

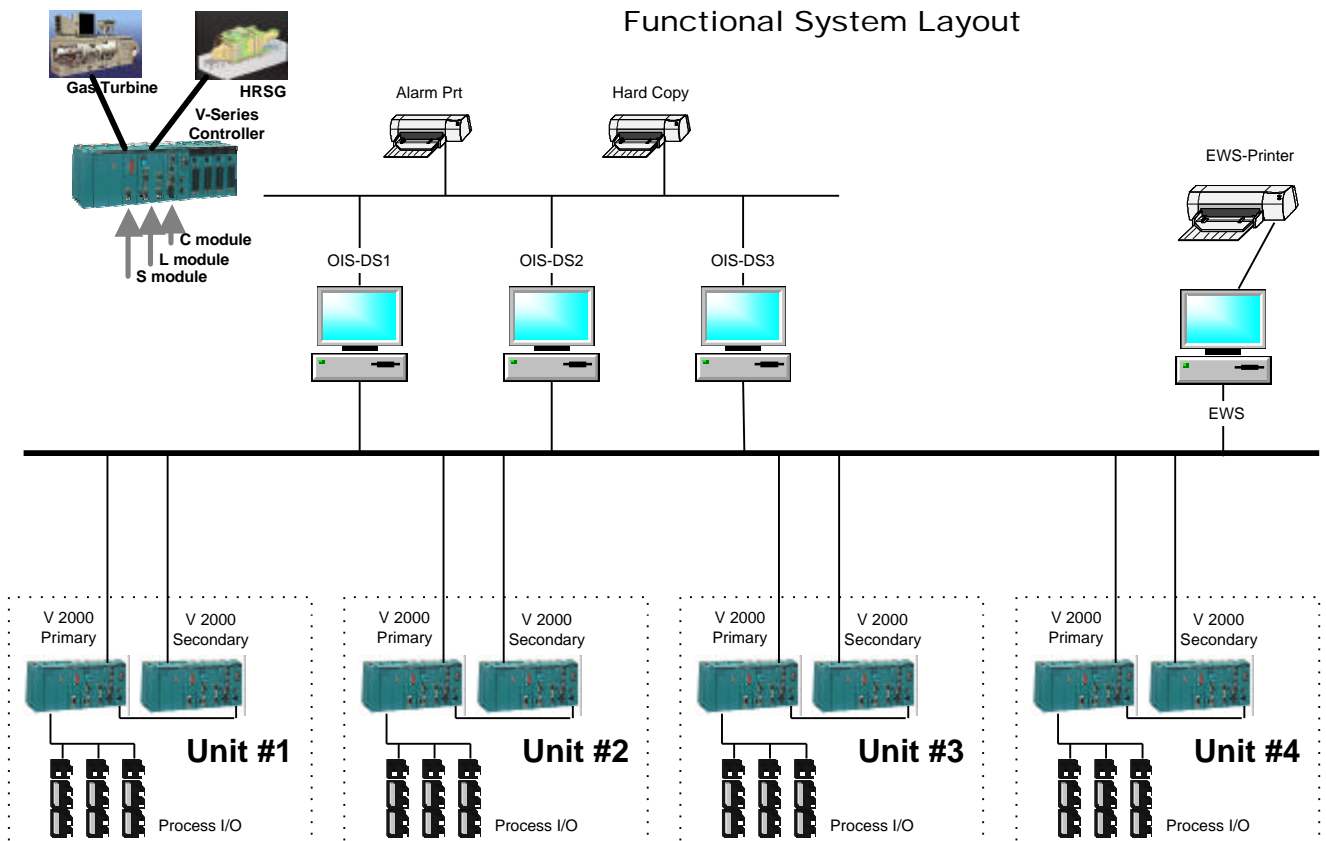
COGEN Control

System Overview

With the deregulation of the Power Industry (USA) and the major impact this is creating (California) many facilities are turning to 'COGEN' (Co-Generation) installations. Typically this involves a Gas Turbine with an Electrical Generator and a Waste Heat Boiler. The Waste Heat Boiler is often provided with ancillary burners (Duct Burners) to provide additional energy for the Boiler to produce the required steam capacity.

The V-Series provides the integration of the Turbine Control, S-Module (traditional carried out with an independent PLC) and the Boiler and 'Balance of Plant' Control, L-Module into one environment. Given the ability of the V-Series redundancy options, addition security is provided for the Turbine control, traditional not seen with the PLC control.

System Configuration



COGEN System

TOSHIBA

Features

- 1) Turbine Control utilizing the S-Module with direct I/O and employing redundancy for improved plant security.
- 2) Boiler and Balance-of-Plant control utilizing the L-Module with Process I/O and employing redundancy.
- 3) Interfacing to other ancillary, peripheral equipment via the C-Module utilizing the OPC server technology provides an Open Integrated Control System.
- 4) Connection to the TOSDIC OIS-DS operator interface station provides a transparent, easily maintained view of the Process for the operator.
- 5) 'Global Parameter' features of the V-Series are well used in this application, transferring data from the S-Module and C-Module to the L-Module where the in-built Tag features can be utilized.