

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 291/MP/2015**

**Coram:**

**Shri Gireesh B. Pradhan, Chairperson  
Shri A. K. Singhal, Member  
Shri A. S. Bakshi, Member  
Dr. M. K. Iyer, Member**

**Date of order : 30.03.2017**

**In the matter of**

Miscellaneous petition for issuing orders for exemption of losses to APSLDC for Simhadri Stage-I power to Andhra Pradesh under the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 and Indian Electricity Grid Code.

**And in the matter of**

1. Transmission Corporation of Andhra Pradesh Limited,  
Vidyut Soudha, Khairatabad,  
Hyderabad
2. Andhra Pradesh State Load Despatch Centre,  
6<sup>th</sup> Floor, Vidyut Soudha, Khairatabad,  
Hyderabad
3. Southern Power Distribution Company of A.P. Limited,  
Corporate Office, APSPDCL, Kesavayanagunta,  
Behind Srinivasa Kalyana Mandapam,  
Tirupati
4. Eastern Power Distribution Company of A.P. Limited,  
Corporate Office, APEPDCL, P&T Colony,  
Seetammadhara, Visakhapatnam

**...Petitioners**

**Vs.**

1. Southern Region Load Despatch Centre,  
29, Race Course X Road,  
Bangalore



2. Southern Regional Power Committee,  
29, Race Course X Road,  
Bangalore

...Respondents

**For Petitioner** : Shri Amit Kapur, Advocate for the petitioners  
Shri S. Vallinayagam, Advocate for the petitioners  
Shri M. Murali Krishna, AP Transco Limited

**For Respondents** : Ms. Jayantika Singh, NLDC  
Shri Anil Thomas, SRLDC  
Shri M Venkateshan, SRLDC

### **ORDER**

The instant miscellaneous petition has been filed by Transmission Corporation of Andhra Pradesh Limited (APTRANSCO), Andhra Pradesh State Load Despatch Centre (APSLDC), Southern Power Distribution Company of A.P. Limited (SPDCL) and Eastern Power Distribution Company of A.P. Limited (EPDCL) (collectively referred to as "petitioners") seeking exemption from payment of PoC charges and losses in respect of power flowing from Simhadri STPS Stage-I to state of Andhra Pradesh in Southern Region under Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 (referred as "the 2010 Sharing Regulations") and Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010 (referred as "2010 Grid code").

2. The petitioners have submitted as under:-

- a. State of Andhra Pradesh was bifurcated into State of Andhra Pradesh and State of Telangana with effect from 2.6.2014 under the Andhra Pradesh Reorganization Act, 2014 (2014 Act). As per the 2014 Act and Ministry of



Power's directive, the power from Simhadri STPS Stage-I is to be shared in the ratio of 46.11 and 53.89 between Andhra Pradesh and Telangana respectively;

- b. Earlier, Ministry of Power, Government of India in 1995 allocated entire quantum of Simhadri STPS Stage-I (2 X 500 MW) exclusively to the erstwhile State of Andhra Pradesh. The erstwhile APSEB laid entire 400 kV associated network for evacuation of power from Simhadri Stage-I. APSLDC was authorized to carry out the scheduling of Simhadri Stage-I. As per Regulation 6.4.2(c)(iii) of the 2010 Grid Code, scheduling of a Central Generating Stations could be done by respective State Load Despatch Centre if home State has a firm share of above 50% from the respective Central Generating Station. Accordingly, Simhadri Stage-I scheduling was done by erstwhile APSLDC with intimation of the day to day schedules and EBC wing has been mailing the actual energy injected into grid for every 15 minute time block for computation/verification of UI claims being received from NTPC (SR) every week. The monthly energy payments were done based on the availability certification issued by NTPC and fixed charges are paid as per the Commission's orders and prevailing regulations;
- c. State of Telangana in its letter dated 18.9.2015 to SRPC stated that the scheduling of Simhadri STPS Stage-I STPS Stage-I generation should be taken up by SRLDC. As per Section 2(36)(i) and 2(36)(ii) of the Electricity Act, 2003 (2003 Act), inter-State transmission system includes the system



for conveyance of electricity from one State to another and it does not include the transmission of power within State. Section 2(36)(iii) of the 2003 Act deals with the transmission of power within the territory of State using the transmission system built by the CTU. In the instant case, the CGS station is within Andhra Pradesh. The CGS is electrically connected to State of Andhra Pradesh by a transmission system built, owned and operated by the State of AP and power is transferred to State of Andhra Pradesh. Transfer of power from Simhadri STPS Stage-I to the sub-station of Andhra Pradesh is not through ISTS lines and power is transferred through state owned dedicated lines. Scope of PoC is applicable to customers who use ISTS for transferring power. Therefore, no POC charges are leviable on the State of Andhra Pradesh in respect of the transmission system owned, operated and maintained by State of Andhra Pradesh for evacuation from Simhadri STPS Stage-I to State of Andhra Pradesh. As such, application of PoC charges and losses may be exempted in respect of the transmission system used to transfer power from Simhadri STPS Stage-I to the Grid of State of Andhra Pradesh;

- d. Andhra Pradesh is availing its share of allocated power through 400 kV feeders of the transmission system of Andhra Pradesh from Simhadri STPS Stage-I (CGS) to Kalpaka Sub-station switchyard which is again owned and operated by State of Andhra Pradesh. No part of the regional transmission system is used by the Andhra Pradesh for transfer of power from Simhadri STPS Stage-I. Accordingly, the Andhra Pradesh state is not liable to pay the transmission charges;



- e. No transmission losses are incurred in the regional transmission system on account of drawl of power by Andhra Pradesh from Simhadri STPS Stage-I. Therefore, there is no pooled regional transmission loss and no such loss could be appropriated to the State of Andhra Pradesh;
- f. The power flow of 1000 MW Simhadri STPS Stage-I generation before and after reorganization is through transmission system owned by State of Andhra Pradesh. There is no change in flow of power. The power flow path is same before and after the reorganization;
- g. If the instant assets are included in the PoC pool, then PoC charges and losses on Simhadri STPS Stage-I power will be imposed on State of AP for 461.10 MW of power irrespective of the fact that the power is evacuated from the CGS using transmission system of the State of Andhra Pradesh. As a result, it will be additionally burdened with POC charges (@ 138 crore per annum) and losses (@ 40 crore per annum) for a transmission system. Point of injection and point of withdrawal is same and both are within State of Andhra Pradesh;
- h. The existing methodology does not envisage the present situation and application of the same to the facts of this case will work contrary to the mandate of Section 39 of 2003 Act;
- i. The mandate of 2003 Act is to protect the interest of consumers. 2010 Grid Code is made for transfer of power in a reliable, economic and efficient manner, while facilitating healthy competition in the generation and supply of electricity. In this case, if PoC charges and losses are imposed for Simhadri STPS Stage-I power on



State of Andhra Pradesh, the same will run contrary to the objects and reasons of 2010 Grid Code;

- j. The existing system of scheduling and dispatching need not to be disturbed, more particularly when the project/generator is connected to STU. As per the 2014 Act read together with clause (5) and (6) of schedule 12, thereof the generator is now connected STU of Andhra Pradesh and the lines to State of Telangana cutting through Andhra Pradesh have now become inter-State. As provided in the 2014 Act, the procedure in vogue prior to bifurcation shall continue except the liability of payment of inter-State transmission charges by Telangana. The provisions of 2014 Act shall prevail over all other Laws. The principle of law laid down by Hon'ble Supreme Court in Swarna Rekha case (2004 (6) SCC 689) supports the petitioner's contention;
- k. In a similar case, WRLDC is not collecting PoC charges and not applying losses to MSEDCL for power from Ratnagiri Power Project Limited (RGPPL). RGPPL is a generating station embedded in the State of Maharashtra similar to Simhadri STPS Stage-I in Andhra Pradesh. MSEDCL, Daman and Diu, Dadra & Nagar Haveli and Goa are having shares in RGPPL generation, PoC charges and losses are applicable to Daman and Diu, Dadra & Nagar Haveli and Goa as they are having share in RGPPL generation. PoC charges and losses are not applicable to MSEDCL because it is embedded in MSEDCL network as approved in the 18<sup>th</sup> WRPC meeting. WRLDC intimated in that meeting that no injection and withdrawal PoC losses are applicable to



MSEDCL. In this regard, SRPC wrote a letter to WRPC and WRPC replied to SRPC about non-applicability of PoC losses to RGGPL;

- I. In 28<sup>th</sup> SRPC meeting held on 10.10.2015, SRPC stated that Simhadri STPS Stage-I scheduling could be done by SRLDC from 16.11.2015 onwards and the same was accepted by CMD, APTRANSCO. In the 113<sup>th</sup> OCC held on 6.11.2015, APTRANSCO requested to follow the procedure adopted in RGPPL case in the case of Simhadri STPS Stage-I for AP scheduling. SRLDC suggested Andhra Pradesh to approach the Commission for directions to adopt the procedure followed in the case of RGPPL to Simhadri STPS Stage-I by SRLDC;
  - m. Accordingly, the instant petition is filed for exempting State of A.P. from POC charges and losses in respect of the power flowing from Simhadri STPS Stage-I to State of Andhra Pradesh through the transmission system owned and operated by the State of AP.
3. SRPC vide letter dated 11.1.2016 has submitted as under:-
- a. As per IEGC 6.4.2(a) coordination of scheduling in respect of Simhadri STPS Stage-I falls under the jurisdiction of SRLDC after 2.6.2014 as Simhadri STPS Stage-I has share with Andhra Pradesh and Telangana;
  - b. As Simhadri STPS Stage-I was a dedicated station to Andhra Pradesh prior to bifurcation of State of Andhra Pradesh, transmission system was built by Andhra Pradesh for evacuation of power from Simhadri STPS Stage-I;



- c. Simhadri STPS Stage-I is fully embedded in Andhra Pradesh STU with connectivity to Simhadri STPS Stage-II;
  - d. Entire power of Simhadri STPS Stage-I is evacuated through APSTU system only except during contingency when it may be evacuated through Simhadri STPS Stage-II;
  - e. As Simhadri STPS Stage-I power is evacuated through STU system, it is requested that ISTS loss to the quantum of power scheduled to Andhra Pradesh may not be applied by SRLDC while computing drawal schedule of Andhra Pradesh;
  - f. No ISTS loss is being caused to wheel power from Simhadri STPS Stage-I to AP since the injection points ex-bus of Simhadri STPS Stage-I are the drawal points for AP;
  - g. Similar principle of not applying loss while scheduling is being adopted by WRLDC for RGPPL quantum for computing drawal schedule of Maharashtra.
  - h. Further, interface meters have been installed across the transmission lines crossing the border between A.P and Telangana to account for ISTS draw/ deviations for each state. The drawl points for Telangana are within Telangana boundary. However these lines are yet to be considered under POC sharing mechanism;
4. SRLDC has submitted vide affidavit dated 21.1.2016 as follows:-





- a. Simhadri STPS Stage-I, a CGS with a capacity of 1000 MW (2x500MW) is located in Andhra Pradesh. The station was 100% dedicated to erstwhile Andhra Pradesh. As per Regulation 6.4.2(a) of the 2010 Grid Code, the station was originally under the control area of erstwhile APSLDC and accordingly, the scheduling was carried out by erstwhile APSLDC. Subsequent to the bifurcation of erstwhile Andhra Pradesh into State of Andhra Pradesh and State of Telangana w.e.f. 2.6.2014, the power from Simhadri STPS Stage-I has been shared in the ratio of 46.11 : 53.89 by Andhra Pradesh and Telangana States respectively as per Schedule 12 of 2014 Act, and GO Ms No 20 dated 8.5.2014;
- b. Upon bifurcation of States, the Simhadri Station became a Regional Entity falling under the control area of SRLDC as per Regulation 6.4 2(a) of 2010 Grid Code, since it has share of power for both Andhra Pradesh and Telangana. However, both Telangana and Andhra Pradesh mutually agreed to schedule the Simhadri STPS Stage-I generation by APSLDC. Since Regulation 6.4.3 of the 2010 Grid Code provides for exemption to be obtained for scheduling for operational expediency, it was decided in the SRPC meetings that Andhra Pradesh would approach the Commission for necessary exemption and this exemption has been consistently insisted by SRLDC and SRPC for continuation of scheduling for the Simhadri STPS Stage-I generation by APSLDC. The role of SRLDC was limited to the consideration of schedule for inter-State exchange of power to Telangana from Simhadri STPS Stage-I as per Regulation 6.4.4 of 2010 Grid Code;



c. Subsequently, Telangana vide letter dated 18.9.2015 requested for scheduling of Simhadri STPS Stage-I to be done by SRLDC in line with Regulation 6.4.2(a) of the 2010 Grid Code. The issue was discussed in 28<sup>th</sup> TCC/SRPC meeting and 113<sup>th</sup> OCC meeting and it was decided to commence scheduling of Simhadri STPS Stage-I w.e.f. 6.11.2015 by SRLDC, as APSLDC had not approached the Commission for the exemption as committed in the SRPC meetings. In the 113<sup>th</sup> OCC meeting, APSLDC requested SRLDC to carry out the scheduling of Simhadri STPS Stage-I without applying PoC injection/drawal losses to Andhra Pradesh. SRLDC clarified that scheduling of power from any Regional Entity including Simhadri STPS Stage-I can be done only on applying PoC injection and drawal zone losses in line with the Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations 2010 (2010 Sharing Regulations);

d. Power generated from Simhadri STPS Stage-I, since 2.6.2014, is shared by more than one State and hence it is a 'Regional Entity' in line with Regulation 6.4.2(a) of the 2010 Grid Code. The said status was also not disputed by the petitioner. The said provision is quoted below:-

"2. The following generating stations shall come under the respective Regional ISTS control area and hence the respective RLDC shall coordinate the scheduling of the following generating stations:

a) Central Generating Stations (excluding stations where full Share is allocated to host state)"

e. The drawal schedule of Regional Entity shall be computed by summing Ex-Bus drawl schedule from ISGS along with all transactions after deducting the



transmission loss (estimated) in line with Regulation 6.5(7)(ii) of 2010 Grid Code;

f. As per Regulation 2(1)(zz) of the 2010 Grid Code "Net Drawal Schedule" means the drawal schedule of a Regional Entity after deducting the apportioned transmission losses (estimated);

g. Simhadri STPS Stage-I is connected with Kalpaka Sub-station of AP through 400 kV D/C NTPC Simhadri-Kalpaka line and with of Simhadri STPS Stage-II through inter-connector;

h. In line with the 2010 Sharing Regulations, PoC Charges are applied on all DICs who use ISTS. The third Amendment to the 2010 Sharing Regulations, clarifies that even the state owned lines used for evacuation of CGS is deemed as ISTS. The relevant provisions of the 2010 Grid Code is reproduced below:-

"2(1)(l) Designated ISTS Customer or DIC means the user of any segment(s) or element(s) of the ISTS and shall include generator, State Transmission Utility, State Electricity Board or load serving entity including Bulk Consumer and any other entity or person directly connected to the ISTS and shall further include any intra-State entity who has obtained Medium Term Open Access or Long Term Access to ISTS."

i. Scope of the 2010 Sharing Regulations provides for Yearly Transmission Charges to be computed as below:-

"3. Yearly Transmission Charges, revenue requirement on account of foreign exchange rate variation, changes in interest rates, etc., as approved by the Commission and Losses shall be shared amongst the following categories of Designated ISTS Customers who use the ISTS:-

(a) Power Stations / Generating Stations that are regional entities as defined in the Indian Electricity Grid Code (IEGC); "(b) State Electricity Boards/State Transmission Utilities connected with ISTS or designated agency in the State (on behalf of distribution companies, generators and other bulk customers connected



to the transmission system owned by the SEB/STU/ intra-State transmission licensee);

(b) Any bulk consumer directly connected with the ISTS, and

(c) Any designated entity representing a physically connected entity as per clauses (a), (b) and (c) above”

j. As per clause 1.4 and 1.5 of the Commission’s approved procedure for "Sharing of Inter State Transmission System Losses” provides as follows:-

"1.4 The ISTS losses as arrived as per this procedure shall be applied on all the Regional Entities in line with Regulation 7 (1) (r) and 7 (1) (s) of Central Electricity Regulatory Commission (Sharing of inter-State Transmission Charges and Losses) Regulations, 2010. The entities embedded within the State jurisdiction shall have to share additional losses for using intra-State system as applicable in the respective control area.

1.5 The percentage loss shall be applied on regional basis to harmonise with the scheduling and despatch and regional Energy Accounting on the regional basis.”

Although the transmission lines of APTRANSCO are used for evacuation of power from Simhadri STPS Stage-I, the power evacuated is of Regional Entity and an ISGS power. Further, even as per the 2003 Act, the present lines fall under the definition of ISTS. Considering the above provisions of 2010 Grid Code, 2010 Sharing Regulations, and 2003 Act, it was clarified to APSLDC that PoC losses are to be applied for any Regional Entity either connected to ISTS or deemed ISTS coming under the control area of RLDC;

k. The petitioner has requested to adopt the procedure followed in the case of RGPPL located in Maharashtra and exempt it from payment of ISTS losses. However, both Simhadri STPS Stage-I and RGPPL are on different footing. As per para (vii) under sub clause (t) of clause (1) of Regulation 7 of the 2010 Sharing Regulations, the long term beneficiaries of ISGS connected to STU network shall continue to pay the transmission charges for the STU network as



per the existing mechanism. Since, RGPPL is only connected with STU network, in line with the existing scenario and regulations it was then decided that ISTS loss for CTU network shall not be applied for the power scheduled to MSEDCL and for rest of the allocation i.e. to D&D, DNH and Goa both STU and CTU losses shall be applied. However, subsequent to the third amendment to the 2010 Sharing Regulations, of the State owned lines used for evacuation of CGS needs to be considered as ISTS as per Regulation 7(1)(t)(iii). Accordingly, as and when RGPPL gets scheduled for other than e-bidding power with PSDF subsidy, applicable losses will be applied on it;

I. The allocation to Andhra Pradesh and Telangana from Simhadri STPS Stage-I has to be treated as deemed LTA and charges have to be applied accordingly. However, since transmission system of Andhra Pradesh is being used for evacuation of power, Andhra Pradesh may request SRPC to identify and certify the transmission system used for inter-State transfer of power. Andhra Pradesh may approach the Commission to get the tariff of the same approved, and after approval, tariff of the transmission system may be included in PoC computation. As per Regulation 7(1)(t)(iii) of the 2010 Sharing Regulations, the state owned lines used for evacuation of CGS shall be considered as ISTS. The relevant Regulation is as extracted below:-

"(vii) In case an ISGS is connected only to STU network and the shares of the beneficiaries of the said station are being delivered through the STU network, such a line of the STU network shall be considered as an ISTS for the purpose of these regulations."

- m. It is appropriate to consider the STU owned 400 kV Simhadri STPS - Kalpakka D/C lines as deemed ISTS lines. Accordingly, APTRANSCO should file a tariff petition before the Commission;
- n. Other examples in the country where STU system is used for evacuation of ISGS are as under:-
- i. While scheduling of power by WRLDC to Bhilai Steel Plant (BSP) from its captive CGS station NSPCL (NTPC-SAIL joint venture), applicable PoC losses has been applied considering the operation of the plant in the interconnected network though evacuation of power was through the four 220 kV dedicated lines owned and operated by BSP. In the case of SAIL BSP v. WRLDC (2/RP/2014), the Commission has held that SAIL-BSP is an Intra-state entity of Chhattisgarh which is a DIC and is thus liable to share losses under the 2010 Sharing Regulations.
  - ii. Narora ISGS power is evacuated through 220 kV owned by Uttar Pradesh. The charges of Narora transmission system are considered in PoC computation and the same is recovered through POC.
  - iii. In case of MAPS, Kalpakkam, ISGS power is evacuated through 220 kV lines owned by Tamil Nadu. Tamil Nadu has not yet requested for inclusion of charges of Kalpakkam transmission system in PoC but the charges are recovered/settled through the method agreed in SRPC based on wheeling charges concept.



In all the above cases, PoC Injection and Drawal zonal losses are being applied to all the entities having share in the respective plants including the States whose lines are used for evacuation.

5. The petitioners in their rejoinder to the reply filed by SRLDC have submitted, vide affidavit dated 1.2.2016, as under:-

a. In the dynamic power flows, the entire power from Simhadri STPS Stage-I is flowing through the dedicated network of only Andhra Pradesh;

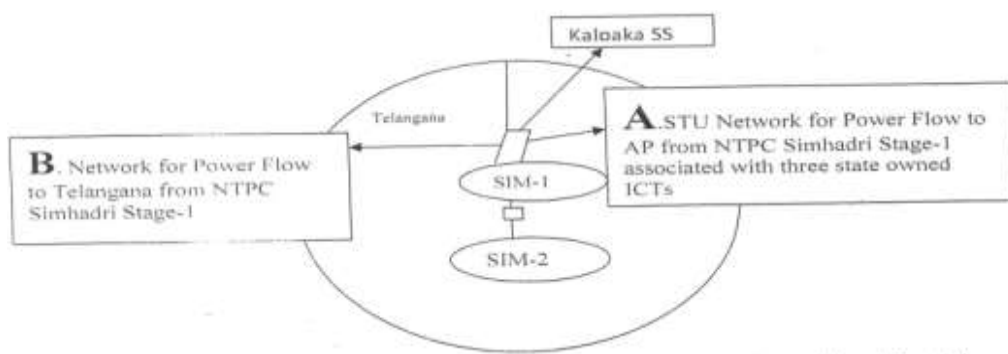
b. The scheduling of Simhadri STPS Stage-I was discussed in the SRPC Commercial Sub-Committee meetings and SRPC meetings before and after bifurcation of State of Andhra Pradesh. Based on the discussions, SRPC Secretariat had suggested to APSLDC to obtain exemption from the Commission as provided under the 2010 Grid Code. Subsequently, TS-SLDC had been requested to issue the consensus that scheduling of Simhadri STPS Stage-I be continued by APSLDC in order to avoid further commercial impact not only on APDISCOMs but also on TSDISCOMs. Due to non-receipt of concurrence from TS-SLDC, APSLDC could not seek the exemption from the Commission even though it was discussed in SRPC meetings as well as OCC meetings;

c. Telangana SLDC had addressed a letter to SRLDC stating that scheduling of Simhadri STPS Stage-I be done only by SRLDC. Accordingly, SRLDC decided that it would undertake the scheduling of Simhadri STPS Stage-I with effect from 6.11.2015 subject to applying PoC losses to Andhra Pradesh also to the extent of their share from the said project. Then APSLDC represented to



SRLDC that in the Western Region, there is a precedence of exemption of PoC losses when connected to STU. But, SRPC Stated that the said issue was settled in an amicable manner in the WRPC meetings with WRLDC. As stated above, WRLDC has not been applying any PoC losses to Maharashtra to the extent of their share in RGGPL, though part of capacity of said project is being supplied to other states. In the petition, it was stated about the precedence of RGPPL project, and in fact no additional lines were laid by CTU for evacuation of Simhadri STPS Stage-I. The entire physical network for evacuation of power from Simhadri STPS Stage-I is same before and after bifurcation of Andhra Pradesh;

d. It is submitted that the instant case is not in the scope of POC regulations. Therefore, third amendment to 2010 Sharing Regulations is not applicable. SRLDC is mainly insisting on the third amendment in view of said scope of PoC, the same cannot be applied in the instant case. The pictorial representation of the Simhadri STPS Stage-I is given as under:-



e. With regard to the contention of SRLDC that Section 2(36)(i) of the 2003 Act is applicable to Andhra Pradesh, it has been submitted that as per the above diagram, it is clear that only Andhra Pradesh State power is flowing



through 'A' part of network and there is no conveyance of power to the other State, hence, it is not ISTS;

f. Special provisions have been made in the 12<sup>th</sup> Schedule of the 2014 Act. In clause (5) of para C, it is explained about EHT lines falling under deemed ISTS and other lines to be considered as respective STU lines. The sub-clause 5 and 6 of clause "C" of the 12th Schedule of 2014 Act is reproduced below:-

"5. Transmission lines of APTRANSCO of 132 KV and higher voltage cutting across the successor States shall be deemed as Inter-State Transmission System (ISTS) lines. The transmission lines falling within the territory of each successor State shall be transferred to the respective State Transmission Utilities. The maintenance of ISTS lines shall also be done by successor States in their respective jurisdictions.

6. The power of the Central Generating Stations will be allotted in such ratio to the State of Telangana and the State of Andhra Pradesh based on the actual energy consumption of the last 5 years of the relevant DISCOMS in the respective successor State."

As per the above clause, it is clear that all NTPC Simhadri- Kalpakka lines fall within territory of successor state of Andhra Pradesh and evident that it is not an ISTS line and it is only a STU line;

g. As per Section 107 of the 2014 Act, the 2014 Act prevails over any other law in force. Therefore, the SRLDC's claim runs contrary to the provisions of the 2014 Act. The instant lines are not used as ISTS and hence it does not fall within the scope of 2010 Sharing Regulations and as such the PoC losses and charges are not applicable;

h. Contrary to the submissions of the SRLDC, the Simhadri STPS Stage-I is not a Regional Entity, as it supplies power to one State alone. The question, whether a generator, due to effect of bifurcation of State, would become an



inter-State generator or not is now pending before the Hon'ble High Court of Andhra Pradesh, in a case of APDISCOM's versus GMR;

i. Inter-connector between Simhadri STPS Stage-I and II is part of Simhadri STPS Stage-II and was constructed only for drawal of start-up power for Stage-II. It is not part of CTU or ISTS or deemed ISTS. Applying losses on the drawl of power from Simhadri by Andhra Pradesh does not arise as it would offend the provisions of law under schedule 12 read with Section 107 of the 2014 Act;

j. As regards RGGPL, the objections raised by SRLDC are imaginary. After lot of deliberations, WRPC has taken a decision that PoC losses and charges are not applicable to Maharashtra. While considering STU line as ISTS or deemed ISTS, the same becomes ISTS, only for other beneficiaries but not for the DISCOM's or STU of the same State. The definition ISTS as per Section 2(36)(i), (ii) and (iii) read with scope of the 2010 Sharing Regulations corroborates the said propositions of law. The PoC charges and losses are applicable to other States only if power is transmitted to other State on STU line but not the host State of STU. Further, if POC regulations are applied to host State who owns and maintains the STU, POC losses and charges get reduced to other beneficiaries at the cost of host State which is not in consonance with law and principles of natural justice;

k. In the instant case, petitioner has laid four dedicated 400 kV lines and a sub-station with three ICT's and sub-system exclusively to evacuate Simhadri-1 power almost before ten years by spending around ₹200 crore. SRLDC has stated that the review petitioner may approach the Commission to get tariff for



the Simhadri evacuations system. By doing so, Andhra Pradesh may get a meager amount of ₹10 crore approximately whereas the host State will be burdened with ₹170 crore per annum and the same has to be passed on to the consumers, as detailed below:-

Andhra Pradesh-Share	461.1	MW
Avg. POC losses in 2015% (Actual Losses are Negligible (0.002%))	3.5	%
Losses	16.1385	MW
Cost of Unit (Pooled Cost of AP)	3.6	₹
PoC Losses for A Year (MU)	127.20834	MU
PoC Losses for a Day (MU)	0.348516	MU
Cost of PoC Losses for a Day (₹)	1,25,46,57.6	₹
Cost of PoC Losses for a Year (₹)	45,79,50,024	₹
Avg. Trans. Charges (₹/Month/MW) (Avg. 2015)	2,21,264	₹
Annual Trans. Charges (₹)	1,22,40,32,448	₹
Total Cost of PoC	1,68,19,82,472	₹

i. The process of application of PoC losses starts with computation of loss and pooling of all such loss along with all ISTS and Deemed ISTS and then sharing such loss as per 2010 Sharing Regulations. The injection point of the generator and the drawal point of Andhra Pradesh are one and the same, hence, there is no loss in the system and further there is no loss along the Deemed ISTS. As such, sharing of losses along the deemed ISTS by Andhra Pradesh is illogical;

m. As regards SRLDC's contention regarding applicability of PoC losses to SAIL-BSP, it has been submitted that SAIL-BSP is embedded system which draws power from dedicated transmission line as well as from the STU system, whereas in case Simhadri STPS Stage-I STPS, Andhra Pradesh draws power only from its own system. However, even the said case of SAIL-BSP has been remanded to Commission.



### **Analysis and Decision:**

6. We have heard the learned counsels and representatives of the parties. We have considered the pleadings of the parties, including reply filed on behalf of SRPC and SRLDC and the documents available on record. On the basis of the submissions made by the parties, the following issues are framed:-

- a. Who shall exercise control area jurisdiction over Simhadri STPS Stage-I of NTPC?
- b. Whether PoC charges & losses shall be applicable on Andhra Pradesh for scheduling its share of power from Simhadri STPS Stage-I generating station?

7. We consider these issues in the following paragraphs.

Issue No. (a): Who shall exercise control area jurisdiction over Simhadri STPS Stage-I STPS of NTPC?

8. The petitioner has submitted that the entire quantum of Simhadri STPS Stage-I (2x500 MW) was exclusively allocated by Ministry of Power, Government of India in 1995 to the erstwhile State of Andhra Pradesh. The associated 400 kV transmission system for evacuation of power from Simhadri STPS Stage-I was laid down by erstwhile APSEB as the entire power generated from Simhadri STPS Stage-I was supplied to erstwhile Andhra Pradesh. Scheduling of Simhadri STPS Stage-I was being done by erstwhile APS DLC. The erstwhile State of Andhra Pradesh was bifurcated into State of Andhra Pradesh and State of Telangana with effect from 2.6.2014 under the 2014 Act. As per the 2014 Act and Ministry of Power, Government of India's directive, the power from Simhadri STPS Stage-I has been shared in the



ratio of 46.11% and 53.89% between Andhra Pradesh and Telangana with effect from 2.6.2014. In 28<sup>th</sup> SRPC meeting held on 10.10.2015, SRPC suggested that scheduling of Simhadri STPS Stage-I could be done by SRLDC with effect from 16.11.2015 onwards which was accepted by CMD, APTRANSCO. However, in the 113<sup>th</sup> OCC held on 6.11.2015, APTRANSCO requested that as in the case of scheduling of power from RGPPL to MSEDCL, the transmission charges and losses should not be levied on the utilities of Andhra Pradesh, as the transmission system for supply of power from Simhadri STPS Stage-I is owned and operated by Andhra Pradesh.

9. SRLDC has submitted that after bifurcation of erstwhile Andhra Pradesh into Andhra Pradesh and Telangana, the Simhadri Stage-I STPS has become a 'Regional Entity' falling under the control area of SRLDC as per Regulation 6.4(2)(a) of 2010 Grid Code. However, both Telangana and Andhra Pradesh mutually agreed to schedule the Simhadri Stage-I STPS generation by APSLDC. Since Regulation 6.4(3) of 2010 Grid Code provides for exemption of scheduling by SRLDC for operational expediency, it was decided in the SRPC meetings that Andhra Pradesh shall approach the Commission for necessary exemption. SRLDC and SRPC insisted on APSLDC to seek exemption from the Commission in order to continue scheduling of the Simhadri STPS Stage-I generation by APSLDC. Subsequently, Telangana vide letter dated 18.9.2015 requested that the scheduling of Simhadri STPS Stage-I should be done by SRLDC in line with the Regulation 6.4.2(a) of the 2010 Grid Code. The issue was discussed in 28<sup>th</sup> TCC / SRPC meeting and 113<sup>th</sup> OCC meeting held on 6.11.2015 wherein it was decided that scheduling by SRLDC would commence w.e.f. 6.11.2015 SRLDC, as APSLDC did not approach the Commission to obtain necessary exemption. In the 113<sup>th</sup> OCC meeting, APSLDC requested SRLDC to



carry out the scheduling of Simhadri STPS Stage-I without applying PoC injection/drawal losses to Andhra Pradesh's share of power.

10. We have considered the submission of the petitioner, SRPC and SRLDC. On bifurcation of the State of Andhra Pradesh, the power from Simhadri STPS Stage-I is shared in the ratio of 46.11% and 53.89% between Andhra Pradesh and Telangana with effect from 2.6.2014. After the bifurcation, Simhadri STPS Stage-I supplied power to two States namely, Andhra Pradesh and Telangana. As per Regulation 6.4.2(a) of the 2010 Grid Code, Simhadri STPS Stage-I came to be vested in SRLDC. Regulation 6.4.2 (a) provides as under:-

“6.4.2 The following generating stations shall come under the respective Regional ISTS control area and hence the respective RLDC shall coordinate the scheduling of the following generating stations:

(a) Central Generating Stations (excluding stations where full Share is allocated to host State).”

11. As per the Regulation 6.4.2(a) of the 2010 Grid Code, Central Generating Stations (except where full share is allocated to the host State) shall come under the jurisdiction of the respective RLDC. After bifurcation of the erstwhile State of Andhra Pradesh into Andhra Pradesh and Telangana, Simhadri STPS Stage-I is supplying power to two States and hence its control area, falls within the jurisdiction of SRLDC. Accordingly, we direct that the scheduling of Simhadri STPS Stage-I shall be carried out by SRLDC. Both Telangana and Andhra Pradesh have now agreed that the scheduling of Simhadri STPS Stage-I should be done by SRLDC. The only caveat put forth by the petitioners is that on scheduling of power by SRLDC, the transmission charges and losses of ISTS from Simhadri STPS Stage-I should not be fastened on Andhra Pradesh as the State is connected to Simhadri STPS Stage-I though the transmission system



owned by Andhra Pradesh. The concern of the petitioner with regard to allocation of transmission charges and losses of ISTS has been dealt with in later part of the order.

Issue No (ii): Whether PoC charges & losses shall be applicable on Andhra Pradesh to the extent of share of Andhra Pradesh from Simhadri STPS Stage-I STPS generating station?

12. The petitioner has submitted that Simhadri STPS Stage-I STPS station is within Andhra Pradesh and is electrically connected to State of Andhra Pradesh by a transmission system built, owned and operated by APTRANSCO. Transmission of power from Simhadri STPS Stage-I STPS to the sub-station of Andhra Pradesh is not through ISTS lines and power is transferred through state owned dedicated lines. After bifurcation, Andhra Pradesh is availing its share of allocated power through 400 kV feeders of the transmission system of Andhra Pradesh from Simhadri STPS Stage-I STPS to Kalpaka Sub-station switchyard which is also owned and operated by Andhra Pradesh and no part of the regional transmission system is used by the Andhra Pradesh for transfer of power from Simhadri STPS Stage-I STPS. The power flow of 1000 MW from Simhadri STPS Stage-I STPS generation before and after bifurcation of erstwhile Andhra Pradesh is through the transmission system of Andhra Pradesh. There is no change in flow of power i.e. the power flow path is same before and after the reorganization. Accordingly, Andhra Pradesh is not liable to pay the transmission charges. Further, no transmission losses are incurred in the regional transmission system on account of drawal of power from Simhadri STPS Stage-I. Therefore, there is no pooled regional transmission loss and no such loss could be appropriated to Andhra Pradesh. If the methodology of calculation is changed as PoC model, the PoC charges & losses on Simhadri STPS Stage-I power will be imposed on State of Andhra



Pradesh for 461.10 MW of power irrespective of the fact that the power is evacuated from the CGS using transmission system of the State of Andhra Pradesh. In the instant case, point of injection and point of withdrawal is same and both are within Andhra Pradesh and hence, there is no loss in the system and further there is no loss along the Deemed ISTS.

13. The petitioner has further requested to adopt the procedure followed in the case of RGPPL, where no injection and withdrawal PoC losses are made applicable to MSEDCL. In this regard, SRPC sought clarification from WRPC regarding treatment of PoC losses to the schedules of the beneficiaries of RGPPL. In response, WRPC informed that PoC injection and drawal losses are not applicable to Maharashtra share from RGPPL whereas the same are applicable to other beneficiaries such as Daman & Diu, Dadra and Nagar Haveli and Goa. The relevant portion of the said letter dated 27.10.2015 by WRPC to SRPC is extracted hereunder:-

“With reference to you letter SRPC/SE-II/2015 dated 27.10.2015. PoC losses treatment to the schedule of its beneficiary from RGPPL is done as follows:

- 1) RGPPL is a ISGC, operated through joint venture of NTPC, GAIL, etc through SPV and is connected only to Maharashtra STU system.
- 2) RGPL has more than one beneficiary and are therefore, it is being scheduled by WRLDC.
- 3) For computation of drawal schedule of Maharashtra from RGPPL, PoC injection losses and drawal losses are not applied for its share from RGPPL.
- 4) For computation of drawal schedule for other beneficiaries (DD, DNH & Goa) from RGPPL, PoC injection losses and drawal losses are applied to these beneficiaries.”

14. According to SRLDC, Simhadri STPS Stage-I stands on a different footing from RGPPL as the generating station is inter-connected with Simhadri STPS Stage-II and shares the common bus bar. SRLDC has further submitted that as per sub-clause (t) of clause (1) of Regulation 7 of 2010 Sharing Regulations, in case an ISGS is connected only to STU network and the shares of the beneficiaries of the said





station are being delivered through the STU network, such a line of the STU network shall be considered as an ISTS.

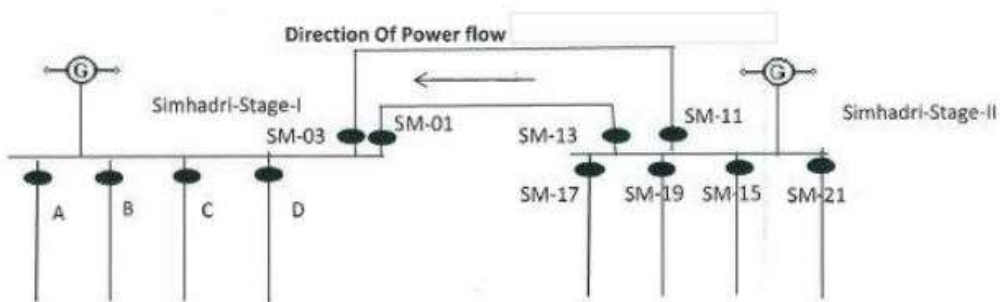
15. SRLDC has further submitted that the allocation to Andhra Pradesh and Telangana from Simhadri STPS Stage-I has to be treated as deemed LTA and charges have to be applied accordingly.

16. SRPC vide letter dated 16.11.2015 has submitted as follows:-

- “ .....
9. In all cases where SRLDC computes drawal schedules for any buyer/beneficiary, it deducts loss component from the total requisition from each station by a beneficiary in accordance with CERC (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010.
  10. These losses are applied since injection point of ISGS and drawal point of the beneficiary are differently located and thus losses in ISTS need to be deducted from the drawal of beneficiary.
  11. RGPPL, a JV of NTPC and GAIL (in WR), having Maharashtra, Goa DD & DNH as beneficiaries is connected only to STU network of Maharashtra and is being scheduled by WRLDC as per CERC (Indian Electricity Grid Code) Regulations, 2010 6.4 Demarcation of responsibilities: 2(a).
  12. In case of RGPPL, the injection point of RGPPL and drawal point of Maharashtra are the same since RGPPL is connected only to STU and no power from RGPPL flows to ISTS.
  13. Since there is no power flow/loss in the ISTS for RGPPL, WRLDC/WRPC is not applying any loss while computing drawal schedule of Maharashtra. Whereas for Goa, DD & DNH, loss in respect of RGPPL requisition from these beneficiaries is applied.
  14. NTPC, Simhadri Stage-I is connected to AP-STU system and to NTPC, Simhadri Stage-II via bus coupler. NTPC, Simhadri Stage-II is connected to the ISTS.
  15. Evacuation system of NTPC, Simhadri Stage-I is only AP-STU system while bus coupler to Stage-II is provided for reliability purpose only. Power flow direction is from NTPC, Simhadri Stage-II to NTPC, Simhadri Stage-I via bus coupler and is of the order of about 200 MW.
  16. It can be kindly seen from Special Energy Meter data that power from NTPC, Simhadri Stage-II is getting evacuated through AP-STU system rather than NTPC, Simhadri Stage-I power through ISTS.
  17. In view of the above, it is to be considered that NTPC, Simhadri Stage-I power flows only through AP STU system ( as power flow for about 95 % time is from NTPC, Simhadri Stage-II to NTPC, Simhadri Stage-I).
  18. Hence, similar to the scheduling process for RGPPL (WR) adopted by WRLDC for Maharashtra NTPC, scheduling process for Andhra Pradesh in respect of Simhadri Stage-I merits kind consideration.
- .....”



17. As per the SRPC's submissions, though Simhadri STPS Stage-I is connected to Simhadri STPS Stage-II through bus coupler which is further connected to ISTS, evacuation system of Simhadri STPS Stage-I is only through STU system of Andhra Pradesh. The inter-connection between Simhadri STPS Stage-I and Stage-II is only for reliability purpose. Further, as per Special Energy Meter (SEM) data, power from Simhadri STPS Stage-II is getting evacuated through APSTU system rather than Simhadri STPS Stage-I power through ISTS and about 95 % time, power is flowing from Simhadri STPS Stage-II to Simhadri STPS Stage-I. SLD showing the direction of power flow from Simhadri STPS Stage-I and II is given hereunder:-



**Prior to Simhadri Stage-I As Regional Entity**

Drawal Point of Andhra Pradesh = SM-01 + SM-03

Injection of Simhadri Stage-II= SM-13+SM-11+SM-17+SM-19+SM-15+SM-21

**If Simhadri Stage-I As Regional Entity**

Drawal Point of Andhra Pradesh = A+B+C+D

Injection of Simhadri Stage-I= SM-01+SM-03+A+B+C+D

Injection of Simhadri Stage-II= SM-13+SM-11+SM-17+SM-19+SM-15+SM-21

**Bus Interconnector between Simhadri Stage-I and Stage-II**

Bus Interconnector between Simhadri Stage-I and Stage-II was constructed for start up power for Stage-II from Stage-I

18. SRPC vide letter dated 11.1.2016 has submitted that Simhadri STPS Stage-I is fully embedded in Andhra Pradesh STU with connectivity to Simhadri STPS Stage-II. The entire power of Simhadri STPS Stage-I is evacuated through APSTU system



only except during contingency when it may be evacuated through Simhadri STPS Stage-II. As Simhadri STPS Stage-I power is evacuated through STU system, ISTS loss to the quantum of power scheduled to Andhra Pradesh may not be applied by SRLDC while computing drawal schedule of Andhra Pradesh. No ISTS loss is being caused because of wheeling of power from Simhadri STPS Stage-I to Andhra Pradesh since the injection points ex-bus of Simhadri STPS Stage-I are the drawal points for AP. Similar principle was adopted by WRLDC for RGPPL by not applying loss while scheduling is being quantum for computing drawal schedule of Maharashtra. Further, interface meters have been installed across the transmission lines crossing the border between Andhra Pradesh and Telangana to account for ISTS drawal/deviations for each state. The drawal points for Telangana are within Telangana boundary. However, these lines are yet to be considered under POC sharing mechanism.

19. We have considered the submissions of the petitioner, SRPC and SRLDC. Simhadri STPS Stage-I is connected to STU system of Andhra Pradesh and to Simhadri STPS Stage-II through bus coupler and Simhadri STPS Stage-II is connected to ISTS. Andhra Pradesh is availing its share of power from Simhadri STPS Stage-I through its own system and injection and drawal of power from Simhadri STPS Stage-I takes place at the same point. ISTS system is not being used to wheel power of Simhadri STPS Stage-I to Andhra Pradesh and no ISTS losses are being caused because of wheeling of this power. SRPC vide letter dated 11.1.2016 has submitted that ISTS losses and charges should not be applied for Andhra Pradesh share from Simhadri STPS Stage-I as the share of Andhra Pradesh from the Simhadri



STPS Stage-I is evacuated through STU system of Andhra Pradesh and the injection points at ex-bus of Simhadri STPS Stage-I are the drawal points for Andhra Pradesh.

20. We are of the view that since the injection point and drawal point for evacuation of power to Andhra Pradesh are the same, there cannot be losses and therefore, for computation of drawal schedule of Andhra Pradesh from Simhadri STPS Stage-I, PoC injection losses and drawal losses shall not be applied. Further, ISTS transmission charges shall not be leviable on Andhra Pradesh for drawal of its share from Simhadri STPS Stage-I as ISTS is not used for transmission of power. SRPC has submitted that interface meters have been installed across the transmission lines crossing the border between Andhra Pradesh and Telangana to account for ISTS drawal/deviations for both the States. SRPC has submitted that the drawal points for Telangana are within the boundary of Telangana. However, these lines are yet to be considered under PoC sharing mechanism. We note from the submissions of SRPC that the transmission lines from the point of installation of interface meters crossing the border between Andhra Pradesh and Telangana till the point of drawal within Telangana have acquired the status of ISTS as it is carrying power from the territory of Andhra Pradesh to the territory of Telangana. Further, Clause 5 of Twelfth Schedule of 2014 Act provides as under:-

“5. Transmission lines of APTRANSCO of 132 kV and higher voltage cutting across the successor States shall be deemed as Inter-State Transmission System (ISTS) lines. The transmission lines falling within the territory of each successor State shall be transferred to the respective State Transmission Utilities. The maintenance of ISTS lines shall also be done by successor States in their respective jurisdictions.”

From the above, it is apparent that even the 2014 Act recognizes that the transmission lines of APTRANSCO of 132 kV and higher voltage cutting across the



successor States shall be deemed as ISTS lines, though their maintenance will be done by the successor States in their respective jurisdiction. In order that the tariff of the said lines is included in PoC, there is a requirement for determination of the tariff of the said line by the Commission.

21. APTRANSCO has already approached the Commission for determination of transmission charges for the transmission lines crossing from Andhra Pradesh to Telangana. These lines can be included in the PoC after the tariff is determined by the Commission. Till that time, the transmission lines shall not be covered in the PoC and Telangana shall not be levied transmission charges towards drawal of its share from Simhadri STPS Stage-I. However, since the injection and drawal points of Telangana are different, it shall be liable to pay the PoC transmission losses. In case of any difficulty in implementation of the directions issued in this order, SRPC shall submit a report to the Commission within 6 months of issue of this order and the parties concerned are granted liberty to approach the Commission.

22. With the above, the petition is disposed of.

**(M.K. Iyer)**  
**Member**

**(A.S. Bakshi)**  
**Member**

**(A.K. Singhal)**  
**Member**

**(Gireesh B. Pradhan)**  
**Chairperson**

