30/8/2023

2 types of meters in all the hydel sites based on protocol

* Dlms meters
* Modbus meters

3 types of meters in all hydel sites based on the place where meter is connected

* Main Meters for Gen and GT
* Check meters for feeders in all the sites
* Auxillairy meters
  + Almatti and Gerusoppa have modbu meters - moxa gw – modtcp to modserial is connected
  + Moxa serial port – 485 to meters
  + Eth to pc
* In ghataprabha – no eth meters – no configuration for eth meters required
  + Data is got through DCU ( serial meters ) this data is taken n shown in EMS
* In munirabad – Generator meters and GT meters, no line ( feeder ) meters

Nagjhari

G1 ----- G6

Feeders 10 each has one check meter

Site\_info\_details table contains details of all the meters, this forms the basis for all the modules, backend modules and UI

4 eth ports for pc

KPCL – 2.10 network

KPTCL – 3.10 network

GPS

One main – eth port

VSAT Router IP – diff for each site

Firewall IP – diff for each site

Trouble shooting ( EMS )

* Ping the meter
* Check the ethernet cable between PC n switch and switch n meter
* Remove and connect cable
* Restart process ( DA\_eth )

31/08/2023

Nagajhari – 6 gen , 6 gt, 10 feeders – ( 10 main, 10 check )

Mani – feeder

Main Dashboard

Overall generator details

Line Dashboard

Overall feeders details

Commn Status

Communication status of all the elements in the network

SLD

Mapped to our gens and gts and feeders

Right side –

some avg volt, some v1

Freq – any line freq – Nagjhari

Others – Avg Freq

Aux SLD - Varahi

Meter View:

All meters details including DCU meters can be seen

Common for all sites

Inst Data View:

For main meters

Aux inst data

For aut meters

Some ( Varahi ) all meters inst data in one screen

Gen Data View:

Same as dashboard except graph

Meter Time Sync View

Mgmt:

Schedulr Cap

Dec Cap – Max cap of generators

Sched Cap – Required energy from KPTCL

Diff , if more generated, penalty on site – site

Gen Config:

Config of sitre

Meter Config:

Meter details

DCU Cofig

Gen config

Ring1

Ring2

Device Server:

For aux meters

User Config:

Install User – DCU ser number etc

Admin – other than above all

Operator – Passive

Config File maintained for UI, one config file maintained by backened processes

Threshold Config:

Event Notification Config

SMS, Email

Reports:

Common Reports :

Block Gen, - 15min, only exp

Hourly – add 4 blocks and

Xbus block gen only exp

Xbus hourly gen

Block Trans:

Feeders – imp and expt only main meters

Hourly Trans:

Feeders

Load Survey Rep:

Raw Data – what comes from meter

Midnight – same as above

JEMR1 – Gen Monthly Report

* Common but for some 2 dec points some 4 points

JEMR2 – Trans

ABT

Event

Site specific:

JEMR2 a and JEMR2b – for main and check

JEMR3 – GT meter details Some have Nagjhari, some don’t ask

Aux Hourly Consumpt – Varahi

JEMR4 – Only Aux Trans – Varahi

Load Monthly Hour Report:

Hourly data for a month – Varahi and some other sites

Monthly Day Report

Varahi and some other sites

Monthly Data Report

Monthly Midnight Report

Export Reports ( Excel Format )

In the format given by them

Format is diff for each site

Energy data alone is same rest other sheets are diff

Varahi, mani and few more sites manual entry screens are available

Site specific, number of decimal places of energy values

01/09/2023

Arun

Alerts and Notification Module

NTP Client Module

Nw Health Check

FTP Module

KERP Db Module

NTP Client Module: Details in site\_gen\_upstream\_details tbl