## IN THE APPELLATE TRIBUNAL FOR ELECTRICITY (Appellate Jurisdiction)

### Appeal No. 226 of 2020 & Appeal No. 146 of 2021

Dated: <u>14.07.2025</u>

Present: Hon'ble Mr. Sandesh Kumar Sharma, Technical Member Hon'ble Mr. Virender Bhat, Judicial Member

Appeal No. 226 of 2020

## In the matter of:

## Power Grid Corporation of India Limited

SAUDAMINI, Plot No.2, Sector 29, Near IFFCO Chowk, Gurgaon (Haryana) — 122001 (through its Chairman and Managing Director) ....Appellant(s)

Vs.

 Central Electricity Regulatory Commission Through its Secretary 3<sup>rd</sup> & 4<sup>th</sup> Floor, Chanderlok Building, 36, Janpath, New Delhi-110 001.

## Rajasthan Rajya Vidyut Prasaran Nigam Limited, Vidyut Bhawan, Vidyut Marg, Jaipur - 302005. (through its Chairman and Managing Director)

#### **3.** Ajmer Vidyut Vitran Nigam Limited, 400 kV GSS Building (Ground Floor), Ajmer Road, Heerapura, Jaipur - 302005.

(through its Chairman and Managing Director)

 Jaipur Vidyut Vitran Nigam Limited 400 kV GSS Building (Ground Floor), Ajmer Road, Heerapura, Jaipur - 302005. (through its Chairman and Managing Director)

### 5. Jodhpur Vidyut Vitran Nigam Limited, 400 kV GSS Building (Ground Floor), Ajmer Road, Heerapura, Jaipur - 302005. (through its Chairman and Managing Director)

## 6. Himachal Pradesh State Electricity Board,

Vidyut Bhawan, Kumar House Complex Building II, Shimla — 171004. (through its Chairman)

# 7. Punjab State Electricity Board,

(now Punjab State Power Corporation Limited) Thermal Shed TIA, Near 22 Phatak, Patiala — 147001. (through its Chairman and Managing Director)

## 8. Haryana Power Purchase Centre,

Shakti Bhawan, Sector-6, Panchkula (Haryana) — 134109. (through its Chief Engineer)

## 9. Power Development Department,

Govt. of Jammu & Kashmir, Mini Secretariat, Jammu, Jammu & Kashmir - 180001. (through its Administrative Secretary)

#### **10.** Uttar Pradesh Power Corporation Limited, (Formerly Uttar Pradesh State Electricity Board) Shakti Bhawan, 14, Ashok Marg,

Lucknow — 226001. (through its Managing Director)

**11.** Delhi Transco Limited, Shakti Sadan, Kotla Road, New Delhi - 110002. (through its Chairperson and Managing Director)

## 12. BSES Yamuna Power Limited Shakti Kiran Building, BSES Corporate Annexe, CBD-III GRID, Ground floor, Opposite Agarwal Fun City Mall, Karkardooma, Delhi-110032. (through its Chairman)

#### 13. BSES Rajdhani Power Limited BSES Bhawan, Nehru Place, New Delhi -

BSES Bhawan, Nehru Place, New Delhi — 110019. (through its Chairman)

# 14. North Delhi Power Limited,

(now TATA Power — DDL) NDPL House, Hudson Lines, Delhi — 110009. (through its Chief Executive Officer)

# 15. Chandigarh Administration

Sector-9, Chandigarh – 160009. (through its Administrator)

# 16. Uttarakhand Power Corporation Limited,

Corporate Office, Victoria Cross Vijeyta Gabar Singh Urja Bhawan, Kanwali Road, Balliwala Chowk, Dehradun, Uttarakhand - 248001. (through its Chairperson)

# 17. North Central Railway,

Subedar Ganj Road, Subedarganj, Prayagraj, Uttar Pradesh - 211015. (through its Chief Administrative Officer)

#### New Delhi Municipal Council, 18. Palika Kendra, Sansad Marg, New Delhi — 110002. ...Respondent(s) (through its Chairman) Counsel for the Appellant(s) : Ms. Poorva Saigal Mr. Shubham Arya Ms. Pallavi Saigal Ms. Reeha Singh Ms. Tanya Singh Ms. Shirin Gupta Counsel for the Respondent(s) Ms. Pritha Srikumar Iyer 2 Mr. Arun Sri Kumar Mr. Abhyudaya Shishodia Mr. Atharv Gupta Mr. Shubhansh Thakur Ms. Saumya Sinha Mr. Sulabh Rewari Ms. Vasudha Sharma Ms. Mansi Binjrajka for Res.1

Mr. Rajiv Srivastava for Res.10

# Appeal No.146 of 2021

## In the matter of:

## Power Grid Corporation of India Limited

SAUDAMINI, Plot No.2, Sector 29, Near IFFCO Chowk, Gurgaon (Haryana) — 122001 (through its Chairman and Managing Director)

...Appellant(s)

Vs.

#### 1. Central Electricity Regulatory Commission Through its Secretary 3<sup>rd</sup> & 4<sup>th</sup> Floor, Chanderlok Building,

36, Janpath, New Delhi-110 001.

 Rajasthan Rajya Vidyut Prasaran Nigam Limited, Vidyut Bhawan, Vidyut Marg, Jaipur - 302005. (through its Chairman and Managing Director)

## **3.** Ajmer Vidyut Vitran Nigam Limited, 400 kV GSS Building (Ground Floor), Ajmer Road, Heerapura, Jaipur - 302005. (through its Chairman and Managing Director)

# 4. Jaipur Vidyut Vitran Nigam Limited

400 kV GSS Building (Ground Floor), Ajmer Road, Heerapura, Jaipur - 302005. (through its Chairman and Managing Director)

## 5. Jodhpur Vidyut Vitran Nigam Limited,

400 kV GSS Building (Ground Floor), Ajmer Road, Heerapura, Jaipur - 302005. (through its Chairman and Managing Director)

## 6. Himachal Pradesh State Electricity Board,

Vidyut Bhawan, Kumar House Complex Building II, Shimla — 171004. (through its Chairman)

## 7. Punjab State Electricity Board,

(now Punjab State Power Corporation Limited) Thermal Shed TIA, Near 22 Phatak, Patiala — 147001. (through its Chairman and Managing Director)

## 8. Haryana Power Purchase Centre,

Shakti Bhawan, Sector-6, Panchkula (Haryana) — 134109. (through its Chief Engineer)

# 9. Power Development Department,

Govt. of Jammu & Kashmir, Mini Secretariat, Jammu, Jammu & Kashmir - 180001. (through its Administrative Secretary)

## 10. Uttar Pradesh Power Corporation Limited,

(Formerly Uttar Pradesh State Electricity Board)
Shakti Bhawan, 14, Ashok Marg,
Lucknow — 226001.
(through its Managing Director)

# 11. Delhi Transco Limited,

Shakti Sadan, Kotla Road, New Delhi - 110002. (through its Chairperson and Managing Director)

## 12. BSES Yamuna Power Limited

Shakti Kiran Building, BSES Corporate Annexe, CBD-III GRID, Ground floor, Opposite Agarwal Fun City Mall, Karkardooma, Delhi-110032. (through its Chairman)

## 13. BSES Rajdhani Power Limited

BSES Bhawan, Nehru Place, New Delhi — 110019. (through its Chairman)

## 14. North Delhi Power Limited,

(now TATA Power — DDL) NDPL House, Hudson Lines, Delhi — 110009. (through its Chief Executive Officer)

# 15. Chandigarh Administration

Sector-9, Chandigarh – 160009. (through its Administrator)

### **16.** Uttarakhand Power Corporation Limited, Corporate Office, Victoria Cross

...Respondent(s)

Vijeyta Gabar Singh Urja Bhawan , Kanwali Road, Balliwala Chowk, Dehradun, Uttarakhand - 248001. (through its Chairperson)

17. North Central Railway,

Subedar Ganj Road, Subedarganj, Prayagraj, Uttar Pradesh - 211015. (through its Chief Administrative Officer)

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:

### 18. New Delhi Municipal Council,

Palika Kendra, Sansad Marg, New Delhi — 110002. (through its Chairman)

Counsel for the Appellant(s)

Counsel for the Respondent(s)

- Ms. Poorva Saigal Mr. Shubham Arya Ms. Pallavi Saigal Ms. Reeha Singh Ms. Tanya Singh Ms. Shirin Gupta
- MS. Shinn Gupta
- Ms. Pritha Srikumar Iyer
- Mr. Arun Sri Kumar
- Mr. Abhyudaya Shishodia
- Mr. Atharv Gupta
- Mr. Shubhansh Thakur
- Ms. Saumya Sinha
- Mr. Sulabh Rewari
- Ms. Vasudha Sharma
- Ms. Mansi Binjrajka for Res.1
- Mr. Rajiv Srivastava for Res.10
- Mr. Raj Bahadur Sharma
- Mr. Mohit Mudgal for Res.12 & 13

## **JUDGEMENT**

## PER HON'BLE MR. SANDESH KUMAR SHARMA, TECHNICAL MEMBER

1. The Appeal Nos. 226 of 2020 and 146 of 2021 have been filed by the Appellant, i.e., M/s. Power Grid Corporation of India Limited (in short "PGCIL"), assailing the Orders passed by the Central Electricity Regulatory Commission (in short "Central Commission" or "CERC") dated 21.06.2018 in Petition No.241/TT/2016 and Order dated 22.06.2018 in Petition No.6/TT/2018, respectively.

# Description of the Parties

2. The Appellant Power Grid Corporation of India Limited is a Government of India enterprise within the meaning of the Companies Act, 1956, and is an Inter-State Transmission Licensee under Section 2(73) of the Act, that owns, develops, and operates an interstate transmission system across the country. The Appellant also discharges the functions of the Central Transmission Utility (in short "CTU") in terms of Section 2(10) and 38 of the Act.

In both the appeals, Respondent No. 1 is CERC, established under section
 76 of the Electricity Act, 2003.

4. Respondents Nos. 2 to 18 are the various distribution licensees or electricity departments, or power procurement companies of States, who are procuring transmission services from the Appellant, mainly beneficiaries of the Northern Region.

# Factual Matrix of the Case(s)

5. The implementation of Static Var Compensators (in short "SVCs") in the Northern Region was proposed during the 30<sup>th</sup> Standing Committee Meeting held on 19.12.2011. The Central Transmission Utility (CTU) highlighted the rapid increase in load demand, reliance on power imports, seasonal generation fluctuations due to hydro plants, and heightened demand during the paddy season in Haryana and Punjab. These operational challenges necessitated improved reactive power management for grid stability.

6. Based on system studies, CTU proposed installing SVCs at Ludhiana (+600/-400 MVAR), Kankroli (+400/-300 MVAR), and New Wanpoh (+300/-200 MVAR).

7. In the 30<sup>th</sup> Standing Committee Meeting of the Northern Region, the proposal for the installation of Static Var Compensators at Ludhiana, Kankroli, and Wanpoh was approved, with Member (PS), CEA endorsing the proposal in the interest of grid security and quality power supply. The CTU was advised to undertake further studies for SVCs in Haryana.

8. This proposal was approved in the 25<sup>th</sup> NRPC meeting on 24.02.2012.

9. Subsequently, in the 31<sup>st</sup> Standing Committee Meeting, the Central Electricity Authority (CEA) informed that the Ministry of Power had constituted an Enquiry Committee to investigate the grid disturbances of 30.07.2012 and

31.07.2012. The Committee recommended, among other measures, the installation of adequate static and dynamic reactive power compensators to prevent outages due to over-voltage and to provide necessary voltage support under both steady-state and dynamic conditions.

10. Pursuant to this approval, the Appellant's Board of Directors granted Investment Approval on 16.05.2014 for all three locations. The SVC at the 400/220 kV Kankroli Sub-station, with a capacity of (+) 400 MVAR/ (-) 300 MVAR, was sanctioned at an estimated cost of ₹82,998 lakhs, including ₹4,527 lakhs towards Interest During Construction, based on February 2014 price levels. The project was scheduled to be commissioned within 27 months, i.e., by 15.08.2018.

11. Subsequently, the Appellant filed Petition No. 241/TT/2016 on 16.11.2016 under the 2014 Tariff Regulations seeking determination of transmission tariff for the said project for the 2014-19 period. The Appellant claimed initial spares at 6.36%, contending that the SVC installation, being an addition to an existing substation, should be treated as a brownfield project under Regulation 13(d)(iii).

12. Further, it was submitted that since SVCs are imported and prone to cost escalation and procurement delays, procuring sufficient initial spares was necessary. Hence, the claim was sought under the discretionary powers of the Commission under Regulations 54 and 55, read with Regulation 13(d)(iii).

13. In the Impugned Order dated 21.06.2018, while determining the transmission tariff, the Central Electricity Regulatory Commission rejected the Appellant's request to allow initial spares at 6% under the "Transmission Sub-

station (Brownfield)" category (Regulation 13(d)(iii) of the 2014 Tariff Regulations).

14. Instead, the CERC categorized SVCs as "Series Compensation Devices" under Regulation 13(d)(iv) and sanctioned initial spares at the lower ceiling of 4%, resulting in an allowed amount of ₹692.04 lakhs as against the Appellant's claim of ₹1,078.80 lakhs. This led to an under-recovery of ₹386.76 lakhs.

15. Aggrieved, the Appellant filed Review Petition No. 32/RP/2018, which was dismissed by CERC via Order dated 23.01.2019. The Commission reiterated that the 2014 Regulations did not specifically provide norms for SVCs, and since SVCs serve a compensating function like Series Compensation Devices, even though installed in shunt, they were reasonably treated under the same category with a 4% ceiling. The Commission held that no convincing justification was provided to treat SVCs under the Brownfield substation category, and the higher cost of SVCs alone could not justify a higher spares allowance. Accordingly, no error was found in the original order.

16. Thus, being aggrieved by the Impugned Orders dated 21.06.2018 passed by the CERC in the Petition No. 241/TT/2016, and Order dated 22.06.2018 in Petition No.6/TT/2018, the Appellant has preferred the present captioned appeals.

17. The two appeals are identical in all respects, including the background, except the location of the substations where these SVCs are installed, i.e., Kankroli substation in Appeal No. 226 of 2020 and New Wanpoh substation in Appeal No. 146 of 2021.

18. The Appeal No. 226 of 2020 shall be the lead appeal in this judgment.

# Written Submissions of the Appellant, PGCIL

19. The present Appeal has been filed by the Appellant against the Impugned Order dated 21.06.2018 in Petition No. 241/TT/2016, passed by the CERC.

20. In the Impugned Order, the Central Commission, while determining the transmission tariff for 400/220 kV Kankroli Sub-station: (+) 400 MVAR/ (-) 300 MVAR Static VAR Compensator, has held as under:

"26. We have considered the submission of the petitioner. We are considering the initial spares of the instant asset under Regulation 13(d)(iv) as the asset falls under the definition of "series compensation device" and the ceiling limit for the same is 4.00%."

21. In this regard, Regulation 13(d)(iv) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014, for the period between 2014-19 (in short "Tariff Regulations, 2014") reads as under:

"13. Initial Spares:

Initial spares shall be capitalised as a percentage of the Plant and Machinery cost upto cut-off date, subject to following ceiling norms:

(a) Coal-based/lignite-fired thermal generating stations -4.0%

| (b) Gas Turbine/Combined Cycle thermal         |      |  |
|--|------|--|
| generating stations                            | -    |  |
| 4.0%   |      |  |
| Hydro generating stations including pumped     |      |  |
| storage hydro generating station.              | -    |  |
| 4.0%   |      |  |
| Transmission system                            |      |  |
| (i) Transmission line -                        | 1.0% |  |
| (ii) Transmission Sub-station (Green Field)    | -    |  |
| 4.0%   |      |  |
| (iii) Transmission Sub-station (Brown Field) - | 6.0% |  |
| (iv) Series Compensation devices and HVDC      |      |  |
| Station  | -    |  |
| 4.0%   |      |  |
| (v) Gas Insulated Sub-station (GIS) -          | 5.0% |  |
| (vi) Communication system - 3.5.               |      |  |

22. Given the above, the Central Commission, while considering the initial spares to be capitalised for SVC, has categorised SVC as Series Compensation Device ('SCD') and consequently, has allowed capitalization of initial spares at 4% of the Plant and Machinery Cost of the Project up to the cut-off date.

23. As against the above, the Appellant claimed that the SVC being part of "Brownfield project" under Regulation 13(d)(iii) of Tariff Regulations, 2014, ought to be allowed initial spares at 6% of the Plant and Machinery Cost of the Project up to the cut-off date.

24. The Central Commission in the Impugned Order has erroneously considered the SVC under the categorization of SCD without appreciating the following:

- (a) The technical difference between SVC and SCD;
- (b) The SVC under the project, being installed in the existing substation, ought to have been categorised as a brownfield project, which is covered under Regulation 13(d)(iii) of Tariff Regulations, 2014; and
- (c) Impugned Order in contradiction to its earlier Order dated 28.12.2016 in Petition 149/TT/2016.
- 25. The above submissions are detailed here under:

# TECHNICAL DIFFERENCE BETWEEN SVC AND SCD

26. The Appellant submits that the Commission overlooked key technical distinctions between Static VAR Compensators (SVCs) and Series Compensation Devices (SCDs), despite both being classified under the FACTS family. SVCs are shunt-connected devices designed to regulate reactive power through thyristor-based control systems. Their primary function is to maintain voltage stability by adjusting capacitive or inductive current output, thereby enhancing grid stability. In contrast, SCDs are series-connected and serve a different operational purpose. Therefore, the Appellant argues that the two technologies are not technically similar and should not be treated as functionally equivalent under the 2014 Tariff Regulations.

27. The Appellant explains that Series Compensation Devices (SCDs) are primarily used to enhance the power transfer capability of transmission lines by reducing their effective inductance. This compensation improves the line's maximum power transmission capacity by lowering the phase angle for a given power flow, thereby increasing the system's stability margin. Unlike SVCs, which regulate reactive power, SCDs are intended to control real power flow. Hence, the Appellant contends that the two serve distinct technical functions and should not be equated for regulatory classification purposes.

28. A table summarizing the key technical distinction between SVC and SCD is as follows:

| CRITERIA   | STATIC VAR                    | SERIES                    |
|------------|-------------------------------|---------------------------|
|            | COMPENSATOR                   | COMPENSATION              |
|            | ('SVC')                       | DEVICE                    |
|            |                               | ('SCD')                   |
| Connection | Shunt                         | Series                    |
| Function   | Provides dynamic reactive     | Provides fixed            |
|            | power compensation to         | compensation to increase  |
|            | maintain voltage levels and   | the power transfer        |
|            | improve system stability.     | capability of the         |
|            |                               | transmission line by      |
|            |                               | reducing line impedance.  |
| Response   | Fast response time, typically | Fixed compensation, so no |
| Time       | in milliseconds, to system    | response time.            |
|            | voltage changes.              |                           |

| Control     | Active device with automatic    | Passive device with no       |
|-------------|---------------------------------|------------------------------|
|             | control to adjust reactive      | dynamic control.             |
|             | power in real-time.             |                              |
| Flexibility | Highly flexible as it can       | Limited flexibility as       |
|             | dynamically vary reactive       | compensation is fixed.       |
|             | power.                          |                              |
| Stability   | Enhances both steady-state      | Improves steady-state        |
|             | and transient stability of the  | stability but has no control |
|             | power system.                   | over transient stability.    |
| Components  | Thyristor-controlled reactors   | Fixed capacitors in series   |
|             | (TCR) and thyristor-switched    | with the transmission line.  |
|             | capacitors (TSC).               |                              |
| Application | Used in systems requiring       | Primarily used in long       |
|             | voltage control, stability, and | transmission lines to        |
|             | power quality improvement.      | improve power flow and       |
|             |                                 | stability.                   |
| Cost        | Approximately Rs. 175           | Approximately Rs. 40         |
|             | Crores                          | Crores                       |

29. The Appellant submits that SVCs are location-specific in design and more complex than SCDs, typically comprising multiple branches and components, many of which are imported. This results in higher costs and delays in procurement and transportation, especially during equipment failure, necessitating adequate initial spares. The Appellant contends that the Commission, in the Impugned Order, failed to consider these technical and logistical factors and imposed a 4% cap under Regulation 13(d)(iv) of the 2014 Tariff Regulations without providing

specific reasoning for applying this limit to SVCs.

# <u>SVC, BEING A BROWN FIELD PROJECT, OUGHT TO HAVE BEEN</u> <u>CATEGORISED UNDER REGULATION 13(d)(iii) OF TARIFF</u> <u>REGULATIONS, 2014</u>

30. The Appellant argues that the Commission failed to recognize that the installation of SVCs in this case constitutes a brownfield project, not a greenfield one. Unlike greenfield projects, which involve new infrastructure, brownfield projects utilize existing facilities. The Appellant refers to the Minutes of the 30th Standing Committee Meeting on Power System Planning for the Northern Region held on 19.12.2011, which recorded that SVCs were to be installed at existing substations in Ludhiana, Kankroli, and New Wanpoh. On this basis, the Appellant contends that the project should have been categorized under Regulation 13(d)(iii) of the 2014 Tariff Regulations, allowing 6% capitalization for initial spares, instead of the 4% cap under Regulation 13(d)(iv).

31. In this regard, reliance is also hereby placed on Statement of Reason for Tariff Regulations, 2014, which is as follows:

"15.13

. . . .

b) Initial spares have been claimed only for certain number of substation assets. It is observed that the though the expenses claimed were higher than the norms, the same were restricted by the Commission based on the norms. It is further observed that due to higher scale of procurement, per unit cost of spares is less in case of new substations. The Commission considered it appropriate to segregate total substation assets under analysis into greenfield and brownfield substation assets.

In case of greenfield substation assets, it is observed that around 86% of the assets are having initial spares up to 4% of plant & machinery cost. Accordingly, it is considered appropriate to fix the ceiling limit of initial spares as 4% of plant and machinery cost. In case of brownfield substation assets, the average claim towards initial spares for majority of assets is found to be around 6% of the plant and machinery cost. Therefore, it is considered appropriate to fix the ceiling limit as 6% in case of Transmission Sub-stations (brownfield)."

32. The Central Commission accepted the above reasoning in the Order dated 15.05.2022 passed in Review Petition No. 11/RP/2021 regarding STATCOM (Static Synchronous Compensator). The relevant extract of the Order is as follows:

"8. We have heard representative of the Review Petitioner and have perused the record including order dated 25.1.2021. The representative of the Review Petitioner contended that in the original petition i.e. Petition No. 85/TT/2019, PGCIL claimed Initial Spares @ 6.83% as against the ceiling of 6% of the plant and machinery cost for STATCOM at Nalagarh as it is a brownfield sub-station in terms of Regulation 13(d)(iii) of the 2014 Tariff Regulations. However, the Commission vide order dated 25.1.2021 allowed Initial Spares @4% of the plant and machinery cost as per Regulation 13(d) (iv) of the 2014 Tariff Regulations considering STATCOM a Series Compensation Device and the same is an error apparent on record which needs to be modified. The representative of the Review Petitioner further contended that Regulation 13(d) (iv) of the 2014 Tariff Regulations provides for Initial Spares with respect to 'Series Compensation Device' while STATCOM is not 'Series а Compensation Device' and as such the requirement of Initial Spares in case of STATCOM is higher than a Series Compensation Device like FSCs and other equipment. He further contended that equipment such as coupling transformer, MV bus, mechanically switched capacitor/reactor, valves, valve hall and other necessary auxiliary facilities are required for installation of STATCOMs. This is the reason that related Initial Spares requirement is high and it should be treated as a shunt compensation device and Initial Spares @ 6% may be allowed for the same. The representative of the Review Petitioner contended that in the present case, Initial Spares @ 6% may be allowed as the Commission vide order dated 18.10.2021 in Petition No. 658/TT/2020 and order dated 18.1.2022 in Petition No. 481/TT/2020 has already allowed Initial Spares @ 6% for STATCOM.

9. On perusal of record, we find that the Review Petitioner claimed Initial Spares in respect of the transmission asset under brown field sub-station category. It is also observed that the Review Petitioner took approval for STATCOM as a separate element. It is fact that norms for STATCOM are not specified in the 2014 Tariff Regulations. The Commission has observed in the order dated 25.1.2021 that basic purpose of STATCOM is to provide compensation and as per Regulation 13(d)(iv) of the 2014 Tariff Regulations, the ceiling for Initial Spares for compensation device is fixed at 4%. The Review Petitioner, however, has brought out that the primary purpose of series compensation devices is to regulate the power flow in the transmission lines, whereas shunt compensating devices are used for providing voltage support and dynamic support during network contingencies and, therefore, a shunt connected compensation device, like an STATCOM, and series compensation device are significantly different from each other. Therefore, neither of them can be taken as an alternative to each other.

10. We also notice that Nalagarh Sub-station is an existing substation which was executed in the year 1999 and STATCOM was executed on 31.3.2019. Thus, there is a case for treating the same under the brownfield category under Regulation 13(d) (iii) of the 2014 Tariff Regulations instated of treating it under Regulation 13(d)(iv) of the 2014 Tariff Regulations."

33. The Appellant submits that SVCs and STATCOMs are functionally similar shunt-connected devices, differing only in their control technologies: SVCs use thyristor-based systems, while STATCOMs use IGBT-based systems. As the Commission, in Review Petition No. 11/RP/2021, treated STATCOM as a brownfield project under Regulation 13(d)(iii), the same rationale should apply to SVCs.

34. Further, the Appellant highlights that in the Commission's order dated 28.12.2016 in Petition No. 149/TT/2016 (*Power Grid v. Rajasthan Rajya Vidyut Prasaran Nigam Ltd. & Ors.*), a 6% capitalization was rightly allowed for an SVC under Regulation 13(d)(iii), which the Commission failed to consider in the present case.

35. It is a settled principle of law that the Commission is bound by its previous orders, and the consistency must be followed in passing an Order on the same issue. In the case of *Birbal v. Ghaziabad Development Authority, (2006) 10 SCC 305*, the Hon'ble Supreme Court held that there must be consistency in passing judicial orders. The view has been followed in several judgments, viz., *State of U.P. and others v. Hirendra Pal Singh and others*, (2011) 5 SCC 305, *Pearl Enterprises and Another v. Union of India and Others*, 2011 SCC OnLine HP 5915.

36. Reliance is also placed on the decision of this Tribunal dated 16.07.2018 in Appeal No. 281 of 2016, *NHPC Limited v. Power Grid Corporation of India Limited and Ors.* The relevant extracts of the Order are as follows:

**"14.4** We have gone through the rival contentions of the learned counsel appearing for both the parties carefully on this issue and find that the findings of the Central Commission in the present case and in the subsequent cases have a large variance. NHPC alleges for the differential treatment in their case while comparing with the subsequent cases of PKTCL and PGCIL. On the other hand, the Respondents have submitted that the facts in the present case and

those subsequent cases of PKTCL are quite different and there is no contrast in the decision taken by the Central Commission. It is, however, relevant to opine that the findings and decisions of the Central Commission have to be consistent and uniform based on principle of natural justice and equity in all the cases as far as liability for delay in commissioning of the respective assets of the parties is concerned. It is further noted that a review petition in respect of the said petition No. 156/TT/2015 is pending before the CERC and the entire issue, as such, needs comprehensive adjudication."

37. The 2014 Tariff Regulations did not specifically account for SVCs under provisions for initial spares. Recognizing the operational necessity for sufficient spares in brownfield substations, including SVCs, the Commission subsequently introduced a distinct 6% ceiling for such equipment in later tariff frameworks. Hence, the Appellant contends that a 6% capitalisation for SVCs should be permitted under Regulation 13(d)(iii), by invoking the Commission's powers to relax or remove difficulties under Regulations 54 and 55 of the 2014 Tariff Regulations.

# Written Submissions of the Respondent No. 1, CERC

38. The Appeal challenges the CERC's order dated 21.06.2018 passed in Petition No. 241/TT/2016, whereby the Commission approved capitalization of initial spares for a 400/220 kV Kankroli Sub-station (+400 MVAR/–300 MVAR SVC) under the "SVCs in Northern Region" project at 4%, by classifying the SVC

as a Series Compensation Device under Regulation 13(d)(iv) of the 2014 Tariff Regulations. The Appellant had sought approval of spares at 6% under the classification of a brown-field Transmission Sub-station under Regulation 13(d)(iii).

39. A Review Petition (No. 32/RP/2018) filed against the order was disposed of by CERC through a common order dated 23.01.2019 along with Review Petition No. 33/RP/2018. The Appellant contends that the classification was incorrect, arguing that SVCs differ technically from Series Compensation Devices, that the installation within an existing substation should qualify as a brown-field project, and that the order is inconsistent with the Commission's earlier decision dated 28.12.2016 in Petition No. 149/TT/2016. However, the Commission maintains its decision based on the 2014 Regulations and the reasoning provided in both the original and review orders.

40. Regulation 13(d) of the 2014 Tariff Regulations provides the norms for the capitalization of initial spares of transmission assets. It reads as follows:

## "13. Initial Spares:

Initial spares shall be capitalised as a percentage of the Plant and Machinery cost upto cut-off date, subject to following ceiling norms:
(a) Coal-based/lignite-fired thermal generating stations - 4.0%
(b) Gas Turbine/Combined Cycle thermal generating stations - 4.0%
(c) Hydro generating stations including pumped storage hydro generating station. - 4.0%
(d) Transmission system (i) Transmission line - 1.00%
(ii) Transmission Sub-station (Green Field) - 4.00%
(iii) Transmission Sub-station (Brown Field) - 6.00%
(iv)Series Compensation devices and HVDC Station - 4.00%
(v) Gas Insulated Sub-station (GIS) - 5.00%
(vi) Communication system - 3.5%"

41. Since the 2014 Tariff Regulations do not expressly mention Static VAR Compensators (SVCs), the Commission assessed which clause of Regulation 13(d) would be applicable for determining the admissibility of initial spares. It held that SVCs fall within the ambit of Regulation 13(d)(iv), which pertains to 'Series Compensation Devices and HVDC Stations', rather than the general category of brown-field substations under Regulation 13(d)(iii).

42. This conclusion was based on the functional similarity between SVCs and Series Compensation Devices, particularly with reference to the role of the SVC in the transmission project in question. The Appellant, however, continues to rely on its argument regarding the technical differences between SVCs and SCDs and has reiterated concerns about cost escalation and delays specific to the procurement of SVC spares.

43. It is submitted that the above submissions, which have been reiterated by the Appellant in its Written Submissions dated 20.11.2024, were duly considered by the Respondent Commission in its Orders passed in Petition No. 241/TT/2016 and the subsequent Review Petition in the following terms:

"13. The norms for initial spares for Static Var Compensators (SVC) are not specified in the 2014 Tariff Regulations. SVC is also a compensating device, like Series Compensation Device (SCD). Though, SVC can be placed in shunt, it is basically a compensation device and therefore, it was considered akin to Series Compensation Device in the impugned orders and allowed initial spares @ of 4% as provided for SCD in Regulation 13(d)(iv) of the 2014 Tariff Regulations. Further, PGCIL has not given any convincing reason for categorizing the SVC under Regulation 13(d) (iii) of the 2014 Tariff Regulations. Moreover, higher cost of SVC cannot be reason for allowing initial spares @ 6% under Regulation 13(d) (iii) categorizing the SVCs under the head "Transmission Sub-station (Brown Field)-6.00%". Thus, there is no error in the impugned orders.

14. PGCIL has contended that Commission in order dated 28.12.2016 in Petition No.149/TT/2016 had allowed initial spares @ 6% and the same may be made applicable in the present case. This submission of PGCIL is not acceptable. In the present case, the Commission in the absence of any specific provision for SVC, by a conscious decision had categorized the SVC alongwith the SCD, since the functioning of the SVC is also in the nature of compensation device in line with SCD and allowed initial spares @ 4% in the impugned orders. In our considered view, the order dated 28.12.2016 was based on the facts pleaded therein and therefore *cannot be made applicable in the instant case.* Accordingly, the PGCIL's contention is rejected.

15. For the reasons stated above, we are unable to agree with the proposition as suggested by the petitioner. We, therefore, reject the instant Review Petition Nos. 32/RP/2018 and 33/RP/2018 at admission stage itself. Accordingly, Review Petition Nos. 32/RP/2018 and 33/RP/2018 stand disposed of as dismissed."

44. Thus, SVCs were classified as being akin to SCDs in view of the same function of 'reactive power management' being served by both devices.

45. It is submitted that the above classification was also approved, having regard to the larger context of the purpose for which a 'Provision for SVCs' was allowed in the Transmission Project. Regard may be had to the Minutes of the 30<sup>th</sup> Standing Committee Meeting of the Central Electricity Authority on Power System Planning of Northern Region, which was held on 19.12.2011, and where representatives of the Appellant were also participants:

## *"21. Provision of Static Var Compensator (SVC)*

POWERGRID representative stated that the load demand in Northern region was growing at a fast pace and power had to be imported from other regions to meet the peak demand and the large interconnected grid posed the challenge of operation of lines under various seasonal and operational conditions. There are large number of hydro power stations in Northern Region whose generation reduces to very low levels during winter season. Load demand increases to very high levels in Haryana / Punjab area during paddy season. <u>All these</u> <u>factors necessitate the proper reactive power management for</u> <u>efficient operation of the grid.</u>

POWERGRID carried out the system studies considering the existing/planned transmission system in Northern region. Based on results of these system studies, they proposed to provide Static Var Compensators (SVC) at following substations: Ludhiana S/s: (+)600 MVAR / (-) 400 MVAR Kankroli S/s: (+)400 MVAR / (-) 300 MVAR New Wanpoh S/s: (+)300 MVAR / (-) 200 MVAR

. . . . . . . . .

Member (PS), CEA suggested to agree with the above proposal in the interest of grid security and supply of quality power. He advised POWERGRID to carry out system studies for assessing the requirement of SVC in Haryana and put up the proposal for consideration in the next Standing Committee Meeting.

# After detailed deliberations, members agreed to the above proposal."

46. The SVCs installed under the Transmission Project were intended for regulating reactive power in the grid. Recognizing that this function aligns with the role of Series Compensation Devices, the Commission categorized SVCs under Regulation 13(d)(iv) of the 2014 Tariff Regulations, as it was the most appropriate and closely applicable provision in the absence of an express reference to SVCs.

47. The Commission, in its Statement of Reasons dated 24.04.2014 for the 2014 Tariff Regulations, justified the 4% ceiling on initial spares under Regulation 13(d)(iv) based on the average claims for spares of fixed series compensation substation assets. It also acknowledged and recorded the inputs provided by the Appellant's representatives during the public consultation process for drafting the 2014 Regulations. The following extract of the SOR can be referred to as follows:

# "15. Initial Spares {Regulation 13} ....

# ... Commission's Views

15.12 In response to the proposed limit of initial spares, the suggestions were mainly on the ceiling limit proposed by the Commission. Many stakeholders have suggested increasing proposed ceiling limit of initial spares. POWERGRID has suggested working out the spares on the basis of list of initial spares. The Commission has carefully examined the ceiling limit. In view of various suggestions, in order to fix ceiling limit of initial spares for transmission system, the Commission decided to review the proposed ceiling limit on the basis of the information regarding initial spares submitted by various transmission licensees during the Tariff Period 2009-14.

15.13 As regards suggestion for consideration of the list of spares along with the quantity, the Commission felt that the information regarding initial spares filed by various transmission licensees on affidavit should be considered to work out the ceiling limit. It is clarified that as per the proforma along with list of spares, item wise indicative cost was also required to be furnished. The same was not made available by POWERGRID and in the absence of such an important detail, the option of specifying initial spares in terms of the list of spares could not be explored completely. In view of various suggestions, in order to fix ceiling limit of initial spares for transmission system, the Commission analysed a number of petitions received during the Tariff Period 2009-14 and observed as under:

a) Around 86% of the transmission lines assets have initial spares upto 1% of Plant and Machinery cost, accordingly, it is considered appropriate to fix the ceiling limit of initial spares as 1% of plant and machinery cost as proposed in the draft Regulations.

b) Initial spares have been claimed only for certain number of substation assets. It is observed that the though the expenses claimed were higher than the norms, the same were restricted by the Commission based on the norms. It is further observed that due to higher scale of procurement, per unit cost of spares is less in case of new substations. The Commission considered it appropriate to segregate total substation assets under analysis into greenfield and brownfield substation assets. In case of greenfield substation assets, it is observed that around 86% of the assets are having initial spares up to 4% of plant & machinery cost. Accordingly, it is considered appropriate to fix the ceiling limit of initial spares as 4% of plant and machinery cost. In case of brownfield substation assets, the average claim towards initial spares for majority of assets is found to be around 6% of the plant and machinery cost. Therefore, it is considered

appropriate to fix the ceiling limit as 6% in case of Transmission Substations (brownfield).

c) The average claim of initial spares of fixed series compensation substation assets were found to be around 4%. Accordingly, it is considered appropriate to fix the ceiling limit at 4% instead of 4.50% proposed in the draft Regulations.

d) In case of HVDC sub-stations, the average claim of initial spares as a percentage of plant and machinery cost of assets is found to be around 4%. Accordingly, it is considered appropriate to fix the ceiling limit at 4% instead of 4.50% proposed in the draft Regulations. In response to the suggestions of stakeholders, it is clarified that the cost of spare transformer is excluded while fixing the ceiling limit.

e) The claim of initial spares in case of GIS assets is found to be in the range of 3.5% - 5.51% with average being 5.12%. Accordingly, it is considered Statement of Reasons CERC (Terms and Conditions of Tariff) Regulations,2014 appropriate to fix the ceiling limit at 5% instead of 4.50% proposed in the draft Regulations.

f) Rate of initial spares for PLCC shall be considered in line with respective transmission sub-station."

48. The Appellant, if adversely impacted by cost implications arising from newer technologies like SVCs, could have sought relaxation of norms under Regulation 13(d)(iv) by invoking the Commission's powers under Regulations 54 and 55 of the 2014 Tariff Regulations. However, no such application was made. Accordingly, the Commission applied the existing framework and, considering the functional role of the SVCs, categorized them under the specific provision of Regulation 13(d)(iv) rather than the general provision in Regulation 13(d)(iii).

49. The Appellant relies on the Commission's order dated 28.12.2016 in Petition No. 149/TT/2016 to argue that SVCs should uniformly be treated under Regulation 13(d)(iii) as brown-field transmission substations. However, the Commission clarifies that the said order was issued in a distinct context involving the determination of tariff for that specific SVC project, which required detailed consideration of various elements such as capital cost, time and cost overruns, IDC, IEDC, and initial spares. Moreover, the order was passed ex-parte, with no Respondent participating or challenging the claims. Thus, the Commission submits that the earlier order cannot serve as a binding precedent for universal classification of SVCs under Regulation 13(d)(iii). Extracts of the Order dated 28.12.2016:

## "Initial Spares

19. The petitioner has claimed initial spares of `1298.92 lakh pertaining to sub-stations on the "cut-off" date of 31.3.2019. The petitioner has also submitted Auditor's certificate dated 22.11.2016 in support of its claim.

20. Regulation 13 of the 2014 Tariff Regulations provide for ceiling norms for capitalization of initial spares. Regulation 13 of the 2014 Tariff Regulations specify as follows: ...

21. The ceiling limit is 6.00% with regard to sub-station of the Plant and Machinery Cost of the element for brown-field projects. Accordingly, the initial spares are allowed as specified in the 2014 Tariff Regulations and it is as under: ... 22. The initial spares claimed by the petitioner are in excess by `101.19 lakh pertaining to sub-station as prescribed under Regulation 13 of the 2014 Tariff Regulation. The initial spares allowed for the instant assets are as follows:-

23. There is discrepancy in Form-14 with regard to Plant and Machinery cost (excluding IDC and IEDC) up to COD as compared to Auditor's Certificate submitted by the petitioner. Hence, the petitioner is directed to submit revised Form-14 at the time of truing up."

50. Therefore, it is submitted that the interpretation of the Regulations for the categorization of initial spares of SVCs under Regulation 13(d) was not discussed in the Order dated 28.12.2016 in Petition No. 149/TT/2016. Since no competing submissions were raised or considered by the Commission in that case, the proceedings in Petition No. 149/TT/2016 are '*sub silentio*' with respect to the true interpretation of Regulations 13(d)(iii) and (iv) in the context of initial spares of a SVC. The principle of *sub-silentio* as an exception to the general rule of precedents has been explained by the Hon'ble Supreme Court in *State of U.P. v. Synthetics and Chemicals Ltd.* [(1991) 4 SCC 139] as follows:

"41. ...Here again the English courts and jurists have carved out an exception to the rule of precedents. It has been explained as rule of sub silentio. <u>'A decision passes sub silentio, in the technical sense that has come to be attached to that phrase, when the particular point of law involved in the decision is not perceived by the court or present to its mind.</u>' (Salmond on Jurisprudence, 12th Edn., p. 153.) In Lancaster Motor Co. (London) Ltd. v. Bremith

Ltd., the Court did not feel bound by earlier decision as it was rendered 'without any argument, without reference to the crucial words of the rule and without any citation of the authority'. It was approved by this Court in MCD v. Gurnam Kaur. The Bench held that, 'precedents sub silentio and without argument are of no moment'. The courts thus have taken recourse to this principle for relieving from injustice perpetrated by unjust precedents. <u>A decision which is not express and is not founded on reasons nor it proceeds on consideration of issue cannot be deemed to be a law declared to have a binding effect as is contemplated by Article 141."</u>

51. Further, in *Delhi Airtech Services (P) Ltd. v. State of U.P.* [(2011) 9 SCC 354], the Hon'ble Supreme Court has also held as follows:

"42. It has been held in the decision of this Court in MCD v. Gurnam Kaur [(1989) 1 SCC 101 : AIR 1989 SC 38] that <u>when a point does</u> <u>not fall for decision of a court but incidentally arises for its</u> <u>consideration and is not necessary to be decided for the ultimate</u> <u>decision of the case, such a decision does not form a part of the</u> <u>ratio of the case but the same is treated as a decision passed</u> <u>sub silentio.</u>

43. The concept of "sub silentio" has been explained by Salmond on Jurisprudence, 12th Edn. as follows : (Gurnam Kaur case [(1989) 1 SCC 101 : AIR 1989 SC 38], SCC pp. 110-11, para 11)

"11. ...'A decision passes sub silentio, in the technical sense that has come to be attached to that phrase, when the particular point of law involved in the decision is not perceived by the Court or present to its mind. The Court may consciously decide in favour of one party because of Point A, which it considers and pronounces upon. It may be shown, however, that logically the court should not have decided in favour of the particular party unless it also decided Point B in his favour; but Point B was not argued or considered by the Court. In such circumstances, although Point B was logically involved in the facts and although the case had a specific outcome, the decision is not an authority on Point B. Point B is said to pass sub silentio.'" (AIR p. 43, para 11)

44. The aforesaid passage has been quoted with approval by the three-Judge Bench in Gurnam Kaur [(1989) 1 SCC 101 : AIR 1989 SC 38] . This Court in Gurnam Kaur [(1989) 1 SCC 101 : AIR 1989 SC 38] , in order to illustrate the aforesaid proposition further relied on the decision of the English Court in Gerard v. Worth of Paris Ltd. [(1936) 2 All ER 905 (CA)] In Gerard [(1936) 2 All ER 905 (CA)] , the only point argued was on the question of priority of the claimant's debt. The Court found that no consideration was given to the question whether a garnishee order could be passed. Therefore, a point in respect of which no argument was advanced and no citation of authority was made is not binding and would not be followed. This Court held that such decisions, which are treated having

been passed sub silentio and without argument, are of no moment. The Court further explained the position by saying that one of the chief reasons behind the doctrine of precedent is that once a matter is fully argued and decided the same should not be reopened and mere casual expressions carry no weight."

52. Therefore, the Commission's Order dated 28.12.2016 in Petition No. 149/TT/2016 cannot be considered to be a binding precedent on this issue.

## Written Submissions of the Respondent No. 10, UPPCL

53. The present appeal challenges the Central Electricity Regulatory Commission's order dated 21.06.2018 and review order dated 23.01.2019. The Commission had allowed initial spares at 4% of the cost of Plant and Machinery for Static Var Compensators (SVC), treating them under Regulation 13(d)(iv) of the 2014 Tariff Regulations, which applies to Series Compensation Devices (SCD), rather than under Regulation 13(d)(iii) applicable to Transmission Substation (Brownfield), under which the Appellant had claimed 6.36%. The Commission found that SVCs function similarly to SCDs as compensating devices and therefore warranted the same treatment.

54. In the review order dated 23.01.2019, the Commission held that the Appellant failed to provide convincing justification for applying the higher 6% limit, and that a higher cost alone is not a valid basis. It is further submitted that the appeal raises no new grounds beyond those already addressed in the original and review petitions, and on this basis, the appeal deserves to be dismissed. The

orders under challenge are submitted to be just, legal, and fit to be upheld.

55. The Central Electricity Regulatory Commission, in its order, addressed the absence of specific norms for initial spares for Static Var Compensators (SVCs) in the 2014 Tariff Regulations and correctly applied the same rate as for Series Compensation Devices (SCDs), considering both to be compensating devices serving similar functions. The Appellant's argument for a higher rate of spares due to import-related costs and delays was found to be legally unsustainable.

56. Furthermore, the Appellant's reliance on the "Power to Relax" and "Power to Remove Difficulty" provisions under Regulations 54 and 55, read with Regulation 13(d)(iii), was inconsistent. These discretionary powers are meant to alleviate genuine hardship, not to selectively invoke provisions that allow higher tariff benefits. The Commission rightly found this approach untenable.

57. Additionally, the Appellant reiterated technical differences between SVCs and SCDs, but admitted that both serve the same purpose: voltage control and network stability. The distinction in physical attributes or higher cost, which stems from the Appellant's procurement decisions, does not justify a different regulatory classification. Since the functional purpose remains the same, the Commission held that cost alone cannot warrant a higher rate of initial spares. The appeal thus appears to be motivated primarily by the desire to recover higher costs, a ground rightly rejected by the Commission.

58. The Appellant has relied on the Statement of Reasons of the 2014 Tariff Regulations to argue that the Static Var Compensator (SVC), being part of an

existing substation, should be treated as a brownfield asset eligible for a higher rate of initial spares.

59. However, the Statement of Reasons merely provides the rationale behind classifying assets into greenfield and brownfield categories and discusses average spare claims; it does not confer any legal entitlement to higher capitalization solely on that basis. The Appellant's primary claim rests on the assertion that brownfield projects generally incur higher costs and, therefore, warrant a higher initial spare percentage.

60. However, this line of reasoning is flawed and unsupported by the Regulations, as higher costs alone do not justify reclassification of an asset or invocation of Regulation 54 ("Power to Relax") or Regulation 55 ("Power to Remove Difficulty"). The Appellant's own reliance on these discretionary provisions confirms the absence of a vested legal right to such a classification or entitlement.

61. In conclusion, the Appeal lacks merit, is based on an erroneous understanding of the applicable regulatory framework, and deserves to be dismissed. The orders passed by the Commission on 21.06.2018 and 23.01.2019 are legal, reasoned, and justified.

## Analysis and Conclusion

62. After hearing the Learned Counsel for the Appellant and the Learned Counsel for the Respondents at length and carefully considering their respective

submissions, we have also examined the written pleadings and relevant material on record. Upon due consideration of the arguments advanced and the documents placed before us, the following issue arises for determination in this Appeal:

Whether the CERC was justified in categorising the Appellant's Static Var Compensator (SVC) as a Series Compensation Device (SCD) on the ground that it is "a compensation device," and denying the Appellant's claim for capitalisation of initial spares at the rate of 6% of the Plant and Machinery cost up to the cut-off date, in terms of Regulation 13(d) (iii) of the 2014 Tariff Regulations?

63. The Appellant in Appeal No.226 of 2020 has prayed for the following:

"(a) Admit the present Appeal and set aside the Impugned Order dated 21.06.2018 passed by the Ld. CERC in Petition No. 241/TT/2016 to the extent that it disallows Appellant's claims for 6% rate of capitalisation for initial spares of Static VAR Compensator (SVC);

(b) Declare and allow capitalisation @ 6% of Plant and Machinery Cost (upto cut-off date) for Appellant's Static VAR Compensator (SVC) in terms of Regulation 13(d)(iii) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014; and
(c) pass such other and further orders / directions as this Hon'ble Tribunal

may deem just and proper in the facts and circumstances of the case."

64. The Appellant in Appeal No.146 of 2021 has prayed for the following:

*"(a) Admit the present Appeal and set aside the Impugned Order dated 22.06.2018 passed by the Ld. CERC in Petition No. 6/TT/2018 to the extent* 

that it disallows Appellant's claims for 6% rate of capitalisation for initial spares of Static VAR Compensator (SVC);

(b) Declare and allow capitalisation @ 6% of Plant and Machinery Cost (upto cut-off date) for Appellant's Static VAR Compensator (SVC) in terms of Regulation 13(d)(iii) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014; and

(c) pass such other and further orders / directions as this Hon'ble Tribunal may deem just and proper in the facts and circumstances of the case."

65. Since the issues and the prayers of the Appellant are identical in both the Appeals, the decision rendered by us in the Appeal No. 226 of 2020 is also applicable to the Appeal No. 146 of 2021.

66. The Appellant sought capitalisation of initial spares at the rate of 6% of the Plant and Machinery cost under Regulation 13(d)(iii) of the CERC (Terms and Conditions of Tariff) Regulations, 2014, contending that the installation qualifies as a Brown Field substation project.

67. The Central Commission, however, treated the SVC as a "Series Compensation Device" within the meaning of Regulation 13(d)(iv), allowing initial spares only to the extent of 4%, and rejected the Appellant's review petition (32/RP/2018, vide order dated 23.01.2019) seeking reconsideration of the classification.

68. The Appellant contended that the Commission erred in mechanically categorizing the SVC as a Series Compensation Device (SCD) without appreciating the technical distinction between the two.

69. It was submitted that though both SVCs and SCDs fall under the broader umbrella of FACTS (Flexible AC Transmission Systems), these perform distinct functions:

- SVCs are shunt-connected devices used for dynamic reactive power compensation, voltage regulation, and enhancing grid stability.
- SCDs are series-connected passive devices that regulate real power and increase the transmission capacity of lines.

70. The Appellant also placed before us the comparative chart of the difference between SVC and SCD, as under:

| CRITERIA   | STATIC VAR                  | SERIES                   |
|------------|-----------------------------|--------------------------|
|            | COMPENSATOR                 | COMPENSATION             |
|            | ('SVC')                     | DEVICE                   |
|            |                             | ('SCD')                  |
| Connection | Shunt                       | Series                   |
| Function   | Provides dynamic reactive   | Provides fixed           |
|            | power compensation to       | compensation to increase |
|            | maintain voltage levels and | the power transfer       |
|            | improve system stability.   | capability of the        |
|            |                             | transmission line by     |
|            |                             | reducing line impedance. |

| Response    | Fast response time, typically   | Fixed compensation, so no    |  |
|-------------|---------------------------------|------------------------------|--|
| Time        | in milliseconds, to system      | response time.               |  |
|             | voltage changes.                |                              |  |
| Control     | Active device with automatic    | Passive device with no       |  |
|             | control to adjust reactive      | dynamic control.             |  |
|             | power in real-time.             |                              |  |
| Flexibility | Highly flexible as it can       | Limited flexibility as       |  |
|             | dynamically vary reactive       | compensation is fixed.       |  |
|             | power.                          |                              |  |
| Stability   | Enhances both steady-state      | Improves steady-state        |  |
|             | and transient stability of the  | stability but has no control |  |
|             | power system.                   | over transient stability.    |  |
| Components  | Thyristor-controlled reactors   | Fixed capacitors in series   |  |
|             | (TCR) and thyristor-switched    | with the transmission line.  |  |
|             | capacitors (TSC).               |                              |  |
| Application | Used in systems requiring       | Primarily used in long       |  |
|             | voltage control, stability, and | transmission lines to        |  |
|             | power quality improvement.      | improve power flow and       |  |
|             |                                 | stability.                   |  |
| Cost        | Approximately Rs. 175           | Approximately Rs. 40         |  |
|             | Crores                          | Crores                       |  |

71. The Appellant claimed that the SVCs in question were installed at existing substations (such as Kankroli, Ludhiana, and New Wanpoh), thereby qualifying the installation as a Brown Field Project. The Appellant relied on Minutes of the 30<sup>th</sup> Standing Committee on Power System Planning to demonstrate that the

SVCs were integrated into pre-existing infrastructure.

72. Further, reliance was placed on the Statement of Reasons (SOR) to the 2014 Regulations, which justified a 6% ceiling for initial spares in Brown Field substations due to the higher unit cost and lower scale of procurement as compared to Green Field assets.

73. The Appellant argued that in Review Petition No. 11/RP/2021 vide order dated 15.05.2022, the Commission itself allowed 6% spares for STATCOMs (another shunt-connected compensator) considering the same logic. As SVCs and STATCOMs only differ by control technology (thyristor-based vs. IGBT- Insulated-gate bipolar transistor), the same treatment ought to have been accorded to SVCs.

74. It was further submitted that in Petition No. 149/TT/2016 vide Tariff Order dated 28.12.2016 (*Power Grid Corporation of India Limited vs. Rajasthan Rajya Vidyut Prasaran Nigam Limited and Ors.*), the CERC had correctly allowed 6% capitalisation for SVCs installed at existing substations, thus establishing a precedent which the Commission was bound to follow.

75. Per Contra, the Commission defended its decision by stating that the 2014 Regulations do not specifically provide for SVCs. In the absence of express mention, the Commission exercised its discretion to classify SVCs under the broader category of "compensating devices," specifically under Regulation 13(d)(iv).

76. It was submitted that the SVCs were functionally similar to SCDs in that both

aim to stabilise power flow and voltage. As such, the Commission treated SVCs as akin to SCDs for the limited purpose of applying the ceiling for capitalisation of initial spares.

77. The Commission argued that merely because the SVCs were installed at an existing substation, they cannot automatically qualify as "Brown Field" substation assets. The classification under Regulation 13 is determined more by functional similarity than by location alone.

78. The Commission also asserted that its earlier order in Petition No. 149/TT/2016 cannot be treated as binding precedent, as the issue of classification under Regulation 13 was neither argued nor considered in that proceeding, and hence the order passed there was '*sub silentio*'.

79. The Commission further noted that the Appellant did not file a formal prayer under Regulations 54 (*'Power to Relax'*) and 55 (*'Power to Remove difficulty'*) seeking relaxation or removal of difficulty and thus could not retrospectively claim benefits on equitable grounds.

80. UPPCL supported the findings of the Commission, arguing that SVCs were rightly treated as compensating devices analogous to SCDs. They pointed out that technical distinctions cited by the Appellant were cosmetic and that both devices ultimately aim to stabilise the grid and control power quality.

81. UPPCL emphasized that cost cannot be a determinant for regulatory classification, and the higher import cost of SVCs does not warrant an increase in

the ceiling for initial spares.

82. It was also contended that the Appellant's invocation of 'Power to Relax' was paradoxical if the classification under Regulation 13(d)(iii) was applicable, such a plea would have been unnecessary. This showed that even the Appellant did not have legal certainty about its claim.

83. The Tribunal has carefully examined the technical nature of SVCs and finds merit in the Appellant's contention that SVCs and SCDs serve distinct purposes within the transmission system. The difference in configuration (shunt vs. series), control mechanism (dynamic vs. passive), and functional objective (voltage/reactive vs. real power compensation) is substantial and not superficial.

84. We agree that the two differ in functional and configuration-wise, undisputedly, the comparative chart placed before us categorically differentiates the two:

| CRITERIA   | STATIC VAR                  | SERIES                   |
|------------|-----------------------------|--------------------------|
|            | COMPENSATOR                 | COMPENSATION             |
|            | ('SVC')                     | DEVICE                   |
|            |                             | ('SCD')                  |
| Connection | Shunt                       | Series                   |
| Function   | Provides dynamic reactive   | Provides fixed           |
|            | power compensation to       | compensation to increase |
|            | maintain voltage levels and | the power transfer       |
|            | improve system stability.   | capability of the        |

|             |                                 | transmission line by         |
|-------------|---------------------------------|------------------------------|
|             |                                 | reducing line impedance.     |
| Response    | Fast response time, typically   | Fixed compensation, so no    |
| Time        | in milliseconds, to system      | response time.               |
|             | voltage changes.                |                              |
| Control     | Active device with automatic    | Passive device with no       |
|             | control to adjust reactive      | dynamic control.             |
|             | power in real-time.             |                              |
| Flexibility | Highly flexible as it can       | Limited flexibility as       |
|             | dynamically vary reactive       | compensation is fixed.       |
|             | power.                          |                              |
| Stability   | Enhances both steady-state      | Improves steady-state        |
|             | and transient stability of the  | stability but has no control |
|             | power system.                   | over transient stability.    |
| Components  | Thyristor-controlled reactors   | Fixed capacitors in series   |
|             | (TCR) and thyristor-switched    | with the transmission line.  |
|             | capacitors (TSC).               |                              |
| Application | Used in systems requiring       | Primarily used in long       |
|             | voltage control, stability, and | transmission lines to        |
|             | power quality improvement.      | improve power flow and       |
|             |                                 | stability.                   |
| Cost        | Approximately Rs. 175           | Approximately Rs. 40         |
|             | Crores                          | Crores                       |

85. The Statement of Reasons to the 2014 Tariff Regulations itself recognises a need to fix higher ceiling limits for initial spares in Brown Field projects due to

constrained environments and limited scale of procurement. The installation of SVCs in existing substations fits squarely within this rationale. Statement of Reason for Tariff Regulations, 2014 reads as under:

"15.13

. . . .

b) Initial spares have been claimed only for certain number of substation assets. It is observed that the though the expenses claimed were higher than the norms, the same were restricted by the Commission based on the norms. It is further observed that due to higher scale of procurement, per unit cost of spares is less in case of new substations. The Commission considered it appropriate to segregate total substation assets under analysis into greenfield and brownfield substation assets.

In case of greenfield substation assets, it is observed that around 86% of the assets are having initial spares up to 4% of plant & machinery cost. Accordingly, it is considered appropriate to fix the ceiling limit of initial spares as 4% of plant and machinery cost. In case of brownfield substation assets, **the average claim towards initial spares for majority of assets is found to be around 6% of the plant and machinery cost.** Therefore, it is considered appropriate to fix the ceiling limit as 6% in case of Transmission Sub-stations (brownfield)."

86. Further, the Commission's order in RP No. 11/RP/2021, treating STATCOMs (also shunt-connected compensators) under Regulation 13(d)(iii),

fortifies the logic for including SVCs in the same category. The distinction based on location and function aligns more with a Brown Field substation asset than with SCDs. The relevant extract of the Order:

> "8. We have heard representative of the Review Petitioner and have perused the record including order dated 25.1.2021. The representative of the Review Petitioner contended that in the original petition i.e. Petition No. 85/TT/2019, PGCIL claimed Initial Spares @ 6.83% as against the ceiling of 6% of the plant and machinery cost for STATCOM at Nalagarh as it is a brownfield sub-station in terms of Regulation 13(d)(iii) of the 2014 Tariff Regulations. However, the Commission vide order dated 25.1.2021 allowed Initial Spares @4% of the plant and machinery cost as per Regulation 13(d) (iv) of the 2014 Tariff Regulations considering STATCOM a Series Compensation Device and the same is an error apparent on record which needs to be modified. The representative of the Review Petitioner further contended that Regulation 13(d) (iv) of the 2014 Tariff Regulations provides for Initial Spares with respect to 'Series Compensation Device' while STATCOM is not a 'Series Compensation Device' and as such the requirement of Initial Spares in case of STATCOM is higher than a Series Compensation Device like FSCs and other equipment. further contended that equipment such as coupling He transformer, MV bus, mechanically switched capacitor/reactor, valves, valve hall and other necessary auxiliary facilities are required for installation of STATCOMs. This is the reason that related Initial Spares requirement is high and it should be treated

as a shunt compensation device and Initial Spares @ 6% may be allowed for the same. The representative of the Review Petitioner contended that in the present case, Initial Spares @ 6% may be allowed as the Commission vide order dated 18.10.2021 in Petition No. 658/TT/2020 and order dated 18.1.2022 in Petition No. 481/TT/2020 has already allowed Initial Spares @ 6% for STATCOM.

9. On perusal of record, we find that the Review Petitioner claimed Initial Spares in respect of the transmission asset under brown field sub-station category. It is also observed that the Review Petitioner took approval for STATCOM as a separate element. It is fact that norms for STATCOM are not specified in the 2014 Tariff Regulations. The Commission has observed in the order dated 25.1.2021 that basic purpose of STATCOM is to provide compensation and as per Regulation 13(d)(iv) of the 2014 Tariff Regulations, the ceiling for Initial Spares for compensation device is fixed at 4%. The Review Petitioner, however, has brought out that the primary purpose of series compensation devices is to regulate the power flow in the transmission lines, whereas shunt compensating devices are used for providing voltage support and dynamic support during network contingencies and, therefore, a shunt connected compensation device, like an STATCOM, and series compensation device are significantly different from each other. Therefore, neither of them can be taken as an alternative to each other.

10. We also notice that Nalagarh Sub-station is an existing substation which was executed in the year 1999 and STATCOM was executed on 31.3.2019. Thus, there is a case for treating the same under the brownfield category under Regulation 13(d) (iii) of the 2014 Tariff Regulations instated of treating it under Regulation 13(d)(iv) of the 2014 Tariff Regulations."

87. The justification rendered by the Central Commission is mainly (i) *Review Petitioner took approval for STATCOM as a separate element, (ii) the primary purpose of series compensation devices is to regulate the power flow in the transmission lines, whereas shunt compensating devices are used for providing voltage support and dynamic support during network contingencies, (iii) therefore, a shunt connected compensation device, like an STATCOM, and series compensation device are significantly different from each other. Therefore, neither of them can be taken as an alternative to each other, and (iv)Nalagarh Sub-station is an existing sub-station which was executed in the year 1999 and STATCOM was executed on 31.3.2019. Thus, there is a case for treating the same under the brownfield category.* 

88. Factually, the installation of the SVC in the instant case is similar to the case as quoted above on the grounds that the (i) approval for SVC was obtained as separate element, (ii) it is functionally similar to STATCOM and different from SCD on the same reasons as the STATCOM differs from SCD, and (iii) the Kankroli substation is an existing substation.

89. Accordingly, the justification given by the CERC in the Review Petition

stands good in the present case, and the CERC is bound to be consistent in its approach.

90. Undisputedly, the technical and logical reasons and justifications given by the Commission in accepting the STATCOMs under the brownfield category are identical, as pointed out in the present case, and cannot be ignored.

91. In fact, the technical justifications cannot be changed, even if no argument is made, on being asked whether the Central Commission has erred in passing the Order in RP No. 11/RP/2021, no reply was given.

# 92. We find absolutely no merit in the arguments of the CERC and in failing to explain the similarity or dissimilarity between SVC, STATCOM, and SCD.

93. Therefore, the reliance placed by the Commission, in the Impugned Orders, on functional similarity is found to be legally and technically flawed. The shared term "compensator" cannot justify convergence where core functionalities, installation topology, and operational characteristics diverge.

## 94. Undisputedly, SVC is a similar compensating Device as the STATCOM.

95. Moreover, the rejection of the Appellant's reliance on the Order dated 28.12.2016 (Petition 149/TT/2016) as *"sub silentio"* is not persuasive. Even if the point was not argued, the classification was made and applied by the Commission consciously and not by oversight.

96. Regulatory consistency and legitimate expectations require that similarly placed entities be treated alike. Deviation without just cause or reasoned departure erodes regulatory certainty and violates principles of natural justice and equity.

97. In view of the above findings, we are of the considered opinion that the CERC erred in treating the SVC installed at Kankroli Substation as a Series Compensation Device under Regulation 13(d)(iv) of the 2014 Tariff Regulations.

98. The SVC in question, being a shunt-connected device installed in an existing substation, qualifies as a Brown Field Transmission Substation Asset, and, therefore, the capitalisation of initial spares should have been permitted at 6% under Regulation 13(d)(iii), similar to the STATCOM as considered in RP No. 11/RP/2021.

99. Accordingly, the Impugned Order dated 21.06.2018 is set aside to the extent of this classification. The matter is remanded to the Central Commission for recalculating the tariff of the relevant transmission asset in accordance with the above findings.

# <u>ORDER</u>

For the foregoing reasons as stated above, we are of the considered view that the Appeal Nos. 226 of 2020 & 146 of 2021 have merit and are allowed.

The SVC in question, being a shunt-connected device installed in an existing substation, qualifies as a Brown Field Transmission Substation Asset and, therefore, the capitalisation of initial spares should have been permitted at 6% under Regulation 13(d)(iii).

Accordingly, the Impugned Orders dated 21.06.2018 and 22.06.2018 are set aside to the extent of this classification. The matter is remanded to the Central Commission for recalculating the tariff of the relevant transmission asset in accordance with the above findings.

The Captioned Appeals and pending IAs, if any, are disposed of in the above terms.

PRONOUNCED IN THE OPEN COURT ON THIS 14th DAY OF JULY, 2025.

(Virender Bhat) Judicial Member (Sandesh Kumar Sharma) Technical Member

pr/mkj/kks