| INITE NO - OA   | TDC . Vhanork  | heda TPS   | Unit Cana                               | acity: 210 MW                                     |                          |  |
|---|--|--|---|---|--------------------------|--|
| UNIT NO: 04   |  | Time -   | Date -                                  | No. of days from last sync. :                     |                          |  |
| 1. *HO Code :   | Station Code : T003  | 00:25 Hrs  | 13/11/2015                              | 08 days   | Tuo e sy men             |  |
| Onerating co  | onditions at the time  | ne of Event :-   |   | •   |                          |  |
| Load  |  | Coal Cycles in service   |   | Oil Support                                       |                          |  |
| 90 MW   |  |  | C, D                                    |   | NIL                      |  |
| 3. Nature of Eve  | ent: Unit withdrawn  | to replace gland box   | sheared-off bolts at                    | LPT.  |                          |  |
| 1. Name of Firs   | t <b>Up , Main Protect</b><br>(First Up), MFT Acte   | ions & Protection o  | <b>n which GCB trippe</b><br>Trip.      | ed:   | 2.00                     |  |
| A) Observation  | ns:- At 23:45 hrs on   | date 12/11/2015, ui  | nit was on load at 15                   | 0 MW with 5 Coal cy                               | cles (A, B, C, D & E) in |  |
| corvice The   | load was started red   | ducing by withdraw   | ing coal cycles one                     | by one in order to v                              | vithdraw the unit for    |  |
| replacing she   | ared off bolts of LPT  | gland box. Set Hand  | d Tripped at 00:25 h                    | rs on date 13/11/20                               | 15 when load was 90      |  |
| MW with coa   | l cycles C & D in serv   | rice.  |   |   | ,                        |  |
| 5 B) Remedial   | Action/work done:  | - 4 Nos of gland box   | bolts replaced with                     | new ones. Centering                               | done, washer             |  |
| clearance adi   | usted and kept 0.5 m   | im along the shaft an  | id gland box.                           |   |                          |  |
|   |  |  | ged due to high vibr                    | ations of turbine sha                             | tt & bearings.           |  |
| At about 23:4   | 5 hrs on dt. 12/11/2   | 015,   |   |   |                          |  |
|   | ns (microns): $X_2 = 1$  |  | Y <sub>4</sub> = 122                    |   |                          |  |
|   | tions (microns) : X <sub>4</sub> =   |  |   |   |                          |  |
| 7. Preventive a   | ction suggested (Sh  | nort Term) :-  |   |   |                          |  |
| 8. Preventive a   | ction suggested (Le  | ong Term) :-   |   |   |                          |  |
| 9. Similar event occurred last time:  |  | e:- Unit l   | No # 4, 210MW                           | Time: 17:26 Hrs                                   | Date: 15/10/2015         |  |
| Event: Unit wit   | hdrawn to replace gl   | and box sheared-off  | bolt at LPT.                            |   |                          |  |
| Pemedial Action   | ons: - One gland box   | holt replaced on dat   | te 16/10/2015.                          |   |                          |  |
| Remediai Acci   | Jis, one grand box   |  | y or y                                  |   |                          |  |
| 9A Implementation Status of Long  |  | g Term/Short Tern  | Short Term measures stated at Sr No 7 & |   | <sup>7</sup> & 8 :-      |  |
| 10. Boiler lighted up   |  | Time   | - 04:40 Hrs                             | Date- 14/1  | Date- 14/11/2015         |  |
| IU. DUILET HEI  |  |  |   |   |                          |  |
| 11 T-A Set Sv   | nchronized   |  | - 08:32 Hrs                             | Date- 14/1  | •                        |  |
| 11. T-A Set Sy  | Ouring above outage  | absolute bearing vil   | oration pick-ups mo                     | unting bolts & conne                              | ction checked and        |  |
| 11. T-A Set Sy  | Ouring above outage  | absolute bearing vil   | oration pick-ups mo                     | unting bolts & conne                              | ction checked and        |  |
| 11. T-A Set Sy  | Ouring above outage  | absolute bearing vil   | oration pick-ups mo                     |   | ction checked and        |  |
| 11. T-A Set Sy  | Ouring above outage  | absolute bearing vil   | oration pick-ups mo                     | unting bolts & conne                              | ction checked and        |  |
| 11. T-A Set Sy 12. Remark:- I tightened. Re   | Ouring above outage  | absolute bearing vil   | oration pick-ups mo                     | unting bolts & connection tightened               | ction checked and        |  |
| 11. T-A Set Sy 12. Remark:- I tightened. Re  13. Recomme  | Ouring above outage,<br>lative shaft vibration   | absolute bearing vil<br>(eddy current) pro                         | oration pick-ups mo                     | unting bolts & connection tightened               | ction checked and        |  |
| 11. T-A Set Sy 12. Remark:- I tightened. Re  13. Recommendation   | Ouring above outage, lative shaft vibration and ations of Works Sement/Replacement   | absolute bearing vil<br>(eddy current) pro                         | oration pick-ups mo                     | unting bolts & connection tightened               | ction checked and        |  |
| 11. T-A Set Sy 12. Remark:- I tightened. Re  13. Recommendation 1. Procur 2. Operat                             | Ouring above outage, lative shaft vibration and ations of Works Sement/Replacementional Error:   | absolute bearing vil<br>(eddy current) pro                         | oration pick-ups mo                     | unting bolts & connection tightened               | ction checked and        |  |
| 11. T-A Set Sy 12. Remark:- I tightened. Re  13. Recomment 1. Procur 2. Operat 3. Delay i                       | Ouring above outage, lative shaft vibration and ations of Works Sement/Replacement   | absolute bearing vil<br>(eddy current) pro<br>Section:<br>ht Plan: | oration pick-ups mo                     | unting bolts & connection tightened               | ction checked and        |  |
| 11. T-A Set Sy 12. Remark:- I tightened. Re  13. Recomment 1. Procur 2. Operat 3. Delay i 4. Delay i 5. Trainin | During above outage, lative shaft vibration additions of Works Sement/Replacement ional Error:  In Maintenance: In bringing back the ong of Staff: | absolute bearing vil<br>(eddy current) pro<br>Section:<br>at Plan: | oration pick-ups mo                     | unting bolts & connection tightened Chief Enginee | ction checked and        |  |
| 11. T-A Set Sy 12. Remark:- I tightened. Re  13. Recomment 1. Procur 2. Operat 3. Delay i 4. Delay i 5. Trainin | Ouring above outage, lative shaft vibration additions of Works Sement/Replacement ional Error:  In Maintenance:  In bringing back the              | absolute bearing vil<br>(eddy current) pro<br>Section:<br>at Plan: | oration pick-ups mo                     | unting bolts & connection tightened Chief Enginee | ction checked and        |  |