BEFORE THE TELANGANA STATE ELECTRICITY REGULATORY COMMISSION

Secretary

For perusal

Member

Chairman

5th Floor Singareni Bhavan, Red Hills, Hyderabad – 500 004 ember/T

O.P. No.26 of 2016

IN THE MATTER OF

Petition requesting the Commission

- 1. To make PPA with different plants of TSGENCO public
- 2. To reassess the need for new power plants of TSGENCO
- 3. To hold public hearings on PPAs with new plants of TSGENCO
- 4. To scrutinise capital costs of all power plants of TSGENCO
- 5. To scrutinise fixed cost claims of TSGENCO
- 6. To scrutinise variable costs of different thermal power plants of TSGENCO

7. To allow the objector to be heard in person before the Commission takes a decision on TSGENCO's application.

251117

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IN THE MATTER OF

Name and full address of the petitioner:

Dr. D. Narasimha Reddy, 201, Aarthi Residency, LN Colony, Saidabad, Hyderabad 500 059

Represented by

Dr. D. Narasimha Reddy,

201, Aarthi Residency, LN Colony, Saidabad, Hyderabad 500 059

And

Name and address of the Respondents:

Chairman and Managing Director Telangana State Power Generation Corporation Ltd., Northern Power Distribution Company of Telangana Ltd, Southern Power Distribution Company of Telangana Ltd,

MEMBER (F) PESHI No : 77 DATE: 25 (1)

CHAIRMAN PESHI No DATE 251117 TSERC, HYDERABAD INWARD

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BEFORE THE TELANGANA STATE ELECTRICITY REGULATORY COMMISSION

5th Floor Singareni Bhavan, Lakdi-ka-pool, Red Hills, Hyderabad – 500 004

IN THE MATTER OF

Petition requesting the Commission

- 1. To reassess capacity addition for TSGENCO
- 2. To organise public hearings on PPAs with new plants of TSGENCO
- 3. To bring transparency in PPA process, with different plants of TSGENCO, including releasing PPAs in public domains
- 4. To monitor and evaluate capital costs of all power plants of TSGENCO
- 5. To monitor and evaluate fixed cost claims of TSGENCO
- 6. To monitor and evaluate variable costs of different thermal power plants of TSGENCO
- 7. To allow the objector to be heard in person before the Commission takes a decision on TSGENCO's application.

AFFIDAVIT VERIFYING THE MEMORANDUM OF OBJECTIONS

I, Dr. D. Narasimha Reddy, son of Late D. Nagi Reddy do hereby solemnly affirm and state as under:

The statements made in the paragraphs of the accompanying memorandum of objections now shown to me are true to my knowledge, derived from TSGENCO's application for determination of generation tariff and new stations' capital cost for FY 2014-19 and the material gathered by me and made available to me and are based on information and advice received which I believe to be true and correct.

Solemnly affirm

Deponent

21 - 01 - 2017

Hyderabad

BEFORE THE TELANGANA STATE ELECTRICITY REGULATORY COMMISSION

* 5th Floor Singareni Bhavan, Lakdi-ka-pool, Red Hills, Hyderabad – 500 004

O.P. No. 26 of 2016

- 1.1 The following suggestions and objections on the TSGENCO's application for determination of generation tariff and new stations' capital cost for FY 2014-19 are being submitted in response to public notice dated 27-12-2016.
- 1.2 Power procurement costs constitute substantial part of revenue requirement of electricity utilities in the state. In Telangana state for the financial year 2017-18 out of total revenue requirement of Rs. 31,930 crore power purchase costs constitute Rs. 24,421 crore. In other words, power purchase costs account for 76% of the revenue during the ensuing year. Out of this total power procurement costs Rs. 8,802 crore goes to power plants of TS and APGENCO accounting for 36% of the power procurement costs. Out of all sources of power procurement GENCO plants accounts for the highest share of power procurement cost for the power being supplied in the state. This crucial position of GENCO plants lends added importance to the present application of TSGENCO for determination of generation tariff.
- **1.3** TSGENCO has also taken up KTPS VII unit. TSTRANSCO's application for transmission tariff mentioned that KTPS VII would be connected to the TRANSCO's grid during 2017-18. But details related to this plant are not included in TSGENCO's application.
- **1.4** The present filing does not include information on performance of KTPP II and KTPS VI plants during the year 2016-17.

Capacity Addition to TSGENCO

- **2.1** There has to be complete reassessment of erecting new power plants by TSGENCO. These assessment should be based on parameters of cost, sustainability and technology.
- 2.2 When the State government approached the Union government for various approvals for Yadadri and Bhadradri plants the Union ministry of power indicated that there was no need for these plants in the background of surplus power in the country. Yet, the State government seems to have ignored this and has obtained some approvals for these plants. Recent CEA report on All India Electricity Plan indicated that no new thermal power plants would be needed in the country until 2027. The ARR filings of TSDICOMs for the FY 2017-18 show that more than 10,000 MU of surplus power is available with them. The need for the above two plants needs to be reassessed in the background of CEA report as well as surplus power situation in the state.

PPAs in public domain

3.1 The present filing by TSGENCO lists PPAs with the respect of various generation units, both old and new stations. These PPAs are not publicly available. No public hearings have taken place before the Commission approved these PPAs. The Petition lists the new

PPAs as those of KTPP II and Hydel stations of Jurala and Pulichintala. There is need to hold public hearings on these PPAs separately.

- 3.2 Information in the public domain indicate that work on Bhadradri and Yadadri plants of TSGENCO is going on. The Union Government is reported to have approved the Bhadradri plant. In the case of Yadadri plant the Environment Appraisal Committee (EAC) indicated that there was no need for further public hearing and asked to just publish revised Environmental Impact Assessment (EIA) report. Even after these developments there is no sign of PPAs for procurement from these plants. Without approval of the Commission for these PPAs TSGENCO has gone ahead with erection of the plants.
- 3.3 Under O.P. No. 26 of 2016 TSGENCO has applied for determination of generation tariff and new stations' capital cost for FY 2014-19. The new generation stations include KTPP II. Its PPA is reported to be signed on 27-01-2016; CoD is declared on 24-03-2016 and will be valid up to 23-030-2041. We request the Commission to hold public hearing on PPA in the case of KTPP II and KTPS VI plants.

Evaluated Capital Costs

- 4.1 The filings show that capital expenditure to the tune of Rs. 126.60 crore was incurred on old thermal plants during 2014-15 and Rs. 89.91 crore during 2015-16. In the case of Nagarjuna Sagar Hydel plant Rs. 47.06 crore was incurred during 2014-15 and Rs. Rs. 608.46 crore during 2015-16. There are no details of similar expenditure during 2016-17. According to Section 10.8 of Regulation 1 of 2008 "...The Capital Cost as determined above, shall also include further capital expenditure incurred if any up to the first financial year closing one year after the date of commercial operation of the last unit of the project, its stage or the unit...". CoD of KTPS VI was declared on 23-10-2011 and CoDs of other thermal plans were declared much earlier. CoD of Nagarjuna Sagar Hydel plant was declared on 27-09-1992. Following the above Regulation the additional capital costs claimed as mentioned above shall not be allowed. Further, no explanation was provided for the additional capital expenditure. This is particularly the case with Nagarjuna Sagar Hydel plant where additional capital cost is more than Rs. 650 crore forming 37% of total capital cost of the plant.
- 4.2 The CAG in its Report for the year 2010 examined KTPP I plant and found excess spending was Rs. 555.48 Crore (26.74% of the plant's capital cost). Capital cost of other power plants of TSGENCO shall be assessed on similar lines and excess spending shall not be allowed to be recovered under generation tariff.
- **4.3** The CAG Report for the year ending March 2014 found that selection of costlier pipes for raw water pipeline of KTPP Stage-II resulted in avoidable excess cost of Rs. 43.30 crore. We request the Commission not to allow this excess expenditure to be claimed through generation tariff.
- 4.4 According to the present filing, capital cost of KTPP II at the time of CoD was Rs. 3,237.85 crore and Rs. 1,096.26 crore was spent after the CoD taking the total capital cost to Rs. 4,334.11 crore. Significantly, more than 25% of the total capital cost is reported to be incurred after the CoD. This raises doubts about prudence of this capital cost.
- 4.4 Per MW capital cost of KTPP II stands at Rs. 7.22 crore. This is one of the highest in the country and this itself demands closer examination of capital cost of this plant. In the

context of determination of capital cost of the new power plant it is important to take in to account recent orders of CERC related to capital cost determination of coal based thermal power plants. In its order dated 6.5.2015, CERC has reduced the capital cost from Rs.7774.88 crore claimed by Indira Gandhi Super Thermal Power Project (three units of 500 MW each of Aravali Power Company Pvt. Ltd. at Jhajjar in Haryana) claimed by the Company to Rs.7322 crore (Rs.4.88 crore per MW). In its order dated 6.7.2015, CERC has reduced the capital cost from Rs.3852.45 crore claimed by Koderma Thermal Power Station (unit I of 500 MW of Damodar Valley Corporation in Jharkhand) to Rs.2327 crore (Rs.4.65 crore per MW). In its order dated 8.2.2016, CERC has reduced the capital cost from Rs.5623.19 crore claimed by Vallur Thermal Power Project (two units of 500 MW each of NTPC Tamil Nadu Energy Company Ltd. at Vallur) to Rs.5533.48 crore (Rs.5.53 crore per MW). Even if we take the latest order of CERC the capital cost of KTPP II shall not exceed Rs. 5.60 crore per MW.

4.5 The threshold PLF for payment of incentives shall be 85% in keeping with new technology and Regulations of CERC. APERC Regulations on generation tariff is not revised after 2008 and TSERC is requested to revise the said Regulation in keeping with new technology as well as the revised Regulations of CERC.

Evaluate Fixed charges

5.1 Fixed charges claimed by TSGENCO need to be closely scrutinised. Fixed charges claimed by TSGENCO are higher than that mentioned in TSDISCOMs filings for the year 2017-18. A comparative picture is provided in the following table for some plants as an example.

| Plant | Fixed charges according to Fixed charges according | |
|------------------|----------------------------------------------------|--------------------|
| | TSGENCO (Rs, Cr) | TSDISCOMs (Rs, Cr) |
| KTPS – V | 315.31 | 311.99 |
| KTPS – VI | 568.03 | 564.51 |
| KTPP – II | 1108.66 | 1058.95 |
| Lower Jurala HES | 411.88 | 395.23 |
| Pulichintala | 130.72 | 130.65 |

Evaluate Variable charges

| Power Plant | 2014-15 | | 2015-16 | | 2016-17 | |
|-------------|---------|-----------------|---------|----------------|---------|--------|
| (Rs./Unit) | Present | DISCOMs 2016-17 | Present | DISCOMs | Present | Tariff |
| | filing | filing | filing | 2016-17 filing | filing | Order |
| KTPS -ABC | 2.67 | 2.57 | 2.57 | 2.60 | 2.87 | 2.73 |
| KTPS – V | 2.19 | 2.08 | 2.21 | 2.19 | 2.19 | 2.02 |
| KTPS – VI | 3.38 | 3.01 | 2.89 | 3.10 | 2.98 | 2.69 |
| RTS – B | 2.63 | | 3.03 | 2.71 | 3.53 | 3.10 |
| KTPP – I | 2.47 | 2.28 | 2.68 | 2.50 | 2.73 | 2.61 |
| KTPP – II | | | | | 2.68 | 2.61 |

6.1 A comparison of variable charges for the financial year 2016-17 as provided in the present filing and Tariff Order shows that variable charges quoted in the present filing are higher than the variable charges as approved by the Commission through the Tariff Order. No

reasons were provided for higher variable charges. TSGENCO need to explain whether changes in fuel prices or GCV or heat rate led to these changes.

TSERC Order for FY 2015-16 did not provide plant wise variable charges. There is no Tariff Order for the FY 2014-15. For the years 2014-15 and 2015-16 TSGENCO claims are compared with information provided in TSDISCOMs' tariff filing for the FY 2016-17. For these two years also variable charges claimed by TSGENCO are generally higher than those mentioned by TSDISCOMs. These differences between the filings by TSGENCO on one side and TSDISCOMs on the other need to be examined. We request the Commission to direct TSGENCO to submit complete information on changes in variable charges.

Prayer before the Commission

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