

General Modifications suggested by CPHEEO, NewDelhi for preparation of Detailed Project Reports for Water Supply Schemes proposed under Transition Phase of JnNURM – Dt: 05-10-2013

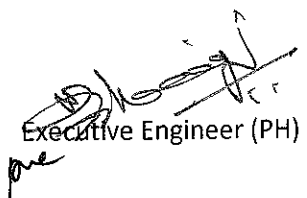
During the appraisal of DPRs for Water Supply Projects, the CPHEEO have suggested the following for adoption of uniform procedure in preparation of Detailed Project Reports

- 1) The water demands may be proposed with 135 LPCD instead of 70 LPCD duly considering the contemplation of the Sewerage System for the towns in future. The additional demands proposed towards floating population, Institutional demand, Fire Fighting demand and transitional losses etc, shall not be taken into consideration for calculating total water demand for the projected year. If the ULB wants to add the floating population, Institutional demand necessary survey towards calculation of floating population & Institutional population shall be carried out and included with required documentary evidence. Fire Fighting Demand will only be considered, if the design and cost required towards appurtenances are to be incorporated in the water supply system duly envisaging the need for the demand, in Project report.
- 2) 15% of losses towards UFW shall be considered on the rate of demand (135 LPCD) only.
- 3) Division of water supply zones and sub-zones shall be minimised duly considering existing network, physical barriers, topographical nature etc,.
- 4) The Distribution System shall be designed with Peak Factor of 3 for all the zones which have population not more than 50,000. The town population shall not be taken into consideration while designing of zonal distribution network.
- 5) The performance and condition of the existing infrastructure / pumping lines/distribution lines shall be assessed properly and proposals for rehabilitation or utilization of the same shall be justified.
- 6) LS Drawings and alignment plans for the Pumping Mains & Gravity mains shall be furnished along with the details of locations of all appurtenances.
- 7) The design of economic pumping size shall be done as per the guidelines given in CPHEEO manual and as per the instructions given by the office of Engineer-in -Chief, PH, Hyd for adoption of rates for pump sets.
- 8) While calculating the capacities of the pump sets a combined efficiency of minimum of 72% shall be considered.

- 9) 100% stand-by for Pump sets shall be provided for pump set capacities of 60 KW or less and 50% stand-by pump sets shall be provided for capacities of less than 60 KW.
- 10) The Hydraulic designs, Structural designs and drawings of the infrastructure proposed such as Intake well, Approach Bridge, MBRs/ELBRs/GLBRs shall be furnished along with the DPR.
- 11) Classification of soils may be considered as per the site investigation and in general, the percentage of earthwork quantities are suggested as under:
- a) Earth work excavation with machinery in all types of soils -70%,
 - b) Earth work excavation with machinery in ordinary rock/SDR soils -5%,
 - c) Earth work excavation by manual labour in all types of soils -20%,
 - d) Earth work excavation by manual labour in Hard Rock-5%.
- If there is a change, necessary soil investigation shall be done by trial pits or by conducting ERT for projecting actual proportions in the estimate. Documentary evidence shall be furnished for supporting the data.
- 12) The Internal Rate Return (IRR) / Economic Rate of Return (ERR) are to be calculated and furnished along with DPRs.
- 13) The price escalation need not be provided in the estimates.
- 14) All the requisite documents such as permissions from the other departments for drawl of water, Railway line crossings, Highway crossings, R&B road crossings, APTRANSCO shall be appended the DPR. The copies of the relevant G.Os/circulars/ permissions shall be appended in the DPR.
- 15) Other mandatory certificates such as Land availability, Council Resolutions, Non- duplication of Schemes etc, from the ULB shall be annexed with the DPR.

Sd/-
Deputy Chief Engineer (PH)

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Executive Engineer (PH)