

Record Notes of the Special Meeting on Finalization of the Outage Schedule of NTPC Talcher Units in Coordination with the Proposed Shutdown of the Talcher–Kolar HVDC Bi-pole during November 2026

A special meeting was convened through VC on 05.08.2026 to deliberate and finalize the outage schedule of NTPC Talcher generating units in coordination with the proposed shutdown of the ± 500 kV Talcher–Kolar HVDC Bipole during November 2026. The meeting was attended by representatives from SRPC, SRLDC, ERPC, ERLDC, ER-I, PGCIL, SR-I, PGCIL, NTPC Talcher and SRHQ, NTPC.

Background:

SRPC highlighted the key decisions of the special meeting convened by ERPC on 23.06.2026, the Minutes of which are (enclosed as **Annexure-1a**), as under:

- ✓ PowerGrid Odisha shall postpone the proposed shutdown of the ± 500 kV Talcher–Kolar HVDC Bipole, requested for 15 days, for execution of the NHAI diversion work and tentatively plan the shutdown during November 2026, considering the comparatively lower system demand during the winter season.
- ✓ During the proposed HVDC Bipole shutdown, PowerGrid Odisha shall undertake all planned shutdown and maintenance activities in the HVDC system, including the replacement of the converter transformer that has been under prolonged DGA observation, so as to optimize the utilization of the shutdown period and avoid the need for additional outages in future.
- ✓ Prior to availing the HVDC Bipole shutdown, PowerGrid Odisha shall complete the HTLS reconductoring of the 400 kV Talcher–Meramundali D/C transmission line, along with the upgradation of the associated bay-end equipment, in all respects. The completion of these works is expected to enhance the power transfer capability of the corridor and thereby reduce the extent of generation curtailment during the HVDC shutdown.
- ✓ NTPC Talcher shall suitably plan the outage of its generating units, including annual overhaul (AOH) or other scheduled maintenance activities, during the proposed shutdown of the Talcher–Kolar HVDC Bipole so as to minimize the effective generation curtailment and optimally utilize the shutdown period.

Deliberations:

a. NTPC Talcher Unit Outage

NTPC Talcher informed that the outage of Unit-2 of Stage-I has been approved by ERPC in coordination with the Talcher–Kolar HVDC Bipole shutdown from **31.10.2026 to 18.12.2026**, i.e., for a period of 50 days.

b. Status of NHAI Diversion Works

- ✓ PGCIL updated the status of the NHAI diversion works associated with the Talcher–Kolar HVDC link and informed that the works not requiring shutdown had been completed about two months ago. PGCIL further informed that NHAI is pressing for early completion of the remaining works and requested that the

required shutdown of 15 days, may be facilitated at the earliest to enable completion of the diversion works.

- ✓ In this context, the need for firm coordination and close monitoring of the NHAI works was emphasized, considering the importance of completing the shutdown within the planned period.

c. Status of Talcher–Meramundali Reconductoring and Bay Upgradation

- ✓ ERPC informed that 400 kV Talcher–Meramundali Ckt-2 is planned to be taken under shutdown tentatively from 06.08.2026 for carrying out balance reconductoring work of 20CKm in LILO portion works. After the shutdown Talcher-Mermundali ckt 2 will be restored/operational bypassing Angul. The reconductoring in LILO part in Ckt-2 is planned to be completed prior to facilitating the Talcher–Kolar HVDC Bipole shutdown. After completion of the reconductoring works in LILO part, Ckt-2 would require a one-day shutdown for restoration of the original configuration. Thereafter, reconductoring of the Ckt-2 original line, along with associated bay upgradation works at either end, would be taken up after the NHAI diversion work.
 - ✓ POWERGRID, Odisha Projects informed that the present shutdown of Ckt-2 is being utilized for isolation of the LILO portion and execution of the reconductoring in LILO part. Subsequently, reconductoring of balance 9Ckm in Ckt-1 would be taken up with the objective of completing the same before the proposed HVDC Bipole shutdown. After completion of the HVDC Bipole shutdown, reconductoring of Ckt-2 original line would be taken up.
 - ✓ Representative of ERTS, PGCIL informed that the bay upgradation works involve civil works and may require approximately 60 days for both main and tie bays. The modality for taking up the bay upgradation along with line reconductoring would be finalized in consultation with OPTCL, ERPC and ERLDC.
- d. MS, SRPC, reiterated that the objective of the meeting is to finalize the Talcher–Kolar HVDC Bipole shutdown schedule with minimum ATC/TTC curtailment and Talcher generation reduction (during exigency) to the SR beneficiaries. Since complete reconductoring of Talcher–Meramundali D/C along with bay upgradation may not be feasible before November 2026, SRPC sought assessment of the system restrictions with and without completion of the proposed strengthening works.
- e. ERLDC presented the ER–SR study results (**Annexure-2a**) and informed that
- ✓ The thermal I_{max} limit of the Talcher–Meramundali corridor is 830 MW up to October 2026, which will increase to 930 MW from November 2026 as per seasonal rating, thereby providing an additional margin of approximately 100 MW.
 - ✓ The Talcher generation sensitivity with respect to Talcher–Meramundali loading is approximately 25%, which would provide an additional generation transfer margin of around 400 MW from November 2026 onwards.
 - ✓ It was observed from the study that, with one circuit of Talcher–Meramundali reconducted and the other circuit yet to be reconducted, the probability as

well as quantum of generation curtailment at Talcher complex during the HVDC Bipole shutdown would be significantly reduced.

- ✓ Under N-1 contingency, in case the non-reconductored circuit trips while the reconductored circuit remains in service, generation curtailment may not be required. However, in case the reconductored circuit trips, generation curtailment may become necessary, considering the prevailing limitation of the associated bay-end equipment.
 - ✓ Similarly, under N-1 conditions, the average block-wise generation backdown requirement during November 2026 is lower compared to October 2026, indicating relatively lower curtailment during the proposed November shutdown period.
- f. SRLDC concurred with the ERLDC assessment and highlighted that completion of at least one circuit, preferably the shorter Ckt-1, along with associated bay upgradation, would improve the system operating margin before facilitating the HVDC Bipole shutdown.
- g. MS, SRPC, observed that under N-1 conditions, outage/tripping of either circuit would have an impact on transfer capability and therefore complete reconductoring of both circuits along with bay upgradation would be desirable to realize the full benefit of the strengthening scheme.

h. Finalization of Talcher–Kolar HVDC Bipole Shutdown Schedule

- ✓ SRPC, informed that the Southern Region is ready to facilitate the Talcher–Kolar HVDC Bipole shutdown between 31.10.2026 to 18.12.2026 (linked with Talcher Stage 1 Unit shutdown)
- ✓ ERPC/ERLDC may finalize the schedule for the Talcher–Meramundali D/C works (reconductoring and bay upgradation) and Talcher–Kolar HVDC Bipole shutdown accordingly.

i. Operational Modality and SPS

ERLDC informed that the operational modality, including necessary SPS provisions, would be finalized jointly by ERPC, ERLDC, PGCIL and NTPC Talcher considering the prevailing status of the Talcher–Meramundali D/C corridor.

j. Replacement of Converter Transformer at Talcher End

- ✓ ER, PGCIL informed that the converter transformers/ICTs at Talcher end are presently under continuous monitoring and are DGA violations are under control. Replacement would otherwise be considered in case of failure/fault.
- ✓ MS, SRPC, reiterated that the converter transformer should be replaced during the proposed Talcher–Kolar HVDC Bipole shutdown itself to avoid similar case during January 2025. SRLDC endorsed the same.

k. Coordination and Monitoring of NHAH Works

- ✓ SRPC/SRLC expressed concern on delay in restoration like the recent experience of the 400 kV Jeypore–Gajuwaka D/C shutdown, which was initially planned for about 22 days by NHAH but extended beyond 80 days.
- ✓ NLDC highlighted that the shutdown should not spill over into January/February 2027, when Southern Region demand is expected to increase, which could result in significant ATC/TTC curtailment.

- ✓ It was concluded that ERTS and SRTS, PGCIL, shall ensure readiness of all required manpower, materials, machinery and equipment by NHAI before facilitating the shutdown. PGCIL, shall nominate/post an official at the work site for day-to-day monitoring of the NHAI works and close coordination with the executing agency.

1. Alternative Bay Rating / System Margin

NLDC suggested that, in case complete bay upgradation is not feasible before the HVDC Bipole shutdown, the feasibility of utilizing 2000 A-rated bay equipment, considering the rating of the reconductored line, may be examined. The corresponding transfer capability/system margin under such configuration shall be jointly assessed by NTPC, OPTCL and PGCIL and the same shall be confirmed in writing and furnished to ERPC/ERLDC.

Recommendations:

- i. NTPC Talcher shall coordinate the approved Unit-2 of Stage-I outage from 31.10.2026 to 18.12.2026 with the HVDC Bipole shutdown.
- ii. The Talcher–Kolar HVDC Bipole shutdown for 15 days, shall be targeted during 01.11.2026 to 18.12.2026, subject to finalization by ERPC/ERLDC in coordination with PGCIL and the concerned utilities.
- iii. Reconductoring of at least Talcher–Meramundali circuit-1, shall be endeavoured to be completed before facilitating the HVDC Bipole shutdown.
- iv. ERPC, ERLDC, ER-PGCIL & NTPC Talcher agreed to finalize the operational modality and SPS provisions for the HVDC shutdown period and communicate the same to SRPC/SRLDC.
- v. POWERGRID, Odisha Project shall undertake the replacement of the converter transformer under prolonged DGA observation during the HVDC Bipole shutdown.
- vi. The ER and SR portions of the HVDC Bipole shutdown shall be coordinated and clubbed to optimize the overall outage duration.
- vii. PGCIL shall co-ordinate with NHAI and ensure completion of the diversion works within the agreed shutdown period of 15 days without any extension.
- viii. ERTS/ERHQ, PGCIL shall ensure day-to-day site monitoring of the NHAI works and keep ERPC, ERLDC, SRPC & SRLDC apprised of progress.
- ix. In case bay upgradation is not feasible within the proposed timeframe, the feasibility of operation with 2000 A-rated bay equipment, considering the reconductored line rating and available system margin, shall be jointly examined and confirmed by ERPC forum.
- x. Talcher-Meramundli reconductoring and bay upgradation will be coordinated by ERPC forum. Any restrictions during the works would be communicated by ERPC/ERLDC to SRLDC/SRPC. SRPC/SRLDC stated same need to be completed before Jan 2027 else the works may be planned from June 2027 onwards.