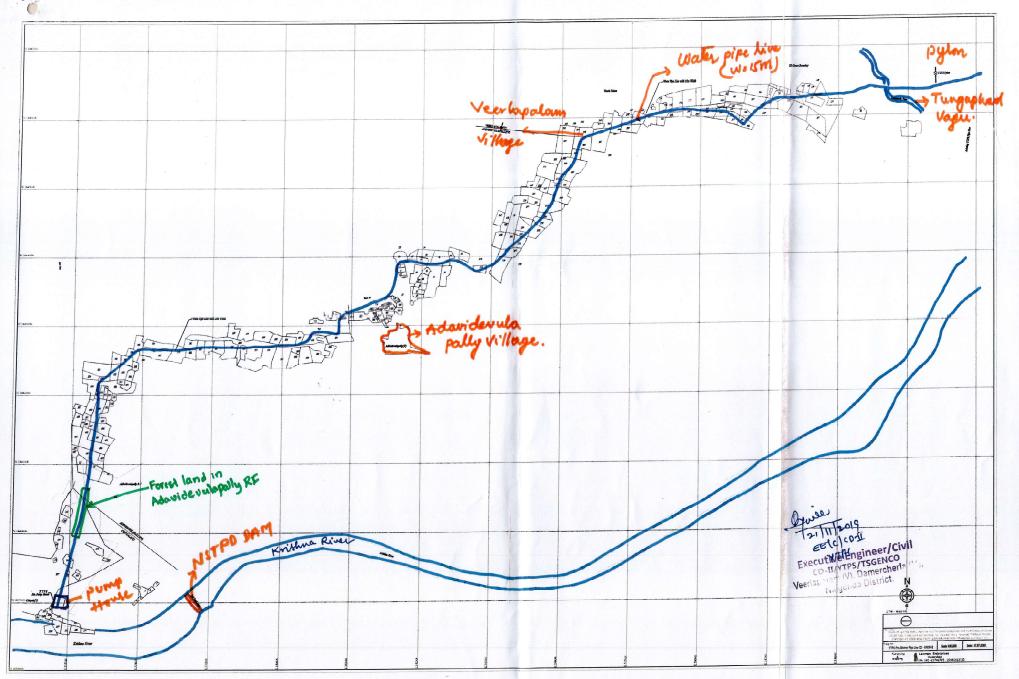
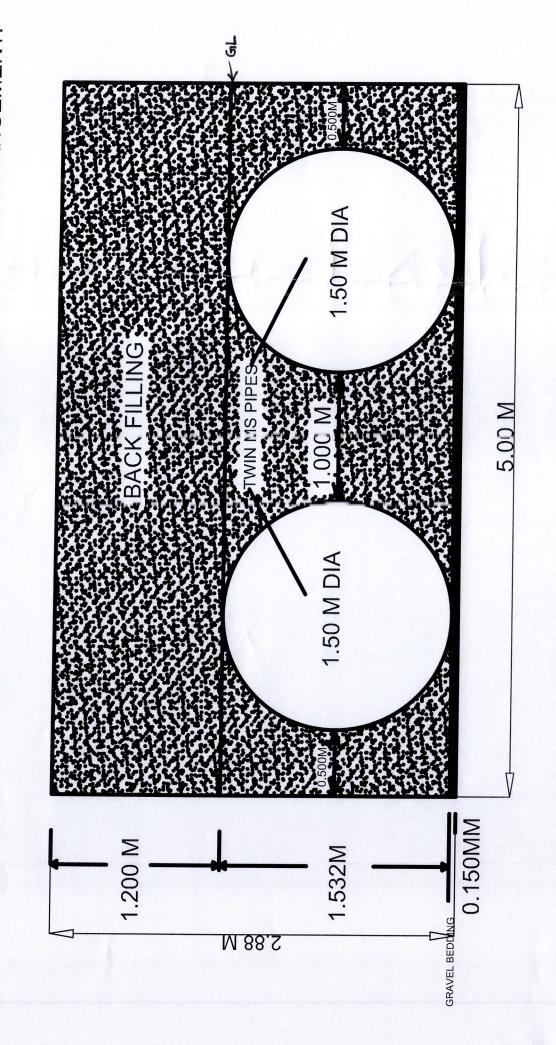
Layout showing alignment of Raw water Pipeline from Nagarjuna Sagar tail pond dam to YTPS



GENERAL CROSS SECTION SHOWING TWIN PIPE LINE LAYING ARRANGEMENT.





TELANGANA STATE POWER GENERATION CORPORATION LIMITED VIDYUT SOUDHA:: HYDERABAD - 500082

CIN: U40102TG2014SGC94070, Phone No: 040-23499407 Website: <u>www.tsgenco.co.in</u> Email ID: <u>ce.cth@tsgenco.co.in</u>

From

The Chief Engineer/Civil/Thermal, TSGENCO, Vidyut Soudha, Hyderabad-500082

To

Sri.G.Trinadh Kumar, IFS, Inspector General of Forests (C), MoEF & CC, GoI, Integrated Regional Office

Integrated Regional Office, Aranya Bhavan, Saifabad, Hyderabad.-500004

<u>Lr No:CE/C/Th/SE.TCD-I/EE-I/F.YTPS-Div of forest land/D.No.133/2022-23, Dt:04.07.2022</u>

Sir,

Sub: TSGENCO-(5x800 MW) YTPS-Diversion of 1892.35 Ha (4676 Acres) of forest land in favour of TSGENCO for establishment of Proposed Coal based Thermal Power Station of capacity 6800 MW at Veerlapalem (V), Dameracherla Mandal, Nalgonda District, Telangana State-Stage-II approval (Final Clearance) accorded – Report on the latest self compliance to the conditions stipulated in the Stage – II approval - Furnished - Reg.

Ref: 1) Lr. No. F. No. 8-07/2015-FC of MoEF & CC, GoI, Dated:07.07.2015.

- 2) Lr. No. SE/C/TCD-I/VS/HYD/F. Forest land/D. No. 155/15, dt. 28.09.2015
- 3) Lr. No. CE/C/Th/SE/C/TCD-I/VS/HYD/F. YTPS Auth/D. No. 163/15, dt. 08.10.2015.

It is to inform that, as per the Condition No. (xxiii) stipulated in the Stage-II (final) approval accorded by MoEF & CC, GoI, vide reference 1st cited, for diversion of 1892.35 Ha (4676 Acres) of forest land under Veerlapalem forest block in favour of TSGENCO for establishment of Coal based thermal power station of capacity 6800 MW at Veerlapalem (V), Dameracherla Mandal, Nalgonda District, Telangana State, the report on the latest self compliance to the conditions stipulated in the Stage-II approval is herewith furnished as Annexure.

Encl: As above

Yours faithfully,

Chief Engineer/Civil/Thermal

Copy to the:

1) The Principal Chief Conservator of Forests, HoFF, Telangana State Aranya Bhavan, Saifabad, Hyderabad

- 2) Chief Engineer/Construction, YTPS, Veerlapalem (V), Dameracherla (M), Nalgonda Dist.
- 3) Superintending Engineer/Civil/Construction Circle-I, YTPS, Veerlapalem (V), Dameracherla (M), Nalgonda Dist.
- 4) SE/Tech to the Chairman and Managing Director, TSGENCO, Vidyut Soudha, Hyderabad.
- 5) DE/Tech to the Director/Projects, TSGENCO, Vidyut Soudha, Hyderabad.
- 6) AEE/Tech to the Director/Civil, TSGENCO, Vidyut Soudha, Hyderabad.

ANNEXURE

Compliance to the conditions stipulated in the Stage-II (Final) approval accorded by MoEF & CC, GoI, for diversion of forest land to an extent of 1892.35 Ha in favour of TSGENCO under Veerlapalem forest block.

1. Condition (i):

Legal status of the diverted forest land shall remain unchanged;

➤ Legal Status of the diverted forest land has been maintained as it is without any changes and also TSGENCO hereby undertakes that the same will be maintained in future.

2. Condition (ii):

Compensatory Afforestation over the Non-forest land, equal in extent to the forest land being diverted, shall be raised and maintained by the State Forest Department from the funds already provided by the User Agency;

➤ For raising and maintaining Compensatory Afforestation over the Non-forest land to an extent of 1892.35 Ha, by the State Forest Department, an amount of Rs. 80.13053 Crores as per the demand Note raised by the DFO/Nalgonda vide Letter No. RC. 6296/2014/S5, dt. 28.04.2015 was deposited by TSGENCO on 02.05.2015 in the Account of Telangana Compensatory Afforestation Fund/Telangana State Compensatory Afforestation Fund Management & Planning Authority (CAMPA). The raising and maintaining of Compensatory Afforestation is in the scope of Forest department.

3. Condition (iii):

The Non forest land transferred and mutated in favour of the State Forest Department shall be notified by the State Government as RF under Section - 4 or PF under Section - 29 of the Indian Forest Act, 1927 or under the relevant section(s) of the local Forest Act, latest within a period of six months from the date of issue of Stage-II approval. The Nodal officer shall report compliance in this regard along with a copy of the original Notification declaring the nonforest land under Section 4 or Section 29 of the Indian Forest Act, 1927, as the case may be, within the stipulated period to the central Government for information and record;

> This condition is to be complied by the Forest department.

4. Condition (iv):

The User Agency shall pay the additional amount of NPV, if so determined, as per the final decision of the Hon'ble Supreme Court of India.

> TSGENCO has already deposited an amount of Rs. 118.46111 Crores towards Net Present Value (NPV) of the Forest land, with the Forest Department on 02.05.2015 in the Account of Telangana Compensatory Afforestation Fund/ Telangana State Compensatory Afforestation Fund Management & Planning Authority (CAMPA) for diversion of the above forest land. Further, TSGENCO hereby undertakes to pay the additional amount of NPV, if so determined, as per the final decision of the Hon'ble Supreme Court of India at later date.

5. Condition (v):

The User Agency shall obtain the Environmental clearance as per the provisions of the Environmental Protection Act 1986 if required.

Ministry of Environment, Forest & Climate Change (MoEF&CC), GoI, New Delhi vide Letter No.J-13012/18/2015-IA.I (T), Dated. 29.06.2017 has accorded the Environmental clearance for establishment of (5x800 MW) Yadadri Thermal Power Station at Veerlapalem (V), Dameracherla (M), Nalgonda Dist. A copy of the Environmental Clearance (EC) was already submitted to the Principal Chief Conservator of Forests, Hyderabad vide Letter No. ED/Civil/Thermal/ SE/Civil/YTPS/F. Forest land/D.No.90/2017, dated. 12.07.2017 and the same is enclosed as Annexure-I.

6. Condition (vi):

The User Agency shall ensure that ash disposal is carried out as per the detailed plan prepared for the purpose, and in accordance with all the environmental safeguards.

➤ TSGENCO hereby undertakes that the ash disposal will be carried out as per the detailed plan prepared for the purpose in accordance with all Environmental safeguards. In this regard, High efficiency Electrostatic Precipitators (ESP) with ash silo system, Effluent Treatment plant (ETP) with Zero Liquid Discharge and Ash water recovery system (AWRS) are proposed and the same will be completed along with the main power plant.

7. Condition (vii):

Following activities shall be undertaken by the user agency under the supervision of the State Forest Department at the project cost:

- a. Proper mitigative measures to minimize the soil erosion and choking of streams will be prepared and implemented.
- b. Planting of adequate drought hardy plant species and sowing of seeds to arrest soil erosion.
- Construction of check dams, retention/toe walls to arrest sliding down of the excavated material along the contour.
- ➤ The plan for mitigative methods to minimize the soil erosion and plantation of suitable species in the proposed project area was submitted to the Principal Chief Conservator of Forests, (Head of Forest Force), Telangana State Forest Department, Aranya Bhavan, Saifabad, Hyderabad vide Lr.No. CE/C/Thermal/SE/TCD-I/F.Forest land/D.No.83/15,Dt.12.06.2015 while submission of additional information as sought by Sr. Asst Inspector General of Forest, MoEF & CC (FC Division), New Delhi in compliance to the conditions stipulated in Stage -I approval. A copy of plan prepared for such mitigative

methods to minimize the soil erosion and plantation of suitable species is here with enclosed as **Annexure - II** for reference. TSGENCO also undertakes that the same will be taken up once the construction works of the above project are completed in full shape.

8. Condition (viii):

Wherever possible and technically feasible, the User Agency shall undertake by involving local community, the afforestation measures in the blanks within the project area being diverted under this approval, in consultation with the State Forest Department at the project cost.

- > TSGENCO has made provision of Rs. 50.00 Crores in the project cost towards development of Green belt and taking up of soil erosion mitigation measures. This provision will include afforestation measures in the blanks within the project area diverted by forest department. The measures of afforestation will be taken up after completion of construction of the project duly finalizing the plan in consultation with the DFO, Nalgonda by involving the local community.
- 9. Condition (ix):
 The user agency shall take all measures to prevent pollution by effluents, particulate matters etc., at the project cost.
 - ➤ A provision of Rs. 3900.00 Crores has been made in the project cost towards control of the pollution from the plant which may be due to emission of gases and other particulate matter from Chimney, plant effluents in the form of liquid state, dust hazard in coal storage yard and also in the form of ash generated due to burning of coal. To control the above pollution, the following systems are proposed for installation in the project.
 - i) High efficiency Electro Static Precipitators

ii) 3 Nos 275 m high Chimneys

- iii) Effluent treatment plant with Zero Liquid Discharge concept by recycling of treated water for reuse of the same in cooling tower make up, green belt development, ashing purpose, in dust suppression system in coal storage yard/ coal conveyors and floor wash in the plant.
- iv) Ash water recovery unit with recycling system for reusing the decanted water from ash pond in ashing.

v) Sewage Treatment plant with recycling system.

- vi) Construction of silos for storage of dry fly ash for issuing to cement and other industries.
- vii) Installation of Flue Gas De-sulphurisation system (FGD) for controlling SOx within the permissible norms
- viii) Installation of Selective Catalytic Reactive system (SCR) for controlling NOx within the permissible norms

All the above works are included in the contract given to M/s. BHEL, Public undertaking company, Govt. of India for a value of Rs. 20,379.00 Crores on EPC

contract system vide LOI No.ED/TPC/SE-III/EME-9/Yadadri TPS (5x800 MW)/D.No.102/17, Dt.17.10.2017 (Copy enclosed as **Annexure -III**). Most of the above works are already commenced by M/s. BHEL and are in progress.

10. Condition (x):

The user agency shall develop a green belt along the power station and also along the water pipe line/channel

TSGENCO has proposed to develop the Greenbelt in all the open areas after completion of the project works in full shape. The plantation was already taken up in the office premises and being maintained by engaging local workers for watering and other purposes.

11. Condition (xi):

The Forest clearance to the project is accorded without any guarantee and coal linkages.

➤ TSGENCO has entered Memorandum of Understanding (MOU) with M/s.Singareni Collicrics Company Limited (A Government Company) for supply of 7.0 Million Tonnes of coal per annum to YTPS. As per the MOU "the Seller shall supply 700 Million Tonnes per Annum (7.0 MMTPA) of G9 & above grades coal/WG-G9 grade for operation of Yadadri Thermal Power Station (5x800 MW) subject to obtaining linkage from Standing Linkage Committee (LT) of Ministry of Coal, Govt. of India for such supplies as per NCDP 2007 and cost plus policy guidelines 2008". The copy of MOU is herewith enclosed as Annexure-IV.

Subsequently, MOC, GoI has introduced SHAKTI POLICY-2017 (Scheme for Harnessing and Allocating Koyala (Coal) Transparently in India) for allocation of coal linkage to the Power Sector.

As per the conditions stipulated in the MOU with M/s. SCCL, TSGENCO has applied to MOC, GoI for allocation of Long-Term Coal Linkage for YTPS (5X800 MW) under SHAKTI POLICY-2017. Ministry of Coal, Govt. of India has granted Long Term linkage of G9 grade coal from M/s. SCCL to YTPS and communicated the orders dated 15th February, 2018 (Copy enclosed as Annexure - V).

12. Condition (xii):

No residential area will be built on forest land diverted;

> TSGENCO has not taken up any residential buildings or such activities so far as per this condition.

13. Condition (xiii):

No labour camps shall be built on forest land diverted;

> This condition is complied.

14. Condition (xiv):

The User Agency shall provide fuels preferably alternate fuels to the labourers and the staff working at the site so as to avoid any damage or pressure nearby forest areas:

> TSGENCO has been ensuring that alternate fuels such as LPG are to be used by the labour and the staff working at site so as to avoid any damage or pressure on the nearby forest areas. Further, strict instructions are being given to the contractors from time to time, who are executing the project works to use only LPG by their labour and staff.

15. Condition (xv):

The boundary of the diverted forest land shall be demarcated on ground at the project cost, by erecting four feet height reinforced cement concrete pillars, each inscribed with its serial No., forward and back bearing, and distance from pillar to pillar;

- An amount of Rs. 9,00,000/- was deposited with the DFO, Nalgonda (vide D.D. No. 966040, dt. 07.10.2015) on 08.10.2015 towards cost of construction of RCC pillars for erection along the common boundary of diverted forest land in favour of TSGENCO and left over forest land under Veerlapalem forest block, Nalgonda Dist. The pillars are already constructed by the forest department.
- ➤ In respect of the diverted forest land, TSGENCO is constructing the compound wall with Pre-Stressed Concrete pillars and wall panels as per the coordinates of the diverted forest land. Also, barbed wire fencing with RCC pillars is provided along the boundary of non-plant area where ash pond is proposed.

16. Condition (xvi):

The layout plan of the proposal shall not be changed without the prior approval of the Central Government;

> There is no change in the layout plan of the above plant.

17. Condition (xvii):

The forest area to be diverted may not be used for any other purpose than the power plant proposed;

> The diverted forest land in favour of TSGENCO is being utilized for construction of thermal power plant only.

18. Condition (xviii):

The forest land shall not be used for any purpose other than that specified in the proposal;

> TSGENCO hereby undertakes that the forest land will not be used for any purpose other than that specified in the proposal.

19. Condition (xix):

The forest land proposed to be diverted shall under no circumstances be transferred to any other agency, department or person without prior approval of the Central Government;

TSGENCO hereby undertakes that the forest land diverted in favour of TSGENCO under any circumstances will not be transferred to any other agency, department or person without prior approval of the Central Government.

20. Condition (xx):

No damage to the flora and fauna of the adjoining area shall be caused;

> TSGENCO hereby undertakes that no damage will be caused to the flora and fauna of the adjoining areas.

21. Condition (xxi):

Any tree felling shall be done only when it is unavoidable and that too under strict supervision of the State Forest Department;

The tree felling or removal of trees is being done by TSGENCO if it is unavoidable and coming across the plant structures with the intimation and permission of State Forest department and further, TSGENCO hereby undertakes that the same will be followed in future.

22. Condition (xxii):

The User Agency in consultation with the state government shall create and maintain alternate habitat/home for the avifauna, whose nesting trees are to be cleared in this project. Bird's nests artificially made out of eco friendly material shall be used in the area including forest area and human settlements, adjoining the forest area being diverted for the project.

➤ It is verified and ascertained that, there are no nesting trees in the proposed project area as it is completely degraded forest land. Hence, it is not necessary to create and maintain alternate habitat/home for the avifauna.

23. Condition (xxiii):

The User Agency shall submit the annual self compliance report in respect of the above conditions to the State Government and to the concerned Regional Office of the Ministry regularly. > TSGENCO has submitted the compliance including undertakings to the conditions stipulated in the State - II approval to the DFO, Nalgonda, vide Letter No. SE/C/TCD-I/VS/HYD/F. Forest land/D. No. 155/15, dt. 28.09.2015 and Letter No.CE/C/Th/SE/C/TCD-I/VS/HYD/F. YTPS No.163/15, dt. 08.10.2015. Further, TSGENCO hereby undertakes that the annual self compliance report in respect of the above conditions will be submitted to the State Government and to the concerned Regional Office of the Ministry regularly.

24. Condition (xxiv):

Any other condition that the concerned Regional Office of the Ministry may stipulates from time to time, in the interest of conservation, protection and development of forests & wildlife.

- > TSGENCO undertakes that, any other condition stipulated by the concerned Regional Office of the Ministry will be complied by TSGENCO from time to time, in the interest of conservation, protection and development of forests & wildlife.
- 25. Condition (xxv):

The User Agency and the State Government shall ensure strict compliance of all conditions for which undertakings have been obtained from the User Agency and also compliance to provisions of the all Acts, Rules, Regulations and Guidelines for the time being in force, as applicable to the project.

> TSGENCO will ensure strict compliance to the conditions for which the undertakings were submitted.

> CHIEF ENGINEER/CIVIL/THERMAL TSGENCO, VIDYUT SOUDHA **HYDERABAD**

ELANGANA STATE POWER GENERATION CORPORATION LIMITED

From:

Executive Director/Civil Thermal, TSGENCO, Vidyut Soudha,

To, The Prl. Chief Conservator of Forests, (Head of Forest Force), Telangana,"Aranya Bhavan", Saifabad, Hyderabad.

Lr No:ED/CIVII/THERMAL/SE/CIVII/YTPS/F.Forest land/D.No. 90/17,Dt. 2/07/2017 Hyderabad

Sir,

Sub: TSGENCO-YTPS-Diversion of 1892.35 Ha(4334.01 Ha) proposed originally) of forest land in favour of TSGENCO for establishment of Coal based thermal Power Station of capacity 6800MW at Veerlapalem (v), Dameracherla Mandal, Nalgonda Dist, Telangana State -Environmental Clearance accorded - Handing over of possession- Requested - Reg

Ref: 1. F No.8-07/2015-FC,dated 27.04.2015 of MoEF&CC(FC),- GoI, New Delhi

2.F No.8-07/2015-FC,dated 07.07.2015 of MoEF&CC(FC),- GoI, New Delhi

3. Lr. No. Rc.No 11064/2014-FCA3, Dt 17.04.2017 of PCCF, TS, Hyd.

4. Lr. No. CE/C/Thermal/SE/TCD-I/F. Forest land/D. No. 60/17, dt. 06.06.2017.

5. Lr. J-13012/18/2015 - IA.I(T), dt 29.06.2017 of MoEF & CC, GoI, New Delhi.

With reference to the letter 3rd cited, it is to inform that, the MoEF&CC, GoI, New Delhi has accorded Environmental Clearance(EC) for establishment of 5X800 MW Yadadri Thermal power station at Veerlapalem (v), Dameracherla Mandal, Nalgonda Dist, Telangana State vide letter 5^{th} cited. A copy of the same is herewith enclosed for reference.

In view of the receipt of Environmental Clearance (EC), it is requested to arrange to cause necessary instructions to the concerned to handover the possession of forest land diverted in favour of TSGENCO so as to enable TSGENCO to take up the construction works of the project.

End - At asove

Yours faithfully,

12/7/2017 Executive Director/Civil

Thermal, TSGENCO

Copy to:

The District Collector, Nalgonda Dist for information.

2. The Forest Development Officer, Nalgonda for information

3. The District Forest Officer, Nalgonda for information

4. SE/Tech to the Chairman & Managing Director, TSGENCO, V.S., Hyderabad

75. DE/Tech to the Director/Projects, TSGENCO, V.S., Hyderabad

PESH!

Annexure:

Phin for Mitigative methods to minimize the soil crosion and plantation of suitable species in the proposed project area:

In order to meet the present and future power requirement of the newly formed Telangana state, Govt. of Telangana has submitted a proposal to set up a new power plant over 4334.01 Ha of forest land for generating 6800 MW power. The GOI vide reference F.No. 8-07/2015-FC, Dt: 27-04-2015 have accorded Stage-I approval for permitting the use of 1892.35 Ha of forest land in Dameracherla (M) for the above proposal. While according the Stage-I approval by the GOI vide condition No. XIII have ordered TSGENCO to take up the following mitigative activities at the project cost:

- a) Proper Mitigative measures to minimize the soil erosion and choking of streams shall be prepared and implemented.
- b) Planting of adequate drought hardy plant species and sowing of seeds to arrest soil erosion.
- c) Construction of check dams, retention/toe walls to arrest sliding down of the excavated material along the contour.

The MOEF&CC, GOI has directed TSGENCO vide F.No. 8-07/2015-FC, Dt: 05-06-2015 to submit a plan indicating the mitigative measures to minimize the soil erosion which should indicate planting of suitable species. In view of the above, the following plan is prepared:

Basic information of the project area:

1) Name of the project

Dameracherla Thermal Power Station

2) Reserve Forest Area involved:

1892.35 Ha

3) Location

Veerlapalem Forest Block

Miryalaguda Range

Nalgonda Division

4) Proposed Production capacity:

6800 MW in phases

Contd. 2

5) Terrain & Topography:

Mix of plane rocky with some hilly patches and fair extent of undulating areas, shallow to very shallow soils with broken sheet rock and rocky areas. Clear signs of severe biotic pressures and soil erosion. The area is very heavily grazed.

6) Vegetation:

Degraded scrub forest with few trees in some areas. Vegetation mainly comprises of following species in their order of abundance.

- i) Sundra (Acacia Chundra)
- ii) Jana (Grevia rotundifolia)
- iii) Vepa (Azadirachta indica)
- iv) Moduga (Butea monosperna)
- v) Tella Thumma (Acacia Leucophila)
- vi) Narbuga (Acacia amara)

Grass growth though possible but is absent because of severe grazing pressure.

7) Water Regime:

River Krishna flows in the south of this area. Project area is mostly dry except one stream Tunga Pahed Bandam (stream) flowing in the middle which ultimately joins the river Krishna outside the project area. This stream has water for major portion of the year. Some SMC interventions can result useful for the vegetation and environment in the area.

Interventions proposed:

Tree planting:

As already pointed out earlier the project area in under severe biotic pressure. Soil erosion, grazing and compaction of soil are the malady. Existing vegetation is severely

Contd..3

to vanish and the natural vegetation will bounce back with vigour. Keeping the terrain and soil conditions in mind, it is suggested to have two planting models for improving the vegetation in the project area. These models are:

- i) Aided natural Regeneration
- ii) Barren Hill Afforestation in small area.

It is proposed to cover 500 Ha under these models. We may take 100 Ha each year. Stress will be on improving natural growth. However, in the gaps we may plant local species like Neem, Butea etc. The project area has a periphery of about 50 Km. It is proposed to have 20m wide belt of plantation around the periphery. This will add a plantation of 100 Ha to the area.

Project will have a network of roads. It is proposed to plant all roads with ever green Ficus species using open ended drums and 3 m tall seedlings of Ficus bengalensis and Ficus religiosa (Avenue plantation). Both sides of the road will be planted and distance between plants will be 10m. 200 seedlings will be required per Km and maintenance of this plantation will be provided for 5 years.

Fruit trees will be got planted by the local people around their homes. Good seedlings and planting cost will be provided. Maintenance cost for 1st year will also be paid at the end of one year if the plant survives. Grass seeds will be broad casted wherever required. Trench unds will be sown with grass seeds or slips or agave. Lumpsum of Rs. 10.00 Laks is being rovided for this for 5 years.

The project area is surrounded by three reserve forest blocks with similar kind of vegetation. It is proposed to have a green belt over an area of 1500 Ha around the project area. This plantation will be taken up by the Telangana state Forest Department. As discussed with local officers, ANR and BHA models will be employed in most of the area. Unit cost including maintenance for 5 years and escalation is Rs. 100000/ per Ha. This cost is tentative and local adjustments will be done at the time of planting.

Soil and Moisture Conservation:

Soil and Moisture conservation interventions are proposed after dividing the areas into three categories viz;

i) Hill slopes

- Slope more than 10%

ii) Undulating areas

- Slopes 2% to 5%

iii) Gentle slopes and near plane areas

- Slopes less than 2%

Hill Slopes: On hill slopes contour bunding with rough stones, staggered contour trenching and contour trenching will be taken up. Staggered trenching will be done on streams of order 1 to 5. Orders of streams are taken with reference to contour map of half meter contour interval. Interval between contour bunds will be 5m for 10% or more slope and 10m for 5 to 10% slopes. Less than 5% slope will have contour trenches. If more than one contour trench is to be taken up the lowest one will be continuous contour trench with septa and all other on upper slopes will be straggered contour trenches. This work will be kept as less as possible. For stabilizing dug out material grass slips or agave will be planted on it.

<u>Undulating Areas</u>: Trenching will be done on streams of order 1 to 5. Gully plugging and small check dams (less than 2m in length) will be done on streams of the order more than 5.

Gentle Slopes: On gentle slopes and near plain areas water harvesting structures like kuntas, percolation tanks and large check dams will be taken up.

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Treatment of Tunga Pahad Bandam (Stream):

This is a stream passing through the project area. This stream has little water for 8 or 9 months in a year. This stream ultimately meets Krishna river in south of the project area. By proper protection of its bunds and check damming of this stream we can improve the water availability in the project area. This water can provide good watering source for our plantation and other moisture needs.

It is also proposed to bund this stream of suitable size where it meets the ash ponds areas of the project to avoid mixing of ash in the stream water. It also proposed to have atleast 10 low CC check dams upto 1.5 m height at various points on this stream within the project area. Stream along the ash ponds is estimated to be about 3 Km in length.

(HITESH MALHOTRA)

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TELANGANA STATE POWER GENERATION CORPORATION LIMITED



(A Govt. of Telangana State Undertaking)

Vidyut Soudha, Hyderabad - 500082. www.tsgenco.telangana.gov.in Phone: 040-23499321 Fax: 040-23499323

From:

The Executive Director,
Thermal Projects Construction,
TSGENCO, Vidyut Soudha,
Khairatabad, Hyderabad-500 082.
Email ID: edtpctgenco@gmail.com

To:

M/s Bharat Heavy Electricals Limited, Power Sector - Marketing, BHEL House, Siri Fort,

New Delhi-110049 Fax: 011-26493561

LOI.No.ED/TPC/SE-III/EME-9/Yadadri TPS (5X800MW)/D.No.102/17,Dt:17.10.2017

Sir,

Sub: TSGENCO – Yadadri Thermal Power Station (5x800MW) - Design, Engineering, Manufacture, Supply, Transportation to site, Insurance, Erection, Testing & Commissioning of Main Plant & Balance of Plant equipment including Civil Works and Mandatory Spares of 5X800 MW Coal Fired Supercritical Thermal Units – Revised Letter of Intent – Issued - Reg.

- 1. LOI No. CEE/TPC/SE-III/Yadadri TPS(5X800MW)/D.No.15/15,Dated:01.06.2015.
- 2. MoEF & CC GOI, EC No. J-13012/18/2015/IA.I(T), Dated: 29.06.2017.
- 3. CFE Order No. 10/TSPCB/CFE/RO-NLG/HO/2017, Dated: 25.07.2017.
- 4. TSGENCO letter No. ED/TPC/SE-III/EME-9/YTPS(5X800MW)/F.No.40/D.No.77/17, Dt: 01.08.2017.
- 5. TSGENCO E-mail on Raw water analysis, Dated 26.09.17.
- 6. MOM dated 04/10/2017 on various technical issues and scope issues discussed on 15.09.2017, 16.09.2017, 18.09.2017, 21.09.2017, 22.09.2017 and 04.10.2017
- 7. MOM dated 04.10.17 on deletion of scope of civil works for Non-plant buildings from BHEL scope
- 8. Commercial MOM signed on 09.10.2017 between M/s BHEL and M/s TSGENCO
- 9. M/s BHEL Revised Techno-Commercial Offer Letter MS-1-14-0007, Dt:17.10.2017.

Telangana State Power Generation Corporation Limited (hereinafter referred to as "Purchaser") is pleased to inform M/s Bharat Heavy Electricals Limited, New Delhi, (hereinafter referred to as "Contractor") that the Purchaser accepts the contractor's revised Techno-Commercial Offer in the reference 9th cited with respect to related discussions, & negotiations, correspondence/clarifications on Design memorandums and Technical offer for 5X800 MW Yadadri Thermal Power Station, to be established near Veerlapalem village, Dameracherla Mandal, Nalgonda District subject to the following terms & conditions.

1.0 SCOPE OF WORK:

It is not the intent to list out complete scope of work hereunder. However, the broad scope of the work shall include but not be limited to the following:

Single EPC contract including basic & detailed design, engineering, manufacture, procurement, pre-assembly, assembly, inspection and testing, packing & forwarding, loading, supply, transportation to site and transit insurance, unloading at site, storage, comprehensive insurance, inter-site & intra-site transportation & handling, construction, erection, testing & commissioning of the Main Plant, Balance of Plant equipment

mandatory spares including warranty period for 365 days from the respective dates of commissioning i.e., COD of all the five coal fired Thermal units (including boiler, turbing generator, transformers, Station C&I, Civil works and all the required balance of packages etc.,) for 5X800MW Yadadri Thermal Power Station.

The Boiler supplied by BHEL will be capable of firing 100% Indigenous and 100% Imported coal as per Coal characteristics mentioned in the Annexure-A of M/s BHEL offer dated 01.06.2015.

The scope of work also includes revised MoEF norms (SOx , NOx, SPM , Specific water consumption as per revised norms), revised design bases for CHP and AHP, COC of 6.5, ZLD, Raw coal storage, etc settled as per Technical Minutes dated 04.10.17.

Indian coal of Grade 13 (SCCL mines) has been considered as worst coalfor design of AHP, CHP and FGD. The broad parameters of Grade-13 coal are GCV 3400 kcal/kg and Ash 46%.

FGD has been designed for worst level inlet SO2 concentration with G-13 grade coal considering sulphur content of 0.7.

The water analysis for designing and engineering of water packages shall be as per reference 5th cited above. As per technical MOM dated 04.10.17, water treatment system has been designed considering FRC of 0.5 ppm in place of 15.9 ppm

A portion of Civil Works has been deleted from BHEL scope of work as per mutually agreed scope, terminal points and exclusions as per Civil exclusion minutes dated 04/10/2017.

2.0 PRICE:

2.1 The Prices for single EPC contract for 5x800 MW Yadadri Thermal Power Station shall be as follows:

SI No	Description	Price		
	•	(INR Crore)		
Α.	SUPPLY CONTRACT			
A.1	Supply of main plant equipment (Ex – BHEL works / BHEL's Sub-Contractor's works/ Port of Entry In India basis) excluding all kinds of taxes/duties.	11,942.12		
A.2	Estimated GST @ 18 % on A.1 above	2,149.58		
A.3	Supply(Ex – BHEL works / BHEL's Sub-Contractor's works/ Port of Entry In India basis)of Mandatory Spares excluding all kinds of taxes/duties	281.00		
A.4	Estimated GST @ 18 % on A.3 above	50.58		
A.5	Sub-Total (Supply Contract)	14,423.28		
В	SERVICES CONTRACT			
B.1	Unloading at site, handling, erection, testing & commissioning, completion of trial operation and handing over including insurance (covering transit & erection, testing & commissioning) excluding all kinds of taxes/ duties	1,648.19		
B.2	Estimated GST@ 18% on B.1	296.67		
B.3	Local Freight of Main Equipment Excluding all other taxes and duties	237.29		
B.4	Estimated GST @ 18 % on B.3	42.71		

1		Price			
SI No	Description				
		(INR Crore)			
B.5	Local Freight of Mandatory Spares Excluding all other taxes and duties	6.30			
B.6	Estimated GST @ 18 % on B.5	1.13			
B.7	Sub-Total (Services Contract)	2,232.29			
C	CIVIL WORKS CONTRACT				
C.1	Civil Works (Excluding all kinds Taxes and Duties and Royalty for Excavation etc.) & incl. of BoCW @ 1%	3,155.44			
C.2	Estimated GST @ 18% on C.1	567.98			
С.3	Sub-Total (Civil Works Contract)	3,723.42			
D	Grand Total (Supplies + Services + Civil Works)	20,379.00			

- 2.2 Prices indicated above at Para 2.1 are firm till the entire completion of the project from the Zero date.
- 2.3 The zero date for the contract shall be reckoned with effect from the date of release of this Revised Letter of Intent.

3.0 TAXES AND DUTIES:

- 3.1 GST at a rate of 18% has been considered in the above prices. However, GST on various items shall be billed as per the HSN codes and applicable GST rates and same shall be paid by TSGENCO at actuals without restricting to the values of GST indicated in the price schedule.
- 3.2 Other than GST if any other government / local body taxes become applicable, such taxes/duties/levies etc shall be paid by TSGENCO extra at actuals.
- 3.3 Basic concessional customs duty of 5% and applicable educational cess 3% is included in the prices at 2.1(A.1 & A.3) above towards the import of raw materials and components.
- 3.4 The CIF component of Rs.3,350.00 Crores (Rupees Three Thousand Three Hundred and Fifty Crores only) is included in the item 2.1 (A.1 & A.3), worked out at State Bank of India exchange rates as applicable on 01.06.2015. Any variation in customs duty due to increase in the rate of customs duty and/ or introduction of any new import levy shall be payable extra as per formula which is to be discussed and mutually agreed upon. Exchange rate variation/Custom duty variation shall be limited to CIF value indicated above. BHEL shall not claim any Exchange Rate Variation, Customs duty and Customs duty variation for imports beyond Rs.3350.00 Crores. The Essentiality Certificate issued by Government of Telangana State will be arranged by TSGENCO. The concessional customs duty @ 5% along with Ed. Cess of 3% is considered on CIF component of Rs.3350.00 Crores and the same is included in the Contract Price.
- 3.5 TDS will be deducted as per the rules made there under.

The terms of payment shall be as follows:

A1) Supply of Main Plant Equipment (Ex- works):

- a) 10% Initial interest free advance to be released as follows:
 - 2.5% of Contract Price towards supplies of main equipment and mandatory spares as interest free initial advance along with LOI against submission of stage wise advance cum performance bank guarantee for an equal amount.
 - 2.5% of Contract Price towards supplies of main equipment and mandatory spares as interest free initial advance within three months of release of LOI against submission of stage wise advance cum performance bank guarantee for an equal amount.
 - 5% of Contract Price towards supplies of main equipment and mandatory spares as interest free initial advance within twelve months of release of LOI against submission of stage wise advance cum performance bank guarantee for an equal amount.

The applicable GST on advance payment shall also be reimbursed by TSGENCO on submission of the invoice by BHEL.

- b) 70% of Contract Price along with 100% applicable GST (net of GST already paid with advance) on pro-rata dispatch of equipment to site.
- c) 15% of the Contract Price on pro-rata receipt of material at site.
- d) 3% of unit wise contract price against Synchronization of each unit.
- e) 2% of unit wise contract price against Trial Operation of each unit.

Unit wise Contract Price for the purpose of payments indicated at (d) and (e) above will be considered as one fifth of 2.1 (A.1).

The advance cum performance Bank Guarantee will be non reducing and will be valid till completion of warranty of unit. No separate contract performance Bank Guarantee will be submitted.

A2) Supply of Mandatory Spares:

- a) 10% Initial interest free advance to be released as per clause 4.A1.a) above
- b) 90% of Contract Price along with corresponding GST (net of GST already paid with advance) against receipt of material at site on pro rata basis.
- c) Delivery of mandatory spares shall be only after 30 months.

B) Freight:

a) 100% of Contract Price along with corresponding taxes & duties against receipt of material at site on pro - rata basis.

C) Erection, Commissioning & insurance:

- a) 10% Initial interest free advance to be released as follows:
 - 2.5% of Contract Price towards Erection & Commissioning as interest free initial advance along with LOI against submission of stage wise advance cum performance bank guarantee for an equal amount.
 - 2.5% of Contract Price towards Erection & Commissioning as interest free initial advance within three months of release of LOI against submission of stage wise advance cum performance bank guarantee for an equal amount.

initial advance within twelve months of release of LOI against submission of stage wise advance cum performance bank guarantee for an equal amount.

The applicable GST on advance payment shall also be reimbursed by TSGENCO on submission of the invoice by BHEL.

- b) 85% of Contract Price along with 100% applicable GST(net of GST already paid with advance) against progressive erection on pro rata basis.
- c) 3% of unit wise contract price along with applicable GST against Synchronization of each unit
- d) 2% of unit wise contract price along with applicable GST against Trial Operation of each unit.

Unit wise Contract Price for the purpose of payments indicated at (c) and (d) above will be considered as one fifth of 2.1 (B.1).

The advance cum performance Bank Guarantee will be non reducing and will be valid till completion of warranty of unit. No separate contract performance Bank Guarantee will be submitted.

D) Civil Works:

- a) 10% Initial interest free advance to be released as follows:
 - 2.5% of Contract Price towards Civil Works as interest free initial advance along with LOI against submission of stage wise advance cum performance bank guarantee for an equal amount.
 - 2.5% of Contract Price towards Civil Works as interest free initial advance within three months of release of LOI against submission of stage wise advance cum performance bank guarantee for an equal amount.
 - 5% of Contract Price towards Civil Works as interest free initial advance within twelve months of release of LOI against submission of stage wise advance cum performance bank guarantee for an equal amount.

The applicable GST on advance payment shall also be reimbursed by TSGENCO on submission of the invoice by BHEL.

- b) 85% of Contract Price along with 100% applicable GST(net of GST already paid with advance) on pro rata basis against Civil & Structural Steel bills.
- c) 3% of unit wise contract price along with applicable GST against Synchronization of each unit
- d) 2% of unit wise contract price along with applicable GST against Trial Operation of each unit.

Unit wise Contract Price for the purpose of payments indicated at (c) and (d) above will be considered as one fifth of 2.1 (C.1).

The advance cum performance Bank Guarantee will be non reducing and will be valid till completion of warranty of unit. No separate contract performance Bank Guarantee will be submitted.

The entire amount of advance paid will be adjusted within the agreed contractual delivery period/commissioning period of the project.

5.0 MODE OF PATRICITY

The payment by TSGENCO shall be released within 30 days of receipt of Invoices' provided such invoices are submitted in accordance with the terms and conditions of the contract.

6.0 LIQUIDATED DAMAGES:

a) For Delays:

Any delay in the commissioning of the equipment (Completion of Trial Operation) beyond the contractual commissioning schedule of 36 months reckoned from the Zero Date for two units and balance three units within 48 Months from Zero Date, due to delays solely attributable to the Contractor shall be subject to levy of liquidated damages at the rate of 0.5% of the unit wise contract price per week of delay subject to a maximum ceiling of 5% of the Unit wise Contract price. Unit wise Contract Price for the purpose of liquidated damages for delay will be considered as one fifth of 2.1 (A.1 + B.1 + C.1).

b) For Mandatory Spares:

In case of delay in supply of mandatory spares beyond 48 months, due to reasons attributable to the contractor, LD shall be levied @ 0.5% of the contract price of undelivered mandatory spares (excluding taxes and duties)per week of delay or part thereof, subject to a ceiling of 5% of the contract price of the undelivered mandatory spares (excluding taxes and duties).

c) For Guaranteed Performance Parameters:

BHEL Guarantees the following parameters in respect of performance of unit, which shall be established by conducting Performance Guarantee Tests. In case of any shortfall in achieving these guarantee parameters, liquidated damages as per the rates indicated in the following table will be levied:

Item No.	Performance Parameters	Unit	Guaranteed Value	Liquidated Damages Amount
1.	Gross Electrical output of each unit	MW	800(at 100% TMCR, 0% Make Up,33°C CWT)	Rs.1,00,000/- (Rupees One lakh only) per every KW shortfall.
2.	Gross Station Heat Rate of each unit at 100% STG MCR.	Kcal/Kwh	2019.4 (*)	Rs. 7.5 Crores (Rupees Seven Crores fifty Lakhs Only) for each Kcal/Kwh increase.
3.	Auxiliary Power Consumption	KW	255900 (**) (For all 5 units as per CEA/ERC norms)	Rs.2,00,000/- (Rupees Two lakhs only) per KW increase.
4.	ESP Particulate Emission at 100% STG MCR with (n-1) fields in service	mg/Nm ³	30	

5.	total NOx (thermal as well as fuel) emission at the outlet of SCR for the range of coal specified	mg/Nm ³	100	-
6.	SOx emission at the FGD outlet for the range of coal specified	mg/Nm ³	100	

^{*} At 100% TMCR, firing with design coal (Blend of 50% imported coal & 50% indigenous coal)@ 27 deg C & 60% Relative humidity.

The maximum ceiling for liquidated damages for performance for each unit shall be 5% of the Unit wise Contract price. Unit wise Contract Price for the purpose of liquidated damages for performance will be considered as one fifth of 2.1 (A.1 + B.1 + C.1).

d) The total liability of the Contractor on account of liquidated damages for performance and delay in commissioning for each unit shall be 10% of the Unit wise Contract price. Unit wise Contract Price for the purpose of liquidated damages will be considered as one fifth of 2.1 (A.1 + B.1 + C.1).

7.0 COMPLETION PERIOD:

The dispatches from BHEL works and the erection activities will be planned to achieve a commissioning schedule (Completion of Trial Operation) of 36 months reckoned from the Zero Date for two units and balance three units within 48 Months from Zero date as detailed below.

Unit No.	Schedule of completion of Trial Operation
UNIT-1 (First unit of Stage 1)	36 Months from the zero date
UNIT-2 (First unit of stage 2)	36 Months from the zero date
UNIT-3 (second unit of stage 1)	48 Months from the zero date
UNIT-4 (second unit of stage 2)	48 Months from the zero date
UNIT-5 (third unit of stage 2)	48 Months from the zero date

8.0 CONTRACT PERFORMANCE GUARANTEE:

BHEL shall submit advance cum performance Bank guarantee as per clause No.4 above.

9.0 TRIAL OPERATION/ COMMISSIONING/ COD AND HANDING OVER:

A) Trial Operation:

On completion of erection of any major items along with its auxiliaries, the same shall be thoroughly inspected by the Contractor together with TSGENCO's Engineers for correctness and completeness and acceptability for Pre-Commissioning Tests. Though the TSGENCO's Engineers associate themselves with such inspection, the responsibility for declaration for correctness,

^{**} For the list of auxiliaries considered for auxiliary power consumption are enclosed at Annexure

pre-commissioning tests shall be carried out after such declaration. The pre-commissioning tests to be performed at site as well as necessary documentation and formats for the protocols to be signed during and after tests shall be prepared by the Contractor taking into account relevant Indian/International/ Manufacturers' standards as applicable and finalized by the TSGENCO sufficiently in advance through mutual discussions. On conclusion of Satisfactory pre-commissioning tests of each individual equipment, the trial operation of each unit (total 5 units) shall start consistent with parameters of the technical specifications.

- ii. The duration of trial operation shall be for 14 days during which period the unit shall run as follows:
 - a) Half to full load or any other load cycle mutually agreed to during which period the unit shall also run on economical load (90% of Full/ Available Load) for 48 hours continuously.
 - b) During the above trial operation the standby auxiliary equipment shall also run for a minimum period of more than 72 hours during which period the equipment including standby equipment shall run at its rated capacity for a maximum period of 24 hrs subject to (a) above.
 - c) Full load continuous operation for seventy two (72) hours.

Any interruption caused by the Contractor up to 24 hours will not affect the period of 14 days trial operation indicated above. In case of such interruption occurring for more than 24 hours, the above period shall be extended correspondingly. The unit is deemed to be commissioned on successful completion of the above trial operation. Upon successful completion of trial operation, a protocol shall be signed by the both parties.

- iii. A document shall be prepared on the results of trial operation. This document besides recording of the details of the various observations during the trial run will also include the date of start and finish of the trial operation and will be signed by the representative of both the parties. The document of the trial operation shall have log sheets and all adjustments, repairs, interruptions etc., shall be recorded therein.
- iv. The readiness of the unit for the trial operation shall be intimated by written notice to TSGENCO. After receipt of such notice and a consent within 15 days from TSGENCO, if the trial operation could not be performed or could not be completed due to any reasons not attributable to the Contractor, the Contractor shall be absolved of the responsibility for the delay and the plant shall be deemed to have been taken over by the TSGENCO at the end of 60 days after the Contractor's notifications of readiness of the same. In case TSGENCO does not reply within 15 days from contractors notification of readiness of Trial Operation, the responsibility of insurance of plant and equipment shall pass on to TSGENCO.
- v. The trial operation shall be carried out in compliance with relevant manufacturers standards and/or relevant Indian / International standards and manufacturers operation directions before starting them.
- vi. Defects which are minor in nature and do not endanger the safe operation of the plant, shall not be considered as reasons for not taking over the plant by the TSGENCO. These defects shall be listed in the above mentioned documents and shall be rectified by the Contractor in accordance with the agreement made in this respect.

B) TAKING OVER AND COMMERCIAL OPERATION:

- i. TSGENCO shall provisionally take over each Unit upon completion of Trial Operation conducted as per clause 9 (A) above, acceptable to the TSGENCO. Contractor may apply to TSGENCO for Final Taking Over Certificate by notice enclosing the Protocol, referred to in clause 9(A) above, and test results, after successful completion of Performance Guarantee Tests. TSGENCO shall, within fourteen (14) days after the receipt of the Contractor's application:
 - a) Issue the Taking over Certificate to the Contractor, stating the date on which the Performance Guarantee Tests are completed in accordance with the Contract including the date of passing of the Test on Completion. The Performance Bank Guarantees shall be returned to the contractor at the end of Warranty Period.

Or

- b) Reject the application, giving reasons and specifying the work required to be done by Contractor to enable the Taking Over Certificate to be issued. Contractor shall then complete such work before issuing a further notice under this section.
- ii. The unit shall be taken over or deemed to have been taken over by the TSGENCO when the Trial Operation is completed or TSGENCO utilises the facilities for generation of power (incl. Infirm Power) whichever is earlier and the responsibility of Insurance will get transferred to the Owner.
- iii. Commercial operation shall begin from the date of successful completion of the trial operation as in 9(A) above or taking over by TSGENCO, whichever is earlier.

10.0 WARRANTY:

Warranty for the plant & equipment shall be 12 months from the date of completion of COD of each unit.

11.0 INSURANCE:

The material and equipment shall be supplied duly covered under transit insurance including Marine Insurance and Insurance related to High Sea Sales, if any. The material so received shall be insured during storage at site till completion of equipment commissioning in full shape. The insurance of plant and equipment i.e., all the FIVE units shall be the responsibility of BHEL till successful completion of trial operation. The insurance shall be arranged in the name of TSGENCO/REC/PFC LTD.

12.0 INSPECTION AND TEST CERTIFICATES:

The quality assurance plans, test certificates, type test certificates, if any, wherever necessary shall be submitted for review and approval of TSGENCO. The SHOP INSPECTIONS WHERVER necessary shall be intimated well in advance for enabling TSGENCO for arranging to carry out the inspection.

13.0 JURISDICTION:

All the disputes arising out of or in connection with this contract shall be settled in the courts of Hyderabad and Secunderabad in the State of Telangana only.

This letter shall be treated as "Letter Of Intent" (LOI). This LOI is not exhaustive and is not intended to cover all the terms and conditions of the contract. This LOI is being issued in duplicate. BHEL shall return the duplicate copy duly signed and stamped on each page by the authorized signatory of the company in token of acceptance of the same. Detailed Purchase Order(s) will be issued separately.

Yours faithfully,

EXECUTIVE DIRECTOR/TPC (For and on behalf of TSGENCO)

We accept the terms and conditions of this Letter of Intent.

Seal of the company

M/s BHEL

Copy communicated to:

- 1. Executive Director/Civil/Thermal/TSGENCO/VS/Hyderabad.
- 2. Chief Engineer/Gen/TSGENCO/VS/Hyderabad.
- 3. Chief Engineer/Civil/Hydel & General Services/TSGENCO/VS/Hyderabad.
- Chief Engineer/Coal & Commercial/TSGENCO/VS/Hyderabad.
- 5. Chief Engineer/Telecom/TPC/TSGENCO/VS/Hyderabad.
- 6. FA & CCA/Accounts/TSGENCO/VS/Hyderabad.
- 7. FA & CCA/Audit/TSGENCO/VS/Hyderabad.
- 8. FA & CCA/RES&CFO/TSGENCO/VS/Hyderabad.
- 9. JS to CMD/TSGENCO/VS/Hyderabad.
- 10. SE /Tech. to CMD/TSGENCO/VS/Hyderabad.
- 11. All SEs/ O/o ED/TPC/TSGENCO/VS/Hyderabad-500082.
- 12. DE /Tech. to Director/Projects/TSGENCO/VS/Hyderabad.
- 13. DE /Tech. to Director/Thermal/ TSGENCO/VS/Hyderabad.
- 14. DE /Tech. to Director/Hydel/ TSGENCO/VS/Hyderabad.
- 15. SAO to Director/Finance/TSGENCO/VS/Hyderabad.
- 16. DE /Tech. to Director/HR/TSGENCO/VS/Hyderabad.
- 17. SAO/Pay & Accounts/TSGENCO/VS/Hyderabad-500082
- 18. Pay Officer/TSGENCO/VS/Hyderabad.
- 19. All EMEs/O/o. ED/TPC/TSGENCO/VS/Hyderabad-500082.
- 20. Resident Audit Officer, EBRA, Vidyut Soudha, Hyderabad-500082.

MEMORANDUM OF UNDERSTANDING

BETWEEN

TSGENCO AND SCCL

FOR SUPPLY OF COAL TO YADADRI THERMAL POWER STATION

(5x800_MW)



తేలంగాణ तेलंगाना TELANGANA

Serial Not 5,044

A 580450
Denomination: 100

Date:27/04/2016, 03:36 PM

Purchaséd By: K.VENKATESHWARLU S/O K.R.II.SHARMA R/O HYD

For Whom TSGENCO, VIDYUT SOUDHA , HYÐ Sub Registrar

Ex. Officio Stamp Vendo

SRO:S.R.Nagar

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding is made on this 27 day of April 2016 (the "MOU") at Hyderabad.

BETWEEN

A. The Singareni Collieries Company Limited, an existing company under the Companies Act, 2013, having its registered office at Kothagudem Collieries (PO) 507 101, Khammam District, Telangana (hereinafter referred to as the "Seller" which expression shall, unless the context otherwise specifies mean and include its successors and permitted assigns) of the FIRST PART

ANT

G.M. (Mklg.) SCCL, Hyderabac

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B. The Telangana State Power Generation Corporation Limited (TSGENCO), a Company registered under the Companies Act, 2013 and having its Registered Office at Vidyut Soudha, Hyderabad, Telangana and herein after called the PURCHASER (which expression shall unless repugnant to the context shall include its legal representatives and successors) on the OTHER PART.

(The Seller and the Purchaser are hereinafter collectively referred to as the "Parties"). Whereas the Seller is a Government Company engaged in mining and sale of coal including coal exploration, design, construction, project management development, operations and allied consultancy services.

Whereas the Purchaser is in requirement of G9 grade coal for their proposed Yadadri Thermal Power Station (4000 MW), Damaracherla, Nalgonda (dt) and requested the Seller to supply coal to meet the generation requirement of this unit.

And whereas the Seller have agreed in principle to supply coal to the Purchaser from cost plus mines after necessary approvals and guidelines as per the Ministry of Coal, Govt. of India, applicable for long term linkage/LoA/cost plus mines.

NOW THEREFORE, in consideration of the premises and mutual covenants herein contained, the Parties hereto agree as follows:

- 1.0 The Seller shall supply 7.00 Million Tonnes per Annum (7 MMTPA) of G9 & above grades coal / WG-G9 grade for operation of Yadadri Thermal Power Station (5x800 MW) subject to the obtaining linkage from SLC (LT) of Ministry of Coal, Govt. of India for such supplies as per NCDP 2007 and cost plus policy guidelines 2008.
- 2.0 The Seller shall issue LoA after approval of application by SLC (LT), MOC, GoI, on successfully achieving the milestones stipulated in LoA, SCCL would execute Fuel Supply Agreement (FSA) with the TSGENCO covering commercial arrangement for supply of coal which shall include price and other details on mutually agreed terms and conditions.

G.M. (Mktg.) SCCL, Hyderabac | Crentles

Chief Engineer (Coal & Commercial) TSGENCO, Vidyut Soudha, HYDERABAD - 500 082.

- 3.0 SCCL shall open new cost plus mines for this power plant and the schedule of opening of such mine shall link to the commissioning of TSGENCO Power Plant which is expected to be commissioned by March 2019 and also Washeries to wash the raw coal as per the requirement of Yadadri TPS. The supply of coal shall commence from January 2019 tentatively. Upon delay in commissioning of the cost plus mines and washery, due to force majeure reasons, coal shall be supplied from other sources on weighted average e-auction prices, on best effort basis.
- 4.0 The Purchaser shall intimate exact date of commissioning of the plant to Seller in advance (i.e 3 months) so that SCCL shall initiate proposal for entering into FSA which shall indicate the modalities for supply of coal.
- The Purchaser shall furnish year wise requirement of coal to Seller sufficiently in advance to supply of coal,
- Settlement of Disputes: In the event of any dispute or difference touching the MOU between the parties shall be settled in accordance with the following guidelines.

ARBITRATION: In the event of any difference or dispute between the parties thereto, such dispute or difference shall be resolved amicable by mutual consultation. Any difference or dispute arising between the parties under this agreement shall be settled through Arbitration in accordance with the provisions of the Arbitration and Conciliation Act 1996. In such event the Tribunal shall consist of three Arbitrators, oneeach to be nominated by the Seller and Purchaser and the Third Arbitrator shall be nominated by the two Arbitrators nominated by the Purchaser and the Seller. The venue of Arbitration shall be decided mutually between the parties.

7.0 Severability and Renegotiation: In the event any part or provision of this Agreement becomes, for any reason, unenforceable or is declared invalid by a Competent Court of Law or Tribunal the rest of this agreement shall remain in full force and effect as if the unenforceable or invalid portions had not been part of this agreement and in such eventuality the parties agree to negotiate with a view to amend or modify this agreement for achieving the original intent of the parties.

G.M. (Mktg.) SGCL, Hyderabad

- 8.0 Termination of MOU: The MOU shall stand terminated after payment of consequential damages liable to Seller or Purchaser, as the case may be. Such consequential damages shall be as per the decision of competent authority of Seller / Purchaser as the case may be.
- 9.0 Effective Date: This MOU will be effective from the date of signing and can be amended/ supplemented or replaced by another document signed by the Parties.

IN WITNESS WHEREOF THE PARTIES THORUGH THEIR AUTHORISED REPRSENTATIVES HAVE SET THEIR HANDS ON THE DAY, MONTH AND YEAR FIRST ABOVE WRITTEN.

For and on behalf of Purchaser. For and on behalf of Seller (TSGENCO) (SCCL) (K.VENKAESWARLU) J.NAGAIAH) G.M. (Marketing) G.M. (Mktg.) EE (Coal & Commercial)near (Coal & Commercial) SCCL, Hyderaba TSGENCO, Vidyut Soudha, HYDERABAD - 500 082. Witness: Witness: (G. Silulusa Ros) Sefrez. (N.V.K. SRINIVAS) DGM (Marketing)



IMMEDIATE

File No.23014/1/2018-CLD Government of India Ministry of Coal <<>>

Shastri Bhawan, New Delhi Qated the 15th February, 2018

Τσ,

Chairman,
Coal India Limited,
Coal Bhawan,
Premise No-04 MAR,
Plot No-AF-III Action Area-1A,
Newtown,Rajarhat,Kolkata-700156

 The Chairman-cum-Managing Director, Singareni Collieries Company Limited, 18, Red Hills, Khairatabad PO, Hyderabad, Telangana.



Subject: 1/2018.

Meeting of the Standing Linkage Committee (Long-Term) for Power Sector SLC/LT No.

I am directed to forward herewith minutes of the meeting of the SLC (LT) for Power Sector held on 1.5.01.2018 to consider requests for linkages to State Sector Power Plants and review status of existing coal linkages/LoAs and other related matters.

2. Recommendations of the SLC(LT) in respect of all the items have been approved by the Competent Authority.

Lincis. as above.

(Dominic Dungdung) Under Secretary to the Govi. of India

Copy to -

1.	Additional Secretary, Ministry of Coal	Chairperson
2.	Principal Advisor (Energy), NITI Aayog, Yolana Bhawan New Delhi.	Member
3.	Joint Secretary (Coal), Ministry of Coal	Member
4.	Advisor (Projects), Ministry of Coal	Member
5.	Joint Secretary (Thermal), Ministry of Power, Shram Shakti Bhawan, New Delhi	Mémber
6.	Joint Secretary (Ports), Ministry of Shipping, Transport Bhawan, New Delhi	Member
7.	Joint'Secretary, Ministry of Steel, Udyog Bhawan, New Delhi	Member
8.	Joint Secretary, Department of Industrial Policy & Promotion, Udyog Bhawan, New	Member
9.	Delhi Executive Director, T. T. (F), Railway Board, Room No. 251, Rail Bhawan, New	Member
10.	Delhi. Director (Marketing), Coal India Limited.	Member
11.	CMD's BCCL, CCL, ECL, MCL, NCL, SEGL & WCL	Members
12.	Chairman-cum-Managing Director, Central Managing Spesian frest Ltd.,	- Member
	Gondwana Place, Kanke Road, Kancingoal & Commercial) DIREC	CTOR (FUEL MANAGEMENT BENÇO, V. S. HYD-82.

De cons

Inward Nos. 289

C/o. Chief Engineer

20 **FEB 2018**

CE/Coal & Commi. SE/Pathning DE/Coal & Commi. DE/Planning

Director (Fuel Management Chairman, Central Electricity Authority, Sewa Bhawan, RK Puram, New Delhi

Chairman, NTPC, Scope Complex, Lodhi Road, New Delhi-110003 Joint Secretary (CBA-II Section), Ministry of Coal 14.

15.

Member Special invitee

Copy to: (i) Director (Technical), CIL ii) GM (S&M), CIL, Kolkata iii) CGM (CP), CIL, Kolkata iv) GM (S&M), CIL, Deinf.

Copy also to -

1. PS to Minister of Coal 2, OSD to Minister for Coal 3, PSO to Secretary (Coal) 4, PPS to Additional Secretary (Coal) 5, PPS to Joint Secretary (LA).

Copy also to - NIC, Ministry of Coal with the request to place it on the Website of the Ministry for information of all concerned.

No. 23014/1/2018-CLD Government of India Ministry of Coal

New Delhi, Dated January, 2018

Minutes of the meeting of the Standing Linkage Committee (Long Term) for Power Sector held on 19.01.2018.

A meeting of the Standing Linkage Committee (Long Term) for Power Sector was held on 19.01.2018 under the Chairmanship of Additional Secretary (Coal) to consider requests for linkages to State Sector Power Plants and review status of existing coal linkages/LoAs and other related matters. The list of participants is at Annexure -1.

Agenda	Brief description of Agenda Ite	ssions	Recommendations with reasons				
Agenda Ite m No. 1	Confirmation of the Minutes of the SLC(LT) meeting held on 21.08.2	There were no comments from any sld	Minutes of the SLC(LT) meeting held on 21.08.2 017 are confirmed.				
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Agenda Item No. 3 Vidarbha Industries Pvt. Ltd. (VIPL) : For Unit –I at Butibori, Nagpur

- 1. Director (CLD) briefed the agenda of the meeting to all participants. Copy of Agenda Note is marked as Annexure-2. The Committee gave an opportunity to PP to state and explain its stand as regards the LoA issued initially to GCPP. PP supplied its written submissions along with few documents which are placed as Annexure-3.
- 2. PP stated that status of Unit-I was mentioned as GCPP in the original application dated 05.05.2006, but CEA later clarified that the Unit should be treated as IPP because the tariff of the proposed power plant is linked to regulated tariff and that there will be no captive consumption. As clarified by CEA, PP had informed MoC that they may be treated as IPP. SLC (LT) in the meeting held on 02.08.2007, deferred the case of Unit-I as MoP representative stated that the project is unlikely