

Committee's recommendation on accident in Unit #6 Kota TPS on 25.09.2003. and remedial measures to be taken to avoid occurrence of major accident in Thermal Power Station-

An accident occurred in unit no.6 Kota TP Station on 25.09.03. A committee was constituted by CEA office order no. 5/41/Secy/2003 dated 26.09.03. to enquire into the incident. Based on the enquiry the following recommendations are made to avoid such recurrence:

1. An independent quality control and supervision agency may be appointed to supervise the quality of works so as to ensure the quality and workmanship of the work carried out at the site.
2. Quality Assurance Programme be prepared and implemented religiously.
3. 100% testing of critical welded joints particularly bunker and bunker-supporting structure (i.e. butt weld, fillet weld and bevelled weld joints) is considered essential.
4. The executing, as well as supervising staff, should have the experience of similar type of jobs and supervising staff should be imparted prior training for the job. They should get themselves fully involved in execution, testing and quality checks.
5. The fabrication and erection job should be carried out strictly in line with the approved fabrication drawings and the same should be ensured.
6. During course of erection, quality of structural steel and welding electrodes should be got tested by independent testing house.
7. The adequate number of safe platforms needs to be provided for easy access to welded joints both for welding and inspection of the welded joints.
8. Adequacy of structural design and welded joints be also got checked by an independent agency by 3D-analysis for design loads with worst combination and connections are to be designed for 100% moment carrying capacity of the beams.
9. If the main contractor subcontracts the work to another agency, then approval of owner must be taken considering his qualification and previous experience.
10. Load cells can be provided at all bunkers supporting points to monitor the excessive load on any support.
11. Suitable lateral supports (Longitudinal as well as transversal) at various height of bunkers should be provided for earthquake and wind load.
12. Preferably separate beams and supports for each bunker independently should be provided to avoid cascading failures.