

Date: 18-07-2025

Standard Operating Procedure (SOP) for issuance of Completion Certificate by Central Transmission Utility of India Limited (CTUIL) for ISTS elements in accordance to Regulation 27(1)(c)(i) as per IEGC-2023

1. The provisions in the Indian Electricity Grid Code Regulation 2023, Regulation no. 27(1)(c)(i) regarding DOCO of ISTS stipulates the following:

“-----Provided also that in case a transmission system or an element thereof executed under regulated tariff mechanism is prevented from regular service on or after the scheduled COD for reasons not attributable to the transmission licensee or its supplier or its contractors but is on account of the delay in commissioning of the concerned generating station or in commissioning of the upstream or downstream transmission system of other transmission licensee, the transmission licensee shall approach the Commission through an appropriate petition along with a **certificate from the CTU to the effect that the transmission system is complete as per the applicable CEA Standards**, for approval of the commercial operation date of such transmission system or an element thereof.

Provided also that in the case of inter-State Transmission System executed through Tariff Based Competitive Bidding, the transmission licensee may declare deemed COD of the ISTS in accordance with the provisions of the Transmission Service Agreement after obtaining (a) **a certificate from the CTU to the effect that the transmission system is complete as per the specifications of the bidding guidelines and applicable CEA Standards** and (b) no load charging certificate from the respective RLDC, where no load charging is possible. -----”

2. In view of the above requirement, the following procedure has been prepared which will be followed by CTUIL for issuance of the said completion certificate:
 - i. Transmission licensee shall write a letter to HoD (PMG), CTUIL clearly mentioning project elements exactly as per TSA/OM which have been completed and for which completion certificate from CTU is sought. Transmission licensee shall also ensure that utilisation of these elements do not depend upon any incomplete element(s) within scope of the project as per TSA for TBCB projects and CTU's OM/NCT's letter/MoP's OM for RTM projects.
 - ii. The transmission licensee shall also attach the following documents along with the aforesaid letter for each of the completed elements:
 - a. Relevant extract of TSA and amendments thereof (for Scope of Work and Elements which are pre-required for declaring CoD) or copy of CTU's OM/NCT's letter/MoP's OM, as applicable.

- b. Approval from CEA for energization of each completed element under consideration
- c. In case, No-load Charging for the subject elements has been done, a Certificate from GRID-INDIA in this regard shall be submitted. In case, No-load charging has not been done due to any reason, an explanation from Transmission Licensee in this regard shall be submitted.
- d. Undertaking by transmission licensee towards completion of the project elements in conformity with applicable CEA Standards & Regulations as amended from time to time and:
 - (i) Bidding Documents & Guidelines and TSA for TBCB projects.
 - (ii) CTU's OM/NCT's letter/MoP's OM for RTM projects.

The Undertaking shall be signed by CMD/CEO/MD/Director of Transmission licensee. However, if transmission licensee is a Central/State Govt. department/PSU, the Undertaking signed by Executive Director (or any officer authorised to exercise the powers of Executive Director, provided a letter to this effect is attached with the undertaking) is also acceptable for RTM projects.

The separate formats of undertaking, for TBCB and RTM projects, are attached at **Annexure-A**.

Annexure-A
(for TBCB projects)

Undertaking towards “full/part” completion of “Name of the Project” by “Name of Transmission Licensee” as per Bidding Documents & Guidelines, TSA and applicable CEA Standards & Regulations

(for obtaining CTU Certificate in compliance with requirement of Fifth proviso to Regulation 27(1)(c)(i) of IEGC-2023)

To whomsoever it may Concern

With reference to “LoI No.----- dated-----” awarded to “Name of Transmission Licensee” and TSA signed on “Date of signing of TSA.....”, I, “Name of CMD/CEO/MD/Director”, “CMD/CEO/MD/Director” of “Name of Transmission Licensee” hereby undertake that:

“Name of the Transmission Licensee” has completed the following elements in all respect as detailed below.

Sl. No.	Scope of Transmission Scheme (as per Schedule-1 of TSA, including Future scope also)	Scope of Transmission Scheme (by Splitting of Transmission elements, if required)	Element(s) which are pre-required for declaring the Commercial Operation (COD) of the respective Element	Date of Completion ^d /Status of balance Transmission elements (Under Implementation/ Charged/ Commissioned)	CTU Certificate Required for Corresponding Elements (Yes/No)
1	Element-1.....	Element-1a.....	Date of completion	Yes
		1b		Status	No
2	Element-2.....	Element-2.....	And so on.....	And so on.....
3	Element-3.....	Element-3.....		
4					

The above elements constitute “full/part” scope of the works under said project.

The above elements have been completed meeting all the requirements of the transmission line, sub-station, communication system and their inter-related systems conforming to the specifications of the Bidding Documents & Guidelines and CEA

Annexure-A
(for TBCB projects)

Standards & Regulations including (i) CEA (Technical Standards for Construction of Electrical Plants and Electric lines) Regulation, 2022 (ii) CEA (Technical Standards for Connectivity to the Grid) Regulations, 2007 (iii) CEA (Technical Standards for Communication in Power System Operation) Regulations, 2020 (iv) CEA (Measures relating to Safety and Electricity Supply) Regulations, 2023, as amended from time to time. These elements are complete and ready in all respect for operation to their full capacity w.e.f.(Date of Completion) for declaration of deemed CoD for all regulatory and commercial purposes. Further, all the conditions stipulated in the approval of CEA for energization of each completed element under consideration have been complied on dated dd/mm/yyyy . No load charging for the completed element has been done and Certificate(s) from GRID INDIA in this regard is attached as **Annexure-I/No-load charging has not been done due to reasons mentioned as follow- (a brief explanation to be given).**

The aforesaid undertaking and statement are being made at the complete risk and cost of the "Name of the Transmission Licensee". Further, "Name of the Transmission Licensee" agrees and undertakes to indemnify and keep indemnified and harmless CTUIL, its Directors and Employees, and assigns from and against any and all actions, claims, proceedings, suits and judgements, damages and losses, all costs, charges and expenses relating thereto arising out of the aforesaid declaration regarding completion of the transmission element(s)/assets(s) meeting all the requirements of Fifth proviso to Regulation 27 (1)(c)(i) of CERC (Indian Electricity Grid Code) Regulations, 2023 and its amendments.

Signature
Name & Designation

Date:

Notes:

- a) *This undertaking shall be signed by the authorized signatory not below the rank of CMD/CEO/MD/Director of the transmission licensee.*
- b) *The particulars to be filled in/reviewed have been highlighted.*
- c) *Strikeout as applicable.*
- d) *The date of completion should not be prior to the*
 - i) *date of approval of energization by CEA.*
 - ii) *date on which conditions stipulated in the approval of CEA for energization of each completed element under consideration have been complied.*

Undertaking towards “full/part” completion of “Name of the Project” by “Name of Transmission Licensee” as per CTU’s OM/NCT’s letter/MoP’s OM and applicable CEA Standards & Regulations

(for obtaining CTU Certificate in compliance with requirement of Fourth proviso to Regulation 27(1)(c)(i) of IEGC-2023)

To whomsoever it may Concern

With reference to “CTU’s OM/NCT’s letter/MoP’s OM dated-----” awarded to “Name of Transmission Licensee”. I, “Name of CMD/CEO/MD/Director/Executive Director”, “CMD/CEO/MD/Director/Executive Director” of “Name of Transmission Licensee” hereby undertake that:

“Name of the Transmission Licensee” has completed the following elements in all respect as detailed below.

Sl. No.	Scope of Transmission Scheme with Item Description (To be filled up as per CTU’s OM/NCT’s letter/MoP’s OM)	Scope of Transmission Scheme with item description (by Splitting of Transmission elements, if required)	Date of Completion ^d of /Status of balance of Transmission elements (Under Implemenetation/ Charged/ Commissioned)	CTU Certificate Required for Corresponding Elements (Yes/No)
1	Element-1.....	Element-1a.....	Date of completion	Yes
		Element-1b.....	Status	No
2	Element-2.....	And so on.....	And so on.....	And so on.....
3	Element-3.....			
4				

The above elements constitute “full/part” scope of the works under said CTU’s OM/NCT’s letter/MoP’s OM.

The above elements have been completed meeting all the requirements of the transmission line, sub-station, communication system and their inter-related systems conforming to the scope of the CTU’s OM/NCT’s letter/MoP’s OM and CEA Standards &

Annexure-A
(For RTM projects)

Regulations including (i) CEA (Technical Standards for Construction of Electrical Plants and Electric lines) Regulation, 2022 (ii) CEA (Technical Standards for Connectivity to the Grid) Regulations, 2007 (iii) CEA (Technical Standards for Communication in Power System Operation) Regulations, 2020 (iv) CEA (Measures relating to Safety and Electricity Supply) Regulations, 2023, as amended from time to time. These elements are complete and ready in all respects for operation to their full capacity w.e.f.(Date of Completion) and applying for approval of CoD for all regulatory and commercial purposes. Further, all the conditions stipulated in the approval of CEA for energization of each completed element under consideration have been complied on dated dd/mm/yyyy . No load charging for the completed element has been done and Certificate(s) from GRID INDIA in this regard is attached as **Annexure-I/** No-load charging has not been done due to reasons mentioned as follow- (a brief explanation to be given).

The aforesaid undertaking and statement are being made at the complete risk and cost of the "Name of the Transmission Licensee". Further, "Name of the Transmission Licensee" agrees and undertakes to indemnify and keep indemnified and harmless CTUIL, its Directors and Employees, and assigns from and against any and all actions, claims, proceedings, suits and judgements, damages and losses, all costs, charges and expenses relating thereto arising out of the aforesaid declaration regarding completion of the transmission element(s)/assets(s) meeting all the requirements of Fourth proviso to Regulation 27 (1)(c)(i) of CERC (Indian Electricity Grid Code) Regulations, 2023 and its amendments.

Signature
Name & Designation

Date:

Notes:

- a) *The Undertaking shall be signed by CMD/CEO/MD/Director of Transmission licensee. However, if transmission licensee is a Central/State Govt. department/PSU, the Undertaking signed by Executive Director (or any officer authorised to exercise the powers of Executive Director, provided a letter to this effect is attached with the undertaking) is also acceptable for RTM projects.*
- b) *The particulars to be filled in/reviewed have been highlighted.*
- c) *Strikeout as applicable.*
- d) *The date of completion should not be prior to the*
 - i) *date of approval of energization by CEA.*
 - ii) *date on which conditions stipulated in the approval of CEA for energization of each completed element under consideration have been complied.*

Undertaking samples (for filling of Scope of Transmission scheme along with other details in Table, for illustrative purpose only)

Annexure-A
(For RTM projects)

A) Example-1/3

Undertaking towards “part” completion Transmission elements under the scheme “Transmission Network Expansion in Gujarat to increase ATC from ISTS, Part-B” by “Power Grid Corporation of India Limited” as per MoP’s OM and applicable CEA Standards & Regulations

(for obtaining CTU Certificate in compliance with requirement of Fourth proviso to Regulation 27(1)(c)(i) of IEGC-2023)

To whomsoever it may Concern

With reference to “MoP’s OM dated-----” awarded to “Power Grid Corporation of India Limited”. I, “Name of CMD/CEO/MD/Director/Executive Director”, “CMD/CEO/MD/Director/Executive Director” of Power Grid Corporation of India Limited hereby undertake that:

Power Grid Corporation of India Limited has completed the following elements in all respect as detailed below:

Sl. No.	Scope of Transmission Scheme with Item Description (To be filled up as per CTU’s OM/NCT’s letter/MoP’s OM)	Scope of Transmission Scheme with item description (by Splitting of Transmission elements, if required)	Date of Completion ^d /Status of balance Transmission elements (Under Implementation/ Charged/ Commissioned)	CTU Certificate Required for Corresponding Elements (Yes/No)
1.	Establishment of 765/400/220 kV Navsari (new) (South Gujarat) S/s (GIS)	Establishment of 765/400/220 kV Navsari (new) (South Gujarat) S/s (GIS)		
	• 765/400kV, 1500 MVA ICT- 2 nos. (7x500 MVA ICT inc 1 spare unit)	765/400kV, 1500 MVA ICT- 2 nos. (7x500 MVA ICT inc 1 spare unit)	Under Implementation	No
	• 400/220 kV, 500 MVA ICT- 3 nos.	500MVA, 400/220 kV ICT- 1 no.	10.03.2025	Yes
		500MVA, 400/220 kV ICT- 1 no.	18.03.2025	Yes
		500MVA, 400/220 kV ICT- 1 no.	Under Implementation	No
	• 765 kV ICT bays- 2 nos.	765 kV ICT bays- 2 nos.	Under Implementation	No

Undertaking samples (for filling of Scope of Transmission scheme along with other details in Table, for illustrative purpose only)

• 765 kV GIS line bays -2 (for Phadge line)	765 kV GIS line bays -2 (for Phadge line)	Under Implementation	No
• 400 kV ICT bays- 5 nos.	400 kV ICT bays- 1 nos	10.03.2025	Yes
	400 kV ICT bays- 1 nos	18.03.2025	Yes
	400 kV ICT bays- 3 nos	Under Implementation	No
• 400 kV line bays - 4 nos. (for Kala and Magarwada lines) .	400 kV line bay - 1 no. (for Magarwada line)	04.03.2025	Yes
	400 kV line bay - 1 no. (for Magarwada line)	05.03.2025	Yes
	400 kV line bays - 2 nos. (for Kala line)	Under Implementation	No
• 220 kV ICT bays- 3 nos	220kV ICT Bay- 1 no.	10.03.2025	Yes
	220kV ICT Bay- 1 no.	18.03.2025	Yes
	220kV ICT Bay- 1 no.	Under Implementation	No
• 765 kV, 330 MVar BR - 2 nos. (7 X 1 10 MVar inc. 1 switchable spare unit)	765 kV, 330 MVar BR - 2 nos. (7 X 1 10 MVar inc. 1 switchable spare unit)	Under Implementation	No
• 1X 80 MVar single phase switchable spare unit (for Ahmedabad – Navsari (New) (South Gujarat) 765 kV D/c line)	1X 80 MVar single phase switchable spare unit (for Ahmedabad – Navsari (New) (South Gujarat) 765 kV D/c line)	Under Implementation	No
• 765 kV Bus Reactor bays - 2 nos.	765 kV Bus Reactor bays - 2 nos.	Under Implementation	No
• 400 kV, 125 MVar Bus Reactor- 1	400 kV, 125 MVar Bus Reactor- 1	04.03.2025	Yes
• 400 kV Bus Reactor bay- 1 no.	400 kV Bus Reactor bay- 1 no.	04.03.2025	Yes
Space provisions for Future Scope <ul style="list-style-type: none"> • 765/400 kV ICT: 4 nos. • 404/220 kV ICT: 4 nos. • 765 kV line bays along with space for switchable line reactor: 8 nos. • 400 kV line bays along with space for switchable line reactor: 6 nos. • 220 kV line bays: 16 nos. 	Space provisions for Future Scope <ul style="list-style-type: none"> • 765/400 kV ICT: 4 nos. • 404/220 kV ICT: 4 nos. • 765 kV line bays along with space for switchable line reactor: 8 nos. • 400 kV line bays along with space for switchable line reactor: 6 nos. 220 kV line bays: 16 nos. 	Under Implementation	No

Undertaking samples (for filling of Scope of Transmission scheme along with other details in Table, for illustrative purpose only)

2.	Navsari (new) (South Gujarat) (GIS)- Kala (GIS) 400 kV D/c line (conductor with minimum capacity of 2100 MVA/Ckt at nominal voltage) with 63MVA _r switchable line reactor on each ckt at Navsari (new) (GIS) end (110 km) <ul style="list-style-type: none"> 400 kV GIS line bays- 2 nos. (at Kala) 63 MVA_r, 400 kV SLR along with switching eqpts.- 2 nos. 	Navsari (new) (South Gujarat) (GIS)- Kala (GIS) 400 kV D/c line (conductor with minimum capacity of 2100 MVA/Ckt at nominal voltage) with 63MVA _r switchable line reactor on each ckt at Navsari (new) (GIS) end (110 km) <ul style="list-style-type: none"> 400 kV GIS line bays- 2 nos. (at Kala) 63 MVA_r, 400 kV SLR along with switching eqpts.- 2 nos. 	Under Implementation	No
3.	Navsari (new) (South Gujarat) (GIS)- Magarwada (GIS) 400 kV D/c line (conductor with minimum capacity of 2100 MVA/Ckt at nominal voltage) 80 km <ul style="list-style-type: none"> 400 kV GIS line bays- 2 nos. (at Magarwada) 	Navsari (new) (South Gujarat) (GIS)- Magarwada (GIS) 400 kV ckt-1 of D/c line (conductor with minimum capacity of 2100 MVA/Ckt at nominal voltage) <ul style="list-style-type: none"> 400kV GIS line bay- 1 no. (at Magarwada) 	04.03.2025	Yes
		Navsari (new) (South Gujarat) (GIS)- Magarwada (GIS) 400 kV ckt-2 of D/c line (conductor with minimum capacity of 2100 MVA/Ckt at nominal voltage) <ul style="list-style-type: none"> 400kV GIS line bay- 1 no. (at Magarwada) 	05.03.2025	Yes
4.	Navsari (new) (South Gujarat) (GIS)- Padghe (GIS) 765 kV D/c line with 330 MVA _r , 765 kV Switchable line reactor on each ckt at Navsari (new)(South Gujarat) end (200 km) <ul style="list-style-type: none"> 765 kV GIS line bays -2 (at Padghe) 765 kV, 330 MVA_r 	Navsari (new) (South Gujarat) (GIS)- Padghe (GIS) 765 kV D/c line with 330 MVA _r , 765 kV Switchable line reactor on each ckt at Navsari (new)(South Gujarat) end (200 km) <ul style="list-style-type: none"> 765 kV GIS line bays -2 (at Padghe) 765 kV, 330 MVA_r SLR - 2 nos (6 X 	Under Implementation	No

Undertaking samples (for filling of Scope of Transmission scheme along with other details in Table, for illustrative purpose only)

	SLR - 2 nos (6 X 110 MVAr)	110 MVAr)		
5.	Augmentation of transformation capacity at Padghe (GIS) 765/400kV substation by 1x1500 MVA ICT. <ul style="list-style-type: none"> 7651400 kV, 1500 MVA- 1 no The available spare equipped bays (765kV bay: existing & 400kV bay: under construction under WRSS XIX scheme) at Padghe (GIS) S/s shall be utilized for the subject ICT	Augmentation of transformation capacity at Padghe (GIS) 765/400kV substation by 1x1500 MVA ICT. <ul style="list-style-type: none"> 7651400 kV, 1500 MVA- 1 no The available spare equipped bays (765kV bay: existing & 400kV bay: under construction under WRSS XIX scheme) at Padghe (GIS) S/s shall be utilized for the subject ICT	Commissioned	No

The above elements constitute **part** scope of the works under said CTU's OM/NCT's letter/MoP's OM.

The above elements have been completed meeting all the requirements of the transmission line, sub-station, communication system and their inter-related systems conforming to the scope of the CTU's OM/NCT's letter/MoP's OM and CEA Standards & Regulations including (i) CEA (Technical Standards for Construction of Electrical Plants and Electric lines) Regulation, 2022 (ii) CEA (Technical Standards for Connectivity to the Grid) Regulations, 2007 (iii) CEA (Technical Standards for Communication in Power System Operation) Regulations, 2020 (iv) CEA (Measures relating to Safety and Electricity Supply) Regulations, 2023, as amended from time to time. These elements are complete and ready in all respects for operation to their full capacity w.e.f. **Date of Completion as mentioned in Table** above and applying for approval of CoD for all regulatory and commercial purposes.

Further, all the conditions stipulated in the approval of CEA for energization of each completed element under consideration have been complied on dated **03.03.2025**. No load charging for the completed element has been done and Certificate(s) from GRID INDIA in this regard is attached as **Annexure-I**.

The aforesaid undertaking and statement are being made at the complete risk and cost of the Power Grid Corporation of India Ltd. Further, Power Grid Corporation of India Ltd. agrees and undertakes to indemnify and keep indemnified and harmless CTUIL, its Directors and Employees, and assigns from and against any and all actions, claims, proceedings, suits and judgements, damages and losses, all costs, charges and expenses relating thereto arising out of the aforesaid declaration regarding completion of the transmission element(s)/assets(s) meeting all the requirements of Fourth proviso to

Undertaking samples (for filling of Scope of Transmission scheme along with other details in Table, for illustrative purpose only)

Regulation 27 (1)(c)(i) of CERC (Indian Electricity Grid Code) Regulations, 2023 and its amendments.

Signature
Name & Designation

Date:

B) Example-2/3

Undertaking towards “part” completion Transmission elements under the scheme “Transmission system strengthening Scheme for evacuation of power from solar energy zones in Rajasthan (8.1 GW) under Phase II -Part B1 (765/400/220 ICT augmentation at Fatehgarh-II and Bhadla-II)” by “Power Grid Corporation of India Limited” as per MoP’s OM and applicable CEA Standards & Regulations

(for obtaining CTU Certificate in compliance with requirement of Fourth proviso to Regulation 27(1)(c)(i) of IEGC-2023)

To whomsoever it may Concern

With reference to “MoP’s OM dated-----” awarded to “Power Grid Corporation of India Limited”. I, “Name of CMD/CEO/MD/Director/Executive Director”, “CMD/CEO/MD/Director/Executive Director” of Power Grid Corporation of India Limited hereby undertake that:

Power Grid Corporation of India Limited has completed the following elements in all respect as detailed below:

Sl. No.	Scope of Transmission Scheme with Item Description (To be filled up as per CTU’s OM/NCT’s letter/MoP’s OM)	Scope of Transmission Scheme with item description (by Splitting of Transmission elements, if required)	Date of Completion ^d of Status of Transmission elements (Under Implementation/ Charged/ Commissioned)	CTU Certificate Required for Corresponding Elements (Yes/No)
1	Augmentation with 765/400kV, 1x1500MVA transformer (6th) at Fatehgarh-IIPS. • 765/400 kV, 1500	Augmentation with 765/400kV, 1x1500MVA transformer (6th) at Fatehgarh-IIPS. • 765/400 kV, 1500	Under implementation	No

Undertaking samples (for filling of Scope of Transmission scheme along with other details in Table, for illustrative purpose only)

Sl. No.	Scope of Transmission Scheme with Item Description (To be filled up as per CTU's OM/NCT's letter/MoP's OM)	Scope of Transmission Scheme with item description (by Splitting of Transmission elements, if required)	Date of Completion ^d /Status of Transmission elements (Under Implementation/ Charged/ Commissioned)	CTU Certificate Required for Corresponding Elements (Yes/No)
	MVA ICT-1 • 765 kV ICT bays-1 • 400 kV ICT bays -1	MVA ICT-1 • 765 kV ICT bays-1 400 kV ICT bays -1		
2	Augmentation with 400/220kV, 4x500MVA Transformer (6 th to 9 th) at Fatehgarh-II PS with suitable Bus sectionalisation at 400 and 220 kV level.	Augmentation with 400/220kV, 4x500MVA Transformer (6 th to 9 th) at Fatehgarh-II PS with suitable Bus sectionalisation at 400 and 220 kV level.		
	• 400/220 kV, 500 MVA ICT - 4 nos.	• 400/220 kV, 500 MVA ICT - 4 nos.	Under implementation	No
	• 400 kV ICT bays -4 nos.	• 400 kV ICT bays -4 nos.	Under implementation	No
	• 220 kV ICT bays -4 nos.	• 220 kV ICT bays -4 nos.	Under implementation	No
	• 220 kV line bays-7 nos.	• 220 kV line bays-6 nos.	20.08.2024	Yes
		• 220 kV line bays-1 no.	Under implementation	No
3	Augmentation with 400/220kV, 3x500MVA Transformer (6 th to 8 th) at Bhadla-II PS with suitable Bus sectionalisation at 400 and 220 kV level. • 400/220 kV, 500 MVA ICT - 3 • 400 kV ICT bays -3 • 220 kV ICT bays -3 • 220 kV line bays-5	Augmentation with 400/220kV, 3x500MVA Transformer (6 th to 8 th) at Bhadla-II PS with suitable Bus sectionalisation at 400 and 220 kV level. • 400/220 kV, 500 MVA ICT - 3 • 400 kV ICT bays -3 • 220 kV ICT bays -3 220 kV line bays-5	Charged	No
4	Augmentation with 765/400 kV ,1x1500 MVA transformer (4th) at Badia-II PS. • 765/400, 1500 MVA ICT- 1 • 765 ICT bays-1	Augmentation with 765/400 kV ,1x1500 MVA transformer (4th) at Badia-II PS. • 765/400, 1500 MVA ICT- 1 • 765 ICT bays-1 400 kV ICT bays-1	Commisioned	No

Undertaking samples (for filling of Scope of Transmission scheme along with other details in Table, for illustrative purpose only)

Sl. No.	Scope of Transmission Scheme with Item Description (To be filled up as per CTU's OM/NCT's letter/MoP's OM)	Scope of Transmission Scheme with item description (by Splitting of Transmission elements, if required)	Date of Completion ^d /Status of Transmission elements (Under Implementation/ Charged/ Commissioned)	CTU Certificate Required for Corresponding Elements (Yes/No)
	• 400 kV ICT bays-1			
5	STATCOM at Fatehgarh-II S/s ± 600 MVAR, 4x125 MVAR MSC, 2x 125 MVAR MSR	STATCOM at Fatehgarh-II S/s ± 600 MVAR, 4x125 MVAR MSC, 2x 125 MVAR MSR	Under Implementaion	No
6	STATCOM at Bhadla-II S/s ± 600 MVAR, 4x125 MVAR MSC, 2x 125 MVAR MSR	STATCOM at Bhadla-II S/s ± 600 MVAR, 4x125 MVAR MSC, 2x 125 MVAR MSR	Under Implementation	No

The above elements constitute **part** scope of the works under said CTU's OM/NCT's letter/MoP's OM.

The above elements have been completed meeting all the requirements of the transmission line, sub-station, communication system and their inter-related systems conforming to the scope of the CTU's OM/NCT's letter/MoP's OM and CEA Standards & Regulations including (i) CEA (Technical Standards for Construction of Electrical Plants and Electric lines) Regulation, 2022 (ii) CEA (Technical Standards for Connectivity to the Grid) Regulations, 2007 (iii) CEA (Technical Standards for Communication in Power System Operation) Regulations, 2020 (iv) CEA (Measures relating to Safety and Electricity Supply) Regulations, 2023, as amended from time to time. These elements are complete and ready in all respects for operation to their full capacity w.e.f. **Date of Completion** as mentioned in Table above and applying for approval of CoD for all regulatory and commercial purposes.

Further, all the conditions stipulated in the approval of CEA for energization of each completed element under consideration have been complied on dated **03.03.2025**. No load charging for the completed element has been done and Certificate(s) from GRID INDIA in this regard is attached as **Annexure-I**.

The aforesaid undertaking and statement are being made at the complete risk and cost of the Power Grid Corporation of India Ltd. Further, Power Grid Corporation of India Ltd. agrees and undertakes to indemnify and keep indemnified and harmless CTUIL, its Directors and Employees, and assigns from and against any and all actions, claims,

Undertaking samples (for filling of Scope of Transmission scheme along with other details in Table, for illustrative purpose only)

proceedings, suits and judgements, damages and losses, all costs, charges and expenses relating thereto arising out of the aforesaid declaration regarding completion of the transmission element(s)/assets(s) meeting all the requirements of Fourth proviso to Regulation 27 (1)(c)(i) of CERC (Indian Electricity Grid Code) Regulations, 2023 and its amendments.

Signature
Name & Designation

Date:

Annexure-A
(For TBCB projects)

C) Example-3/3

Undertaking towards “part” completion of “Additional 400kV feed to Goa” by “Goa-Tamnar Transmission Project Limited (GTTPL)” as per Bidding Documents & Guidelines, TSA and applicable CEA Standards & Regulations

(for obtaining CTU Certificate in compliance with requirement of Fifth proviso to Regulation 27(1)(c)(i) of IEGC-2023)

To whomsoever it may Concern

With reference to “LoI No.----- dated-----” awarded to “Goa-Tamnar Transmission Project Limited” and TSA signed on “28.06.2017”, I, “Name of CMD/CEO/MD/Director”, “CMD/CEO/MD/Director” of “Goa-Tamnar Transmission Project Limited” hereby undertake that:

“Goa-Tamnar Transmission Project Limited” has completed the following elements in all respect as detailed below.

Sl. No.	Total Scope of Transmission Scheme (as per Schedule-1 of TSA, including Future scope also)	Scope of Transmission Scheme (by Splitting of Transmission elements, if required)	Element(s) which are pre-required for declaring the Commercial Operation (COD) of the respective Element	Date of Completion ^d /Status of balance Transmission elements (Under Implementation/ Charged/ Commissioned)	CTU Certificate Required for Corresponding Elements (Yes/No)
1	LILO of one ckt. of	LILO of one ckt. of	COD of element	Under	No

Undertaking samples (for filling of Scope of Transmission scheme along with other details in Table, for illustrative purpose only)

Sl. No.	Total Scope of Transmission Scheme (as per Schedule-1 of TSA, including Future scope also)	Scope of Transmission Scheme (by Splitting of Transmission elements, if required)	Element(s) which are pre-required for declaring the Commercial Operation (COD) of the respective Element	Date of Completion ^d /Status of balance Transmission elements (Under Implementation/ Charged/ Commissioned)	CTU Certificate Required for Corresponding Elements (Yes/No)
	Narendra (existing) – Narendra (New) 400kV D/c quad line at Xeldem	Narendra (existing) – Narendra (New) 400kV D/c quad line at Xeldem	marked at Sl. 3 is prerequisite for commissioning	Implementation	
2	Xeldem - Mapusa 400kV D/c (quad) line	Xeldem - Mapusa 400kV D/c (quad) line	of element at Sl. No.1 or Sl. No.2.	11.11.2024	Yes
3	Establishment of 2x500MVA, 400/220kV substation at Xeldem substation alongwith its 220kV interconnection with existing Xeldem 400kV <ul style="list-style-type: none"> • ICTs: 2x 500 MVA, 400/220 kV • ICT bays: 2 nos. • Line bays: 4 nos. (2 nos. for Xeldem- Mapusa 400 kV D/c (quad) line & 2 nos. for LILO of one ckt. of Narendra (existing) Narendra (New) 400 kV D/c quad line at Xeldem) • Bus Reactor: 1x125 MVAR • Bus Reactor Bay: 1 no. • Space for 2x500MVA, 400/220kV ICTS (future) • Space for Line 	Establishment of 2x500MVA, 400/220kV substation at Xeldem substation alongwith its 220kV interconnection with existing Xeldem 400kV <ul style="list-style-type: none"> • ICTs: 2x 500 MVA, 400/220 kV • ICT bays: 2 nos. • Line bays: 4 nos. (2 nos. for Xeldem- Mapusa 400 kV D/c (quad) line & 2 nos. for LILO of one ckt. of Narendra (existing) Narendra (New) 400 kV D/c quad line at Xeldem) • Bus Reactor: 1x125 MVAR • Bus Reactor Bay: 1 no. • Space for 2x500MVA, 400/220kV ICTS (future) • Space for Line bays along with Line Reactors (future): 4 nos. • 1x63MVAR switchable line reactor along with 	None of the elements can be commissioned independently	11.11.2024	Yes

Undertaking samples (for filling of Scope of Transmission scheme along with other details in Table, for illustrative purpose only)

Sl. No.	Total Scope of Transmission Scheme (as per Schedule-1 of TSA, including Future scope also)	Scope of Transmission Scheme (by Splitting of Transmission elements, if required)	Element(s) which are pre-required for declaring the Commercial Operation (COD) of the respective Element	Date of Completion ^d /Status of balance Transmission elements (Under Implementation/ Charged/ Commissioned)	CTU Certificate Required for Corresponding Elements (Yes/No)
	<p>bays along with Line Reactors (future): 4 nos.</p> <ul style="list-style-type: none"> 1x63MVAR switchable line reactor along with 500 Ohms NGR and its auxiliaries (for Narendra (existing) - Xeldem 400 kV line formed after LILO of one ckt of Narendra (existing) - Narendra (New) 400 kV D/c quad line at Xeldem) 1x80MVAR switchable line reactor along with 500 Ohms NGR and its auxiliaries (for Narendra (New) -Xeldem 400 kV (quad) line formed after LILO of one ckt of Narendra (existing)-Narendra (New) 400 kV D/c quad line at Xeldem) <p><u>220kV</u></p> <ul style="list-style-type: none"> Inter-connection with Xeldem (existing) substation through 220 kV D/c line with HTLS conductor 	<p>500 Ohms NGR and its auxiliaries (for Narendra (existing) - Xeldem 400 kV line formed after LILO of one ckt of Narendra (existing) -Narendra (New) 400 kV D/c quad line at Xeldem)</p> <ul style="list-style-type: none"> 1x80MVAR switchable line reactor along with 500 Ohms NGR and its auxiliaries (for Narendra (New) - Xeldem 400 kV (quad) line formed after LILO of one ckt of Narendra (existing)-Narendra (New) 400 kV D/c quad line at Xeldem) <p><u>220kV</u></p> <ul style="list-style-type: none"> Inter-connection with Xeldem (existing) substation through 220 kV D/c line with HTLS conductor (ampacity equivalent to twin moose conductor) ICT bays: 2 nos. Line bays: 6 nos. (2 nos. for New Xeldem (400kV)- Xeldem (GED) 220 kV D/c line, 2 nos. for New Xeldem (400 kV)- Verna (GED) 220 kV D/c line and 2 nos. for LILO of 2nd circuit of 			

Undertaking samples (for filling of Scope of Transmission scheme along with other details in Table, for illustrative purpose only)

Sl. No.	Total Scope of Transmission Scheme (as per Schedule-1 of TSA, including Future scope also)	Scope of Transmission Scheme (by Splitting of Transmission elements, if required)	Element(s) which are pre-required for declaring the Commercial Operation (COD) of the respective Element	Date of Completion ^d /Status of balance Transmission elements (Under Implementation/ Charged/ Commissioned)	CTU Certificate Required for Corresponding Elements (Yes/No)
	(ampacity equivalent to twin moose conductor) • ICT bays: 2 nos. • Line bays: 6 nos. (2 nos. for New Xeldem (400kV)-Xeldem (GED) 220 kV D/c line, 2 nos. for New Xeldem (400 kV)-Verna (GED) 220 kV D/c line and 2 nos. for LILO of 2nd circuit of Ambewadi-Ponda 220kv D/c line at New Xeldem (400 kV) • Space for ICT bays (future): 2 nos. • Space for Line bays (future): 6 nos.	Ambewadi-Ponda 220kv D/c line at New Xeldem (400 kV) • Space for ICT bays (future): 2 nos. • Space for Line bays (future): 6 nos.			

The above elements constitute **“part”** scope of the works under said project.

The above elements have been completed meeting all the requirements of the transmission line, sub-station, communication system and their inter-related systems conforming to the specifications of the Bidding Documents & Guidelines and CEA Standards & Regulations including (i) CEA (Technical Standards for Construction of Electrical Plants and Electric lines) Regulation, 2022 (ii) CEA (Technical Standards for Connectivity to the Grid) Regulations, 2007 (iii) CEA (Technical Standards for Communication in Power System Operation) Regulations, 2020 (iv) CEA (Measures relating to Safety and Electricity Supply) Regulations, 2023, as amended from time to time. These elements are complete and ready in all respect for operation to their full capacity **w.e.f. 11.11.2024 (Date of Completion)** for declaration of deemed CoD for all regulatory

Undertaking samples (for filling of Scope of Transmission scheme along with other details in Table, for illustrative purpose only)

and commercial purposes. Further, all the conditions stipulated in the approval of CEA for energization of each completed element under consideration have been complied on dated dd/mm/yyyy. No load charging for the completed element has been done and Certificate(s) from GRID INDIA in this regard is attached as **Annexure-I/No-load charging has not been done due to reasons mentioned as follow- (a brief explanation to be given).**

The aforesaid undertaking and statement are being made at the complete risk and cost of the “Goa-Tamnar Transmission Project Limited”. Further, “Goa-Tamnar Transmission Project Limited (GTTPL)” agrees and undertakes to indemnify and keep indemnified and harmless CTUIL, its Directors and Employees, and assigns from and against any and all actions, claims, proceedings, suits and judgements, damages and losses, all costs, charges and expenses relating thereto arising out of the aforesaid declaration regarding completion of the transmission element(s)/assets(s) meeting all the requirements of Fifth proviso to Regulation 27 (1)(c)(i) of CERC (Indian Electricity Grid Code) Regulations, 2023 and its amendments.

Signature
Name & Designation

Date: