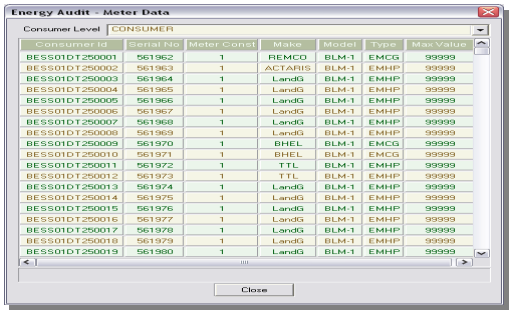
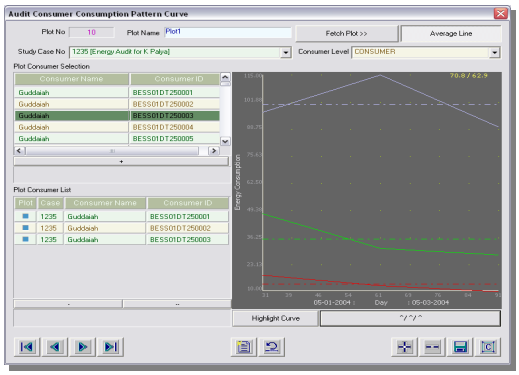
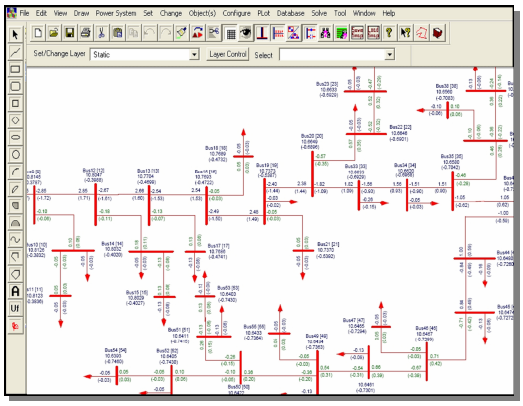
MiPDAP

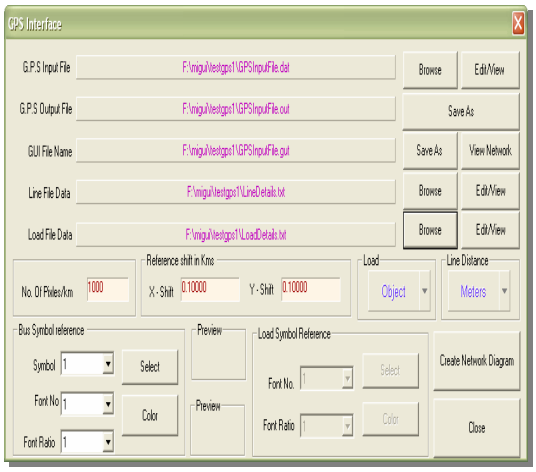
MiPower™ Distribution system Analysis & Planning

Modeling of Distribution Network/Substation
Energy accounting for the power system network
Network mapping with consumer indexing for the Power system network with different voltage levels
DTC wise loss assessment for the distribution network









MiGui – Network Editor

MiEA – Energy Auditing

MiRA – Reliability Analysis

MiSO – Switching Optimization

MiRG – Report Generation

MiMRI – MRI Data Downloading

Power LFA – 3 Phase Load Flow

MiCAE – Cost Analysis & Estimation

MiASSET – Asset Management

MiPDC – Protective Device Co-Ordination

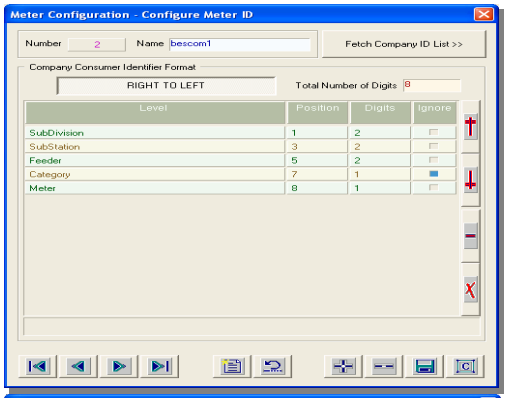
MiGPS – Geographical Positioning System Interface

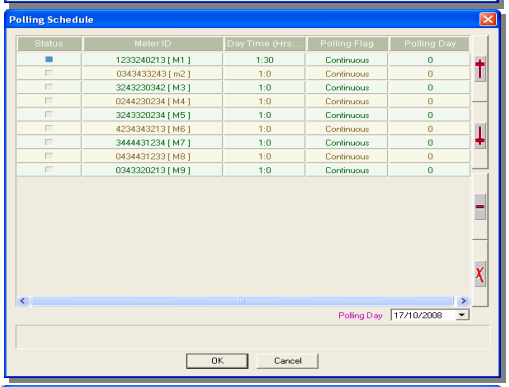
MiLR – Load Research

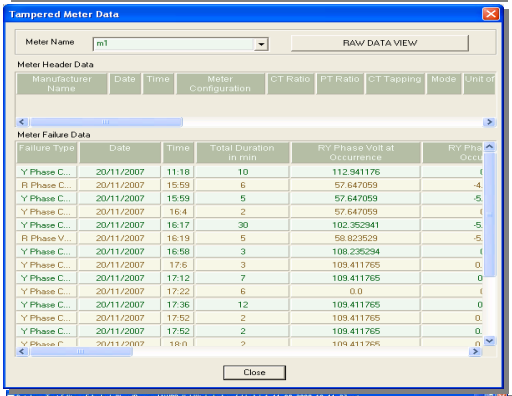
MiPDAP

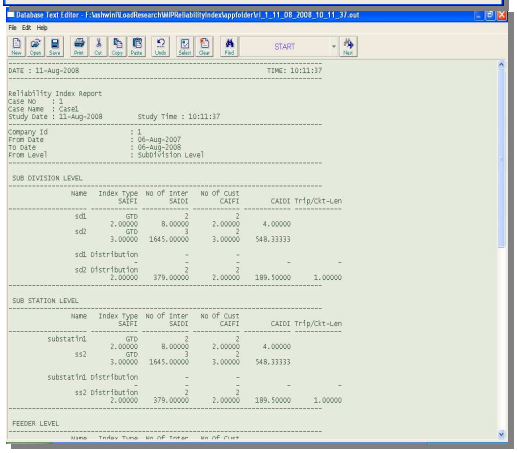
MiPower™ Distribution system Analysis & Planning

MiRA – Reliability Analysis









RI Calculation

SAIFI - System Average Interruption Frequency Index

SAIDI - System Average Interruption Duration Index

CAIFI - Customer Average Interruption Frequency Index

CAIDI - Customer Average Interruption Duration Index

Polling the tamper data from the ETV meter, daily, weekly, monthly or yearly

Segregation data in to Header & Tamper Data – **Parsing**

Parses hexadecimal to decimal

Updation of the Data to Database

UI screens for -**Meter configuration and polling schedule**

No Of Tripping per n KM of Line for Sub Division Level, Sub Station Level, Feeder Level and Meter Level

Subdivision Level Report
Index calculations for the subdivision level

Substation Level Report
Index calculations for both subdivisions and substations

Feeder Level Report
Index calculations for subdivision, substation and feeder

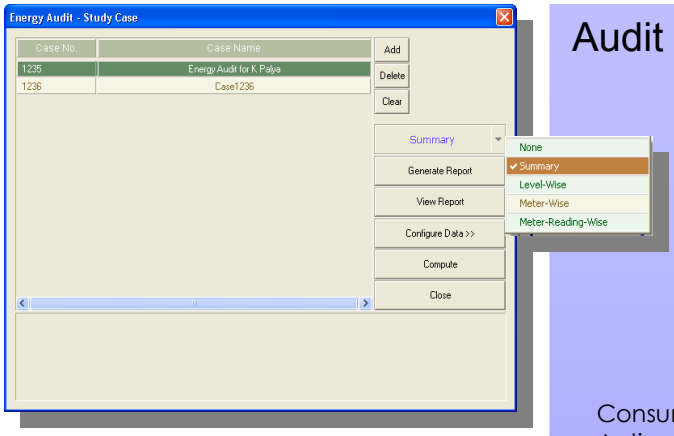
Meter Level Report
Index calculations for subdivision, substation feeder and meter

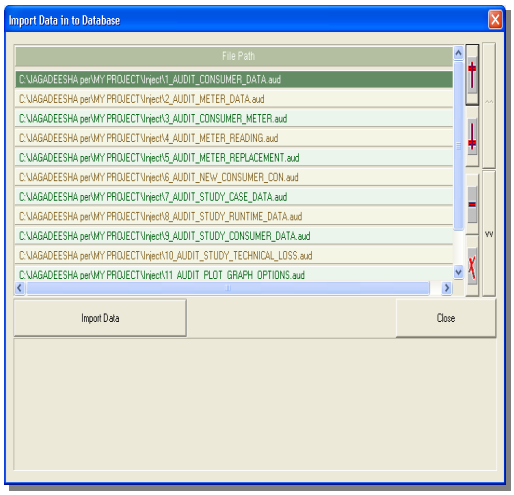
Meter Reading wise Report
Index calculations for subdivision, substation, feeder, and meter contains the failure type, Date and time of failure occurrence, duration of failure, RY voltage, BY voltage, RY Current and BY Current

MiPDAP

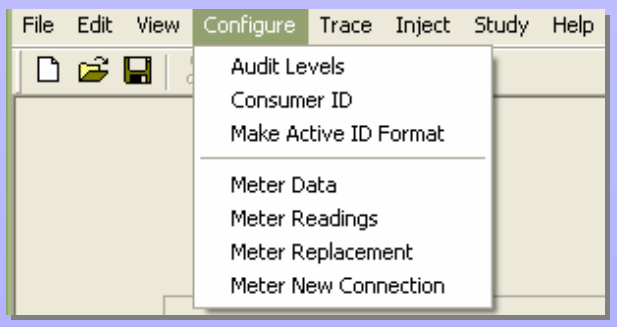
MiPower™ Distribution system Analysis & Planning

MiEA – Energy Auditing





Audit levels - DTC's, feeder, consumer, etc.



Consumer ID <<===>>. Audit level digits.
Active ID format: To make particular company active.
Meter data
Meter Readings
Meter Replacement history
Meter New Connection

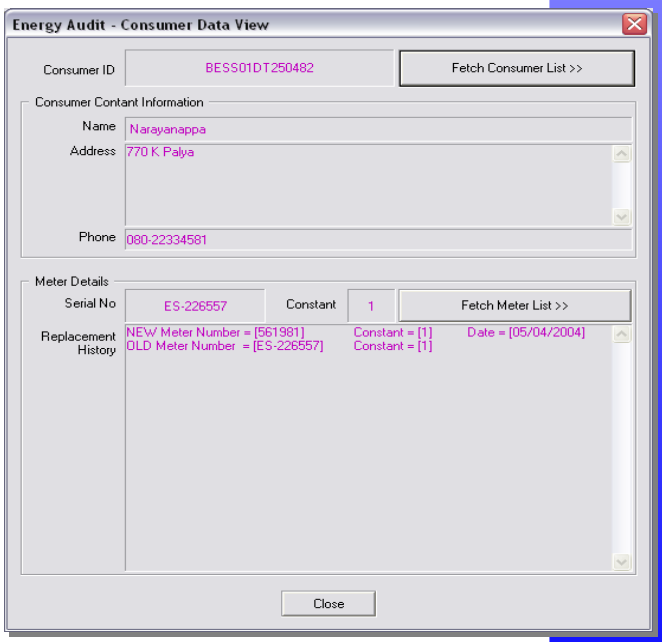
Consumer Identification Format Configuration

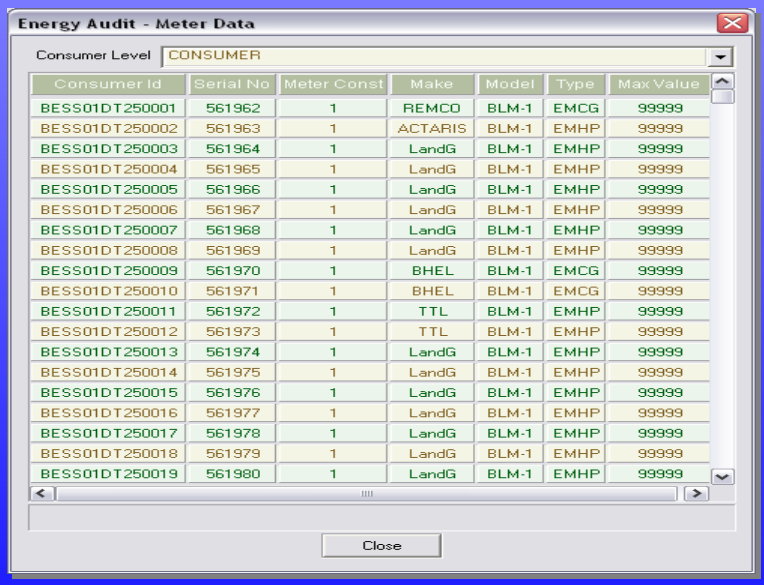
Consumer Data View

Creating consumer data view dialog
Popping of data from database if exists based upon meter id or consumer id.
Data will be displayed either meter id or consumer id.

Consumer Technical Loss

Energy Audit Study Execution and Report Generation

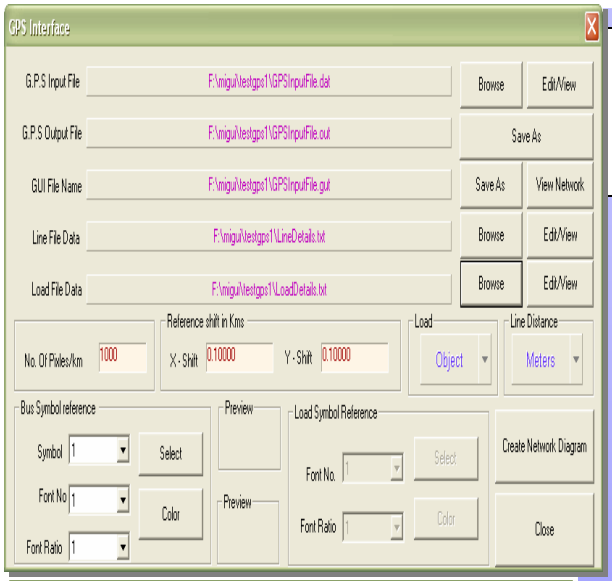


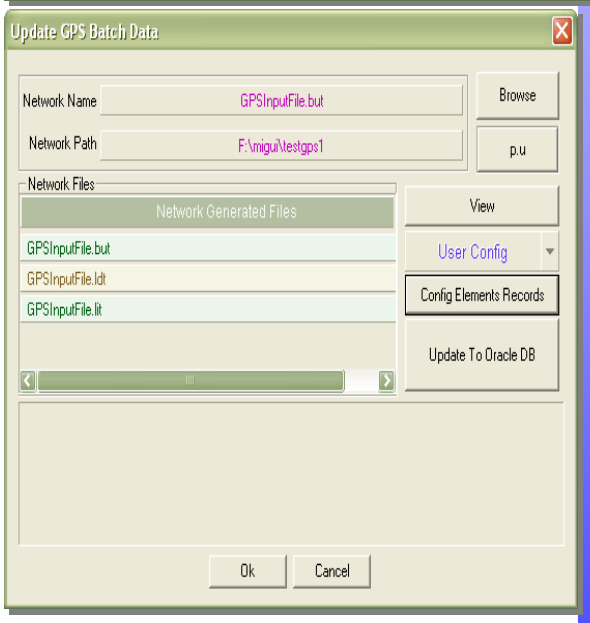


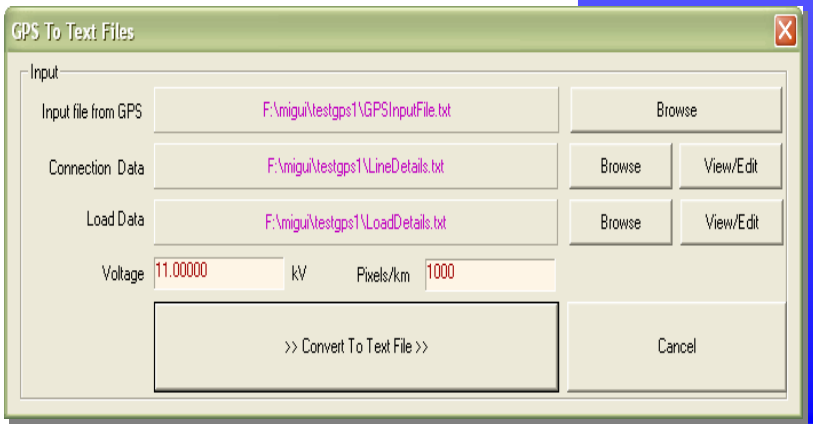
MiPDAP

MiPower™ Distribution system Analysis & Planning

MiGPS – Geographical Positioning System Interface

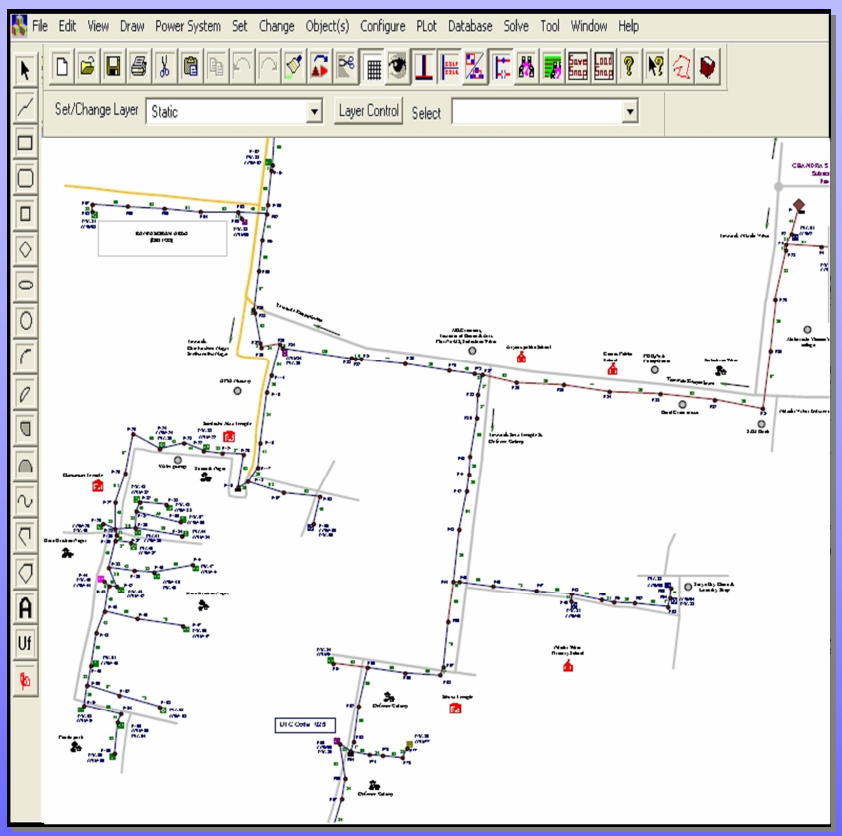






Interface for GPS: Recording positions of the Distribution Network elements

Automatic generation of the distribution network



Direct record of GPS points

Way Point record Geographically

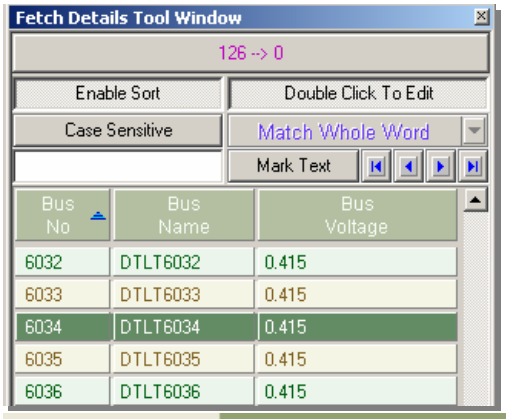
Easy creation of the database

Easy creation of Distribution Network Diagram

MiPDAP

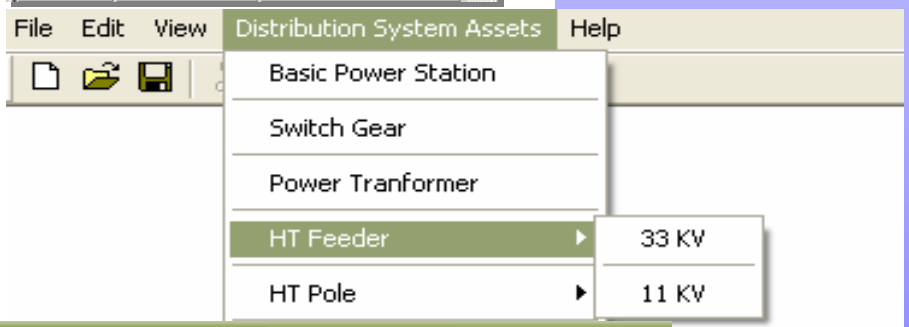
MiPower™ Distribution system Analysis & Planning

MiASSET – Asset Management

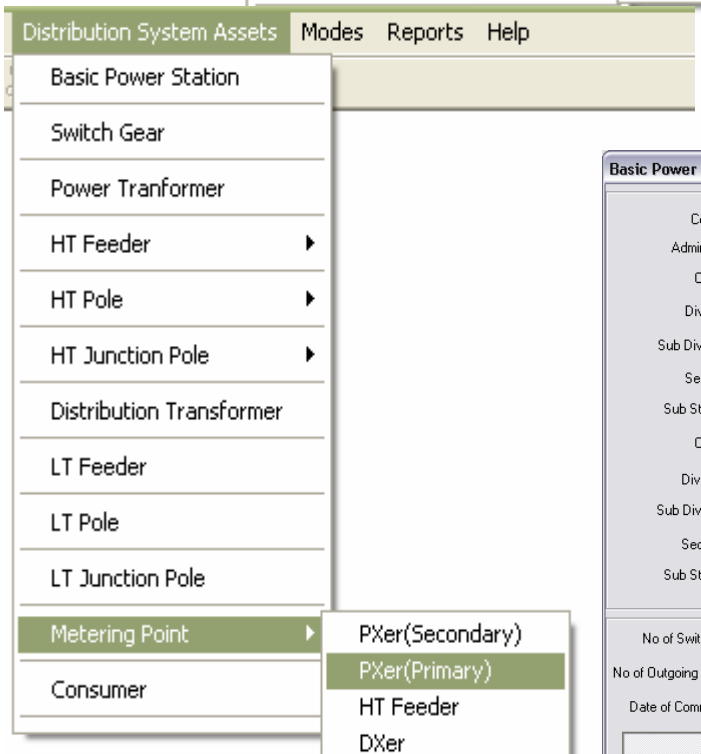


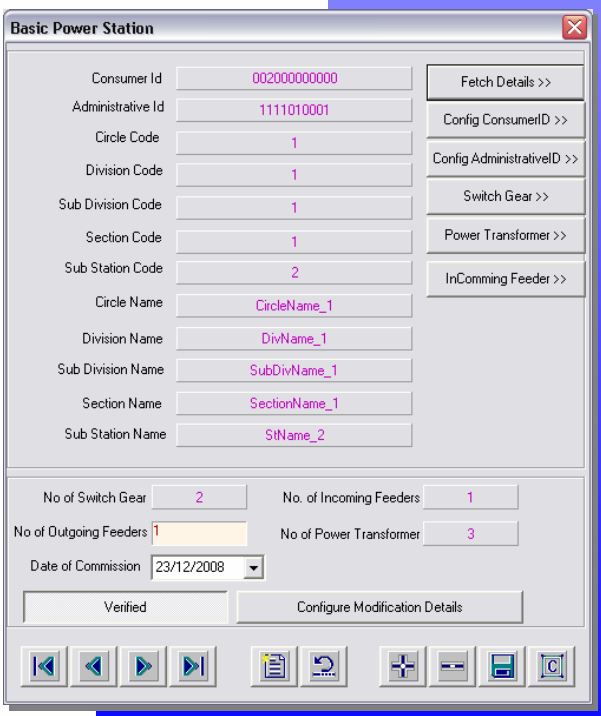
MiASSET - To view and updated all electrical device (assets) data of distribution network.

Navigation of Records
Traversing Records
Graphical User Interface for Record Operations
- Viewing Records
- Adding/Deleting Records
- Record Operations in Database
- Record Fetch
- SORTING
- Network Tracing & editing



User Manager responsibilities:
Grouping Permissions
Creating/Managing roles
Creating/Managing user account
Assigning/Reassign roles

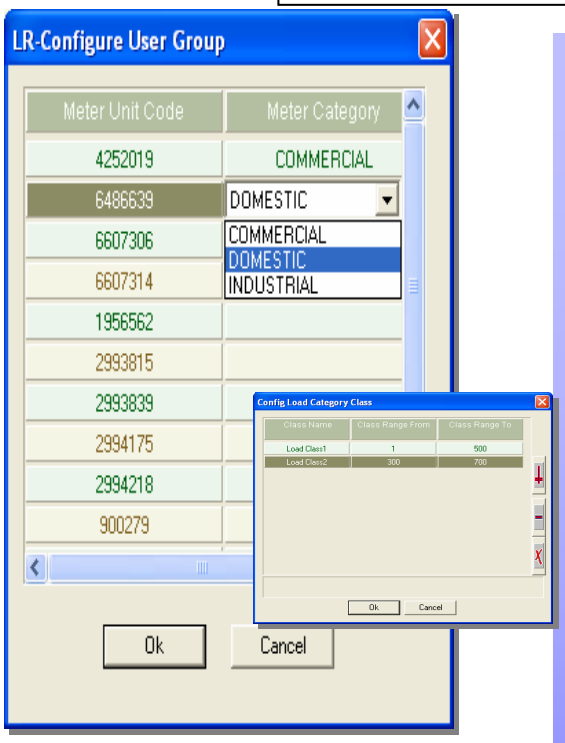




MiPDAP

MiPower™ Distribution system Analysis & Planning

MiLR – Load Research



MiPLOAD RESEARCH

Load Characterisitics

Load Categories

Load Category Classes

User Groups - Configure predominant consumer type associated with different meters (all meters identified separately by meter unit code). Different types of consumers are recognized as configured

Metered Customers - Configure data for non-metered customers

Meter Data - Load Meter Data contained in the formatted excel files.

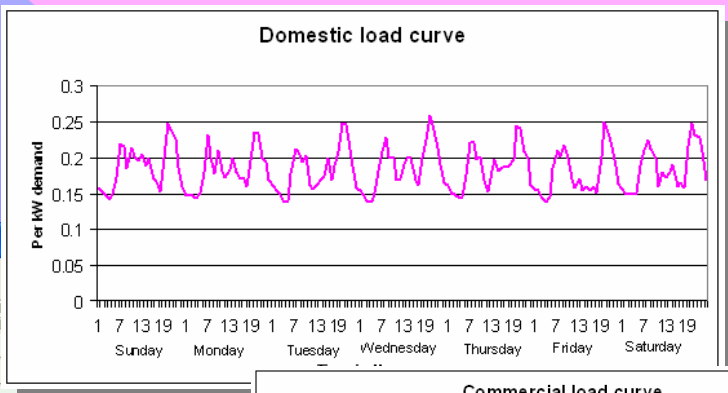
Edit

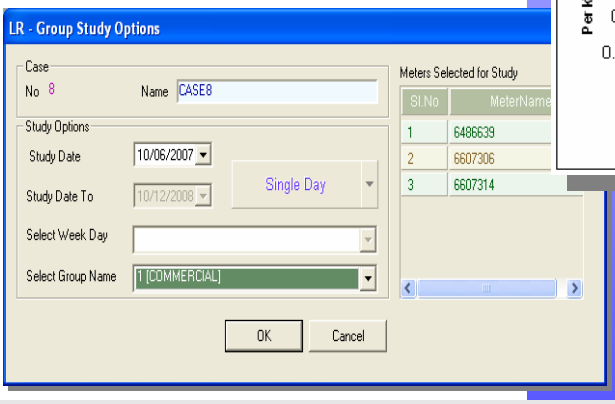
View

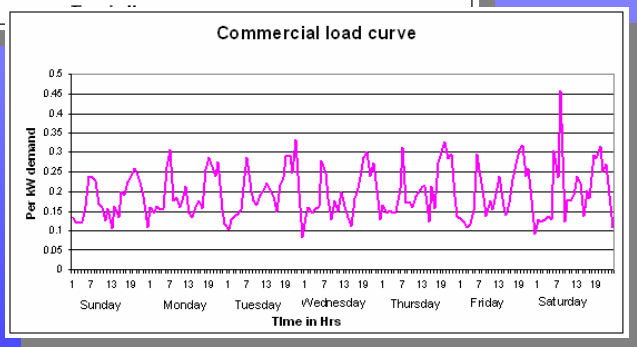
Delete

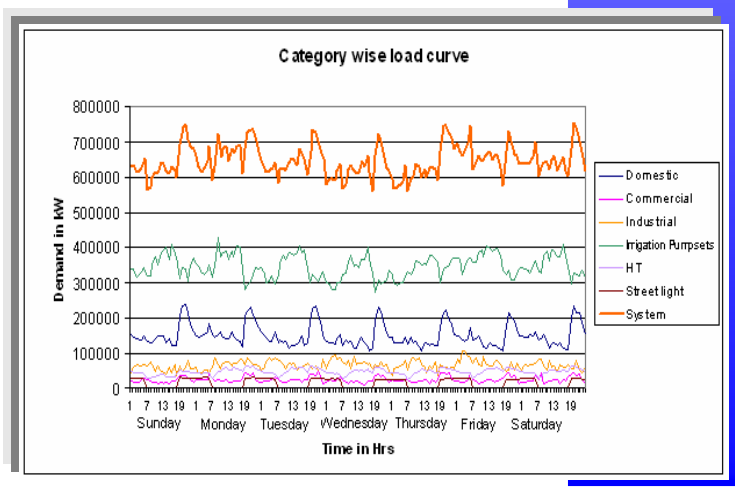
Group Meter Load Research:
Study Case Screen provides option to create and configure case studies, execute the configured case studies, generate reports and view graph.

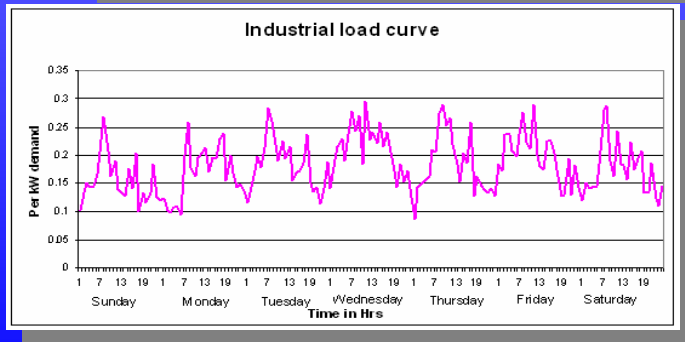
Group Study: Configure cases for different types of studies such as Single Day Analysis, Multiple Days Analysis and Typical Weekday Analysis







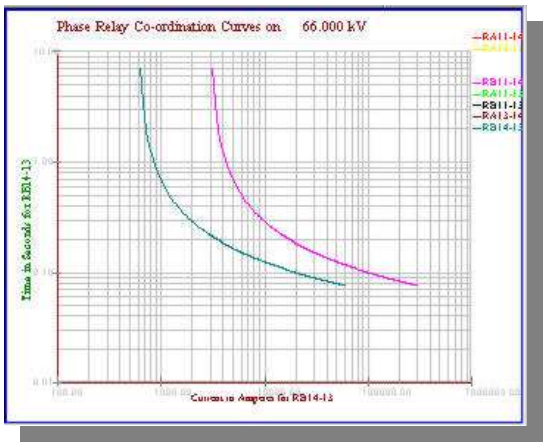




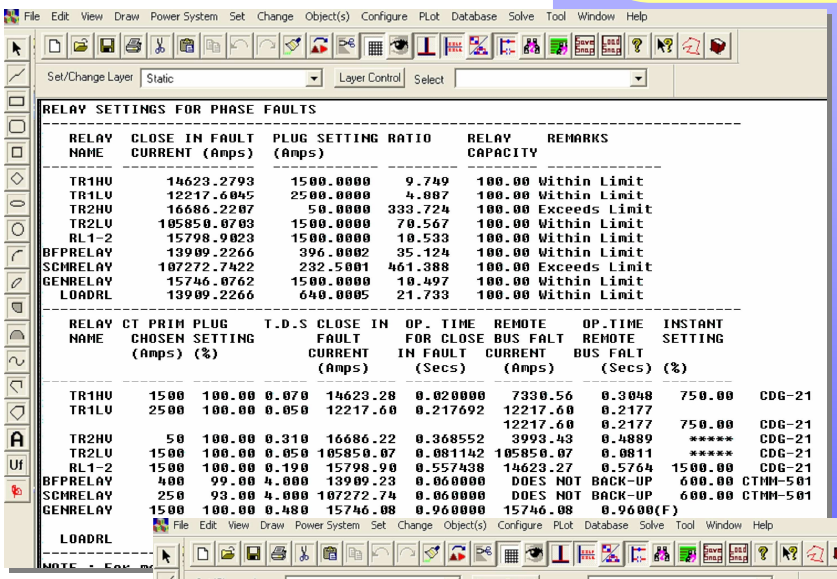
MiPDAP

MiPower™ Distribution system Analysis & Planning

MiPDC – Protective Device Co-Ordination



Inbuilt discrimination time calculator
Optional inclusion of motor contribution during fault simulation
Zone 1, zone 2 and zone 3 setting for distance relays
Hot and cold curves considered
Phase and Earth relay co-ordination
Automatic / Interactive / Manual Primary-back-up relay pairs generation

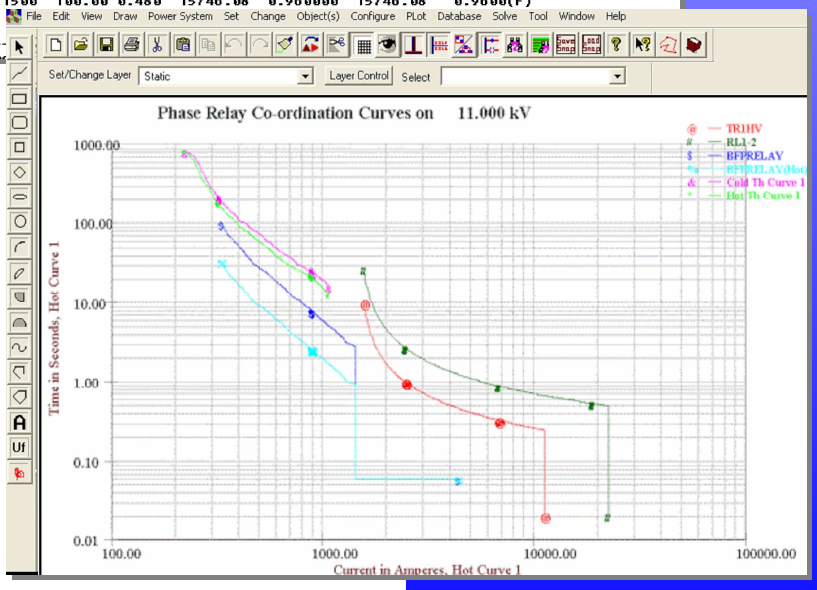


RELAY SETTINGS FOR PHASE FAULTS

RELAY NAME	CLOSE IN FAULT CURRENT (Amps)	PLUG SETTING (Amps)	RATIO	RELAY CAPACITY	REMARKS
TR1HV	14623.2793	1500.0000	9.749	100.00	Within Limit
TR1LV	12217.6045	2500.0000	4.887	100.00	Within Limit
TR2HV	16686.2207	50.0000	333.724	100.00	Exceeds Limit
TR2LV	105850.0703	1500.0000	70.567	100.00	Within Limit
RL1-2	15798.9023	1500.0000	10.533	100.00	Within Limit
BFPRELAY	13909.2266	396.0002	35.124	100.00	Within Limit
SCMRELAY	107272.7422	232.5001	461.388	100.00	Exceeds Limit
GENRELAY	15746.0762	1500.0000	10.497	100.00	Within Limit
LOADRL	13909.2266	640.0005	21.733	100.00	Within Limit

RELAY NAME	CT PRIM CHOSEN SETTING (Amps)	PLUG SETTING (%)	T.D.S	CLOSE IN FAULT CURRENT (Amps)	OP. TIME FOR CLOSE FAULT IN (Secs)	REMOTE BUS FALT CURRENT (Amps)	OP.TIME REMOTE BUS FALT (Secs)	INSTANT SETTING (%)	
TR1HV	1500	100.00	0.070	14623.28	0.020000	7330.56	0.3048	750.00	CDG-21
TR1LV	2500	100.00	0.050	12217.60	0.217692	12217.60	0.2177		
						12217.60	0.2177	750.00	CDG-21
TR2HV	50	100.00	0.310	16686.22	0.368552	3993.43	0.4889	*****	CDG-21
TR2LV	1500	100.00	0.050	105850.07	0.081142	105850.07	0.0811	*****	CDG-21
RL1-2	1500	100.00	0.190	15798.90	0.557438	14623.27	0.5764	1500.00	CDG-21
BFPRELAY	400	99.00	4.000	13909.23	0.060000	DOES NOT	BACK-UP	600.00	CTMM-501
SCMRELAY	250	93.00	4.000	107272.74	0.060000	DOES NOT	BACK-UP	600.00	CTMM-501
GENRELAY	1500	100.00	0.480	15746.08	0.960000	15746.08	0.9600(F)		
LOADRL									

- ✓ Text and Graphical Output
- ✓ Export to AutoCAD
- ✓ Thermal curves for each equipment
- ✓ Optional Voltage input from load flow or flat start
- ✓ Overload factor, unbalance factor and discrimination time for each relay
- ✓ Extensive database of relays



- ✓ Extensive fuse data
- ✓ Easy adding of new relay to library
- ✓ Graphical co-ordination
  Pick, drag and drop relay curves