OPM MODULE - IN E URJA PROCESS

Input Data

- Running hours of critical equipments of unit and common auxiliaries of station from log sheet of control room desk engineer.
- Coal consumption data from control room coal integrator log sheet.
- Oil consumption data from control room log sheet.
- DM Water consumption from control room log sheet.
- Chemical analysis data from chemical laboratory for different fuel like coal, biomass (As received & As fired), Oil (LDO & FO), Water – maintained by Chemical Lab.
- DM Water generation data by chemical laboratory.
- Fuel receipt data & Stock Position by CHP.
- In single module, Generation Data, Fuel consumption data, APC data, rejection data, running hrs of boiler & turbine, duration of different type of outages and backing down & Full Load Hrs. (Partial Load, Forced Outages, Planned Outages, etc.); Generation Loss in MWh of different types of outages and backing down. (Partial Load, Forced Outages, Planned Outages, etc.).
- Daily DC / DI to be entered by engineers who handle the EASS module. After finalization from implemented schedule of SLDC same should be corrected / edited.
- Occurrence report filled by control room SCE for Unit trip/stop.
- Intimation and FO analysis report for tripping of unit filled by Efficiency Department after detail investigation with root cause and remedial action.
- Tripping time / date should be editable as in existing system it is not allowed i.e. once same is entered whole outage required to be cancelled.
- Target Generation, Maintenance Planning, Extension & GERC parameters TPS wise to be entered by HO. Also same are editable as and when req.
- During data entering there should be cross check of entered data should be shown.
- Provision for changing the formulas in case of addition/retirement of generating units
- Duplication of Partial loss of RSD in terms of MWh and Hrs should be avoided as same is occur in existing system.
- Separate collection plan for Switch Yard C/R Engineers / Operation Engineers - SCE for data entry of 220 KV / 400 KV / 132 KV / ICT Feeder Lines 24 hours reading.(TPS wise this condition should be different)

Adequate facility should be provided to transfer the details from module to excel. Also the trends, charts etc can also be prepared

Department:

- Operation department of power stations
- Chemical Lab
- CHP / Fuel Handling Department
- Efficiency Department of Power station
- Efficiency Department of Head Office.

Process Description:

- Control room engineer creates a document / batch and entered different performance parameter like Generation, consumption of ST, consumption Station UAT , consumption of Station Tie, consumption of GT, Coal Consumption with type of coal, Oil Consumption, DM water Consumption with detail bifurcation and same must be link to process inventory also.
- Control room engineer enters different performance parameter data daily at 5:30 hrs for generating 06:00 hrs report. (Parameters like APH FG Temp, O2, Furness Pressure, Wind box DP BTD position etc.)
- Control room engineer enters different types of outages for calculating of generation loss in Mwh like part load, BD, Planned, Forced etc. Same is cross check by efficiency dept and makes necessary correction.
- Control room engineer enters different types of outages in Hrs like Full Load, part load, BD, Planned, Forced etc. Same is cross check by efficiency dept and makes necessary correction.
- CHP Department of Power station enters different type of fuel receipt (i.e. Indian, wash , imported, swapped, any new introduced fuel like biomass etc.) rack wise with receive time and release time and also colliery detail with wagon position (receive, unloaded/release, balance) and demurrage hrs also.
- Chemical Department of power station enters proximate analysis data for as received as well as fired coal on daily basis. Also sampling analysis data for LDO & FO & water enters as & when basis.
- Switch yard Control room engineer / Operation Engineer - SCE enters data for Total DC and DI daily and Efficiency department makes correction date wise after finalization from implemented schedule of SLDC.
- SCE enters data of unit occurrence/intimation report
- Changes / correction will be carried out than same should be reflected / updated in all reports instantly.

Output: (Output reports can be generated in various forms i.e. pdf, world, excel, trend etc.)

- Day wise selection for report with any data.
- Data comparison should be carried out in any type of trends. (user have to choice type of trend)
- With single entry by Operation Engineer in single module only, all necessary reports should be run.
- APC should be calculated by GT (sent out) base and UAT + ST base also.
- Nos of outage report category wise i.e. BTF, Other than BTF, TG, Electrical, C&I, Human Error, Coal shortage, PM, RSD, Others should be auto generated by Intimation report / FO analysis report.
- All the parameters - PAF should be calculated by Running hrs based and DC base also.
- Daily Efficiency Report (including KPI report data) for Power Station.
- Daily 00:00 Hrs Report for Power Station
- Daily 06:00 Hrs Report for Power Station
- Daily Fuel Report for Power Station
- Daily Efficiency Report for Head Office
- Monthly Performance Report

- Monthly Generation Loss Report
- Fortnightly Marit Order Report
- Monthly line interface report.
- Year wise MIS Report.
- Forced Outage occurrence/Intimation Report
- Forced Outage Analysis Report
- Unit Outages Details-month wise/year wise
- Non Availability of Major Auxiliaries
- MICR Report
- Monthly Award Scheme for Heat Rate- TPS
- Monthly Coal Report to Coal cell A/C-TPS
- Various reports as required by HO – Daily/Monthly/Yearly

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