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**GOVERNMENT OF TELANGANA
IRRIGATION AND CAD DEPARTMENT**

From

K.Penta Reddy,
Advisor, Lift Irrigation Schemes,
Irrigation & CAD Dept,
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Jalasoudha, Errummanzil,
Hyderabad.

Lr.No. ADV/LIS/ 142

To

All the CE'S,
I&CAD Department,

Dt: 25 .07.2017


Sir,

Sub: Operation and Maintenance guide lines of pumping stations – reg.

As per the instructions of Minister for Irrigation, Marketing, Operation and Maintenance guide lines to be followed in pumping-stations in his jurisdiction is here with enclosed.

Chief Engineer's are requested to instruct the concerned to follow these guide lines for operation and in maintenance activities in their pump-houses. In addition to the activities specified in the guide lines given, if any other activities specified by the manufacturers or required in view of specific futures of pump-house in their area are to be got to be done regularly.

Yours faithfully,


(K.Penta Reddy) 25.07.17

Advisor,
Lift Irrigation Schemes,
I&CAD Department,
Govt.of Telangana.

Copy to ENC (Irrigation), for information and further necessary action .

Copy to ENC(AW), for information and further necessary action .

OPERATION AND MAINTENANCE OF LIFT IRRIGATION SCHEMES

By
SRI. K. PENTA REDDY,
ADVISOR LIFT SCHEMES,
GOVT. OF TELANGANA

Pumping stations are to be designed taking care of power grid conditions like voltage, frequency and in take and cistern reservoir levels variation into consideration, so that there will not be any problem in running of pumps, In present days properly designed pumping station, there will not be much maintenance works, except routine type maintenance.

Present days routine maintenance works will be cleaning of dust, greasing, checking the oil levels of bearings and check power grid system parameters like voltage and frequency and adjust the pump operation requirements.

Operation and Maintenance activities of pumping stations vary from one pumping station to other pumping station and depends on type and design of pumping station.

I. MAIN COMPONENTS OF LIS SCHEMES

A). Main Equipment

- Pump with Pump Controller and associated equipment
- Motor with Excitation System
- Discharge Valve
- Power Transformers
- Station Transformers
- Unit auxiliary transformers
- SFC transformers
- Pumps starting equipment(SFC system or FCMA system)
- Substation Equipment 33KV/132KV/220KV/400KV
- Power Transmission Lines (33KV/132KV/220KV/400KV)
- H.T and L.T Switchgear Panels(11KV and 415V system)
- D.C Supply.110V or 220V system and 24V Sytem
- UPS supply 100V or 250V system
- Pump and Motor's A.C auxiliaries (OPU system, Compressor system, Cooing water system).
- Capacitor units for Power factor improvement in particular during shutdown periods of pumps.
- H.T and L.T Power Cables.
- Control and Instrumentation Cables.
- Brake & Jack System.
- D.G Set for Emergency Supply.
- Meters (Voltage, Current, Power and Energy).

