



सत्यमेव जयते

भारत सरकार

Government of India

विद्युत मंत्रालय

Ministry of Power

केंद्रिय विद्युत प्राधिकरण

Central Electricity Authority

सदस्य (तापीय) कार्यालय

Office of Member (Thermal)

संख्या: के.वि.प्रा./टी.ई.टी.डी./एम- 23/2018/87-157

दिनांक: 15th January, 2019

सेवा में,

All State Power Secretaries, Thermal Power Generating Plants/ Utilities (Public or Private) – As per list

विषय: - Advisory on safety aspects in Thermal Power Stations – के बारे में.


महोदय,

As you may be aware that a boiler accident had occurred in Feroze Gandhi Unchahar TPS 500 MW Unit # 6 of NTPC on 01.11.2017. In this regard a committee was constituted by Ministry of Power under Chairmanship of Member (Thermal), CEA. The committee submitted their report to MoP in January, 2018. Another committee was constituted by DHI under Chairmanship of Shri T. S. G. Narayannen, Technical Advisor (Boilers), DIPP. Both the committees have made their recommendations for safe operation of the unit/ plant system(s) to avoid recurrence of such incident in future. Ministry of Power has desired that based on recommendations of above committees an advisory be issued to all the thermal power stations in the country. Accordingly, the following are advised to be followed by all the power utilities:

1. All systems & facilities of the unit/ plant including C&I systems etc. should be completed before commissioning/ COD. Subsequently, unit should operate on sustained basis without use of any contingency arrangements.
2. The control loops for all major parameters of unit operation should be commissioned along with unit commissioning and should be available during regular operation of the unit.
3. The commissioning of wall soot blowers and long retractable soot blowers (LRSBs) should be completed in all respect during commissioning of the unit.
4. The ash handling capacity of bottom ash handling system, economizer ash handling system, air preheater ash handling system and ESP fly ash handling system should be adequately designed keeping in view the likely maximum ash content of the coal.
5. Qualified boiler operation engineer (BOE) should be engaged in boiler operation to ensure safe operation of the boiler which is mandatory under the Boilers Act 1923.
6. The manhole door/ scaffolding door provided at bottom of the furnace should not be opened while boiler is in operation.

7. Water injection for dislodging of ash build- up over furnace bottom should be avoided. Further, if water jetting is necessary, the same should be resorted to with due consideration for technical aspects of flame stability and stable combustion conditions to be maintained inside the boiler.
8. The accumulation of ash in S panel should be controlled and continuous ash removal should be ensured without blocking the furnace bottom opening. In this respect, the provision for providing alarm and tripping of the unit with increasing level of bottom ash in the boiler should be explored in consultation with the OEM.
9. The standard operating procedures (SOPs)/ local management instruction (LMI) of the plant should be periodically reviewed and plant operating instructions to be followed in dealing with various situations of plant operation should be in line with OEM recommendations. Further, the plant operating guidelines should emphasise on safety aspects and compliance of good practices directed towards avoiding risky plant operating conditions.
10. While attending any problem during boiler operation, clear practice of having a check list for the safe practice should be adopted. This should be approved by Operation, Maintenance & Safety departments with final approval of the Head of Plant.
11. The permit system for undertaking O&M activities should be endorsed by safety department apart from operation and maintenance departments. The protocol of work permit for carrying out any activity in the unit should be strictly adhered to.
12. Maintenance department should not resort to any maintenance work when the boiler is in operation endangering human safety. If the problem is not fully resolved/ beyond correction, the boiler should be stopped for undertaking the maintenance/modification work. In this respect, proper communication should be made and insisted upon to shut down the unit so as to avoid risky plant operating conditions.
13. The persons working in the ash handling area should be provided with thermal wear which can withstand high temperature and flame proof clothing for people working near the furnace area.
14. The plant engineers deployed at different levels should have adequate and relevant experience as per duties involved and they should be able to effectively handle all plant operational aspects and exigencies likely to occur in the plant operation.
15. The control room logbooks should be filled in a proper manner indicating prevailing status of key unit parameters, operating parameters of major equipment/ systems and shift activities should be entered in a chronological manner without any ambiguity.
16. Separate shift charge engineer (SCE) should be posted for a distantly located unit, if any, in the power station.

भवदीय,



(पी. डी. सिवाल)

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