

## **R&D related to ICT for Stable Electricity Supply,**

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**Keywords** : ICT, Wireless, Sensor, Robot, Inspection & Maintenance, Smart Meter, Integration of Photovoltaic(PV)

#### **Abstract**

Kansai EPCO in Japan is developing technologies including ICT for Stable Electricity Supply toward 2030.

This Presentation includes brief introduction of “ICT on the Demand Side” and “Counter Measures against Mass PV introduction”.

Main part of the presentation is about “application of ICT in Maintenance/Replacement of Generation and Network facilities” (Efficient/Smart Operation & Maintenance).

The draft content of this presentation is as followings.

- Introduction
- ICT on the Demand Side
  - New Metering System (KANSAI’s Smart Meter), etc.
- Counter Measures against Mass PV introduction
  - Frequency, Voltage, etc.
- ICT in Maintenance/replacement of Generation and Network facilities (Efficient/Smart Operation & Maintenance)
  - Wireless Sensor in Hydro Power Station,
  - Other example
    - Display-Analysis Sensor Technologies for Remote Inspection and Monitoring, Inspection & Maintenance Robots, Virtual Reality Technologies, etc.
  - Middle/Long term Issues and Expectation for ICT
- Conclusion

Finally, I would like to express my sincere gratitude to Mr. Michifumi Miyashita of CRIEPI in Japan for his support in this presentation and research with KANSAI EPCO about wireless sensor in maintenance of Hydro Power Station.