

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 299/MP/2018

Coram:

**Shri P. K. Pujari, Chairperson
Dr. M. K. Iyer, Member
Shri I.S.Jha, Member**

Date of Order: 29th January, 2020

In the matter of

Petition under Section 79 of the Electricity Act, 2003 read with Central Electricity Regulatory Commission (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State Transmission and related matters) Regulations, 2009 for clarification regarding construction modalities for BALCO- Dharamjaygarh 400 kV D/C (2nd D/C Line) for the purpose of connectivity to BALCO for 250 MW as a bulk consumer.

And

In the matter of

Bharat Aluminium Company Limited,
Balco Nagar,
Korba-495684
Chhattisgarh

..... Petitioner

Versus

1. Power Grid Corporation of India Limited
B-9, Qutab Institutional Area,
Katwaria Sarai, New Delhi-110016
2. Central Electricity Authority
Sewa Bhawan, R.K.Puram,
Sector-1, New Delhi-110066
3. Power System Operation Corporation Limited
B-9 (1st Floor), Qutab Institutional area,
Katwaria Sarai, New Delhi -110016

..... Respondents



The following were present:

Shri Sanjay Sen, Sr. Advocate, BALCO
Shri Hemant Singh, Advocate, BALCO
Shri Lakshya Bagdwal, Advocate, BALCO
Shri Karan, Advocate, BALCO
Ms. Suparna Srivastava, Advocate, PGCIL
Shri G. Chakraborty, PGCIL
Dr. V. N. Paranjape, PGCIL
Shri P. S. Das, PGCIL
Ms. Jyoti Prasad, PGCIL

ORDER

The present Petition has been filed by M/s Bharat Aluminium Company Ltd. (hereinafter referred to as "BALCO"), seeking clarification regarding the construction modalities for the 400 kV D/C BALCO Dharamjaygarh transmission line. The Petitioner has made the following prayers:

- a) *Allow the Petitioner to construct the dedicated transmission line i.e. BALCO–Dharamjaygarh 400 kV 2nd D/C line, in the facts and circumstances of the present case;*
- b) *Hold and declare the following:*
 - i) *that the dedicated transmission line i.e. BALCO– Dharamjaygarh 400 kV 2nd D/C line, shall be developed, owned and operated by the Petitioner; and*
 - ii) *that the 400 kV 2nd D/C line shall be connected to Dharamjaygarh pooling station.*
- c) *Hold and declare that the Respondent/ PGCIL/ CTU shall not be entitled to claim any charges from the Petitioner for use of the abovementioned dedicated transmission line by the Petitioner; and*
- d) *Pass any order and/or any such orders as this Hon'ble Commission may deem fit and proper under the facts and circumstances of the present case and in the interest of justice.*

Submissions of the Petitioner

2. The Petitioner has submitted the following:
 - a. It is engaged in the business of metal and mining, having integrated



aluminium complex situated at Korba, in the State of Chhattisgarh. The present installed capacity of the aluminium smelter for production of primary aluminium metal is 575 KTPA having 2 Pot lines. The Petitioner is also a generating company within the provisions of the Electricity Act, 2003. The Petitioner Company has total power generating and commissioned capacity of 2010 MW (4X67.5 MW; 4X135 MW; and 4X300 MW) at Balco Nagar, Korba, Chhattisgarh in Western Region.

b. The Petitioner has been granted grid connectivity by Respondent No. 1, CTU/ Powergrid Corporation of India Ltd. (PGCIL) in the generator/ captive generator category for 2010 MW and for the existing smelter capacity of 575 KTPA through the BALCO–Dharamjaygarh 400kV D/c line. It is planning to expand the existing aluminium smelting capacity by addition of another 510 KTPA, which shall form part of the existing integrated aluminium complex setup by the Petitioner.

c. For the purpose of expansion of the existing aluminium smelting capacity, additional power to the tune of 800 MW shall be required in order to operate the proposed new smelter. The aforesaid requirement of power for the new smelter shall be fulfilled through the available internal captive power generation capacity to the extent of 550 MW and it will import the balance power (250 MW approx.) from inter-State Transmission System (ISTS) through open access/ Group Captive mode, as the case may be.

d. For the purpose of importing the aforesaid balance power from grid under open access, the Petitioner is required to seek connectivity from the Respondent No. 1 for 250 MW.

e. For the said purpose, a meeting was held on 13.11.2017 wherein the Central Electricity Authority (Respondent No. 2), Central Transmission Utility (Respondent No. 1), National Load Dispatch Centre (an entity under Respondent No. 3) and the Petitioner were present. During the said meeting, it was suggested that the Petitioner can apply for the Connectivity for its requirement of additional power under the category of 'bulk consumer'.



f. Pursuant to the aforesaid meeting, the Petitioner submitted an online Application No. 1200000909 dated 1.12.2017 for Connectivity for 250 MW as a 'bulk consumer'. The aforesaid application for Connectivity was made with following arrangement wherein the Petitioner desires to segregate its generating units in the manner as provided herein below:

- i. 580 MW [1x300 MW (CPP) + 4x70MW (up gradation of 4x67.5MW) (CPP)] units with New Smelter Load of 800 MW for which the Petitioner seeks connectivity to the tune of 250 MW for meeting the average demand of the smelter load;
- ii. 1440 MW [1x300 (IPP)+ 2x300MW (CPP)+ 4x135MW (CPP)] units with existing smelter load of 940 MW.

g. Pursuant to filing of the aforesaid application for grant of connectivity, the Petitioner participated in the 43rd Meeting of Standing Committee on Power System Planning of Western Region held on 11.5.2018 at Vadodara wherein the protocol for granting Connectivity to the Petitioner for 250 MW, as a 'bulk consumer' was agreed.

h. Further, during the said meeting, it was also suggested that the Petitioner shall construct the BALCO–Dharamjaygarh 400 kV 2nd D/C along with 2 no. of 400 kV bays at both ends for the purpose of availing the connectivity to import power to the extent of 250 MW in order to meet the requirement of additional load for the new smelter as proposed by the Petitioner. It was further suggested in the said meeting that the Petitioner may approach the Commission seeking clarification regarding construction modalities for the BALCO– Dharamjaygarh 400 kV 2nd D/C line. The relevant extract of the minutes of the meeting is given as under:

"i. The connectivity to M/s BALCO, as a bulk consumer, would be granted through BALCO–Dharamjaygarh 400 kV 2nd D/C transmission line. The BALCO – Dharamjaygarh 400 kV 2nd D/C transmission line along with 2 no. of 400 kV bays at both ends would be implemented by M/s BALCO on its own cost.

ii. M/s BALCO may approach CERC regarding construction modalities for the 400 kV D/c line."

i. The Regulation 2(1)(b)(i)(d) 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 2009 Connectivity Regulations) provides for the definition of the 'bulk Consumer' as under:

"in respect of connectivity, any consumer who intends to avail supply of minimum load of 100 MW from the Inter –State Transmission System."

Since the Petitioner has applied for Connectivity to import 250 MW, it falls within the purview of the 'bulk consumer' as per the above definition.

j. As per Regulation 8(8) of the 2009 Connectivity Regulations, the dedicated transmission line to be constructed by the Petitioner from its generating station to the ISTS pooling station needs to be developed, owned and operated by the Petitioner. As such, the Petitioner seeks approval of the Commission to construct the BALCO– Dharamjaygarh 400 kV 2nd D/C line at its own cost, which shall be owned and operated by the Petitioner.

k. The approval is sought by the Petitioner since the Regulation 8(8) of the 2009 Connectivity Regulations provides for the construction modalities in the event a dedicated transmission line is constructed by a generating station. However, the 2009 Connectivity Regulations does not deal with the case when such dedicated transmission line is constructed by a bulk consumer. In the present case, since the Petitioner is seeking Connectivity to the grid under the category of bulk consumer, the approval sought is necessary for enabling the Petitioner to construct the dedicated transmission line and such dedicated transmission line shall be owned and operated by the Petitioner.

3. The Petition was admitted on 15.11.2018 and notices were issued to respondents to file their reply. In response, POSOCO has filed its reply vide affidavit dated 4.2.2019.

4. The Petitioner vide affidavit dated 26.11.2018 has filed revised memo of parties and has impleaded CEA and POSOCO as respondents to the Petition.

Reply of POSOCO

5. The Respondent No.3, POSOCO vide its reply affidavit dated 4.2.2019 has



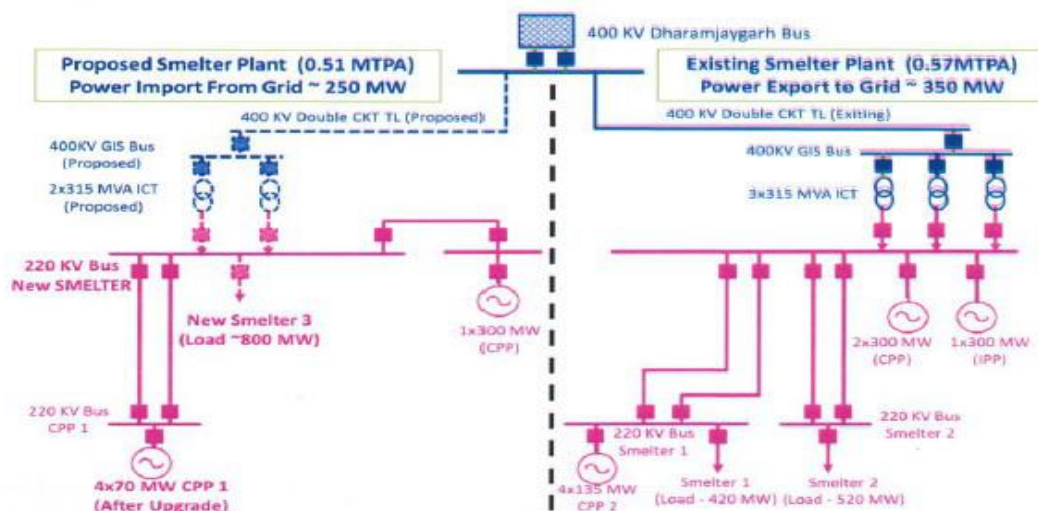
submitted as under:

- a. that in a meeting held on 10.3.2017 amongst CTU, POSOCO, BALCO and CEA, the following was agreed:

"1. Existing Connectivity with ISTS through BALCO - Dharamjaygarh 400 kV D/C line, provided for injection of power from both CPP and IPP units of BALCO, is adequate. The existing regulations do not have provision for separate connectivity for CPP and IPP units connected with ISTS system at a single point. Further, BALCO is not eligible to apply for additional connectivity for the same generation capacity for which connectivity has already been granted. In case, if BALCO still desires separate connectivity for CPP and IPP units connected with ISTS system at a single point, M/s BALCO may approach CERC for necessary direction in this regard.

2. M/s BALCO is resorting to frequent change of status of its units from IPP to CPP and / or vice versa. M/s BALCO may therefore clearly identify the IPP units & CPP units and submit necessary documents to CEA, CTU and POSOCO in this regard.

EXHIBIT – II: Proposed Arrangement and Grid Connectivity Details for Proposed and Exiting Plant



- b. Subsequently, the matter was again deliberated in the 42nd meeting of Standing committee of Power System Planning of Western Region held on 17.11.2017, and it was discussed that M/s BALCO is changing the status of its units from CPP to IPP and vice versa, very frequently. The proposed arrangement and grid connectivity details for proposed and exiting plant are shown above.

- c. Long Term Access may be provided to the Petitioner for augmentation



with new smelter load of 800 MW with the proposed arrangement having 1x300MW (CPP) and 4x70 MW (upgradation of 4x67.5MW) CPP units for import of 250 MW from ISTS through 400kV BALCO-Dharamjaygarh 2nd double circuit line. For providing separate Connectivity as a bulk consumer, the Petitioner needs to be registered as a separate user with the requirement of 250 MW import from ISTS and giving a separate control area status. Thus, there would be two regional entities, BALCO-IPP/CPP and BALCO-Bulk Consumer. If inter-connection between the two is to be kept closed for reliability purpose, then metering and accounting methodology would have to be decided in advance.

d. There is no provision in the 2009 Connectivity Regulations for a bulk consumer to build and operate a dedicated transmission line. However, the 2009 Connectivity Regulations has provisions for a generating station to build and operate dedicated transmission lines. In this regard, the Commission may refer to an earlier order dated 8/6/2013 passed in Petition No. 245/MP/2012 in the matter of Essar Steel India Ltd. (ESIL), before taking a final view on the prayer of the petitioner company. In the Petition No. 245/MP/2012, the petitioner therein (ESIL) in its capacity as bulk consumer had sought transfer of its load control area jurisdiction from SLDC Gujarat to WRLDC and had also sought grant of status of regional entity. The Commission, in its order dated 08.06.2013 in the said petition, decided as under:

“Conclusion: -

49. In the light of the above discussion and after considering the view of Central Electricity Authority, the following directions are issued for compliance by all concerned:

(a) The load control area jurisdiction of ESIL shall be shifted from the Gujarat SLDC to WRLDC, Mumbai after disconnection of ESIL from Gujrat Transmission System.

(b) ESIL shall be granted status of a Regional Entity of Western Regional Grid.

(c) Scheduling and Energy accounting of ESIL shall be carried out by WRLDC in accordance with the prevailing regulations.

(d) All telemetry, voice and data communication in accordance with the IEGC shall be provided by ESIL to the satisfaction of WRLDC before commencement of scheduling of ESIL.

(E) ESIL shall comply with various provisions of Connectivity Regulations, Grid Code, UI Regulations and other relevant regulations of the Commission and maintain its drawal as per schedule.



(F) All instructions of ERLDC shall be complied with by ESIL in accordance with the 2003 Act and Grid Code and any instance of non-compliance by ESIL would be viewed seriously and dealt with in accordance with law.

(G) RLDC may like to satisfy itself about the effectiveness of the system of load shedding scheme in case of Generator outage and suggest suitable operational protocol to the petitioner to make this system responsive for safer grid operation. Petitioner shall provide necessary arrangements at its own cost.

(H) ESIL shall be granted status of Designated ISTS Customer (DIC) and since it is connected at 400 kV node of CTU network and not connected with state system, it will be considered as a separate (drawal) cone in accordance with the principles adopted for generating stations directly connected at 400 kV ISTS under the Sharing Regulations as mended from time to time. Till computation of POC charges for next application period, Gujarat withdrawal cone charges and losses shall be applied in case of ESIL

(I) Staff of the commission shall process the case for necessary amendment to the Grid Code to clarify the position of bulk consumers which are connected only to inter-State transmission system and the major portion of its long term power is coming from a generator located outside the state in which bulk consumer is located.

(j) M/s ESSAR steel Ltd shall remain liable to pay all applicable cross subsidy charges including surcharges and other charges, if any applicable under the provisions of the 2003 Act and as per the provisions of the regulations of State Regulatory Commission. Necessary metering arrangement shall be in accordance with the arrangement as already agreed to between ESIL and DGVCL.

(k) The issue of dues of DGVCL needs to be sorted out by DGVCL and ESIL bilaterally.

The matter is disposed of in terms of the above.”

Report of the Committee under Member (Power System), CEA

6. The Commission vide Record of Proceedings (RoP) of hearing dated 17.1.2019 decided to constitute a Committee under the Chairmanship of Member (Power System), Central Electricity Authority with representative from the Petitioner, PGCIL and NLDC as members of the Committee with a mandate to go into all aspects for construction modalities for the 400 kV D/C BALCO Dharamjaygarh transmission line. The Committee submitted its report to Commission on 9.5.2019 with recommendation as under:

“ 4. Detailed Study Report

4.1 Scenario-1:

Connectivity to BALCO for 250 MW load through BALCO-Dharamjaygarh 400kV D/c (2nd) line along with associated 400kV bays at both ends



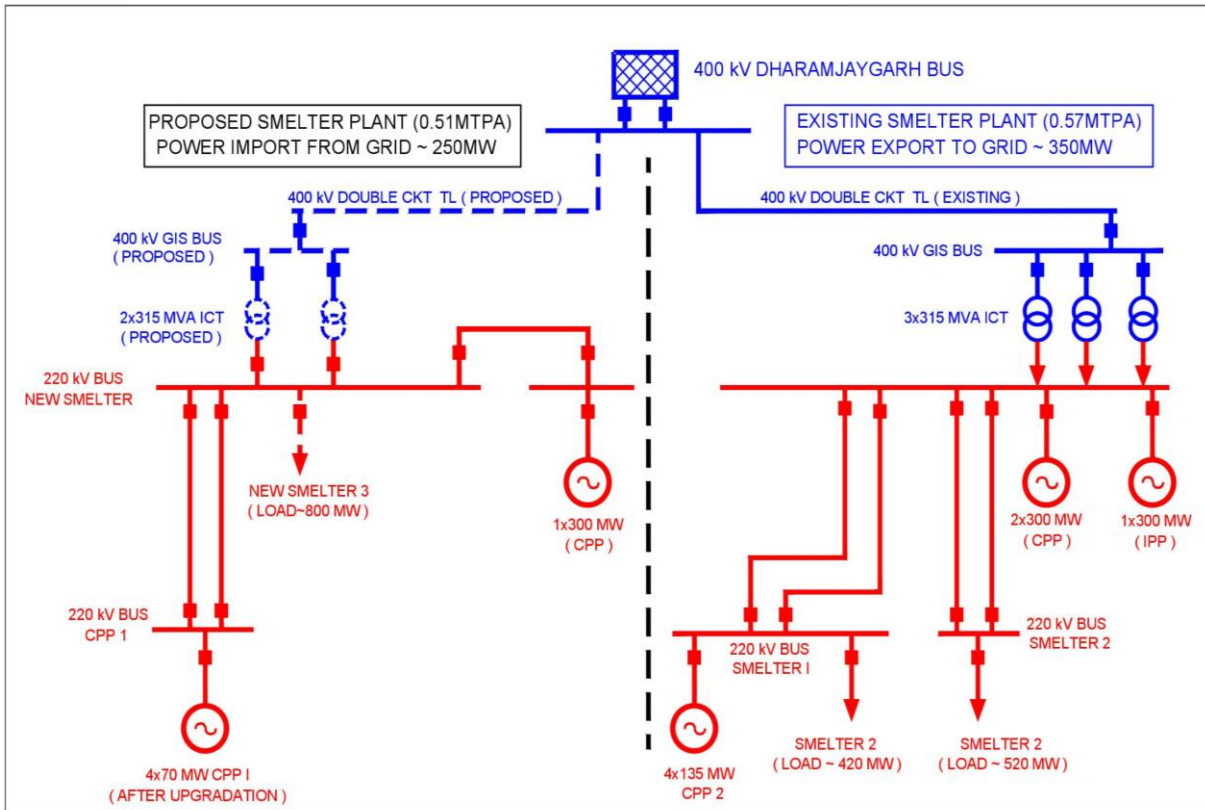
In this scenario connectivity to BALCO for its 250 MW load would be granted for through BALCO-Dharamjaygarh 400kV D/c (2nd) line (new) along with associated 400kV bays at both ends. The transmission line would be of dedicated nature, which would serve BALCO load. The cost of construction of line and end bays (about 120 cr.) would be borne by M/s BALCO.

Issue: Electricity Act 2003 / CERC Regulations allows construction of dedicated line by generators but there is no provision for implementation of dedicated transmission line by bulk consumer.

The broad scope of works to be implemented by M/s BALCO for effecting the connectivity is given below:

- (i) 400 kV D/c line (about 25 km)
- (ii) 4 nos. 400 kV line bays
- (iii) 2 x 315 MVA, 400/220 kV ICTs at BALCO Complex along with ICT bays at 220 kV and 400 kV

The schematic arrangement is shown below:



Merits:

a) BALCO as generator and BALCO as a bulk consumer would be connected to ISTS system at Dharamjaygarh through two different 400 kV D/c lines. The Metering and Energy Accounting as Bulk consumer and as IPP would be done at 400 kV at Dharamjaygarh S/s (ISTS).

b) Complete isolation of BALCO as IPP (generator) and BALCO as bulk consumer. Both, BALCO bulk consumer (Generation: 580 MW + Load: 800 MW) and BALCO IPP/CPP (Generation: 1440 MW + Load: 940 MW) are getting connected to the ISTS point through an independent 400 kV D/C TM line.

Demerits:

a) Suboptimal transmission system:

One 400 kV D/C transmission line between BALCO and Dharamjaygarh is injecting 350 MW to the ISTS at Dharamjaygarh and from other transmission line between BALCO and Dharamjaygarh, there is drawl of 250 MW implies round tripping of 250 MW.

b) Unnecessary investment of about Rs. 120 Crores.

c) The construction of 2nd 400 kV D/c line would consume scarce RoW and 2 nos. 400 kV ISTS line bays at Dharamjaygarh S/s.

d) Injection of 350 MW from BALCO to Dharamjaygarh and drawl of 250 MW from Dharamjaygarh to BALCO would incur net annual loss of about 3.95 million units as compared to injection and drawl through same line. In addition there would also be additional losses through new 2x315 MVA ICT and increased losses through existing 3x315 MVA ICTs. The detailed calculations is enclosed at Annexure-II.

e) In the rare event of tower failure of new 400 kV D/C line between BALCO-Dharamjaygarh / outage of Dharamjaygarh 765/400 kV S/S, the new smelter plant (BALCO-Bulk load) would be operating in islanded mode and the chances of survival are less as it would become generation deficit (to the tune of 250 MW) island.

4.2 Scenario-2:

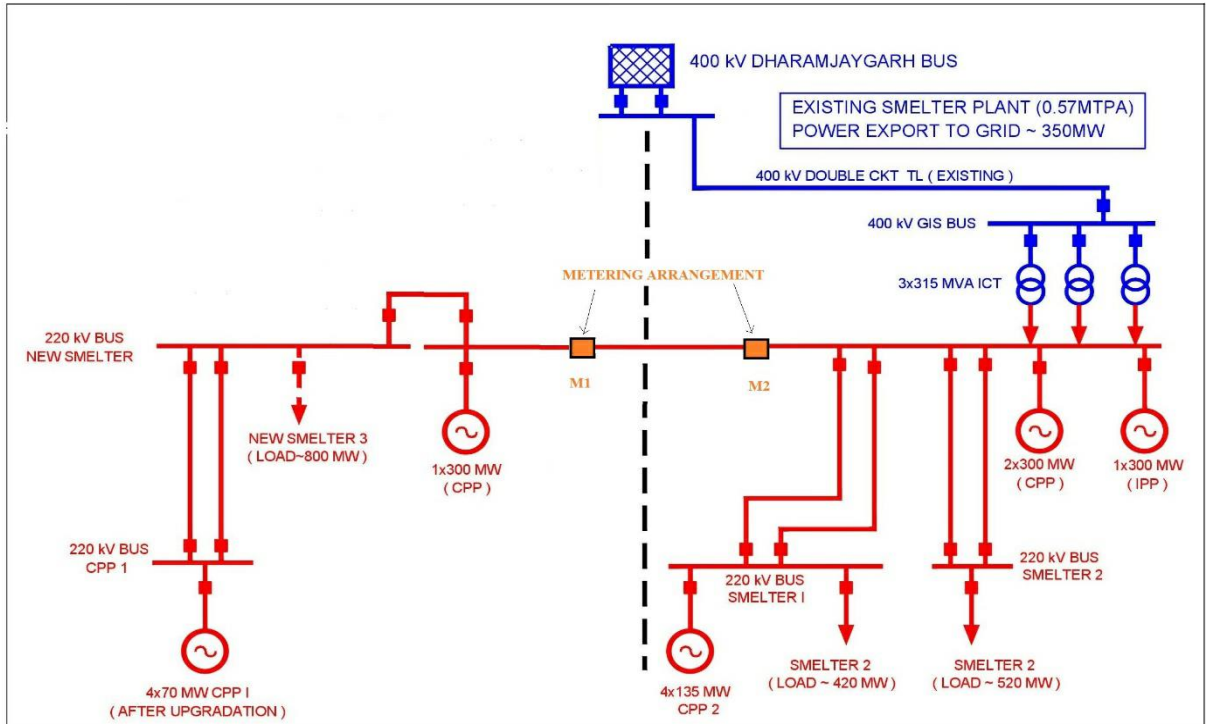
Connectivity to BALCO for 250 MW through existing BALCO-Dharamjaygarh 400kV D/c line

Connectivity to BALCO as bulk consumer for its 250 MW would be granted through existing BALCO-Dharamjaygarh 400 kV D/c line. 220 kV bus of BALCO (IPP) and BALCO (Bulk consumer) would be inter connected.

Issue: Suitable metering and accounting & scheduling arrangement need to be designed for BALCO as IPP (generator) and BALCO as bulk consumer.

Schematic arrangement is given below:





Merits:

a) *Optimal Transmission System:*

One 400 kV D/C transmission line (existing) between BALCO and Dharamjaygarh would be utilised for injection (350 MW) as well as drawl (250 MW). In fact, there would be net injection of 100 MW, thereby avoiding round tripping of 250 MW of power from BALCO to Dharamjaygarh and back to BALCO. Hence, avoiding transformation and transmission losses for about 250 MW of power.

b) *Avoid investment of about Rs. 120 cr.*

c) *Avoid consumption of scarce RoW for 2nd line and 2 no. 400 kV ISTS line bays at Dharamjaygarh.*

d) *Avoid net annual loss of about 3.82 million units involved in round tripping of 250 MW of power.*

e) *In the rare event of tower failure of existing 400 kV D/C line between BALCO-Dharamjaygarh / outage of Dharamjaygarh 765/400 kV S/S, the entire BALCO complex (load 1700 MW and generation 2010 MW) would be operating in islanded mode and has better chance of survival.*

Demerits:

a) *Issues related to energy accounting / scheduling and control area jurisdiction for two different entities (BALCO as IPP and BALCO as bulk consumer) needs resolution.*

b) *Connectivity to BALCO as bulk consumer involves grant of connectivity at 220 kV bus of BALCO. Generally, the connectivity is granted by the nodal agency CTU / STU at an ISTS point / at STU point.*

5. Recommendations:

a) From optimal transmission planning point of view and to conserve scarce RoW, the connectivity to BALCO as bulk consumer for its 250 MW load may be granted through existing 400 kV D/C line between BALCO and Dharamjaygarh. Connectivity to BALCO as bulk consumer involves grant of connectivity at 220 kV bus of BALCO, which is not an ISTS point. Hence, sharing of existing 400kV D/C dedicated line along with 400/220kV, 315MVA ICTs for connectivity to Dharamjaygarh ISTS point for BALCO as a bulk consumer is required.

In case of emergency situation like outage of BALCO-Dharamjaygarh 400 kV D/C line (tower outage) / outage of 400 kV Dharamjaygarh bus, grid connectivity to BALCO can be provided through LILO of 2nd ckt of Korba - Birsinghpur 400kV D/c line at BALCO switchyard (LILO section already existing as a part of earlier interim arrangement and 400 kV switchyard to be implemented by BALCO) with suitable bypass arrangement at BALCO 400 kV switchyard. The LILO would normally remain bypassed at BALCO and in case of exigencies and as per the instructions of the Grid Operator, the LILO could be utilised for extending grid connectivity to BALCO. M/s BALCO needs to submit the bypassing scheme, so that the same could be deliberated with WR constituents and finalised.

Facilitation Required from CERC:

BALCO as bulk consumer may be permitted to use the existing BALCO-Dharamjaygarh 400kV D/C dedicated line along with 3x315MVA ICTs of M/s BALCO (IPP) on sharing basis for Connectivity and Open Access. Further, jurisdiction of POSOCO / WRLDC may be extended to BALCO complex for scheduling and energy accounting for simultaneous injection and drawl by BALCO. For this necessary metering arrangements needs to be placed at BALCO complex for BALCO as bulk consumer and BALCO as IPP (generator).

b) Alternatively, connectivity to BALCO for its 250 MW load may be granted through BALCO-Dharamjaygarh 400 kV D/c (2nd) line (New) along with associated 400 kV bays at both ends as mentioned in scenario-1 which would be a transmission line of dedicated nature for BALCO.

Grid connectivity to BALCO IPP and BALCO Bulk Load, in case of outage of either BALCO (IPP)-Dharamjaygarh 400 kV D/C (existing) line- or BALCO (Bulk consumer)-Dharamjaygarh 400 kV D/C (new proposed) line respectively, can be provided through 220 kV interconnections arrangement. The 220 kV interconnection arrangement would be normally kept open.

Facilitation Required from CERC

Section 9 (1) and 10 (1) of Electricity Act, 2003 have provision for captive generation and Generating Companies to construct, maintain or operate dedicated transmission lines. There is no provision for construction of dedicated line by a bulk consumer in the act.

Enabling provision needs to be made in the act / connectivity regulation to allow bulk consumer to construct transmission line of dedicated nature.

OR



The line of dedicated nature for bulk consumer may be constructed, operated and maintained by transmission licensee (say POWERGRID) and transmission charges for the dedicated line may be borne by the bulk consumer.

Analysis and Decision

7. The Petitioner has submitted that it is expanding the existing aluminium smelting capacity at its integrated aluminium complex at Korba (Chhattisgarh) by addition of another 510 KTPA and for this purpose, it requires additional power to the tune of 800 MW. Of the additional requirement of power of 800 MW, about 550 MW can be fulfilled through its available internal captive power generation capacity while for balance requirement of 250 MW, it needs to import power from ISTS through open access as bulk consumer.

8. The Petitioner has submitted that the issue related to the Petitioner's additional requirement of 250 MW from ISTS was discussed in 43rd Meeting of Standing Committee on Power System Planning of Western Region where grant of Connectivity to the Petitioner as bulk consumer was agreed to. It was also suggested in the meeting that the Petitioner shall construct the BALCO– Dharamjaygarh 400 kV 2nd D/C along with 2 no. of 400 kV bays at both ends for the purpose of availing the Connectivity. It was further suggested in the said meeting that the Petitioner may approach the Commission seeking clarification regarding construction modalities for the BALCO– Dharamjaygarh 400 kV 2nd D/C line. The Petitioner has submitted that pursuant to discussions in the said meeting of Standing Committee, it has approached the Commission.

9. The respondent, PGCIL during the hearing has submitted that the Petitioner's application for grant of Connectivity has already been processed. However, there is no provision in the Act or the 2009 Connectivity Regulations for construction of



dedicated transmission line by a Bulk consumer. POSOCO has also submitted on the same lines stating in absence of any such legal/ regulatory provision, the Commission may decide on the request of the Petitioner.

10. The Commission had constituted a Committee under chairmanship of Member (PS), CEA to go into all aspects for construction modalities for the 400 kV D/C BALCO- Dharamjaygarh transmission line. The Committee has submitted its report to Commission on 9.5.2019 and had considered two scenarios as reproduced in earlier part of this order. One option was to grant Connectivity to BALCO as bulk consumer for its requirement of 250 MW through existing 400 kV D/C line between BALCO and Dharamjaygarh with necessary metering arrangement. In the alternative, the Committee had considered that the required Connectivity to BALCO may be granted through BALCO- Dharamjaygarh 400 kV D/C (2nd) line (New) along with associated 400 kV bays at both ends as a dedicated transmission line which may either be constructed by PGCIL or the Commission may allow building of such line by bulk consumer by making an enabling provision in Act/ the 2009 Connectivity Regulations.

11. We have considered the submissions of the Petitioner and the Respondents and perused the report submitted by the Committee under Member (PS), CEA. In the instant case, the Petitioner in its capacity as 'bulk consumer' is seeking construction modalities for approval to construct dedicated transmission line (BALCO- Dharamjaygarh 400 kV 2nd D/C line). CTU, POSOCO as well as the Committee under the Member (PS), CEA are of the view that as a bulk consumer, the Petitioner cannot construct a dedicated transmission line. Provisions regarding dedicated transmission line as provided in the Act and the 2009 Connectivity Regulations are



as under.

12. Regulation 2(1)(b)(i)(d) read with the definition under 2(1)(c) of the 2009 Connectivity Regulations provides the definition of a 'bulk consumer' as follows:

"in respect of connectivity, any consumer who intends to avail supply of minimum load of 100 MW from the Inter-State Transmission System."

In the instant case, the Petitioner has applied for Connectivity for 250 MW and as such the Petitioner is a 'bulk consumer' for this quantum of power since it exceeds 100 MW.

13. The relevant portion of Clause (8) of Regulation 8 of the 2009 Connectivity Regulations is extracted as under:

"The dedicated transmission line from generating station of the applicant generating Company or any other entity on behalf of generating company to the pooling station of the transmission licensee (including deemed transmission licensee) shall be developed, owned and operated by the applicant generating Company or any other entity on behalf of generating company. The specifications for dedicated transmission lines may be indicated by CTU while granting Connectivity or Long term Access or Medium term Open Access:

Provided that CTU shall plan the system such that maximum length of dedicated transmission line does not exceed 100 km from switchyard of the applicant till the nearest pooling substation of transmission licensee:

Provided further that dedicated transmission line may exceed 100 km, if such an Applicant, so chooses:

Provided also that in case any connectivity grantee is not utilizing the bay allocated to it at ISTS substation, CTU may cancel its Connectivity as per provisions of these regulations and detailed procedure and allocate the bay to other Applicant. In such an event, the original grantee shall either dismantle its bay or enter into an Agreement with a new grantee as indicated by CTU for utilization of the bay within a period of 2 months of cancellation of Connectivity.

Provided that where the dedicated transmission lines have already been constructed/are under construction by CTU under coordinated transmission planning, the following shall apply:

(a) The transmission charges for such dedicated transmission lines shall be payable by the concerned generating company to the transmission licensee (including deemed transmission licensee) from the date of COD of the dedicated line till operationalisation of LTA of the generating station of the generating company:



(b) After operationalisation of the LTA, the dedicated transmission line shall be included in the POC pool and payment of transmission charges for the said dedicated transmission line shall be governed as per the CERC (Sharing of inter-state transmission charges and losses) Regulations, 2010 as amended from time to time.”

Thus, the 2009 Connectivity Regulations provides for generators to develop, own and operate dedicated transmission lines and there is no corresponding provision for a bulk consumer.

14. Further, section 2(16) of Electricity Act, 2003 defines dedicated transmission line as follows:

(16) “dedicated transmission lines” means any electric supply-line for point to point transmission which are required for the purpose of connecting electric lines or electric plants of a captive generating plant referred to in section 9 or generating station referred to in section 10 to any transmission lines or sub-stations or generating stations, or the load centre, as the case may be;

Section 9(1) of the Electricity Act, 2003 provides as under:

“Section 9. (Captive generation):

(1) Notwithstanding anything contained in this Act, a person may construct, maintain or operate a captive generating plant and dedicated transmission lines:

Provided that the supply of electricity from the captive generating plant through the grid shall be regulated in the same manner as the generating station of a generating company.

1[Provided further that no licence shall be required under this Act for supply of electricity generated from a captive generating plant to any licensee in accordance with the provisions of this Act and the rules and regulations made thereunder and to any consumer subject to the regulations made under subsection (2) of section 42.]

Section 10(1) of the Electricity Act, 2003 provides as under:

Section 10. (Duties of generating companies): --- (1) Subject to the provisions of this Act, the duties of a generating company shall be to establish, operate and maintain generating stations, tie-lines, sub-stations and dedicated transmission lines connected therewith in accordance with the provisions of this Act or the rules or regulations made thereunder.

From the above definition of dedicated transmission line as provided in Section 2(16) of the Act read with Section 9(1) and Section 10(1) of the Act, it can be



seen that for qualifying a line as dedicated transmission line, one point of such line must terminate at generating station or captive generating station. The Act doesn't provide for a dedicated transmission line from a bulk consumer point to grid.

15. Thus, in line with submissions of the Respondents (CTU and POSOCO) and as also stated in the Report of the Committee under Member (PS), CEA, we observe that there is no provision in the Act or in the 2009 Connectivity Regulations for construction of a dedicated transmission line by a bulk consumer. Hence, Petitioner's prayer regarding, allowing to construct, own and operate a dedicated transmission line (BALCO-Dharamjaygarh 400 kV D/c (2nd) line (NEW)) is rejected.

16. The Committee constituted under chairmanship of Member (PS), CEA has recommended as under:

“5. Recommendations:

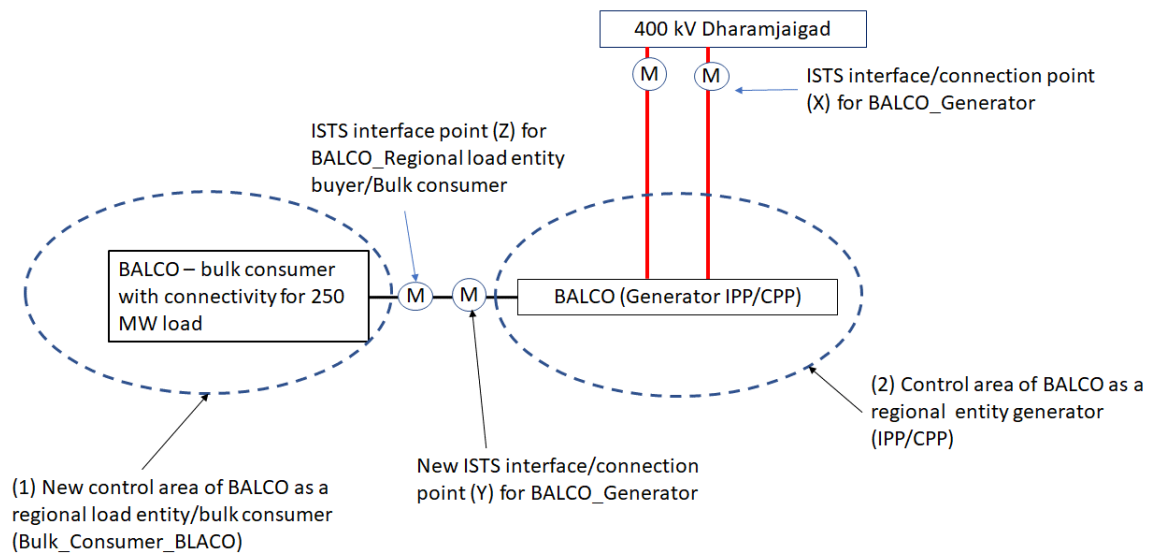
a) From optimal transmission planning point of view and to conserve scarce RoW, the connectivity to BALCO as bulk consumer for its 250 MW load may be granted through existing 400 kV D/C line between BALCO and Dharamjaygarh. Connectivity to BALCO as bulk consumer involves grant of connectivity at 220 kV bus of BALCO, which is not an ISTS point. Hence, sharing of existing 400kV D/C dedicated line along with 400/220kV, 315MVA ICTs for connectivity to Dharamjaygarh ISTS point for BALCO as a bulk consumer is required.

In case of emergency situation like outage of BALCO-Dharamjaygarh 400 kV D/C line (tower outage) / outage of 400 kV Dharamjaygarh bus, grid connectivity to BALCO can be provided through LILO of 2nd ckt of Korba - Birsinghpur 400kV D/c line at BALCO switchyard (LILO section already existing as a part of earlier interim arrangement and 400 kV switchyard to be implemented by BALCO) with suitable bypass arrangement at BALCO 400 kV switchyard. The LILO would normally remain bypassed at BALCO and in case of exigencies and as per the instructions of the Grid Operator, the LILO could be utilised for extending grid connectivity to BALCO. M/s BALCO needs to submit the bypassing scheme, so that the same could be deliberated with WR constituents and finalised.”

17. The Committee has recommended granting Connectivity to the Petitioner as a bulk consumer for load of 250 MW through existing 400 kV BALCO-Dharamjaygarh D/C line. The Committee has noted that such an arrangement will have benefits such



as ensuring optimal transmission system; saving investment of about Rs. 120 crores in constructing a new D/C line; avoiding unnecessary right of way issues in constructing a new line; saving transmission losses; and avoiding net annual loss of 3.82 million units in round tripping. Therefore, we accept the recommendation of the committee as regards providing Connectivity through existing 400 kV BALCO-Dharamjaygarh D/C line. As suggested by the Committee, it should be done through suitable metering, accounting and scheduling arrangements for the Petitioner (as a captive generator) and the Petitioner (as bulk consumer). The metering arrangement proposed by the Committee is as below:



18. We observe that with above arrangement there shall be two entities connected at ISTS interface point of Dharamjaygarh namely BALCO (as captive generator) and BALCO (as Bulk consumer). WRLDC shall carry out scheduling and accounting for these two entities at ISTS periphery duly considering accounting of BALCO (as Bulk consumer) at its interface with BALCO (as captive generator). Necessary metering and accounting arrangements shall be finalised by CTU and WRLDC after discussing the same at Western Regional Power Committee.

19. Further, during deliberations in the Committee under Member (PS), CEA, the representatives of NLDC had suggested that BALCO may be provided with additional source other than Dharamjayagarh from reliability point of view. This aspect may be considered by CTU in consultation with CEA and NLDC so that required reliability is met.

20. The control area jurisdiction of BALCO complex shall be under WRLDC that shall carry out Scheduling and energy accounting in accordance with the prevailing regulations.

21. Petition No. 299/MP/2018 is disposed of in terms of the above.

Sd/-
(I.S.Jha)
Member

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

Sd/-
(P.K.Pujari)
Chairperson

