



Network Forecaster

The Network Forecaster is the CYME add-on module designed to help you manage and plan expansions and changes over time on your distribution network. It allows creating, viewing and modifying time-dependent projects/scenarios in a selected period such as addition of loads at a given date (year, month or day), change/ replacement of power transformers within the substation, rephasing/ reconductoring project, network switching or reconfiguration, etc. This module will help greatly to structure the distribution planning projects.

Program Features

The Network Forecaster module inherits its main analytical and topological functions from the CYME existing modules. Taking into account future changes on the network, you will be able to simulate different scenarios that will allow identifying and correcting problems related to system growth.

The network changes can be grouped to facilitate the viewing and editing of the main project. For example if a project is delayed, the user can simply move the concerned group of modifications to a different year and see the impact on the whole network. If a project is cancelled or on standby, the associated tasks can be disabled to reflect that situation and the Network Forecaster will flag any abnormal conditions due to this change.

The module's capabilities are further enhanced by the Advanced Project Manager module which is an extensive tool that supports the collaborative and detailed preparation of time-based projects that can span several years.

Specific analyses and reports can be attached to any group of network changes.

The main features of the module include:

- Automated analyses insertion: voltage drop, short-circuit, load growth, load allocation or contingency analyses that can be related to any point on the network, at any point in time, based on identified network modifications for both normal or contingency mode of operations.
- Save analysis configurations. User-defined configurations allow, for example, setting the analysis parameters and then easily re-use the same parameters by selecting this configuration.



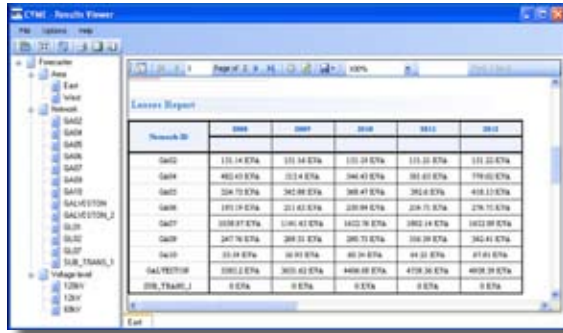
- Validation process: the sequence of tasks is verified to avoid inserting invalid changes. The same validation process is run when loading an existing project to verify the project against any updates to the base case.
- Multi-level structured project: allows multiple users to work on the creation and modification of the same network easily and concurrently in a database separated from the main CYME database.
- Migration tool: facilitates the transfer of forecasts on the updated network from one year to the next, thus minimizing data handling and modifications going from one planning cycle to the other.
- Scenario mode: embedded in the Network Forecaster, allows the user to analyze all the alternatives contemplated and easily compare the impacts of each solution.

Results Viewer

The results are then presented in a viewer, which is an enhanced reporting tool that conveys an overall view of the network over the next years and allows the user to dig into more detailed data on any part of the network.

With this results viewer, you can generate reports for each distribution line, substation, and zone contained in the network.

- Contingency report: backupfeeder and outage feeder.
- Feeder report: results over the forecasted years about the feeder peak demand, overloads, losses, new customers, load transfers, abnormal conditions etc.
- Network Summary Report: demand, losses, normal and emergency overload, low voltage and high voltage conditions, load transfers, new customers.



Network ID	2008	2009	2010	2011	2012
Q002	176.14 KVA	176.14 KVA	176.14 KVA	176.14 KVA	176.14 KVA
Q004	482.40 KVA	482.40 KVA	482.40 KVA	482.40 KVA	482.40 KVA
Q005	204.70 KVA	204.70 KVA	204.70 KVA	204.70 KVA	204.70 KVA
Q006	170.19 KVA	170.19 KVA	170.19 KVA	170.19 KVA	170.19 KVA
Q007	1038.97 KVA	1038.97 KVA	1038.97 KVA	1038.97 KVA	1038.97 KVA
Q009	247.76 KVA	247.76 KVA	247.76 KVA	247.76 KVA	247.76 KVA
Q010	77.14 KVA	77.14 KVA	77.14 KVA	77.14 KVA	77.14 KVA
GALVESTON	2281.2 KVA	2281.2 KVA	2281.2 KVA	2281.2 KVA	2281.2 KVA
005_TRANSMISSION	0 KVA	0 KVA	0 KVA	0 KVA	0 KVA