## **OpenICCP**

## **Inter-Control Center Communications Protocol**

The real-time, inter-utility exchange of data has become critical to the operation of inter-connected systems. Regional Independent System Operators (ISO) and Transmission Operators with connections to various transmission and distribution utilities depend on the real-time exchange of data with all grid and market participants. The ICCP or TASE.2 protocol is an internationally recognized standard for communications between electrical utility control centers. ICCP uses the Manufacturing Messaging Specification (MMS) for the messaging service needed by ICCP.

OSI's **OpenICCP**<sup>TM</sup> product is an implementation of the standardized ICCP protocol and has been designed for optimal performance, ease of maintenance and simple configuration. **OpenICCP** can be deployed as an integrated module to a **monarch**<sup>TM</sup> SCADA system, or can be installed as a stand-alone product, to interface with legacy SCADA systems.

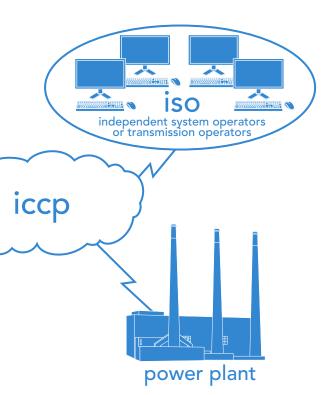
**OpenICCP** appears as a communications protocol to the **monarch** system, with all data acquired via the ICCP protocol being placed in the database, subject to all standard SCADA operations, including archiving, alarming, tagging and more. A Virtual Control Center (VCC) model is used as an abstract model of a control center. Control Centers can be configured to contain data points, data sets and transfer sets. Bilateral tables define the association between two Control Centers and contain the security properties of the control center, allowing only authorized connections and data exchanges to take place.

system/transmission operator

**OpenICCP** has been field certified to connect to a number of external ICCP systems, including ERCOT, SPP, PJM, MISO, CALISO, ECAR and more.

**OpenICCP** additionally supports redundant nodes with automatic failover. Multiple diagnostics and user displays are provided to assist in the configuration and maintenance of data transfers and links.

**OpenICCP** supports MMS protocol layers from various third-party MMS suppliers.



Product specifications in this document are subject to change without notice.

