

**BEFORE THE HARYANA ELECTRICITY REGULATORY COMMISSION AT
PANCHKULA**

Case No. HERC/P. No. 27 of 2026

Date of Hearing : **09/07/2026**

Date of Order : **27/07/2026**

IN THE MATTER OF:

Petition under Regulation 3.2.2 of HERC (Electricity Supply Code) Regulations, 2014 ("Supply Code") as amended by the (2nd Amendment) Regulations, 2019 read with Haryana Electricity Regulatory Commission (Conduct of Business) Regulations, 2019 seeking approval of the Hon'ble Commission for allowing grant of connectivity to the upcoming 2x25 kV Railway Traction Sub-Stations (TSS) at Rathdana, Dhola Majra & Kesri, at voltage level other than those specified by the Hon'ble Commission under the Supply Code.

Petitioner

Uttar Haryana Bijli Vitran Nigam Ltd. Through Executive Engineer/ Planning Vidyut Sadan, IP No. : 3 & 4, Sector-14, Panchkula.

VERSUS

Respondents:

Northern Railways Through its Sr. Divisional Electrical Engineer (TRD) Office of The Divisional Railway Manager, State Entry Road, New Delhi,

Proforma Respondents:

Haryana Vidyut Prasaran Nigam Ltd. Through Executive Engineer/ TS Division, Plot No. C-4, Shakti Bhawan, Sector-6, Panchkula.

Present

On behalf of the Petitioner

1. Sh. Raghujeet Singh Madan, Advocate
2. Ms. Aerika Singh, Advocate
3. Sh. Lovepreet Singh, Advocate
4. Sh. Sonu Ram, SDO , UHBVN

On behalf of the Respondent

1. Sh. Raheel Kohli, Advocate
2. Sh. Subhash Dhiman, XEN, HVPN
3. Sh. Sachin Kumar Sharma, SSE/Railway

QUORUM

Shri Nand Lal Sharma, Chairman
Shri Mukesh Garg, Member
Shri Shiv Kumar, Member

ORDER

1. Petition:

- 1.1 That the present petition is being filed through Er. Sandeep Sikri presently working as Executive Engineer, Planning, Uttar Haryana Bijli Vitran Nigam Ltd. ("UHBVNL"), who is authorized to file the present Petition and is also fully conversant with the facts and circumstances of the case based on knowledge derived from the record.
- 1.2 That the present petition is being filed under Regulation 3.2.2 of the Haryana Electricity Regulatory Commission (Electricity Supply Code) Regulations, 2014 (2nd Amendment) Regulations, 2019 ("Supply Code") seeking approval of the Hon'ble Commission for allowing grant of connectivity to the upcoming 2x25 kV Railway Traction Sub-Stations ("TSS") at (1) Rathdana, (2) Dhola Majra & (3) Kesri, at voltage level other than those specified by the Hon'ble Commission under the Supply Code.

I. DESCRIPTION OF PARTIES:

- 1.3 That the Petitioner-UHBVNL is a State-owned distribution company incorporated under the Companies Act, 1956 upon the unbundling of the erstwhile Haryana State Electricity Board. The Petitioner holds the license for Distribution and Retail Supply of power in the Northern Zone of Haryana comprising Panchkula, Ambala, Yamunanagar, Kurukshetra, Kaithal, Karnal, Panipat, Sonapat, Rohtak and Jhajjar.
- 1.4 That Indian Railways have been divided into separate zones and Respondent no. 1-The Northern Railway ("NR") is one of the Railway zones of India and the northernmost zone of the Indian Railways. Operating under the aegis of the Ministry of Railways, the Northern Railway comprises of 6 Divisions-Ambala, Delhi, Ferozpur, Lucknow, Moradabad and Jammu. The Respondent No. 1 owns, installs and operates an extensive traction network powered by multiple Traction Sub-Stations (TSS).
- 1.5 That Respondent No. 2- Haryana Vidyut Prasaran Nigam Limited ("HVPNL") is a State Government owned company registered under Indian Companies Act, 1956 and is presently engaged in the business of Transmission in the State of Haryana. HVPNL has been notified by the State as the State Transmission Utility for the purpose of Section 39 of the Electricity Act, 2003 ("Act, 2003").

II. FACTUAL MATRIX:

- 1.6 That the present petition relates to three- upcoming 2x25 kV Railway Traction Sub-Stations ("TSS") located at (1) Rathdana, (2) Dhola Majra & (3) Kesri. The Respondent No. 1 vide its Memo No. 230-Elect./TRD/Har/2x25kV Proj.DUK dated 14.07.2025 sought connectivity for the said sub-stations. A copy of the Memo dated 14.07.2025 is annexed. The details of the applied load and voltage level sought to be granted by the Respondent No. 1 is as under:

Sl.	Location of the upcoming 2x25 kV Railways TSS	Applied Load (MVA)	Name of the sub-station from where the connectivity is requested	Voltage Level at which the connectivity has been sought.
1.	Rathdana	18	132 kV S/Stn. Harsana	132 kV
2.	Dhola Majra	32	220 kV S/Stn. Shahbad	220 kV
3.	Kesri	30	220 kV S/Stn. Tepla	220 kV

III. LEGAL CONSPECTUS:

- 1.7 That it is submitted that Regulation 3.2.1 of the Haryana Electricity Regulatory Commission (Electricity Supply Code) Regulations, 2014 ("Supply Code"), as amended from time to time, prescribes as under:
"3.2.1 Supply shall generally be given at the following voltages on the basis of contracted load:

Category	System of Supply
<i>Low Tension</i>	
<i>Contracted load upto 5 KW</i>	<i>Single phase at 230V</i>
<i>Contracted load above 5 KW and up to 50 KW</i>	<i>3 Phase 4 wire at 400V</i>
<i>High Tension</i>	
<i>Contracted load exceeding 50 KW and up to 5000 kVA</i>	<i>3 Phase at 11 kV</i>
<i>Contracted load exceeding 2000 kVA and up to 25000 kVA</i>	<i>3 Phase at 33 kV</i>
<i>Contracted load exceeding 5000 kVA and up to 75000 kVA</i>	<i>3 Phase at 66 kV</i>
<i>Contracted load exceeding 25000 kVA and up to 100000 kVA</i>	<i>3 Phase at 132 kV</i>
<i>Contracted load exceeding 75000 kVA and up to 320000 kVA</i>	<i>3 Phase at 220 kV</i>
<i>Contracted load exceeding 320000 kVA</i>	<i>3 Phase at 400 kV</i>

Further, as Regulation 3.2.2 of the Supply Code, prescribes as under:
"3.2.2 In case where supply, depending upon the technical conditions of the transmission/ distribution system and / or the requirement of the consumer, has to be given at a voltage other than specified in Regulation 3.2.1/ approved plan, the licensee may accept the request of the applicant with the approval of the Commission.

Further, in case 33 kV voltage level is not available in the area of supply than load above 5 MVA up to 8 MVA may be served through 11 kV feeder with appropriate type/ size of conductor. Provided, the difference of cost of 33 kV Substation at the consumer end along with its connectivity from the distribution / transmission licensee's substation including the bay and the actual cost of connection of 11 kV is borne by the consumer.

Provided further that, in case intermediate voltage level between 33 kV and 220 kV is not available in the area of supply of the licensee, the load upto 37.5 MVA may be served through 33 kV feeder with

appropriate type/ size of conductor provided the difference of cost of substation as per Regulation 3.2.1 at the consumer end along with its connectivity from the distribution / transmission licensee's substation including the bay and the actual cost of connection on 33 kV is borne by the consumer."

In view of the above, the Petitioner has approached this Hon'ble Commission seeking approval under Regulation 3.2.2 of the Supply Code (reproduced above) for grant of connectivity at a voltage level other than that specified under the Supply Code.

- 1.8 That it is pertinent to mention that Respondent No. 1, vide Memo dated 16.02.2026 addressed to Respondent No. 2, emphasized the specialized requirements of Railway Traction for ensuring efficient power distribution over long distances and minimizing transmission losses. Respondent No. 1 further pointed out that, in terms of the "PSI Guideline for Increasing Speed Potential to 160 KMPH on Indian Railways, Instructions No. TI/IN/0043 Rev. 01", connectivity for 2x25 kV Railway traction power supply can be availed only at 220 kV or 132 kV voltage level only. Accordingly, Respondent No. 1 requested that connectivity be granted at either the 132 kV or 220 kV voltage level.

A copy of the Memo dated 16.02.2026 is annexed. A copy of the aforesaid Railway Instructions No. TI/IN/0043 Rev. 01 is also annexed. the relevant extract of which is reproduced below.

"(b) Power is generally obtained from 220 kV or 132 kV three phase networks from the power utility to reduce voltage imbalance on the transmission network. In the 2x25 kV TSS, the three-phase supply is utilized at the Traction Substation."

- 1.9 That it is further submitted that this Hon'ble Commission has previously granted similar approvals. In this regard, attention is invited to the Order dated 14.05.2024 passed in HERC/Petition No. 02 of 2024 titled Uttar Haryana Bijli Vitran Nigam vs. Haryana Rail Infrastructure Development Corporation Ltd. & Anr., wherein this Hon'ble Commission was pleased to allow a petition seeking analogous relief, while holding as under:

"8. After considering written as well as oral averments of the petitioner, the Commission allows the petitioner to provide new power connection for feeding 220 kV Traction Sub-Station of Haryana Rail Infrastructure Development Corporation Limited at Village Mandothi for Haryana Orbital Rail Corridor Project with a connected load of 5 MW with contract demand of 6.25 MVA load at 220 kV voltage level, as prayed for, subject to the condition that in case the HRIDCL applies for extension of load in future in next 8 years or thereafter, in that case fresh technical feasibility from feeding source of 400kV shall be carried out and the cost of line/bays etc. if any shall be borne by HRIDCL."

A copy of the order dated 14.05.2024 in HERC/Petition No. 02 of 2024, is also annexed.

IV. FEASIBILITY REPORT AND CHARGES PAYABLE BY THE RESPONDENT NO. 1:

1.10 That it is humbly submitted that the feasibility for grant of connectivity at higher voltage levels for the three TSS has been duly examined by the Petitioner herein along with the officials of Respondent No. 2. Upon detailed technical evaluation, the proposed connectivity at the higher voltage level has been found to be feasible. In this regard, a Joint Feasibility Report for TSS Rathdana and the Joint Feasibility Report of TSS at Dhola Majra and Kesri which was forwarded by the Respondent No. 2 to the Petitioner herein vide Memo No. 237 dated 15.12.2025 is annexed.

1.11 That it is further submitted that the grant of connectivity at the higher voltage level, in terms of the Joint Feasibility Report, shall be subject to the following conditions:

- a. The entire cost involved in releasing the proposed load to Respondent No. 1 is required to be and shall be borne exclusively by Respondent No. 1 in accordance with the Haryana Electricity Regulatory Commission (Duty to Supply Electricity on Request, Power to Recover Expenditure Incurred in Providing Supply and Power to Require Security) Regulations, 2016, along with all subsequent amendments.
- b. The Respondent No. 1 shall further furnish an undertaking to both Petitioner-UHBVNL and Respondent No.2-HVPNL confirming that any additional cost or charges, including service connection charges, supervision charges, departmental charges, deposit works cost, and any additional financial implications worked out at any later stage shall also be paid by them within 15 days from the date of issuance of such demand by either utility.
- c. Additionally, Respondent No. 1 shall execute a tripartite agreement with Petitioner-UHBVNL and Respondent No.2-HVPNL for construction of line/ bay by HVPNL, subject to the condition that the Respondent No. 1-NR shall have no objection for the utilization of the bays or any further arrangement in case same is required for feeding future/ upcoming sub-stations of HVPNL
- d. Further, Respondent No. 1 shall deposit, prior to commencement of works, all applicable supervision charges, service connection charges, deposit work costs, and any other statutory or regulatory charges required for establishing the necessary connectivity and release of load. Further, all GST implications and guidelines on deposit works issued by Respondent No. 2-HVPNL, shall also be strictly adhered to by the Respondent No.1.

1.12 That it is humbly submitted that aforementioned sequence of events clearly establishes that the feasibility of providing power supply at higher voltage level, subject to deposit of the requisite charges as per the Regulations.

In view of the above facts and the prevailing legal position, the Petitioner respectfully seeks the approval of this Hon'ble Commission for providing connection at 132 kV level to the upcoming 2x25 kV Railway TSS at Rathdana & at 220kV level to upcoming 2x25 kV Railway TSS at Dhola Majra and Kesri, subject to the conditions specified and upon deposit of cost as mandated under the Regulations.

- 1.13 That the present petition is Bonafide and in larger public interest.
1.14 That the requisite Court Fee has been duly deposited by the Petitioner.

PRAYER

It is, therefore, respectfully prayed that the present petition may kindly be allowed and this Hon'ble Commission may be pleased to allow this Petition and approve the grant of connectivity:

1. At 132 kV level to the upcoming 2x25 kV Railway TSS at Rathdana;
AND
2. At 220kV level to upcoming 2x25 kV Railway TSS at Dhola Majra and Kesri

Subject to the conditions specified at para no. 11 hereinabove and upon deposit of cost as mandated under the Regulations.;

AND/OR

1. Pass such orders, as the Hon'ble Commission may deem fit and appropriate in the facts and circumstances of the present case.

AND FOR THIS ACT OF KINDNESS AND JUSTICE THE PETITIONER SHALL AS IN DUTY BOUND EVER PRAY.

2. The case was heard on 19/05/2026, None appeared on behalf of respondent Northern Railway. Sh. Raghujeet Singh Madan counsel for the petitioner re-iterated the contents of petition and submitted that the feasibility report has already been provided in the petition. The Commission observed that Northern Railway should be the co-petitioner in this matter and reply from HVPN is expected endorsing the feasibility report to avoid any complication at later stage. Accordingly, the Commission adjourns the matter and directs HVPNL to file its reply in confirmation to technical feasibility report supported with requisite affidavit within two weeks with advance copy to other parties.
3. The case was heard on 09/07/2026, At the outset, Sh Raheel Kohli Counsel for the HVPN apprised that the reply as per earlier directions is under process and requested for 10 days' time to file the same. Sh.Raghujeet Singh Madan counsel for the petitioner submitted written statement on behalf of UHBVN. Acceding to request of respondent, the Commission directs to file the written statement within 10 days and reserves the order.

4. **Written Submissions of Petitioner received on 09/07/2026:**

MOST RESPECTFULLY SHOWETH:

A. RELEVANT DATES AND EVENTS:

1.	Respondent-Northern Railways applied for grant of connectivity at 220 kV level to its upcoming Railway Traction Sub-Station (TSS).	14.07.2025 (Annexure P-1 at Page No. 15)
2.	Joint Technical Feasibility Report	15.12.2025

		(Annexure P-5, at Page No. 50 to 54)
3.	Respondent addressed yet another letter seeking grant of connectivity at higher voltage level while relying on the Ministry of Railways Instruction No. T1/IN/0043 Rev. ('MoR Instructions'). MoR Instructions- Relevant para no. 3.2(b) at Page 20 of the petition.	16.02.2026 (Annexure P-2 Page No. 16)

B. LOCATION AND LOAD APPLIED:

Sl.	Location of the upcoming 2 x 25 kV Railways TSS	Applied Load (MVA)	Name of the sub-station from where the connectivity is requested	Voltage Level at which the connectivity has been sought.
1.	Rathdana	18	132 kV S/Stn. Harsana	132 kV
2.	Dhola Majra	32	220 kV S/Stn. Shahbad	220 kV
3.	Kesri	30	220 kV S/Stn. Tepla	220 kV

C. RELEVANT REGULATIONS:

Haryana Electricity Regulatory Commission (Electricity Supply Code) Regulations, 2014

"3.2.1 Supply shall generally be given at the following voltages on the basis of contracted load:

<i>Category</i>	<i>System of Supply</i>
<i>Low Tension</i>	
<i>Contracted load upto 5KW</i>	<i>Single phase at 230V</i>
<i>Contracted load above 5KW and up to 50 KW</i>	<i>3 Phase 4 wire at 400 V</i>
<i>High Tension</i>	
<i>Contracted load exceeding 50 KW and up to 5000 kVA</i>	<i>3 Phase at 11 kV</i>
<i>Contracted load exceeding 2000 kVA and up to 25000 kVA</i>	<i>3 Phase at 33 kV</i>
<i>Contracted load exceeding 5000 kVA and up to 75000 kVA</i>	<i>3 Phase at 66 kV</i>
<i>Contracted load exceeding 25000 kVA and up to 100000 kVA</i>	<i>3 Phase at 132 kV</i>
<i>Contracted load exceeding 75000 kVA and up to 320000 kVA</i>	<i>3 Phase at 220 kV</i>
<i>Contracted load exceeding 320000 kVA</i>	<i>3 Phase at 400 kV</i>

*Further, as Regulation 3.2.2 of the Supply Code, prescribes as under:
“3.2.2 In case where supply, depending upon the technical conditions of the transmission/distribution system and / or the requirement of the consumer, has to be given at a voltage other than specified in Regulation 3.2.1/ approved plan, the licensee may accept the request of the applicant with the approval of the Commission.*

Further, in case 33kV voltage level is not available in the area of supply than load above 5 MVA upto 8 MVA may be served through 11 kV feeder with appropriate type/ size of conductor. Provided, the difference of cost of 33 kV substation at the consumer end along with its connectivity from the distribution / transmission licensee’s substation including the bay and the actual cost of connection of 11 kV is borne by the consumer.

Provided further that, in case intermediate voltage level between 33 kV and 220 kV is not available in the area of supply of the licensee, the load upto 37.5 MVA may be served through 33 kV feeder with appropriate type/ size of conductor provided the difference of cost of substation as per Regulation 3.2.1 at the consumer end along with its connectivity from the distribution / transmission licensee’s substation including the bay and the actual cost of connection on 33 kV is borne by the consumer.”

D. SIMILAR PETITIONS HAVE BEEN ALLOWED BY THE HON’BLE COMMISSION:

1. HERC/Petition No. 02 of 2024- *Uttar Haryana Bijli Vitran Nigam Vs. Haryana Rail Infrastructure Development Corporation Ltd. & Anr.* (Annexure P-4, At Page. 40)
2. HERC/Petition No. 104 of 2025- *Dakshin Haryana Bijli Vitram Nigam Vs. Haryana Rail Infrastructure Development Corporation Limited* (Decided on 30.04.2026)

5. Written Submissions of Respondent HVPNL received on 21/07/2026:

- 5.1 The present Response is being filed on behalf of Haryana Vidyut Prasaran Nigam Limited (“HVPNL”/“Respondent No. 2”) in compliance with the Order dated 19.05.2026 passed by this Hon’ble Commission, whereby Respondent No. 2 was directed to file its reply confirming the Technical Feasibility Report in respect of the proposed connectivity for the upcoming 2x25 kV Railway Traction Substations at Rathdhana, Dhola Majra and Kesri.
- 5.2 At the outset, it is respectfully submitted that HVPNL is the State Transmission Utility for the State of Haryana and is entrusted with the planning, development, operation and maintenance of the intraState transmission system. In discharge of its statutory functions, HVPNL undertakes technical examination of proposals involving connectivity to the transmission network with due regard to the existing transmission infrastructure, availability of transmission corridors, loading on the transmission network, system reliability, network security and other technical parameters governing the safe and efficient operation of the transmission system.
- 5.3 It is submitted that Northern Railway, through its Senior Divisional Electrical Engineer (TRD), New Delhi, vide communication dated

14.07.2025, sought power supply connectivity for its proposed 2x25 kV Railway Traction Substations at Rathdhana, Dhola Majra and Kesri in the State of Haryana. Since the proposed connectivity involved supply at voltage levels different from those generally prescribed under Regulation 3.2.1 of the Haryana Electricity Regulatory Commission (Electricity Supply Code) Regulations, 2014, UHBVN approached this Hon'ble Commission seeking approval under Regulation 3.2.2 of the said Regulations.

- 5.4 It is respectfully submitted that Regulation 3.2.2 of the HERC Electricity Supply Code recognises that, depending upon the technical conditions of the transmission/distribution system and/or the requirement of the consumer, supply may be provided at a voltage level other than that specified under Regulation 3.2.1, subject to the approval of this Hon'ble Commission. It is in exercise of the said regulatory framework that the present Petition has been preferred by UHBVN.
- 5.5 The role of HVPNL in the present proceedings is confined to placing before this Hon'ble Commission its technical assessment regarding the feasibility of providing the proposed transmission connectivity from the existing network. Accordingly, the present Response is limited to confirming the technical feasibility of the proposed connectivity from the perspective of the State transmission system.
- 5.6 It is respectfully submitted that the proposal for providing connectivity to the proposed 2x25 kV Railway Traction Substations was jointly examined by the Transmission Wing of HVPNL and the Operation Wing of UHBVN from the standpoint of technical feasibility. Upon completion of the requisite evaluation, Joint Technical Feasibility Report dated 16.01.2026 & 03.02.2026 were prepared and duly approved by the competent authorities. A copy of the Joint Technical Feasibility Reports is annexed. The said Reports comprehensively examine, inter alia, the availability of suitable source substations, adequacy of the existing transmission system, loading of the transmission network, availability of transmission bays, right of way, results of the load flow studies, contingency analysis and other technical parameters relevant for providing the proposed connectivity. The conclusions recorded therein represent the considered opinion of HVPNL based on the prevailing transmission network and the detailed studies undertaken in respect of the proposal.
- 5.7 In compliance with the directions contained in the Order dated 19.05.2026, HVPNL places the aforesaid Joint Technical Feasibility Reports before this Hon'ble Commission and respectfully confirms that the findings and conclusions recorded therein correctly reflect the technical feasibility of the proposed connectivity. For the convenience of this Hon'ble Commission, the salient features of the assessment in respect of each of the proposed Railway Traction Substations are briefly set out hereinafter.

Connectivity of 2x25 kV Railway Traction Substation at Rathdhana

- 5.8 The Joint Technical Feasibility Report records that, although the Railway initially sought connectivity at 220 kV level, the most suitable and technically feasible source for providing connectivity to the proposed 2x25 kV Railway Traction Substation at Rathdhana, having a load requirement of 18 MVA, is 132 kV Substation Harsana at 132 kV level. This conclusion has been arrived at after evaluating the availability of right of way, the length of the proposed transmission line, the availability of load margin and the availability of transmission bays at the identified substation.
- 5.9 The Joint Technical Feasibility Report further records that 132 kV Substation Harsana is fed from 220 kV Substation Mohana, which in turn is connected to 400 kV Substation Sonipat Jajji of PGCIL through four circuits. In addition, Harsana Substation is interconnected with 132 kV Substations Fazilpur and Kharkhoda. The maximum loading recorded on the 132 kV Mohana to Harsana double circuit line is well within the rated carrying capacity of the line. It has also been confirmed that the proposed 132 kV double circuit transmission line connecting Harsana Substation with the Traction Substation at Rathdhana, of approximately 8.5 kilometres, can be constructed as a deposit work of Northern Railway, that the requisite right of way is presently available, and that sufficient space exists for construction of two 132 kV line bays together with the associated control and relay panels.
- 5.10 The System Study Cell has also carried out the requisite load flow study and identified certain contingency based constraints on the existing transmission network. The proposal for augmentation of the concerned transmission element has already been initiated and is under consideration. Subject to the said system considerations and the conditions recorded in the Joint Technical Feasibility Report, HVPNL confirms that connectivity to the proposed Railway Traction Substation at Rathdhana for a load of 18 MVA is technically feasible from 132 kV Substation Harsana at 132 kV level.

Connectivity of 2x25 kV Railway Traction Substation at Dhola Majra

- 5.11 Insofar as the proposed 2x25 kV Railway Traction Substation at Dhola Majra is concerned, the Joint Technical Feasibility Report records that the proposal has been examined with reference to the existing transmission infrastructure in the vicinity, availability of transmission corridors, right of way, transmission bays and the loading on the existing network. Upon such examination, it has been concluded that the proposed connectivity for the load requirement of 32 MVA is feasible from an engineering standpoint from 220 kV Substation Shahbad at 220 kV level. The proposed arrangement envisages construction of a 220 kV double circuit transmission line connecting Shahbad Substation with the Traction Substation at Dhola Majra, using 0.4 square inch ACSR conductor on lattice tower/monopole configuration, having an approximate length of 2 kilometres, as a deposit work of Northern Railway. The Joint Technical Feasibility

Report further records that the requisite right of way for the proposed transmission line is presently available.

- 5.12 The Joint Technical Feasibility Report further records that adequate infrastructure exists at 220 kV Substation Shahbad for accommodating the proposed connectivity. It has been confirmed that sufficient space is available for construction of two 220 kV line bays in the switchyard of the said substation. The Report also examines the existing feeding arrangement of the substation and records that the same is presently fed through the 220 kV Shahbad to Jorian double circuit line, the 220 kV Shahbad to Dhurala double circuit line and the 220 kV Shahbad to Rajokheri double circuit line, all employing 0.4 square inch ACSR conductors. The maximum loading on these transmission lines has also been analysed with reference to their respective current carrying capacities, thereby providing the necessary basis for assessing the suitability of the proposed source for extending supply to the Railway Traction Substation.
- 5.13 The Joint Technical Feasibility Report also examines the transformation capacity available at 220 kV Substation Shahbad and records that the existing arrangement comprises three 100 MVA, 220/66 kV transformers, whose maximum recorded loading remains within the available installed capacity. In addition, the System Study Cell has carried out the requisite load flow studies for assessing the impact of the proposed connectivity on the transmission system under normal as well as contingency operating conditions. The study identifies certain overloading on specified transmission elements during contingency scenarios involving outage of one circuit of certain transmission lines. These observations have been duly noted and communicated to the concerned Transmission System Wing for appropriate consideration in the planning and augmentation of the network.
- 5.14 It is respectfully submitted that the aforesaid contingency observations do not detract from the overall technical feasibility of the proposed connectivity. Rather, they form part of the normal system planning process undertaken by HVPNL while assessing new transmission connectivity proposals. Accordingly, the Joint Technical Feasibility Report concludes that connectivity for the proposed 2x25 kV Railway Traction Substation at Dhola Majra for a connected load of 32 MVA is technically feasible from 220 kV Substation Shahbad, subject to compliance with the observations and conditions recorded in the Joint Technical Feasibility Report as well as the approval of this Hon'ble Commission. HVPNL respectfully confirms the aforesaid conclusion.

Connectivity of 2x25 kV Railway Traction Substation at Kesri

- 5.15 In respect of the proposed 2x25 kV Railway Traction Substation at Kesri, the Joint Technical Feasibility Report records that the proposal has been subjected to a detailed examination keeping in view the available transmission infrastructure, network loading, right of way, bay availability and system security. The assessment concludes that the proposed connectivity for a connected load of 30 MVA is feasible

from an engineering standpoint from 220 kV Substation Tepla at 220 kV level. The proposed connectivity contemplates construction of a 220 kV double circuit transmission line connecting Tepla Substation with the Traction Substation at Kesri, employing 0.4 square inch ACSR conductor with lattice tower/monopole configuration, as a deposit work of Northern Railway. The Report also records that the necessary right of way for the proposed transmission line is presently available.

5.16 The Joint Technical Feasibility Report further records that 220 kV Substation Tepla presently has an installed transformation capacity of 360 MVA, comprising two 100 MVA transformers and one 160 MVA transformer, whereas the maximum recorded loading is approximately 300 MVA. It is also noted that augmentation of the transformation capacity has already been incorporated in the integrated transmission planning of HVPNL and UHBVN for the future planning period. The Report further analyses the various transmission lines feeding Tepla Substation, namely the Abdullapur to Tepla, Madanpur to Tepla, Raiwali to Tepla and Tepla to Rajokheri transmission lines, and records the loading on each of the said elements vis a vis their respective current carrying capacities. The assessment also confirms that adequate space is available for construction of two 220 kV line bays for the proposed Railway connectivity.

5.17 The requisite load flow studies have also been undertaken by the System Study Cell by considering the proposed additional load of 30 MVA and the approved transmission infrastructure. The study identifies certain contingency based loading on the 400/220 kV ICTs at PGCIL Panchkula as well as on one circuit of the 220 kV Abdullapur to Rajokheri double circuit line. The Joint Technical Feasibility Report records that the observations of the System Study Cell have already been communicated to the concerned authorities, including Power Grid, wherever necessary. It is further noted that augmentation of the relevant transmission line with equivalent HTLS conductor shall be undertaken as and when warranted by the loading conditions of the network.

5.18 In the aforesaid circumstances, the Joint Technical Feasibility Report concludes that the proposed connectivity to the 2x25 kV Railway Traction Substation at Kesri for a connected load of 30 MVA is technically feasible from 220 kV Substation Tepla, subject to the technical conditions and observations recorded therein and the approval of this Hon'ble Commission. HVPNL respectfully confirms the said conclusion.

Overall Technical Conclusion

5.19 Upon consideration of the Joint Technical Feasibility Reports in respect of all three proposed Railway Traction Substations, it emerges that the proposed connectivity is technically feasible from the following transmission substations:

5.20

Railway Traction Substation	Connected Load	Technically Feasible Source
Rathdhana	18 MVA	132 kV Substation Harsana (132 kV)
Dhola Majra	32 MVA	220 kV Substation Shahbad (220 kV)
Kesri	30 MVA	220 kV Substation Tepla (220 kV)

The aforesaid conclusions are based upon the detailed examination undertaken by the concerned officers of HVPNL and UHBVN and the Joint Technical Feasibility Reports placed on record.

- 5.21 It is respectfully submitted that the technical feasibility confirmed herein is subject to the observations, assumptions and conditions expressly recorded in the Joint Technical Feasibility Reports. In particular, implementation of the proposed connectivity shall be subject to compliance with the applicable provisions of the HERC Regulations, execution of the requisite deposit works, availability of statutory approvals, payment of the applicable charges by Northern Railway, execution of the necessary agreements and compliance with all technical, commercial and operational requirements prescribed by HVPNL and UHBVN from time to time.
- 5.22 Without prejudice to the foregoing, HVPNL further submits that Northern Railway shall be required to comply with all conditions stipulated in the Joint Technical Feasibility Reports, including execution of the requisite tripartite agreement, payment of departmental, supervision and service connection charges, furnishing of the requisite undertakings, obtaining statutory approvals, compliance with the applicable metering requirements and adherence to the guidelines governing execution of deposit works. The confirmation of technical feasibility by HVPNL is, therefore, to be read together with the conditions and stipulations forming part of the Joint Technical Feasibility Reports.
- 5.23 In view of the above, HVPNL respectfully places the Joint Technical Feasibility Reports before this Hon'ble Commission and confirms that the findings and conclusions recorded therein correctly represent the technical feasibility of providing transmission connectivity to the proposed 2x25 kV Railway Traction Substations at Rathdhana, Dhola Majra and Kesri from the identified source substations, subject to the observations and conditions recorded therein.
- 5.24 HVPNL reserves the right to amend, add or alter this Response, if necessary, and/or to file additional submissions and/or documents, if required or if directed by this Hon'ble Commission.

Commission's Order:

1. The Commission examined the petition in detail along with the reply, written submissions on record and heard the arguments of the Petitioner and Respondents in the above matter. The petitioner is seeking approval

for the grant of connectivity to three upcoming 2x25 kV Railway Traction Sub-Stations (TSS) at voltage levels other than those generally prescribed under the existing regulatory framework. The request made by Northern Railway for connectivity to the TSS at Rathdana (18 MVA at 132 kV level), Dhola Majra (32 MVA at 220 kV level), and Kesri (30 MVA at 220 kV level) is in deviation from Regulation 3.2.1 of the HERC (Electricity Supply Code) Regulations, 2014, which prescribes specific voltage levels based on contracted load. However, Regulation 3.2.2 of the Supply Code provides the Commission with the discretion to approve supply at different voltage levels depending on technical conditions or consumer requirements.

2. The Petitioner submitted that Northern Railway, required specialized traction requirements for increasing speed potential to 160 KMPH and connectivity at 132 kV or 220 kV to reduce voltage imbalance and ensure efficient power distribution. The Petitioner cited legal precedents where this Commission granted similar approvals, specifically Order dated 14/05/2024, in Petition No. 02 of 2024, which allowed a 6.25 MVA load at a 220 kV level, and Petition No. 104 of 2025, decided on 30/04/2026. Further, HVPNL, conducted a technical evaluation, prepared Joint Technical Feasibility Reports, which were approved on 16/01/2026, and 03/02/2026, confirmed that the proposed connectivity is engineeringly feasible from the 132 kV Substation Harsana, 220 kV Substation Shahbad, and 220 kV Substation Tepla respectively. In its written statement received on 21/07/2026, HVPNL confirmed the findings of these reports.
3. The Commission, having considered the technical feasibility and the specialized nature of railway traction, finds sufficient merit in the petition and allows the same, subject to the following directions:
 - 3.1 Connectivity is granted at the 132 kV level for Rathdana (18 MVA), and at the 220 kV level for Dhola Majra (32 MVA) and Kesri (30 MVA), as the technical requirement for high-speed rail traction constitutes a valid ground in terms of Regulation 3.2.2.
 - 3.2 Northern Railway shall bear the entire cost involved in releasing the proposed load, including service connection, supervision, and departmental charges, in strict accordance with the HERC Regulations in vogue.
 - 3.3 A tripartite agreement must be executed between the Petitioner, the State Transmission Utility, and Northern Railway for the construction of necessary lines and bays, ensuring that Northern Railway has no

objection to the future utilization of these bays by the utility if required.

- 3.4 Northern Railway must furnish a written undertaking to pay any additional financial implications or charges worked out at a later stage within 15 days of demand.
4. The petition is disposed of, in above terms.

This order is signed, dated and issued by the Members of Haryana Electricity Regulatory Commission on 27/07/2026 due to sad demise of the Chairman on 23/07/2026.

Date: 27/07/2026
Place: Panchkula

-Sd/-
(Shiv Kumar)
Member

-Sd/-
(Mukesh Garg)
Member