

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 441/TL/2025

Coram:

Shri Jishnu Barua, Chairperson

Shri Ramesh Babu V., Member

Shri Harish Dudani, Member

Shri Ravinder Singh Dhillon, Member

Date of Order: 30.10.2025

In the matter of

Application under Sections 14, 15, 79 (1)(e) of the Electricity Act, 2003 read with the Central Electricity Regulatory Commission (Procedure, Terms and Conditions for Grant of Transmission License and other related matters) Regulations, 2024 with respect to grant of transmission licence to Mundra I Power Transmission Limited.

And

In the matter of

Mundra I Transmission Limited,

(wholly owned subsidiary of M/s Adani Energy Solutions Limited)

C-105, Anand Niketan,

New Delhi-110021.

.....Petitioner

Versus

1. Central Transmission Utility of India Limited,

Saudamini, Plot No.2, Sector-29,

Gurgaon-122001.

2. PFC Consulting Limited,

Urjanidhi, 1, Barakhamba Lane, Connaught Place,

New Delhi-110001.

3. Madhya Pradesh Power Management Company Limited,

Block No-11, Ground Floor, Shakti Bhavan,

Vidhyut Nagar, Rampur,

Jabalpur-482 008, Madhya Pradesh.

4. Chhattisgarh State Power Distribution Company Limited,

P.O. Sunder Nagar, Dangania,

Raipur-492013, Chhattisgarh.

5. Maharashtra State Electricity Distribution Company Limited,

Prakashgad, 4th Floor, Bandra (East),
Mumbai-400051.

6. Gujarat Urja Vikas Nigam Limited,
Vidhyut Bhavan, Race Course,
Vadodara-390007.

7. DNH Power Distribution Corporation Limited,
Dadar Nagar Haveli,
66 kV, Amlī Ind. Estate,
Silvasa-396230.

8. Electricity department of Goa,
Electricity department, Government of Goa,
Vidyut Bhavan, Near Mandvi Hotel,
Panaji, Goa-403001.

9. Dadra and Nagar Haveli and Daman and Diu,
Power Distribution Corporation Limited,
1st & 2nd Floor, Vidyut Bhavan, Silvassa,
Dadra and Nagar Haveli-396230.

10. MPSEZ Utilities Limited,
Adani Corporate House, Shantigram,
S.G. Highway, Ahmedabad-382421, Gujarat.

11. Power Grid Corporation of India Limited,
Commercial & Regulatory Cell,
'Saudamini', Plot No.2, Sector-29,
Gurgaon-122001, Haryana.

12. Adani Energy Solutions Limited,
Adani Corporate House,
Shantigram, Near- Vaishno Devi Circle,
S. G. Highway, Khodiyar-382421, Ahmedabad.

...Respondents

Parties present:

Shri Naresh Desai, MITL
Shri Swapnil Verma, CTUIL
Shri Ranjeet S. Rajput, CTUIL

ORDER

The Petitioner, Mundra I Transmission Limited, has filed the present Petition for grant of a transmission licence under Section 14 of the Electricity Act, 2003 (hereinafter referred to as “the Act”) read with the Central Electricity Regulatory

Commission (Procedure, Terms, and Conditions for grant of Transmission Licence and other related matters) Regulations, 2024 (hereinafter referred to as “the Transmission Licence Regulations”) for the grant of a transmission licence to establish transmission project for the “Transmission System for supply of power to Green Hydrogen/ Ammonia manufacturing potential in Mundra area of Gujarat under Phase-I: Part B1 scheme (3 GW at Navinal S/s)” (hereinafter referred to as “the Project”) on a Build, Own, Operate and Transfer basis, consisting of the following elements:

Sl. No.	Scope of the Transmission Scheme	Scheduled COD in months from the Effective Date
1	Augmentation of Transformation capacity at 765/400 kV Navinal (Mundra) S/s (GIS) by 2x1500 MVA ICTs along with 2x330 MVar, 765 kV and 2x125 MVar, 420 kV bus reactors on Bus Section-II and 1x125MVar, 420 kV bus reactor on Bus Section-I. This will involve the creation of 765 kV and 400 kV Bus Sections-2 through a sectionalization arrangement. The 400 kV and 765 kV Sectionaliser shall be normally closed. • Creation of New 765 kV and 400 kV Bus Section-II • 765 kV Sectionaliser – 1 Set • 400 kV Sectionaliser – 1 set • 765/400 kV, 1500 MVA ICT-2 Nos. (on Sec-II) • 765 kV ICT bays- 2 Nos. (on Sec-II) • 400 kV ICT bays- 2 Nos. (on Sec-II) • 330 MVar 765 kV bus reactor-2 Nos. (Sec-II) • 125 MVar 420 kV bus reactor-3 Nos. (1 No. on Sec-I and 2 Nos. on Sec-II) • 765 kV reactor bay- 2 Nos. (Sec- II) • 400 kV reactor bay- 3 Nos. (1 No. on Sec-I and 2 Nos. on Sec- II)	36 months from SPV Transfer (20.3.2028)
2	Navinal (Mundra) (GIS) – Bhuj 765 kV D/C Line	
3	765 kV line bays at each end of Navinal (Mundra) (GIS) – Bhuj 765 kV D/C line • 765 kV line bays-2 Nos. (AIS) (for Bhuj end) • 765 kV line bays-2 Nos. (GIS) (for Navinal (Mundra) end) (on Sec-II)	
4	±300 MVar STATCOM along with 2x125 MVar MSC and 1x125 MVar MSR at Navinal (Mundra) (GIS) 400 kV Bus section-I.	

Sl. No.	Scope of the Transmission Scheme	Scheduled COD in months from the Effective Date
	•±300 MVar STATCOM along with 2x125MVar MSC and 1x125MVar MSR •400 kV bay – 1 No.	
5	±300 MVar STATCOM along with 2x125 MVar MSC and 1x125 MVar MSR at Navinal (Mundra) (GIS) 400 kV Bus section-II •±300 MVar STATCOM along with 2x125 MVar MSC and 1x125 MVar MSR •400 kV bay – 1 No.	

Note:

(i) Wherever required, TSP shall implement complete Dia consisting of 2 (Two) Main Bays and 1 (One) Tie Bay required for completion of diameter (GIS) in one-and-half breaker scheme.

(ii) TSP of Navinal (Mundra) S/s shall provide space for scope of work at Sl. 1, 2, 3 (for Navinal end), 4 and 5 above.

(iii) TSP of Bhuj PS shall provide space for scope of work at Sl. 3 (for Bhuj end) above.”

2. The Petitioner has made the following prayers:

“a) Issue / Grant the Transmission License to the Petitioner for establishing, operating and maintaining the Transmission System as provided for in the Transmission Service Agreement;

b) Allow the “Transmission system for supply of power to Green Hydrogen/Ammonia manufacturing potential in Mundra area of Gujarat under Phase-I: Part B1 scheme (3 GW at Navinal S/s)” to be part of PoC Pool as per Hon'ble CERC (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 and any other amendments thereon issued from time to time by Hon'ble Commission.

c) Condone any inadvertent errors omissions/ errors / shortcomings and permit the Petitioner to add/change/modify/alter these filings and make further submissions as may be required at a future date.

d) Pass any such other order / orders, as may be deemed fit and proper in the facts and circumstances of the case.”

Hearing dated 20.5.2025

3. Notice was issued to the parties to file the reply and rejoinder. Vide Record of Proceedings (hereinafter referred to as “RoP”) for the hearing dated 20.5.2025, the Petitioner was directed to implead POWERGRID (for Bhuj PS) and Adani Energy Solutions Ltd., the TSP of Navinal (for the Mundra S/s) as a party to the Petition and to file a revised memo of parties. Accordingly, the Petitioner, vide affidavit dated 23.5.2025, has filed the revised memo of parties. Further, CTUIL was directed to furnish details of the interconnecting upstream and downstream transmission systems, as well as the connectivity details and GNA grants and/or applications received at Navinal (Mundra) S/s.

4. CTUIL, in compliance with the RoP dated 20.5.2025, vide affidavit dated 9.6.2025, has submitted as under:

i) Details of the upstream/downstream transmission system are as below:

S.No.	Particulars	Details of the transmission System	STU/ ISTS	Implementing Agency	Implementation Mode	Commissioning Schedule/ Status
a)	Upstream Transmission System*	4x1500MVA, 765/400kV Navinal (Mundra) (GIS) S/s LILO of Bhuj-II - Lakadia 765kV D/c at Navinal (GIS)	ISTS	Navinal Tr. Ltd. (Subsidiary of Adani Energy Solution Ltd)	TBCB	14.07.2026 / Under Transmission Licence Stage
b)	Downstream Transmission System	Nil (as no application for GNA has been received from Green Hydrogen/ Ammonia manufacturers in the Mundra area of Gujarat to date, against the subject scheme)				

** The scheme shall cater to the supply of 3000 MW power to Bulk consumers and for meeting 1500 MW demand for Green Hydrogen/ Ammonia projects. GNA/GNARE for cumulative capacity of 3050 MW has been granted to various entities at Navinal (Mundra) ISTS S/s*

(MUL: 1300MW & 495MW, MPL: 1140MW & KCL: 115MW). However, no other applications have been received from any green hydrogen/ other bulk consumers in the area.

ii) The details of the connectivity/ GNA granted and/or application received at Navinal S/s (Mundra) area of Gujarat:

- No Application for GNA has been received from the Green Hydrogen/ Ammonia manufacturers in the Mundra area of Gujarat to date.
- However, Adani New Industries Limited (ANIL) vide letter dated 21.02.2025 has informed that it requires 2.5 GW GNA for Green hydrogen by December 2026 and another 2.5 GW GNA by December 2027, for which applications shall be made by December 2025.

Hearing dated 20.6.2025

5. During the course of the hearing, the representative for the Petitioner submitted that the Petitioner has complied with the directions issued vide RoP dated 20.6.2025. The representative of Respondent, CTUIL, submitted that CTUIL has also filed its compliance affidavit as per the Record of Proceedings for the hearing dated 20.5.2025 and that no application for GNA has been received from Green Hydrogen/ Ammonia manufacturers in the Mundra area of Gujarat to date. He also added that the Transmission Project was approved based on the potential identified and deliberated during the NCT meeting held on 6.8.2024, which was in pursuance of the 26th WR meeting held on 28.2.2024.

6. Vide RoP dated 20.6.2025, CTUIL was directed to clarify the following:

(a) In the 22nd NCT meeting, CTUIL stated that Navinal (Mundra) (GIS) is already under bidding for the supply of the 3000 MW power to the Bulk consumers and for meeting the 1500 MW demand for Green Hydrogen/ Ammonia projects. The proposed scheme is to meet the additional 3000 MW drawal requirement for Green Hydrogen/Ammonia projects (cumulative up to 4500 MW in the Mundra area) at Navinal (Mundra) (GIS) S/s. Justification for proposing the scheme in the 22nd NCT?

(b) On what basis has a transmission licence been recommended by the CTUIL for the instant scheme despite the non-receipt of an application from the upcoming Green Hydrogen/ Ammonia projects?

(c) Why can this scheme not be taken up after exhausting the margins already available at Navinal (Mundra) 4x1500 MVA 765/400 kV substation?

7. CTUIL in compliance with RoP dated 20.6.2025, vide affidavit dated 14.7.2025, has submitted as under:

(a) Justification for proposing the scheme “Transmission System for supply of power to Green Hydrogen/Ammonia manufacturing potential in Mundra area of Gujarat under Phase-I: Part B1 scheme (3 GW at Navinal S/s)” in the 22nd NCT.

- In the 21st NCT meeting held on 6.8.2024, it was deliberated that MNRE has forwarded the Green Hydrogen/ Ammonia manufacturing locations along with the associated electricity demand by 2030. During the meeting, the MNRE representative informed that the modified year-wise electricity demand on account of Green Hydrogen and Green Ammonia production in the Mundra area by 2029- 30 is as follows:

Location	Developer	Electricity Demand 2026-27 (MW)	Additional Electricity Demand in 2027-28 (MW)	Additional Electricity Demand in 2028-29 (MW)	Additional Electricity Demand in 2029-30 (MW)
Mundra	Adani New Industries Limited	2000	6000	8000	6000

- In the first Phase, it was proposed to plan and take up for approval the transmission System for Green Hydrogen/ Green Ammonia production expected by 2027-28. A tentative System for Green Hydrogen/ Green Ammonia production expected by 2028-29 was also planned and was proposed for review later based on the visibility of Green Hydrogen/ Green Ammonia in the above areas. Certain technical issues were raised during the meeting, and based on the same, it was decided that the scheme may again be examined jointly by CEA, CTUIL and Grid India. Thereafter, the scheme may be brought up at the next NCT meeting for decision.
- During the 22nd NCT meeting held on 23.8.2024, it was informed that the 1.5 GW capacity can be accommodated in spare capacity at Navinal-I S/s, which

was under tendering stage at that time. Hence, it was deliberated that the Transmission System needs to be planned in phases to meet the expected balance capacity by 2030.

- In the meeting, the representative of MNRE informed that electricity demand on account of Green Hydrogen/ Green Ammonia production in Mundra would be 22 GW by 2030 as given below:

Year	Cumulative Electricity Demand (MW)
by 2026-27	2000
by 2027-28	8000
by 2028-29	16000
by 2029-30	22000

- It was further deliberated that, as decided in the 21st NCT meeting, the transmission scheme was reviewed in a meeting between CEA, CTUIL, and Grid-India on 14.8.2024. CTUIL informed that an application has not been received from any Green Hydrogen/Green Ammonia manufacturer for the drawal of power from the Navinal S/s. In view of the same, the Chairman, NCT, requested the MNRE to take up the matter with the prospective Green Hydrogen/ Green Ammonia manufacturers in the Navinal area to submit an application to CTUIL in terms of the GNA Regulations, 2022, for the drawal of power.

After deliberations, NCT recommended the Transmission system for the supply of power to Green Hydrogen/ Ammonia manufacturing potential in the Mundra area of Gujarat under Phase-I: Part B1 scheme (3 GW at Navinal S/s)” for implementation under ISTS under TBCB route with an implementation timeframe of 36 Months from the date of allocation to the implementing agency.

(b) and (c): Justification on what basis a transmission licence has been recommended by the CTUIL for the instant scheme despite non-receipt of application from the upcoming Green Hydrogen/Ammonia projects, and why can this scheme not be taken up after exhausting the margins already available at Navinal (Mundra) 4x1500 MVA 765/400 kV substation.

- As per the MNRE, the total electricity demand of Green Hydrogen and Green Ammonia plants/industries in the Mundra area of Gujarat will be around 22 GW by 2029-30, in phases, as informed during the 22nd NCT meeting. By the 2027-28 time frame, the drawal requirement of 8 GW has been intimated by MNRE. Accordingly, the subject scheme has been planned to meet the additional 3 GW drawal requirement for Green Hydrogen/Ammonia projects (cumulative up to 4.5 GW in the Mundra

area). However, due to the non-availability of applications, NCT has decided on an implementation time-frame of 36 months from the date of allocation to the implementing agency.

- Further, Adani New Industries Limited (ANIL) vide letter dated 21.2.2025 has informed that it requires 2.5 GW GNA for Green hydrogen by December 2026 and another 2.5 GW GNA by December 2027 (cumulative 5 GW), for which applications shall be made by December 2025 and has requested to consider the same for further transmission system planning in the Mundra area. If the scheme is taken up at a later date, there may be mismatches between the power requirements by the Green Hydrogen/ Ammonia loads (as projected to come up by MNRE/ communication received from ANIL), in case the applicants request an earlier start date.

Hearing dated 17.7.2025

8. During the course of the hearing, the representative of the Petitioner submitted that all requirements have been duly complied with and, in compliance with the directions issued vide Record of Proceedings dated 20.6.2025, CTUIL has also filed the requisite details. He accordingly requested that the matter be reserved for orders. Further, in response to a specific query of the Commission regarding the planning of the transmission system involved in the present cases, the representative of CTUIL submitted that the said transmission system has been planned on a prospective basis for potential green hydrogen/ green ammonia manufacturers in the Navinal area and, as on date, no application for the grant of connectivity (GNA) has been received from such entities. Accordingly, the matter was reserved for order.

9. Vide RoP dated 17.7.2025, CTUIL, was directed to file the information:

- a) Although NCT recommended the scheme in a meeting held on 22.08.2024, as of now, there is no GNA application for instant augmentation. How would the system be utilised and the transmission charges recovered, in case no GNA application/ limited GNA applications are received from Green Hydrogen/ Green Ammonia developers? or

- b) The applications are received with an effective date of GNA that does not match the SCOD of the instant transmission system.

10. CTUIL, in compliance with the RoP dated 17.7.2025, vide affidavit dated 1.8.2025, has submitted as under:

- (a) As per the MNRE, the total electricity demand of Green Hydrogen and Green Ammonia plants/ industries in the Mundra area of Gujarat will be around 22 GW by 2029-30 in phases, as informed during the 22nd NCT meeting held on 23.8.2024. By the 2027-28 time frame, the drawal requirement of 8 GW has been intimated by the MNRE. Accordingly, the subject scheme has been planned to meet the additional 3 GW drawal requirement for Green Hydrogen/ Ammonia projects (cumulative up to 4.5 GW in the Mundra area). However, due to the non-availability of applications, NCT has decided on an extended implementation time frame of 36 months from the date of allocation to the implementing agency.
- (b) In case no GNA applications are received or are received with an effective date of the GNA that does not match the SCOD of the instant transmission system, the transmission system shall remain unutilized for the period of mismatch. The recovery of transmission charges shall be as per the extant CERC Sharing Regulations, as amended from time to time or as per order(s) of CERC on the subject matter.

11. No reply has been filed by the Respondents despite notice.

12. The Petitioner has submitted that in accordance with the “Guidelines for Encouraging Competition in Development of Transmission Projects” and “Tariff Based Competitive Bidding Guidelines for Transmission Service” (hereinafter referred to as “the Guidelines”) issued by the Ministry of Power, Government of India, under Section 63 of the Act, PFC Consulting Limited (hereinafter referred to as “PFCCL”) was notified by the Ministry of Power, Government of India, vide Gazette Notification. No.

CG-DL-E-13092024-257122 dated 12.9.2024 as the Bid Process Coordinator (hereinafter referred to as "BPC") for the purpose of selection of bidder as Transmission Service Provider (hereinafter referred to as "TSP") to establish the transmission project for "Transmission System for supply of power to Green Hydrogen/ Ammonia manufacturing potential in Mundra area of Gujarat under Phase-I: Part B1 scheme (3 GW at Navinal S/s)" on a Build, Own, Operate and Transfer basis.

13. PFCCCL, in its capacity as the BPC, initiated the bid process on 15.10.2024 and completed the same on 20.3.2025 in accordance with the Guidelines. Adani Energy Solutions Limited was selected as the successful bidder, having quoted the lowest transmission charges of Rs. 3081.73 million per annum to provide transmission services to the beneficiaries of the transmission system.

14. Adani Energy Solutions Limited has furnished the Contract Performance Guarantee (hereinafter referred to as "CPG") in favour of the Nodal Agency, i.e. CTUIL, for Rs. 45.50 crores on 18.3.2025 and has acquired a hundred per cent equity holding in Mundra I Transmission Limited on 20.3.2025. The Petitioner entered into a Transmission Service Agreement (TSA) with CTUIL on 20.3.2025.

15. Section 14 of the Act provides that the Appropriate Commission may, on an application made under Section 15 of the Act, grant a licence to any person to transmit electricity as a transmission licensee in any area as may be specified in the licence.

16. We have considered the submissions of the Petitioner, BPC, and CTUIL. The instant Petition has been proposed as **"Transmission System for supply of power to Green Hydrogen/Ammonia manufacturing potential in Mundra area of Gujarat under Phase-I: Part B1 scheme (3 GW at Navinal S/s)"** with scope of 2x1500MVA

additional augmentation at Navinal (Mundra) S/s by constructing a new Bus Section-II. The scheme also includes Navinal (Mundra) (GIS) – Bhuj 765 kV D/c Line. The 4x1500 MVA Navinal (Mundra) S/s is yet to be issued a transmission license, and its transmission license application is under consideration in the Commission under Petition No. 426/TL/2024.

17. We observe that Navinal (Mundra) under Petition No. 426/TL/2024, has a capacity of 6000 MVA and can carry a load of 4500 MW with N-1 criterion. In the said scheme, applications by Bulk consumers have been received for 3050 MW, and a margin of 1450 MW is available, which can be utilized to grant GNA/GNARE to drawee entities. There is no application beyond 3050 MW in the Mundra area as per records. Accordingly, CTUIL was specifically directed to clarify the reasons for recommending the instant augmentation at Navinal (Mundra) S/s in spite of the available GNA margin in Navinal S/s already awarded and no additional GNA applications having been received. CTUIL, in its response, has mainly submitted that the representative of MNRE during the 22nd NCT meeting held on 23.8.2024 stated that electricity demand on account of Green Hydrogen/ Green Ammonia production in Mundra would be 22 GW by 2030. CTUIL further submitted that due to the non-availability of applications, the implementation time frame of 36 months has been decided. On a specific query of the Commission as to who shall bear the transmission charges if the system comes up but there is no drawee entity to utilize the same, CTUIL stated that in case no GNA applications are received or are received with an effective date of the GNA that does not match the SCOD of the instant transmission system, the transmission system shall remain unutilized for the period of mismatch and the recovery of transmission charges shall be as per the extant CERC Sharing Regulations.

18. Considering the genesis of the scheme, submissions of the CTUIL and information on record, the issue which attracts our concern is whether the instant scheme is suitable for the grant of a transmission licence. The same has been discussed in subsequent paragraphs.

19. The instant scheme was first discussed in the 26th CMETS-WR held on 28.02.2024, wherein it was deliberated that MNRE, after consultation with Green Hydrogen/ Green Ammonia manufacturers, has **forwarded** locations of Green Hydrogen/ Green Ammonia capacities expected to be installed by 2030, along with the electricity demand at these locations. The relevant extracts of the MNRE OM dated 01.11.2023 are as under:

1/54/2023 - NT
Ministry of New and Renewable Energy
Government of India

Atal Akshay Urja Bhawan
Lodhi Road, New Delhi – 110003
1st November 2023

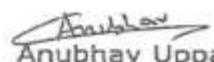
OFFICE MEMORANDUM

Subject: Details of year-wise planned Green Ammonia/ Green Methanol capacities and corresponding withdrawal capacities - reg.

The undersigned is directed to refer to the discussions held during the meeting chaired by Hon'ble Minister with Green Hydrogen Industry stakeholders/associations on 19th October 2023, wherein Hon'ble Minister had instructed the developers to provide details of year-wise planned Green Ammonia/ Green Methanol capacities and corresponding withdrawal capacities desired at different locations. Hon'ble Minister also instructed that this information should be shared with the Central Transmission Utility of India Limited (CTUIL) for the purpose of planning the required substation capacities at these specified locations.

2. MNRE has consolidated the information received from various developers regarding their planned projects and their withdrawal requirements at the respective locations. The compiled list is attached herewith.

3. This issues with the approval of the component authority.


Anubhav Uppal
Scientist - C

Enclosed: as above

Connectivity to the Grid for planned Green Ammonia/ Green Methanol Plants						
S. No.	Developer	Product (Green Hydrogen/ Ammonia/ Green Methanol/ others- specify)	Planned Capacity (in Million Tonnes Per Annum)	Expected Year of Operations (provide breakup of capacity year wise)	Location where connectivity is required (mention the nearest port as well, if applicable)	Required Capacity of Power withdrawal from nearest Substation (In GW)
1.	Renew Power	Green Ammonia	1.1 MMTPA	300 TPD - 2026 1500 TPD - 2028 1500 TPD - 2030	Paradip	3 GW
		Green Ammonia	1.1 MMTPA	300 TPD - 2027 1500 TPD - 2029 1500 TPD - 2031	Gopalpur	3 GW
		Green Ammonia	1.1 MMTPA	300 TPD - 2027 1500 TPD - 2029 1500 TPD - 2031	Tuticorin	3 GW
		Green Ammonia	1.1 MMTPA	300 TPD - 2027 1500 TPD - 2029 1500 TPD - 2031	Kakinada	3 GW
		Green Ammonia	1.1 MMTPA	300 TPD - 2027 1500 TPD - 2029 1500 TPD - 2031	Kandla	3 GW
		Green Methanol	0.3 MMTPA	450 TPD - 2027 450 TPD - 2029	Rayagada	1.1 GW
		Green Methanol	0.5 MMTPA	750 TPD - 2027 750 TPD - 2029	Malkangiri	1.8 GW
2.	Axis Energy Ventures India Pvt Ltd	Green Hydrogen, Ammonia, Methanol and its derivatives	2 MMTPA	1 MMTPA - 2027 1 MMTPA - 2030	Ramayapatnam Port, Andhra Pradesh	3.5 - 4 GW
3	Welspun New Energy	Green Hydrogen & Green Ammonia	0.7 MMTPA (GA equivalent)	0.1 MMTPA - 2027 0.6 MMTPA - 2030	Kendrapada dist.	3.5 GW
		Green Hydrogen & Green Ammonia	1 MMTPA (GA equivalent)	0.1 MMTPA - 2027 0.9 MMTPA - 2030	Kandla area, Kutch district	5 GW
4.	Gentari Hydrogen India	Green Ammonia	0.5 MMTPA (500 KTPA) Phase 1	2027	V. O. Chidambaram Port - Tuticorin (Tamil Nadu)	750 MW (0.75 GW)
		Green Ammonia	0.5 MMTPA	2028	New Mangalore Port	750 MW (0.75 GW)

			(500 KTPA) Phase 1		- Mangalore (Karnataka)	
5.	Aditya Birla Renewables	Green Ammonia	0.1 MMTPA	2027-28	Paradip Port	0.15 GW
6.	Greenko	Green Ammonia	1 MMTPA	2026	Kakinada	1.5 GW
		Green Ammonia	1 MMTPA	2027	Kakinada	1.5 GW
		Green Ammonia	1 MMTPA	2027	Tuticorin	1.5 GW
		Green Ammonia	1 MMTPA	2028	Mangalore	1.5 GW
		Green Ammonia	1 MMTPA	2028	Kandla	1.5 GW
7.	Adani New Industries Limited (ANIL)	Green Ammonia	1.2 MMTPA	2027	Injection point: (a) Lakadia ISTS S/s (up to 4 GW from Zone 3) (b) At a nearby location of Zone II / Zone I which may be taken into CEA planning considering huge quantum of power. Else, Radhanesda ISTS S/s (up to 18 GW) from Zone II / Zone I	4 GW
		Green Ammonia	1.2 MMTPA	2028		7 GW
		Green Ammonia	1.6 MMTPA	2029		6 GW
		Green Ammonia	1.6 MMTPA	2030		5 GW (22* GW combined) Withdrawal point - Proposed ISTS S/s at Navinal, Mundra (22 GW) <i>*Overall plan is for transmission of ~ 40 GW of RE through ISTS by the end of 2032 for ~9 MTPA of Green Ammonia production</i>
8.	Infinity Global	Green Ammonia (Odisha)	0.5 MMTPA	Phase 1- 2027 Phase 2- 2029	Gopalpur Port, Odisha	0.75 GW RTC
		Green Ammonia (Tamil Nadu)	0.5 MMTPA	Phase 1- 2027 Phase 2- 2029	Tuticorin Port, Tamil Nadu	0.75 GW RTC

9.	Ocelor Energy	Green Ammonia	1 MMTPA	0.1 MMTPA – Jan 2027 0.9 MMTPA – Jan 2030	Gopalpur Industrial Park (TATA SEZ) in Odisha near Gopalpur port	0.15 GW [connected on state (Odisha) transmission system by Jan 2027] 1.5 GW [connected on Inter State transmission system by 2030]
		Green Ammonia	1 MMTPA	0.1 MMTPA – Jan 2027 0.9 MMTPA – Jan 2030	Kandla, Gujarat near Deendayal/Kandla port	0.19 GW [connected on Inter State Transmission System by Jan 2027] 1.5 GW [connected on Inter State transmission System by 2030]
10.	Hindustan Petroleum Corporation Limited (HPCL)	Green Hydrogen – Visakhapatnam Refinery	0.37 KTPA (0.00037 MMTPA)	November 2023	Visakhapatnam, Andhra Pradesh	2.6 MW (0.0026 GW)
		Green Hydrogen – Barmer Refinery	4.30 KTPA (0.0043 MMTPA)	December 2025	Newai, Dist. Balotra, Rajasthan	30 MW (0.03 GW)
		Green Hydrogen – Visakhapatnam Refinery	2.60 KTPA (0.0026 MMTPA)	December 2025	Visakhapatnam, Andhra Pradesh	20 MW (0.02 GW)
		Green Hydrogen – Visakhapatnam Refinery	21.80 KTPA (0.0218 MMTPA)	2030	Visakhapatnam, Andhra Pradesh	150 MW (0.15 GW)
11.	Bharat Petroleum Corporation Limited	Green Hydrogen through electrolysis (cumulative production)	0.70 KTPA (0.0007 MMTPA)	2025	Bina, MP	5 MW (0.005 GW)
			7.60 KTPA (0.0076 MMTPA)	2027	Yet to be finalized	55 MW (0.055 GW)
			30.70 KTPA (0.0207 MMTPA)	2030	Yet to be finalized	150 MW (0.15 GW)

		Green Hydrogen through biomass (cumulative production)	37 KTPA (0.037 MMTPA)	2030	Yet to be finalized	
12.	NTPC	Green Ammonia	0.5 MMTPA	2027	VOC Port, Tuticorin, Tamil Nadu	1 GW
		Green Ammonia	1 MMTPA	2027	Deendayal Port, Kandla, Gujarat	2 GW
		Green Ammonia	2 MMTPA	2027	Pudimadaka, Andhra Pradesh (Near Visakhapatnam Port)	4 GW
		Green Ammonia	0.5 MMTPA	2028	Syama Prasad Mookerjee Port, (Near Haldia port)	1 GW
		Green Methanol	0.5 MMTPA	2028	Simhadri / Pudimadaka, Andhra Pradesh, (Near Visakhapatnam Port)	1 GW
Total			29.295 MMTPA			75.3 GW

As per the above, MNRE has consolidated the information received from Green Ammonia/Hydrogen manufacturers, which provides the anticipated power demand for their projects. We observe that there is nothing on record to show that MNRE assessed the

potential of Green hydrogen/ Green ammonia at these locations, including the feasibility of the locations or land availability.

20. Section 38 of the Act provides as under:

“Section 38. (Central Transmission Utility and functions):

...

(c) to ensure development of an efficient, coordinated and economical system of inter-State transmission lines for smooth flow of electricity from generating stations to the load centres;

The Act provides that CTUIL plans an efficient and economical transmission system in a coordinated manner. We observe that the data consolidated and shared by MNRE could serve as one of the inputs for planning a transmission system, but it cannot be the only basis for taking up the implementation of the planned system. The transmission system under Petition 426/TL/2024 has a spare capacity of about 1500 MW, and taking up implementation of the plan for an additional 3000 MW transmission capacity without any application may lead to burdening the distribution companies at large.

21. We are unable to accept the argument given by CTUIL referring to letter dated 21.2.2025 of Adani New Industries Limited (ANIL) that it requires 2.5 GW GNA for Green hydrogen by December 2026 and another 2.5 GW GNA by December 2027 (cumulative 5GW) for which applications shall be made by December, 2025 and that if the scheme is taken up at a later date, there may be mismatches between requirement of power by the Green Hydrogen/ Ammonia loads (as projected to come up by MNRE/ communication received from ANIL) in case the applicants request an earlier start date.

22. We observe that the entity that is seeking to draw power through the transmission system does not wish to make an application and bind itself with a commitment of date but expects at the same time, to get the transmission system constructed at the cost of beneficiaries. While CTUIL has planned and recommended the transmission system, it has

not answered categorically the question as to who will bear the transmission charges in case no application is made by the entity and whether the system will be stranded for some period or permanently. We are of the view that if an entity is committed to developing the project of Green Hydrogen/ Green Ammonia, it needs to submit its application to CTUIL in a timely manner to ensure that transmission systems are constructed matching its drawal requirements. In this regard, we have taken note of the "Strategic Interventions for Green Hydrogen Transition (SIGHT) Programme" under the National Green Hydrogen Mission for the development of Green Hydrogen/ Ammonia projects. The relevant extracts of the scheme are as under:

1.2. There could be several modes for the implementation of the 'Incentive Scheme for Green Hydrogen Production'. These are presently identified as follows:

Mode 1: Bidding on least incentive demanded over the three-year period, through a competitive selection process.

Mode 2: Aggregation of demand and calling for bids for production and supply of Green Hydrogen and its derivatives at the lowest cost through a competitive selection process.

Mode 2 can be of following types:

- **Mode 2A:** The implementation agency/agencies shall aggregate demand and call for bids for production and supply of Green Ammonia at the lowest cost through a competitive selection process with the incentive being fixed.
- **Mode 2B:** The implementation agency/ agencies shall aggregate demand and call for bids for production and supply of Green Hydrogen at the lowest cost for a single refinery or multiple refineries, as decided by the Implementing Agency, through a competitive selection process with the incentive being fixed.

According to the above scheme, SECI has published an RfS wherein a supply period for the Green Ammonia project has been set as 36 months from the issuance of the LOA. The relevant extracts of RfS No. SECI/C&P/MI/00/0006/2024-25 dated 11.07.2024 provides as under:

9 *Commissioning of Green Hydrogen Production Facilities*

- 9.1 The Green Hydrogen Production Facilities to be set up under this RfS shall be allowed **36 months from the date of issuance of Letter of Award (LoA)** for commissioning of full Production Capacity which shall be referred to as Scheduled Commissioning Date (SCD) of the Project. For e.g., if the LoA is issued on 10.07.2025, the SCD shall be considered as 10.07.2028.
- 9.2 A detailed commissioning procedure will be issued subsequent to the issuance of LoA and prior to SCD. The GHP will be required to intimate SECI at least 45 days in advance regarding expected date of commissioning/part-commissioning of the Project so that SECI may plan for site inspection or any other activity to be planned for confirmation/validation of the commissioning/ part-commissioning.
- Site inspection and verification of parameters as per the RfS may also be carried out by agencies authorized by MNRE/SECI.
- 9.3 An inspection team comprising members from SECI and/or any agency authorized by SECI will visit the Production Facility at the time of commissioning or immediately after its commissioning to verify the pathway of production, and production capacity, as promised at the time of bid submission. If required, MNRE/SECI may also designate

RfS for Setting up Production Facilities for Green Hydrogen under SIGHT Scheme (Mode-I-Tranche-II)	RfS No. SECI/C&P/MI/00/0006/2024-25	Page 11 of 86
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As per the above, the implementation period for the Green Hydrogen project is about 36 months under the SIGHT scheme from the issuance of the LOA. This does not include the manufacturers' gestation or planning period.

23. As noted above, the timeline for implementing a Green Hydrogen/ Ammonia project has been specified as 36 months from issuance of LOA, and the instant transmission scheme has also been awarded with an implementation time frame of 36 months, considering there was no GNA applicant.

24. As discussed above, the transmission planning for additional augmentation, even before exhausting the available margin of GNA under the implementation substation (under 426/TL/2024) and without any GNA application, may lead to a redundant transmission system. In such a situation, the transmission charges of the instant scheme would be borne by the general public at large, as the transmission system would not be put to use for a specific bulk consumer.

25. The Act mandates that the inter-state transmission system be developed in an efficient and economical manner. However, the instant transmission scheme may lead to a

redundant transmission asset without any visibility of its utilization. Therefore, we are of the considered view that it is premature to consider the grant of a transmission licence for the instant transmission scheme, as it does not fulfil the requirement under section 38(2)(c) of the Act. We find it appropriate to refer the proposal for the instant transmission scheme back to the NCT for reconsideration on the basis of its likely utilization and impact on the consumers in the absence of any application for its use by the bulk consumers. Accordingly, we direct the Petitioner and the CTUIL to approach the NCT with the observations as made in this Order. After the decision of the NCT, the Petitioner may approach the Commission if so advised.

26. The Petition No. 441/TL/2025 is disposed of in terms of the above.

sd/-
(Ravinder Singh Dhillon)

Member

sd/-
(Harish Dudani)

Member

sd/-
(Ramesh Babu V.)

Member

sd/-
(Jishnu Barua)

Chairperson