

**Central Electricity Regulatory Commission,
New Delhi**

Petition No. 188/MP/2016

Coram:

Shri Gireesh B. Pradhan, Chairperson

Shri A.K. Singhal, Member

Shri A.S. Bakshi, Member

Dr. M. K. Iyer, Member

Date of Order: 5th December, 2017

In the matter of:

Petition under Sections 79(1) (f) read with 79(1) (c) and 79(1) (b) and Section 60 of the Electricity Act, 2003, *inter alia* seeking adjudication of disputes as regards the terms of payment/compensation for operation and maintenance of the Petitioner's 2 Nos. of 400 kV Line bays including 2 Tie Bays at 765/400 kV switchyard at Power Grid, Bharari, Substation, Bilaspur, Chhattisgarh and other reliefs.

And

In the matter of

Lanco Amarkantak Power Ltd.
Lanco House, Plot No. 397, Udyog Vihar, Phase-III,
Gurgaon-122016, Haryana

Vs.

1. Power Grid Corporation of India Limited,
B-9, Qutub Institutional Area,
Katwaria Sarai, New Delhi-110016

2. Western Regional Load Despatch Centre,
F-3, M.I.D.C. Area, Marol
Andheri (East), Mumbai-400 093

Parties Present:

Shri Deepak Khurana, Advocate, LAPL
Shri Buddy Ranganadhan, Advocate, LAPL
Shri M.G. Ramachandran, Advocate, PGCIL
Ms. Anushree Bardhan, Advocate, PGCIL
Shri R.P. Padhi, PGCIL
Shri Abhishek Garg, PGCIL
Shri B.P. Kundu, PGCIL
Ms. Pragya Singh, WRLDC
Shri S.S. Barpanda, WRLDC



ORDER

The Petitioner, Lanco Amarkantak Power Ltd, has filed the present petition under Section 79 (1) (f) read with Section 79 (1) (b) and (c), and Section 60 of the Electricity Act, 2003 seeking adjudication of disputes as regards the terms of payment/compensation for operation and maintenance of the Petitioner's 2 Nos. of 400 kV Line bays including 2 Tie Bays at 765/400 kV switchyard at Power Grid, Bharari, Substation, Bilaspur, Chhattisgarh.

2. The Petitioner has submitted that the following facts have led to the filing of the present petition:

(a) The Petitioner has set up a 600 MW (2x300 MW) coal based Thermal Power Plant in Village-Pathadi, Korba District in the State of Chhattisgarh for which the Petitioner was required to construct 2 Nos of 400 kV line bays at Western Region Pooling Point for connectivity of 400 kV D/C Pathadi Thermal Power Station-WR Pooling point near Sipat. For this purpose, the Petitioner and Power Grid Corporation of India Ltd. (PGCIL) entered into an agreement dated 20.10.2009. The said Agreement was amended vide Supplementary Agreement dated 8.3.2010 ('Supplementary Agreement'). In terms of Clause 2 of the amended agreement, PGCIL scope of works, *inter alia*, included design, engineering, procurement, erection, project management, testing and commissioning and other works incidental thereto for execution of the 2 nos. of 400 kV bays at WR Pooling Station (near Sipat). Further, in terms of clause 2.1(ix) of the amended agreement, after completion of the works, O & M of the said bays was required to be done by PGCIL on behalf of the Petitioner. In this regard,



PGCIL vide its email dated 11.10.2014 sent a draft Memorandum of Understanding (MOU) to the Petitioner for O & M bays of the line bays.

(b) As per Clause 4.1 of the MOU, the Petitioner was required to pay to PGCIL the O&M charges for each line bay in terms of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as '2014 Tariff Regulations') i.e. Rs. 60.30 lakh/per year/bay with yearly escalation @ 3.32% of the O&M charges fixed for the previous year as per Regulation 29(3) of the 2014 Tariff Regulations. However, as per clause 3.1 of the draft MOU, major spares and consumables were required to be procured by the Petitioner. As per Clause 6 of the draft MOU, the Petitioner was required to take insurance cover of equipment at its own costs. The said provisions in the MOU were ex-facie contrary to Regulation 3(42) of the 2014 Tariff Regulations, which clearly provides that O&M expenses includes the expenditure on manpower, repairs, maintenance spares, consumables, insurance and overheads but excludes fuel expenses and water charges.

(c) The Petitioner vide its email dated 10.9.2015, enclosing the amendment in the draft MOU requested PGCIL to bring the said payment/compensation clauses for the O & M of Line Bays in line with the 2014 Tariff Regulations. The Petitioner stated that if the Petitioner was to procure major spares and consumables, then the O&M expenses should not include the cost to be incurred by the Petitioner for procurement of major spares and consumables, in as much as Regulation 3(42) of the 2014 Tariff Regulations, provides that the O&M expenses are inclusive of the



cost of major spares and consumables. If the Petitioner was to take insurance cover for equipment at its cost then, as per the 2014 Tariff Regulations, the O&M cost should exclude the cost to be incurred by the Petitioner towards taking insurance cover.

(d) PGCIL vide letter dated 16.10.2015 informed the Petitioner that the modifications made by the Petitioner are not in line with the standard guidelines of PGCIL and advised the Petitioner to convene a meeting to sort out the areas of disagreement over the MOU provisions. In this regard, a meeting was convened on 26.10.2015. However, no consensus could be reached between the Petitioner and PGCIL.

(e) The Petitioner vide its letter dated 18.11.2015 further requested PGCIL to charge the O & M as per the 2014 Tariff Regulations. In the said letter, the Petitioner also proposed to carry out O&M on its own if PGCIL was not agreeable to do so. However, no response was received from PGCIL. Further, the Petitioner vide its letter dated 2.2.2016, informed PGCIL that the start date of O&M for the said Line Bays shall be the date on which the MOU was signed between the Petitioner and PGCIL. The Petitioner further informed PGCIL that as the bay requirement is due for annual testing, the Petitioner proposed to carry out the testing till the issue relating to O&M agreement is resolved. No response was received from PGCIL in this regard.

(f) The Petitioner vide its letter dated 12.3.2016 informed PGCIL that the execution of the MOU is pending at its end and the Petitioner is ready to undertake the O & M of the bays. However, one day before the scheduled



date, the Petitioner was not allowed to carry out the O&M of bays forcing 400 kV line to be under shut down for more than two days.

(g) The Petitioner, vide its letter dated 15.3.2016 informed PGCIL that it is acting in an unjustified manner by imposing one sided terms relating to payment of charges for the O&M of the bays and the Petitioner is looking forward to sign the MOU at the earliest or for a solution including the option to refer the matter to Commission for expeditious resolution of the issue. The Petitioner requested PGCIL that pending resolution of the issue, the parties should comply with the provisions of the Grid Code in coordination with WRLDC and the Petitioner be allowed to carry out the O&M of the bays.

(h) PGCIL vide its email dated 6.6.2016 proposed revised O&M rates at ₹24.46 lakh per bay/annum for the Financial Year-2017, without including spares and overheads. However, PGCIL wrongly considered tie bays separately and demanded O&M charges for a total of 4 bays (2 main bays and 2 tie bays) instead of 2 main bays which is contrary to the 2014 Tariff Regulations in as much as the said Regulations do not consider tie bays separately for the O&M expenses of main bays.

(i) The stand of PGCIL is contrary to the Regulations and is arbitrary and unjustified. Despite the admitted position that the O&M charges have to be as per the 2014 Tariff Regulations, PGCIL is deviating from the said Regulations by excluding the cost of the major spares and consumables as well as insurance cover for equipments from the O & M charges. The



further stand of PGCIL in charging separately for tie bays is also contrary to the Regulations. There is no justification or warrant for the same. Therefore, the conduct of PGCIL is high handed and arbitrary. PGCIL is seeking to unjustly and wrongfully enrich itself at the cost of the Petitioner. Such conduct of PGCIL is likely to cause adverse effect on the competition in the electricity industry in a regulated regime, and therefore the same is totally impermissible and unwarranted. Therefore, this Commission may issue appropriate orders under Section 60 of the Act. The Petitioner is facing difficulties in carrying out O & M of 2 Nos. 400 kV bays owing to conduct of PGCIL. The O & M of bays is necessary in order to maintain continuous flow of power from the generating station of the Petitioner as well as to ensure the reliability and security of the grid.

(j) On the pretext of the above dispute, PGCIL had stopped dissemination of downloaded data to WRLDC (of the SEMs installed at the premises of the PGCIL substation, Bilaspur) from 18.7.2016 which is required for energy account of the Power Station of the Petitioner. The Petitioner, vide its email dated 25.7.2016 had requested PGCIL to provide energy meter reading of the SEMs installed at its premises. However, petitioner has submitted that PGCIL refused to provide the said data/information until the MoU was signed on the dotted line by the Petitioner.

(k) WRLDC, vide email dated 28.7.2016, requested the Petitioner to provide SEMs data of 400 KV Lanco D/C line at Bilaspur end for the period 18.7.2016 to 24.7.2016. The Petitioner, vide its email dated 28.7.2016 apprised WRLDC about the efforts made by it to collect information from



PGCIL and requested that since the transmission losses from its switchyard to PGCIL sub-station at Bilaspur is 0.65% approx., WRLDC should consider 0.65% loss on energy accounting on provisional basis till data is disseminated by PGCIL to WRLDC.

(l) As per the Regulation 5.2(r) of the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010 (hereinafter referred to as the 'Grid Code'), PGCIL is required to provide downloaded data of the SEMs installed at the premises of PGCIL's substation, Bilaspur to WRLDC and the Petitioner. Therefore, non-furnishing of required SEM downloaded data by PGCIL is a clear violation of the Grid Code.

(m) If PGCIL does not immediately furnish the required SEM data/information from its installed meter at its substation to WRLDC, then WRLDC would consider the transmission losses upto 2% instead of actual 0.65% which shall be detrimental to the Petitioner in as much as the same would lead to under-recovery of the tariff from the beneficiaries of the power supply to the extent of 1.35% of the generated power. As such the immediate directions are required to be issued to the Respondent No. 1 to furnish the required SEM data/information from its installed meter at its substation to WRLDC.

(n) With regard to shifting of metering point, the Petitioner has stated that the Bulk Power Transmission Agreement dated 5.3.2007 signed between PTC and PGCIL provides that the injection point of the generated power shall be the Loop-In-Loop-Out ('LILLO') point i.e. interconnection of



generation project Bus (Pathadi) to 400 kV Korba-Sipat S/C line of PGCIL. The LILO point was at a distance of 30.45 Km from switchyard of the Petitioner's generating station. 400 kV dedicated transmission line upto LILO was operationalized along with commissioning of the 300 MW Unit 1. Long Term Open Access was made effective from the synchronization date of the Unit I (i.e. from 1.5.2009) and metering for power supply was done at the switchyard of the Petitioner's power station. There has been no amendment to the BPTA dated 5.3.2007. Since 1.5.2009, the metering was being done at the generating station's switchyard recorded by PGCIL's meters for the power sent out as the power was injected at LILO point as per the BPTA. The daily availability declarations and Scheduled Energy were accounted by WRLDC at the generating station's switchyard bus-bar of the Petitioner.

(o) The Commission vide order dated 13.5.2014 in Petition No. 30/MP/2014 issued notice to all generators who were injecting power through LILO arrangement. In the said Petition, NLDC had prayed that the CTU should be directed to review all connectivity granted to ensure that the CEA Standards are complied with and stop granting connectivity through interim LILO arrangement and the connectivity already granted through interim LILO arrangements may be shifted to final arrangements. The Petitioner's LILO arrangement was normalised on 8.9.2014 and Pathadi-Bilaspur 400 KV DC transmission lines were charged and connected to the 765/400 kV PGCIL Bilaspur sub-station. The LILO arrangement was normalized by extending a 44 Km (approx.) dedicated transmission line from LILO point upto 765/400 kV PGCIL Bilaspur sub-station.



(p) Immediately after the annual overhaul of the Unit I i.e. from 8.9.2014 onwards, WRLDC started considering the meter readings based on the meters installed at the 765/400 kV PGCIL Bilaspur sub-station, which meant that as per WRLDC, the LILO point was no longer permissible for the Petitioner to inject generated power and the only permissible point for injection of the generated power for the Petitioner was 765/400 kV PGCIL Bilaspur sub-station. The Petitioner, vide its letter dated 14.10.2014, raised the issue of change of metering point from its generating Station's switchyard to 765/400 kV PGCIL Bilaspur sub-station before WRLDC and requested to consider the LILO point as Injection Point and not the 765/400 kV PGCIL Bilaspur sub-station. However, WRLDC, vide its letter dated 19.11.2014, alleged that in light of the Regulation 2 of the Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006 and Regulation 6.4.2.1 of the Grid Code, meters are required to be installed at the electrical boundary of the regional entities and since, the lines between the Petitioner's generating station to Bilaspur sub-station are dedicated lines, SEM at Bilaspur is appropriate for energy accounting. In the light of the above letter, from 8.9.2014, the daily availability declarations and Scheduled Energy have been accounted at the 765/400 kV PGCIL Bilaspur Sub-station, as a result of which the Petitioner is incurring additional energy loss of 0.65% to 0.75% while transmitting power from the switchyard of the generating station upto PGCIL's Bilaspur sub-station.

(q) The Petitioner is supplying entire capacity/power from its generating station to the beneficiaries located in more than one State at regulated



tariffs determined at the ex-bus of the generating Station and with the beneficiaries of the generating Station paying the Petitioner, the tariff as determined under the applicable tariff regulations which consider Auxiliary Energy Consumption on normative basis as the energy consumption by auxiliary equipments within the generating station. Therefore, there is no scope for the Petitioner to consider the transmission line loss in the tariff determined on ex-bus power station basis. The beneficiaries are paying PGCIL, the requisite monthly transmission charges including the POC Charges for the entire Capacity of the generating station for which long term access was granted by PGCIL. Accordingly, the above transmission line losses also need to be considered as part of Inter-State Transmission System losses and ought to be given similar treatment as POC charges in the facts and circumstances of the present case.

(r) The impugned direction of WRLDC vide its letter dated 19.11.2014 is erroneous, unjustified, unreasonable and gravely prejudicial to the Petitioner in as much as a result thereof the Petitioner is incurring additional energy loss of 0.65% to 0.75% while transmitting power from the switchyard of the Power Station upto the PGCIL's Bilaspur sub-station without being adequately compensated by the beneficiaries of supply of such power.

(s) The provisions of the Central Electricity Authority (Installation and Operations of Meters) Regulations, 2006 and Grid Code are not applicable to the case of the Petitioner in as much as indisputably the Petitioner has built a dedicated transmission line from its switchyard to the sub-station and transmission losses arising thereof have not been factored in the tariff paid



by the beneficiaries and the beneficiaries have never disputed about the metering point. Therefore, the letter dated 19.11.2014 issued by WRLDC is liable to be quashed by the Commission.

(t) The disputes in the present Petition are in regard to inter-State transmission of electricity. In the absence of O&M of the bays on account of unreasonable and unjustified actions of PGCIL, grid reliability and security is likely to be prejudiced, which is a matter directly related to the inter-State transmission of electricity. The present disputes between the Petitioner and PGCIL is a dispute with regard to matters connected with Section 79(1) (b) of the Electricity Act, 2003 as the Petitioner is admittedly supplying power to more than one State. Therefore, this Commission has jurisdiction to entertain and decide the present Petition under Section 79(1) (f) read with Section 79(1) (b) of the Act, 2003 as per the law laid down by the Hon'ble Tribunal for Electricity vide full bench judgment dated 7.4.2016 in Appeal No. 100 of 2013 (Uttar Haryana Bijli Vitran Nigam vs Central Electricity Regulatory Commission &Ors). The dispute between the Petitioner and PGCIL qua the metering point of the generating station of the Petitioner has led to an increase in additional transmission losses upto 0.65% which consequently has led to under-recovery of tariff to the extent of 0.65% of the generated power from the generating station. Therefore, this dispute is covered under Section 79(1)(b) read with Section 79(1) (f) of the Act.

3. Against the above background, the Petitioner has made the following prayers:

- i) Adjudicate the disputes that have arisen between the Petitioner and Respondent No. 1 in relation to terms of payment/compensation to be paid by the Petitioner to Respondent No. 1 for carrying out Operation and Maintenance of the Petitioner's 2 Nos. of 400 kV Line bays including 2 Tie



Bays at 765/400 kV switchyard at Power Grid, Bharari, Substation, Bilaspur, Chhattisgarh;

- ii) Pass an order directing the Respondent No. 1 to regularly and uninterruptedly provide the weekly energy accounting readings from the SEMs installed at 765/400 kV substation at Power Grid, Bharari, Bilaspur, Chhattisgarh to both Petitioner and Respondent No. 2 and further pass an order directing the Respondent No. 2 to revise all the energy accounting statements since 18.07.2016 i.e. the date from which the Respondent No. 1 stopped sending the weekly energy accounting readings to Respondent No. 2 from the SEMs installed at the 765/400 kV substation at Power Grid, Bharari, Bilaspur, Chhattisgarh of the Respondent No. 1;
- iii) Quash the letter dated 19.11.2014 issued by the Respondent No.2 to the Petitioner;
- iv) Pass an order directing the Respondent no. 2 to consider the SEMs installed at the power station switchyard for the purpose of preparing weekly energy accounting statements in place of the SEMs installed at the 765/400 kV substation at Power Grid, Bharari, Bilaspur, Chhattisgarh;
- v) Pass an ex-parte ad-interim order directing the Respondent No.1 to immediately furnish the required SEM data/information from its installed meter at 765/400 kV switchyard at Power Grid, Bharari, Substation, Bilaspur, Chhattisgarh from 18.07.2016 onwards to the Respondent No. 2 and the Petitioner and continue to do so; during the pendency of the present petition.”

4. Notices were issued to the Respondents to file their replies. PGCIL and WRLDC have filed their replies and the Petitioner has filed rejoinders to the same.

5. PGCIL in its reply dated 1.12.2016 has submitted as under:

- (a) All Operation and Maintenance contractual dealings do not fall under the provisions of Section 79 (1) (c) and (d) of the Act and accordingly, the adjudication of such dispute raised by the Petitioner is outside the purview of the Commission. The Commission vide order dated 26.9.2013 in Review Petition No. 4 of 2011 (Tamil Nadu Generation and Distribution Corporation Ltd vs. Power Grid Corporation of India Ltd), had observed that disputes involving transmission licensee and O&M contractors and other contractors is outside the scope of adjudication. Therefore, the present petition is liable to be dismissed in *limine*.



(b) The Petitioner had agreed to the payment of the Operation and Maintenance Charges to PGCIL. As regards the Operation and Maintenance of the two numbers 400 kV Line Bays including two Tie Bays at 765/400 KV Switchyard at Bharari sub-station even at the time Petitioner entered into an Agreement with PGCIL for the services of PGCIL in regard to the construction of the Dedicated Transmission Line connecting the petitioner generating station with Bharari sub-station. The terms and conditions of the above services taken by the Petitioner from PGCIL are set out in the Agreement dated 20.10.2009 as amended by the Supplemental Agreement dated 8.3.2010. The said Agreement, inter alia, envisages the relationship between the parties after the line has been laid down connecting the Petitioner generating station with Bharari Substation. Therefore, it was envisaged between the parties that PGCIL will undertake the Operation and Maintenance of the Bays belonging to Lanco installed in the substation of PGCIL on behalf of the Petitioner on payment basis.

(c) In terms of the said agreement, PGCIL was uniformly charging all such similarly situated persons for whom the bays are operated and maintained by PGCIL at the rate of ₹60.30 lakh per year per Bay (for the year 2014-15) with yearly escalation of 3.32% over the previous year but with a stipulation that the major spares for the bays which may be required from time to time and Insurance shall be provided by the person seeking such services at their cost and expense. The Petitioner was fully aware of the standard agreement which PGCIL was entering into with similarly situated persons at the time when it signed the Consultancy Agreement



dated 20.10.2009 with a stipulation to execute the Operation and Maintenance Agreement upon completion of the scope of works under the Consultancy Agreement. Based on the above, PGCIL rendered the services to the Petitioner.

(d) On completion of the scope of works under the Consultancy Agreement dated 20.10.2009 read with the Supplemental Agreement dated 8.3.2010, PGCIL requested the Petitioner to execute the Operation and Maintenance Agreement in the standard format in which PGCIL has been executing similar agreements with similarly situated persons.

(e) The Petitioner was to execute the MoU and make payment of the Operation and Maintenance Charges to PGCIL in terms of the above agreement. The Petitioner having agreed to execute such agreement at the time of the signing of the "Consultancy Agreement", there is no occasion for the Petitioner not to execute the agreement upon completion of the scope of works and further not to pay the Operation and Maintenance Charges as specified in the Draft MoU.

(f) Despite the above clear position, the Petitioner has failed to execute the MoU and has also failed to pay the charges as payable under the same. As per Clause 4 of the MoU, the Petitioner was required to pay O & M charges for the period from 2.9.2014 (for first bay) and 9.9.2014 (for second bay) when the Project was complete and till 12.5.2016. Accordingly, for two number of Bays, the Petitioner was liable to pay to PGCIL at the rate of Rs 60.30 lakh per year (for FY 2014-15) per bay with yearly escalation at the



rate of 3.32% per Bay i.e. aggregating to Rs 120.60 lakh for two Bays per year with yearly escalation.

(g) Subsequently, from 13.5.2016, PGCIL revised the above O & M charges and instead of Rs. 64.37 lakh per Bay (based on Rs.60.30 lakh for FY 2014-15 with annual escalation @3.32%) restricted to the Main Bay, the charges have been revised to Rs 24.46 lakh per Bay per annum (with effect from 13.5.2016) with annual escalation @ 3.32% till March, 2019 but applicable to each of the Main Bay and Tie Bay. The rate so derived is exclusive of insurance premium. Accordingly, from 13.5.2016, PGCIL is entitled to claim from the Petitioner an aggregate amount of ₹97.84 lakh per year for the four Bays as against Rs. 128.74 lakh for two bays earlier payable. The benefit of the reduction in the above charges from Rs. 128.74 lakh to Rs 97.84 lakh is to the account of Lanco.

(h) The above reduction is uniformly applied to all such similarly situated persons who have similar agreements for Operation and Maintenance of their Bays located in the PGCIL sub-station. The Petitioner had not been discriminated in any manner either in regard to the charges at the rate of Rs 60.30 lakh per year (for FY 2014-15) per Bay with annual escalation of 3.32% up to 12.5.2016 or in regard to Rs 24.46 lakh per year per Bay but inclusive of Tie Bay with effect from 13.5.2016. Therefore, there cannot be any dispute on the liability of the Petitioner to pay the O& M charges as per the standard arrangement.



(i) The charges cannot include the liability to incur spares. The charges itself is comparatively of less amount, i.e., Rs. 64.37 lakh per year per Bay (based on Rs.60.30 lakh for FY 2014-15 with annual escalation @3.32%) revised to Rs 24.46 lakh per year per Bay (with effect from 13.05.2016) but inclusive of Tie Bay. The charges cannot possibly cover the major spares and Insurance which necessarily needs to be borne by the Petitioner. For example, if a major spare has to be included as being at the cost and responsibility of PGCIL, the replacement of a spare in a Bay would itself involve many times the amount received as O & M Charges. The insurance needs to be taken by the owner. However, PGCIL is not the owner of the bays. Accordingly, the O & M expenses cannot include the maintenance spares which are of major nature and insurance.

(j) The 2014 Tariff Regulations allows the O & M cost on a normative basis for PGCIL transmission system. The O & M expenses allowed is across the substations and transmission assets of PGCIL. PGCIL is in a position to maintain major spares common to many of the substations. PGCIL also gets all the tariff elements associated with the capital cost of the bays and assets where PGCIL owns the same. These include interest on loan, return on equity, depreciation, etc. These are not available in the case of O & M undertaken by PGCIL on bays of others. Therefore, the reliance placed by the Petitioner on the 2014 Tariff Regulations is misplaced.

(k) The Operation and Maintenance is being undertaken by PGCIL under an independent contract with the Petitioner and not as a part of the



functions of PGCIL as the Central Transmission Utility or otherwise as a Transmission Licensee undertaking the transmission services to others. Accordingly, the 2014 Tariff Regulations which applies to tariff determination in regard to assets of PGCIL cannot ipso facto be applied to the charges payable by the Petitioner. Therefore, O&M charges notified by the Commission in the Regulations are on per bay concept.

6. WRLDC in its reply has submitted as under:

(a) As per Regulation 6.4.21 of the Grid Code, all concerned entities in whose premises the Special Energy Meters (SEMs) are installed should take weekly meter readings and transmit them to the respective RLDC by Tuesday afternoon every week. Therefore, PGCIL may be directed to download the data from the SEMs (respective premises data) on weekly basis and send the same to the respective RLDC (via email) by Tuesday afternoon irrespective of the ownership of the meter/bay.

(b) The disagreement of opinion between PGCIL and the owner of the SEM/Bay should not act as an obstacle in the act of sending weekly meter data to RLDCs. Since, the SEM data is used for energy accounting of respective regional entities, the communication of the same to RLDCs on weekly basis should be treated with utmost priority.

(c) Since, the Regional Deviation Accounting involves a large number of transmission lines, a common methodology of application



of transmission losses to the standby meters (remote end meter) is adopted, in case the main meter data is not available. Accordingly, in Western Region, 2% transmission loss for transmission lines switched at or above 400 kV and 4% transmission loss to the lines switched at or below 220kV is being currently applied in case the main meter is replaced with a standby meter, for energy accounting purpose.

(d) CTU had granted interim connectivity to the Petitioner by making a Line-In-Line-Out (LILO) of 400 kV Korba-Sipat single circuit (S/C) at the Petitioner's generation bus. An ISTS line made LILO at any substation is treated as connected to the ISTS network and the transmission losses are pooled by the regional entities and therefore considered as Regional ISTS Losses.

(e) In the present case, when the CTU had granted interim connectivity to the Petitioner, the inter-connection of ISTS with the regional entity was at the Petitioner's Bus. Accordingly, the SEMs at the generator's bus were considered for energy accounting till the commissioning of lines (400 kV LANCO-Bilaspur D/C) envisaged for grant of permanent connectivity at 400 kV Bilaspur S/s of the PGCIL.

(f) Since, none of the BPTAs illustrate any accounting methodology, the same is done as per the Central Electricity Authority (Installation and Operation of meters) Regulations, 2006 as amended from time to time. With regard to the Petitioner's claim that since no



amendment of BPTA is done after the permanent connectivity at Bilaspur end, it is clarified that after the permanent connectivity, the inter-connection point with the ISTS will become the 400 kV Bilaspur S/S.

(g) Once a LILO is restored and the permanent connectivity is established by the generator, the inter-connection with ISTS network automatically changes from ISTS to dedicated lines. Similarly, the main meter for accounting of the Petitioner has changed from the Petitioner's Bus to the 400 kV Bilaspur Bus, where the generator got connected with the ISTS System through dedicated transmission lines owned by the Petitioner and they form an integral part of the generation project.

(h) The dedicated line constructed by the Petitioner is neither a part of the ISTS network nor is it considered in calculations of Point of Connection (POC) transmission charges. The dedicated line is a part of the generation tariff of the station. As far as the regional DSM accounting is concerned, the inter connection of the Petitioner with the ISTS point is considered at Bilaspur 400 kV sub-station of PGCIL.

(i) The Petitioner's line is not a part of the POC charges/losses. Dedicated line losses cannot be pooled and shared by all other regional entities since these lines are constructed by the generators for bringing their generation up to the ISTS interconnection point. The same was also discussed and decided in the Standing



Committee on Power System Planning meetings on several occasions.

(j) As per the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 (hereinafter referred to as the 'Sharing Regulations'), it is not possible to include the transmission loss for dedicated lines in the loss calculated on ISTS lines. Once the line is constructed as a dedicated line as per the decision at the Standing Committee meetings, status of the same cannot be changed as ISTS by the generator or anyone else. WRLDC has acted as per the provisions of the Sharing Regulations and Metering Regulations.

7. The Petitioner in its rejoinder to the reply filed by PGCIL has submitted as under:

(a) The contention of PGCIL regarding relationship of parties is misconceived and denied. The order dated 26.9.2013 in Review Petition No. 4 of 2011, referred to and relied upon by PGCIL is not applicable to the present case and is distinguishable.

(b) With regard to PGCIL's contention that the Petitioner has failed to execute the MOU or failed to pay charges as alleged, it is clarified that PGCIL on the one hand has admitted to the non-execution of the MOU and on the other hand is claiming the charges from the Petitioner as per the purported draft MOU circulated by it through an e-mail, which was not in accordance with the Regulations. The claim of PGCIL as per the charges unilaterally levied/claimed by it under



the draft MOU and as mentioned in these paras are contrary to the Regulations.

(c) PGCIL has wrongly considered tie bays separately and demanding O & M charges for a total of 4 Bays instead of 2 bays. The stand of PGCIL is also contrary to the 2014 Tariff Regulations, as no such distinction has been created between Main Bays and Tie Bays under the said Regulations. This stand of PGCIL is further contrary to its own letter dated 30.1.2015 wherein it is clearly stated that tie bays are excluded from O & M charges as per CERC norms.

(d) Data for the period from 18.7.2016 to 30.8.2016 pertains to bays other than that of the Petitioner. This fact was communicated to WRLDC and based on the available material for other bays, PGCIL cannot excuse itself from its statutory obligation to provide downloaded data of the SEMs installed at the premises of the PGCIL substation to WRLDC. Therefore, non-furnishing of the required SEM downloaded data by PGCIL is a clear violation of the Grid Code.

(e) Due to negligence of PGCIL, the Petitioner had to pay approx. ₹1.05 crore extra in the form of DSM charges to WRLDC during the period from 18.7.2016 to 4.9.2016 in the absence of downloaded SEM data. WRLDC has considered flat 2% transmission loss in its calculations of energy accounting as compared to approx. 0.65% actual transmission loss incurred by the Petitioner while transmitting



power from its power station switchyard to the pooling station of PGCIL.

8. The Petitioner in its rejoinder to the reply of WRLDC has submitted as under:

(a) For the energy accounting of power sent by the Petitioner, the SEMs are installed in the premises of PGCIL Bharari Pooling station. In case of non-furnishing of SEM data by PGCIL, the Petitioner as a generating company cannot be held responsible and instead punished by imposing higher standard 2% transmission loss on the energy sent out from its power station switchyard. The non-furnishing of SEM data by PGCIL is an event beyond the control of the Petitioner and is default on the part of WRLDC. WRLDC should ensure that PGCIL regularly sends the SEM data without fail on weekly basis as per the timelines.

(b) It is denied that SEM installed at the Petitioner's bus bar was considered for energy accounting. However, the Petitioner is aggrieved by the change in metering point from its bus bar to PGCIL's 765/400 kV Bilaspur sub-station, as a result of which the Petitioner is incurring additional energy loss of 0.65% to 0.75% (on the basis of past two years energy loss). In view of the position that the Petitioner is supplying the power at regulated tariffs determined at the ex-bus of the Petitioner's power station, there is no scope for considering the transmission loss in the tariff determined on ex-bus power station basis considering normative auxiliary consumption



based on Unit sizes for the equipments installed within the generating station.

(c) No interim-connectivity was granted to the Petitioner. The Petitioner had signed BPTA dated 5.3.2007 which provided that the injection point of the generated power shall be the Loop-In-Loop-Out ('LILO') point i.e. interconnection of generation project Bus (Pathadi) to 400 kV Korba-Sipat S/C line at PGCIL. There has been no amendment to the BPTA dated 5.3.2007. Since 1.5.2009, the metering was being done by SEM meters installed at the generating station's switchyard. The daily availability declarations and scheduled energy were accounted by WRLDC at the generating station's switchyard bus-bar of the Petitioner. At that time, there was no concept of interim connectivity and permanent connectivity was granted to the Petitioner. Therefore, the contention of WRLDC in this regard is contrary to the BPTA.

9. The Petitioner, vide its affidavit dated 16.3.2017 has submitted that as per the Commission's direction dated 19.1.2017, the Petitioner has paid ₹1,24,46,000/- net of TDS of ₹2,54,000/- (@ 2%) to PGCIL on 7.2.2017 towards 50% of O &M expenses for the period from 6.9.2014 to September, 2016. The said payment made was against the interim demand made by PGCIL vide its letter dated 10.11.2016. Subsequently, PGCIL on 8.3.2017 raised a consolidated provisional invoice for 50% O & M expenses for the period from 6.9.2014 till December, 2016 for an amount of ₹1,66,75,000/- (including service tax @15%).



The Petitioner has further paid an amount of ₹39,39,000/- net of TDS of Rs. 36,000/- (@2%) to PGCIL on 15.3.2017.

Analysis and Decision:

10. We have gone through the pleadings and oral submissions of the parties during the hearing. The issues raised by the Petitioner have been dealt with in the succeeding paragraphs.

O&M expenses:

11. The Petitioner in the first prayer has sought adjudication of disputes between the Petitioner and PGCIL in relation to terms of payment/compensation for carrying out O & M of PGCIL's bays including tie bays. Before going into the merits of the case, it is necessary to examine certain preliminary objection regarding jurisdiction of the Commission to adjudicate the dispute raised in the first prayer. The Petitioner has filed the present petition under Section 79 (1) (f) read with Section 79 (1) (b) and (c) of the Act. The Petitioner has argued that since, the Petitioner is a generating company within the meaning of Section 2 (28) of the Act and PGCIL is a transmission licensee within the meaning of Section 2(73) of the Act, the disputes in the present petition are in regard to inter-State transmission of electricity. The Petitioner has argued that the disputes between the Petitioner and PGCIL is a dispute with regard to matters connected with Section 79 (1) (b) of the Act as the Petitioner is admittedly supplying power to more than one State. Therefore, the Commission has jurisdiction to entertain and decide the present petition under Section 79 (1) (f) read with Section 79 (1) (b) of the Act. PGCIL has submitted that the relationship between PGCIL and the Petitioner in regard to O & M Charges payable by the Petitioner for bays is not of a licensee and a generating



company. The contractual dealings on O&M of the bays do not fall under the provisions of Section 79 (1) (c) and (d) and therefore, cannot be said to be a dispute involving Section 79 (1) (c) and (d) as envisaged under Section 79 (1) (f) of the Act. Accordingly, the dispute raised by the Petitioner is outside the purview of the Commission.

12. Section 79 of the Act provides for specific functions of the Commission as under:

“Section 79. Functions of Central Commission: (1) *The Central Commission shall discharge the following functions, namely:-*

(a) *to regulate the tariff of generating companies owned or controlled by the Central Government;*

(b) *to regulate the tariff of generating companies other than those owned or controlled by the Central Government specified in clause (a), if such generating companies enter into or otherwise have a composite scheme for generation and sale of electricity in more than one State;*

(c) *to regulate the inter-State transmission of electricity ;*

(d) *to determine tariff for inter-State transmission of electricity;*

(e) *to issue licenses to persons to function as transmission licensee and electricity trader with respect to their inter-State operations;*

(f) *to adjudicate upon disputes involving generating companies or transmission licensee in regard to matters connected with clauses (a) to (d) above and to refer any dispute for arbitration;*

(g) to (k).....”

13. Under Clause (f) of Section 79 (1) of the Act, the Commission has the power to adjudicate the dispute involving generating company or transmission licensee in respect of Clauses (a) to (d) of sub-section (1) of Section 79 of the Act. The present dispute is not related to inter-state transmission of electricity. PGCIL is undertaking operation and maintenance as a contractor despite the non-payment by the Petitioner. The issue raised in the petition is in regard to the



payment of O&M charges and not matters connected with determination of tariff of PGCIL. The contractual dealings on operation and maintenance of the bays do not fall under the scope and provisions of Section 79 (1) (c) and (d) as stated under Section 79 (1) (f) of the Act. In a similar case, the Commission vide order dated 9.9.2012 in Petition No. 11/2010 (Tamil Nadu Electricity Board Vs. PGCIL and others) has held as under:

“20. ..The Petition has been filed by the Petitioner in the capacity of O & M Contractor. Under Section 79 (1) (f), the Commission can adjudicate upon disputes involving generating companies or transmission licensee and not adjudicate upon disputes involving transmission licensees and O & M Contractors and other contractors. Therefore, the present petition falls outside the scope of the Section 79 (1) (f) of the Act and is accordingly not maintainable.”

14. The above order dated 9.9.2012 was upheld by the Hon’ble Appellate Tribunal for Electricity in its judgment dated 11.11.2013 in Appeal No. 51 and 79 of 2013 (Tamil Nadu Generation and Distribution Company Limited Vs. CERC and others), wherein the Hon’ble Appellate Tribunal has held as under:

“30. (1) The matter of dispute in the present case relates to charges for operation and maintenance services provided by a State utility for a part of inter-State transmission system owned by POWERGRID under an arrangement mutually agreed to between the parties and not under any provision of the Electricity Act, 2003. The matter relates to the charges for the operation and maintenance services provided by a State utility as a contractor to a transmission licensee of inter-State transmission system (POWERGRID), which is not connected with Clauses a) to d) of Section 79(1) of the Electricity Act, 2003 and, therefore, beyond the jurisdiction of the Central Commission under Section 79(1)(f) of the Act.

In the light of the above order and judgment, the Petition is not maintainable before this Commission in respect of O&M expenses.

SEM data not provided by PGCIL for specified period:

15. The Petitioner, in the Second prayer, has sought direction to PGCIL to regularly and uninterruptedly provide the weekly energy accounting readings from



the SEMs installed at 765/400 kV sub-station at Power Grid, Bharari, Bilaspur, Chhattisgarh and has sought direction to WRLDC to revise all the energy accounting statements since 18.7.2016 i.e. the date from which PGCIL stopped sending the weekly energy accounting readings to WRLDC. The Petitioner has submitted that PGCIL has stopped dissemination of downloaded data to WRLDC from 18.7.2016. The Petitioner vide its e-mail dated 25.7.2016 requested PGCIL to provide energy meter reading of the SEMs installed at its premises. However, PGCIL refused to provide the said data until the MoU was signed on the dotted line by the Petitioner.

16. PGCIL has submitted that for the period from 19.7.2016 to 30.8.2016, the data could not be retrieved for the Petitioner`s bays. However, data for the period from 19.7.2016 to 30.8.2016 pertaining to other bays were communicated to WRLDC and based on the available material for other bays, the power flow, etc. on the Petitioner`s bays, for the period from 19.7.2016 to 30.8.2016 can be established by WRLDC.

17. The Petitioner in its written submission dated 19.5.2017 has submitted that PGCIL has started providing the data to WRLDC. However, for the period from 19.7.2016 to 30.8.2016, the data has still has not been provided to WRLDC by PGCIL. The Petitioner has submitted that PGCIL, vide Record of Proceedings for the hearing dated 9.5.2017, was directed to provide the data. PGCIL vide its email dated 10.5.2017 has confirmed that it has provided the SEM data of all energy meters of Bilaspur sub-stations except the Petitioner`s bays for the period from 19.7.2016 to 30.8.2016 which is of no use to the Petitioner. WRLDC has submitted that PGCIL may be directed to download the data from the SEMs (respective



premises data) on weekly basis and send the same to the respective RLDC by Tuesday afternoon irrespective of the ownership of the meter/bay in terms of the Regulation 6.4.21 of the Grid Code.

18. We have considered the submissions of the Parties. Regulation 5.2 (r) of the Grid Code provides as under:

“5.2 (r). All the users, STU/SLDC and CTU shall send information /data including disturbance recorder/sequential event recorder output to RLDC within 24 hours for purpose of analysis of any grid disturbance/event. No user, SLDC/STU or CTU shall block any data/information required by the RLDC and RPC for maintaining reliability and security of the grid for analysis of an event.”

Further, Regulation 6.4.21 of the Grid Code provides as under:

“The CTU shall install special energy meters on all inter connections between the regional entities and other identified points for recording of actual net MWh interchanges and MVA_{rh} drawals. The installation, operation and maintenance of special energy meters shall be in accordance with Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006. All concerned entities (in whose premises the special energy meters are installed) shall take weekly meter readings and transmit them to the RLDC by Tuesday noon. The SLDC must ensure that the meter data from all installations within their control area are transmitted to the RLDC within the above schedule.”

As per the above provisions, all concerned entities in whose premises SEMs are installed are required to take weekly meter readings and transmit the same to the respective RLDC by Tuesday afternoon. In view of the above provisions, PGCIL is required to provide downloaded data of the SEMs installed at the premises of PGCIL's sub-station, Bilaspur to WRLDC and the Petitioner.

19. It is noted that PGCIL has not provided the data for the Petitioner's bays for the period from 19.7.2016 to 20.8.2016 to WRLDC on the ground that the data was not retrieved from the SEM. In our view, PGCIL should endeavour to provide



data since accurate data is a pre-requisite for efficient and correct energy accounting. Non-availability of data for a period of more than one month is not an acceptable proposition. It is observed that at the interface point between Petitioner's plant and Bilaspur substation i.e termination point of dedicated line, only one set of meter i.e Main meter is provided. Energy accounting data is of paramount importance.

20. Regulation 7 of the Central Electricity Authority (Installation and Operation of meters) Regulations, 2006 provides as under:

"7. Location of meters:

(1) The location of interface meters, consumer meters and energy accounting and audit meters shall be as per the Table Given below:

Provided that the generating companies or licensees may install meters at additional locations in their systems depending upon the requirement.

Table

S.No.	Stages	Main meter	Check meter	Stand by meter
	Generating Station	On all outgoing feeders	On all outgoing feeders	High Voltage (HV) side of Generator Transformers (ii) High Voltage (HV) side of all Station Auxiliary Transformers

21. In case, the generator has constructed its dedicated line and commercial billing is being done at interface with ISTS i.e. at termination point of dedicated line, check meter shall be installed in addition to main meter to ensure that in the event of mal-operation of main meter, the data could be retrieved through check meter.



22. Regulation 11 of the Central Electricity Regulatory Commission (Grant of Connectivity, Long term Access and Medium-term Open Access in inter-State Transmission and related matters) Regulations, 2009 (hereinafter referred to as the 'Connectivity Regulations') provides as under:

“11. Interface Meters

- (1) Interface meters shall be installed –
 - (a) by the Central Transmission Utility for and at the cost of the regional entities; and
 - (b) by the State Transmission Utility for and at the cost of the State entities.
- (2) Interface meters for the regional entities shall be open for inspection by any person authorized by the Central Transmission Utility and the Regional Load Despatch Centre.
- (3) Interface meters for the intra-State entities shall be open for inspection by any person authorized by the State Transmission Utility or the State Load Despatch Centre. “

As per the above provisions, CTU is required to install interface meters for and at the cost of regional entities. Accordingly, PGCIL should install check meter at the interface point at the cost of the generator in terms of Regulation 11 of the Connectivity Regulations.

Revision of Accounts:

23. The Petitioner has sought direction to WRLDC to revise all the energy accounting statements since 18.7.2016, i.e the date from which PGCIL stopped sending the weekly energy accounting readings to WRLDC. The Petitioner has submitted that pretext of data corruption now for not providing SEM data is an afterthought and therefore, it is liable to be rejected at the outset with clear directions to WRLDC to consider either the data of SEMs installed at the Petitioner`s switchyard or consider the SEM data of the other circuit for which data is available with PGCIL for the purpose of energy accounting for the power supplied during the period in question. The Petitioner has submitted that due to



non supply of SEM data by PGCIL, the Petitioner had to pay approx. Rs.1.05 crore extra in the form of DSM charges to WRLDC. The Petitioner has requested to issue necessary directions to WRLDC to revise the DSM accounting statement considering 0.65% transmission loss in place of the 2% transmission loss considered by WRLDC or adopt any other methodology so that the Petitioner is compensated for Rs. 1.05 crore.

24. PGCIL has submitted that based on available data for other bays, the power flow, etc. on the Petitioner`s bays for the period from 19.7.2016 to 30.8.2016 can be established by WRLDC. WRLDC has submitted that Region Deviation (DSM) Accounting involves a large number of transmission line, common methodology of application of transmission losses to the stand by meters (remote end meter) is adopted, if main meter data is not available. Accordingly, in Western Region, 2% transmission loss for transmission line switched at or above 400 kV and 4% transmission loss at the lines switched at or below 220 kV is being currently applied in case the main meter is replaced with a standby meter, for energy accounting purpose.

25. It is noted that PGCIL has not provided the data of the LANCO bays for the period from 19.7.2016 to 30.8.2016. As per Regulation 6.4.21 of the Grid Code, PGCIL was required to take weekly meter readings and send the same to respective RLDCs. However, PGCIL has submitted the data of other bays stating that WRLDC can establish data for the Petitioner`s bays through the data of other bays. We have perused the SLD of the Bilaspur Sub-station which is annexed as Annexure. Accordingly, WRLDC is directed to consider the data of other bays provided by PGCIL for the same period to estimate the data for the Petitioner`s



bays. If WRLDC has not received the data for other bays as claimed by PGCIL, then the average loss for the dedicated transmission line as per actual meter data for both ends of the transmission line for last three (3) months shall be considered by RLDC for arriving at loss figure for the disputed period. We are constrained to state that not providing data by PGCIL for the aforesaid period is untenable and would not be tolerated in future. PGCIL is directed to comply with the provisions of the Grid Code and send the weekly energy accounting readings from the SEMS installed at Bilaspur, sub-station to the WRLDC and the Petitioner.

Shifting of Meters:

26. The Petitioner has prayed to direct WRLDC to consider the meter readings installed at the generating station`s switchyard bus-bar of the Petitioner. The Petitioner has submitted that the Bulk Power Transmission Agreement dated 5.3.2007 signed between PTC and PGCIL provides that the injection point of the generated power shall be the Loop-In-Loop-Out ('LILO') point i.e. inter-connection of generation project Bus (Pathadi) to 400 kV Korba-Sipat S/C line of PGCIL and accordingly, the daily availability declarations and Scheduled Energy were accounted by WRLDC at the generating station's switchyard bus-bar of the Petitioner. The Petitioner has argued that pursuant to the Commission`s order dated 13.5.2014 in Petition No. 30/MP/2014, the LILO arrangement was normalized by extending dedicated transmission line from LILO point upto 765/400 kV PGCIL Bilaspur sub-station. The Petitioner's LILO arrangement was normalised on 8.9.2014 and Pathadi-Bilaspur 400 KV DC transmission lines were charged and connected to the 765/400 kV PGCIL Bilaspur sub-station. The LILO arrangement was normalized by extending a 44 Km (approx.) dedicated transmission line from LILO point upto 765/400 kV PGCIL Bilaspur sub-station and accordingly, WRLDC started considering the meter readings based on the



meters installed at the 765/400 kV PGCIL Bilaspur sub-station and due to which from 8.9.2014, the daily availability declarations and Scheduled Energy have been accounted at the 765/400 kV PGCIL Bilaspur Sub-station, as a result of which the Petitioner is incurring additional energy loss of 0.65% to 0.75% while transmitting power from the switchyard of the generating station upto PGCIL's Bilaspur sub-station.

27. WRLDC has submitted as under:

(a) None of the BPTAs illustrate any accounting methodology, the same is done as per the Central Electricity Authority (Installation and Operation of meters) Regulations 2006 as amendment from time to time. With regard to the Petitioner's claim that since, no amendment of BPTA is done after the permanent connectivity at Bilaspur end, it is clarified that after the permanent connectivity, the inter-connection point with the ISTS will become the 400 kV Bilaspur S/S.

(b) Once a LILO is restored and the permanent connectivity is established by the generator, the inter-connection with ISTS network automatically changes from ISTS to dedicated lines. Similarly, the main meter for accounting of the Petitioner has changed from the Petitioner's Bus to the 400 kV Bilaspur Bus, where the generator got connected with the ISTS System through dedicated transmission lines owned by the Petitioner and they form an integral part of the generation project.

(c) The Petitioner's line is not a part of the POC charges/losses. Losses of Dedicated line cannot be pooled and shared by all other regional entities



since, these lines are constructed by the generators for bringing their generation up to the ISTS interconnection point.

(d) As per the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 (Sharing Regulations), it is not possible to include the transmission loss for dedicated lines in the loss calculated on ISTS lines.

28. We have considered the submissions of petitioner and the respondent. We are in agreement with the contention of WRLDC that as per Regulation 2 of the Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006 and Regulation 6.4.21 of the Grid Code, meters are required to be installed at the electrical boundary of the regional entities. Since, the lines between the Petitioner's generating station to Bilaspur sub-station are dedicated lines, SEM at Bilaspur is appropriate for energy accounting. Accordingly, no direction is warranted against WRLDC in this regard.

29. The petition is disposed of in terms of the above.

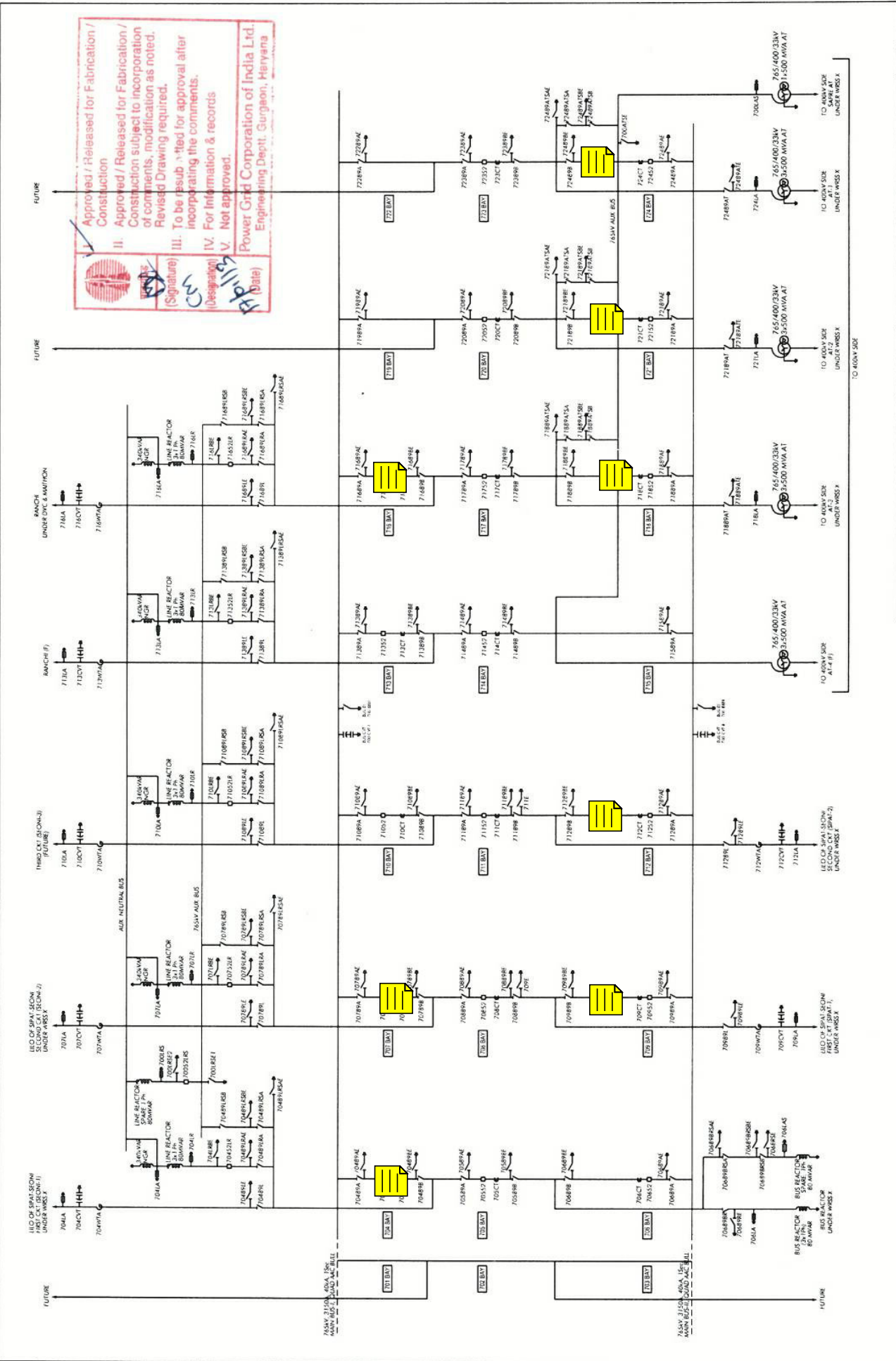
Sd/-
(Dr. M.K. Iyer)
Member

sd/-
(A.S. Bakshi)
Member

sd/-
(A.K. Singhal)
Member

sd/-
(Gireesh B. Pradhan)
Chairperson

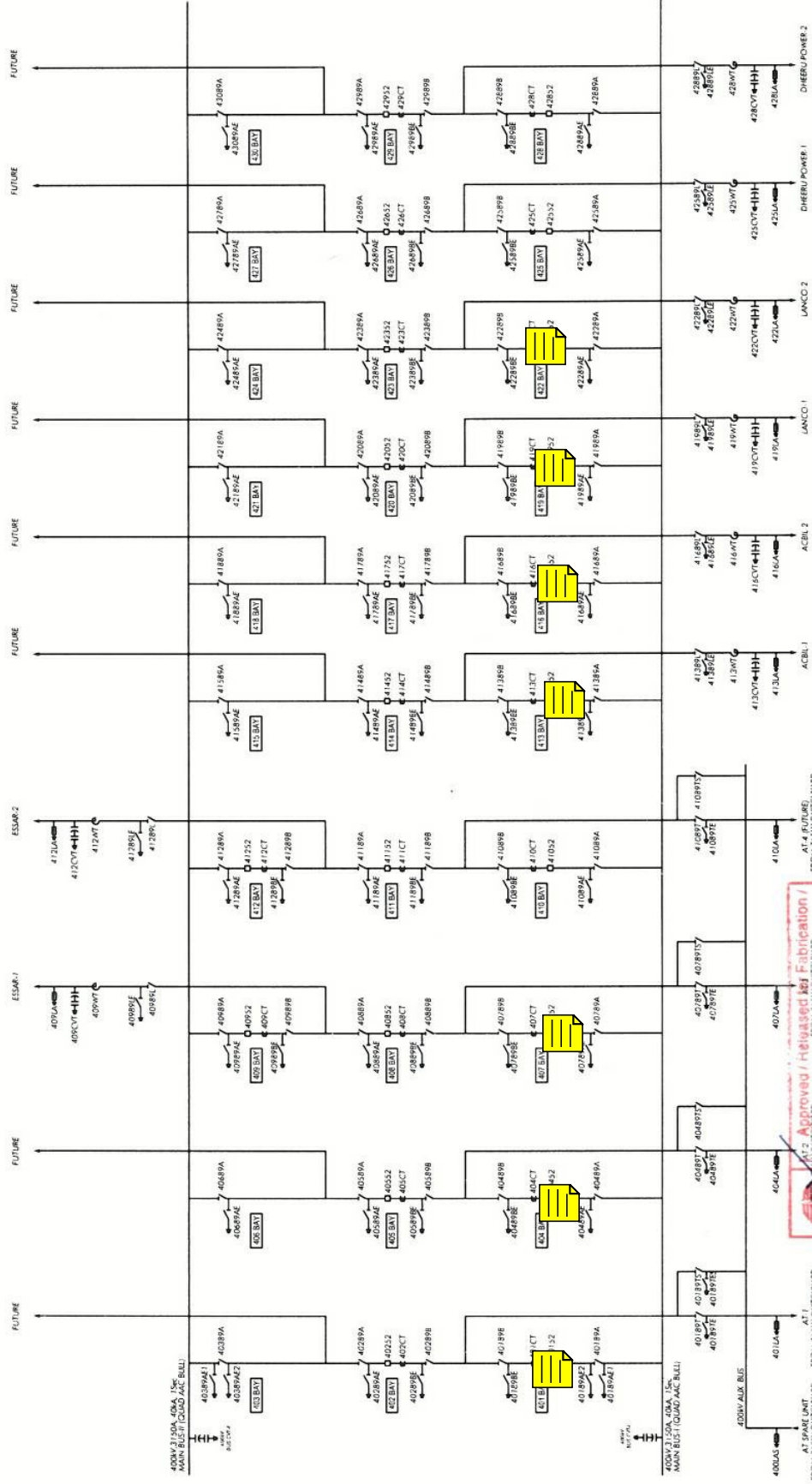




Approved / Released for Fabrication / Construction
 II. Approved / Released for Fabrication / Construction subject to incorporation of comments, modification as noted. Revised Drawing required.
 III. To be resubmitted for approval after incorporating the comments.
 IV. For Information & records.
 V. Not approved.

Power Grid Corporation of India Ltd.
 Engineering Deptt. Gurgaon, Haryana

BILASPUR SUB STATION 765KV SINGLE LINE DIAGRAM		ALSTOM ALSTOM T&D India Limited		SHEET NA 003
		PGCIL-NTAMC-A/GEN-2-023		REV. NEXT SHEET B 004



Approved / Released for Fabrication / Construction
 FROM 75kV SWITCHBOARD UNDER WEISS X

Approved / Released for Fabrication / Construction
 FROM 75kV SWITCHBOARD UNDER WEISS X

Approved / Released for Fabrication / Construction
 FROM 75kV SWITCHBOARD UNDER WEISS X

II. Construction subject to incorporation of comments, modification as noted. Revised Drawing required.

III. To be resubmitted for approval after incorporating the comments.

IV. For information & records.

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Power Grid Corporation of India Ltd.
 Engineering Deptt. Surpagon, Haryana

(Signature)
 (Designation)
 (Date)

ALSTOM ALSTOM T&D India Limited PGCIL-NTAMC-A/GEN-2-023		SHEET NA 004
		REV. B

BILASPUR SUB STATION
400kV SINGLE LINE DIAGRAM