ENERGY COMMAND CONTROL CENTER (eCCC)

Mission

Managing of efficient national energy to meet future environmental and industrial challenge is one of key responsible of Ministry of Energy (MOE) driving to implement real time situation awareness (RTSA) using state of the art technology monitoring system to address critical needs of Ministry of Energy (MOE) with accurate, efficient, and comprehensive energy data information for planning and managing crisis management on abnormal situation to balance national energy demand and supply.

The primary need of eCCC is to deliver accurate energy data information for instance natural gas supply, oil fuel supply, electricity consumption, electricity demand etc as an affordable level.

Increasing complexity and uncertain crisis situation indicates that more work needs to be done to cooperate with energy producers and related energy stakeholders.

Energy Command Control Center (eCCC)

Designing of eCCC brings more complex gathering energy data from various sources for instance PTT Public Co., Ltd and EGAT Co., Ltd. Including energy data internal design interface and report presenting to support high level officer decision making.

eCCC is rousted design system comprising:

- Data and Voice Communication Infrastructure.
- Data link system.
- Geographical over wall display.
- Video conference for smart voice and data.
- Secure energy data with enterprise encrypted technology.
- Energy reporting system.
- Accessible energy data over IT infrastructure and IT tools with encrypted technology.
- 24/7 days operated design.

Figure 1: Energy Command Control Center(ECCC)

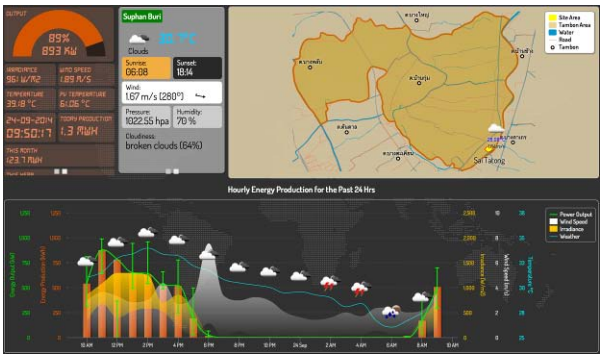

Figure 2: Hourly Energy Production Data

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The energy command control center (eCCC) allows to perform the following tasks:

- Near real time data acquisition.
- Voice communication to related energy stakeholders
- Data communication.
- Energy asset present over geographical profile.
- Monitoring through wall display.
- Energy report.
- Assist analyze crisis situation.
- Assist decision crisis situation.
- Alert energy status beyond planning scenario.

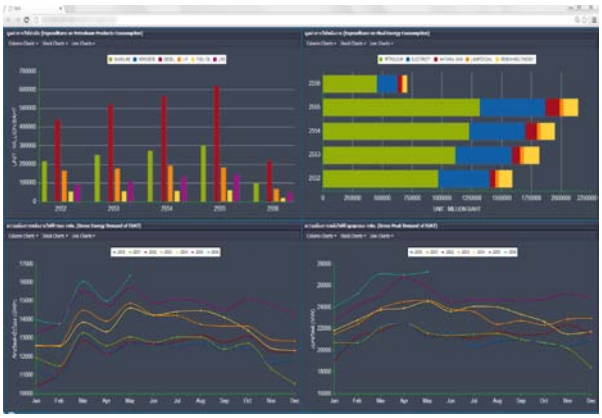

Figure 3: Energy data report

- Procedures and pre-defined configurations for all possible scenario and conditions.
- Permanent evaluation and record of energy values.
- Mobile and Web accessible.

Figure 4: Analysis energy data

To help in this effort, Prompt Technical Services and alliance partner Pims Technologies, with key consultant and technologies provider DNV KEMA, Google Inc, formed team to create a new process framework and leverage concept data mining by extracting only the required energy data information which increase probability of accurate data.

Furthermore, the design using innovative IT for apply applications such as data distribution services, geographical information services enterprise encrypted data services in the field to powerful, collaborative and analytical resources accessible across the enterprise.

Energy data security is paramount when it come to remote monitoring with regards with to the center and data in it. Enterprise security encrypted technologies and authenticated and verified added for access to data and network.

Together with other initiatives, the solution will contribute and efforts to assist and support Ministry of Energy (MOE) for managing multiple environments and crisis situation.

System:	*Communication:*	*Application:*
Near Real Time Data Link	*SDH/SONET*	*Command Control Center (C3I)*
Geographic Information	*LAN/WAN*	*Historical Data Management*
RDBMS Database	*GSM/GPRS*	*Report Data Management*
Data Distribution Services	*Data Interface modem*	*Scenario and Analysis*
Encrypted Data Services	*WEB*	*Geographic Information System (GIS)*
		Mobile Access.
		Web Access.