

# Chubu Electric's New Initiatives for a Low-carbon Society

May 28, 2010

Chubu Electric Power Co., Inc.

Chubu Electric Power Company positions efforts towards the amelioration of environmental protection as one of the most important aspects of our operations, and we are engaged in a variety of initiatives aimed at contributing to the realization of sustainable development in our region by protecting the environment. Based on this awareness, we will pursue the following initiatives designed to support efficient electricity usage by our customers and to otherwise contribute to realizing a low-carbon society.

## Chubu Electric's Independent Initiatives

Field test on remote meter reading using a new type of electricity meter in Kasugai City (Commencement of preparations in FY2010) (Press release on May 28, 2010)

- Installation of **a total of some 1,500 new electricity meters** in homes in Kasugai City on a test basis (from FY2011) for verification of the remote meter-reading function and the **“visualization” effect of electricity usage** via the Internet

Evaluation and research of next-generation homes and solar battery panels by the Research & Development Division (from FY2009)

- Demonstration test of **next-generation homes (smart houses)**, which make full use of renewable energies
- **Evaluation of power-generating characteristics of various solar battery panels**, etc.

## Participation in National Projects

Participation in the demonstration project on establishment of a low-carbon society system through home- and community-based efforts in Toyota City (from FY2010)

- Participatory verification of the **effective utilization of renewable energies in households** through the installation of HEMS\* in smart houses to “visualize” **electricity and other energy** usage
- Verification of the **effective utilization of renewable energies in communities** by networking HEMS systems
- Demonstration of the effects of the above initiatives in **reducing impacts on the electric power system during large-scale dissemination of solar power generation** and the effects of reducing social costs of system countermeasures
- Establishment of low-carbon transportation systems, etc.

\*HEMS: Home Energy Management System

Continuous measurement and analysis of solar radiation amount and other factors in anticipation of large-scale dissemination of solar power generation, and R&D of the evaluation of impacts on the electric power system (from FY2009)

- Continuous measurement of **solar radiation amount and other meteorological data in 61 locations** in the supply area
- **Analysis of fluctuation in solar power generation output; analysis of output smoothing effect** from a wide-area perspective
- **Evaluation of impacts on the electric power system** based on the above data, etc.

Participation in the demonstration project on optimum control technologies for next-generation power transmission/distribution systems (from FY2010)

- Development of **voltage fluctuation control technology for power distribution systems** and **development of low-loss, low-cost equipment** incorporating next-generation exchanger technology, in response to the anticipated large-scale dissemination of solar power generation