

Energy System Integration Social Cooperation Program

[Research of future energy system]

Institute of Industrial Science

Energy system integration

<https://www.esisyab.iis.u-tokyo.ac.jp/>

Research member (professors)



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Architecture:Graduate School of Engineering



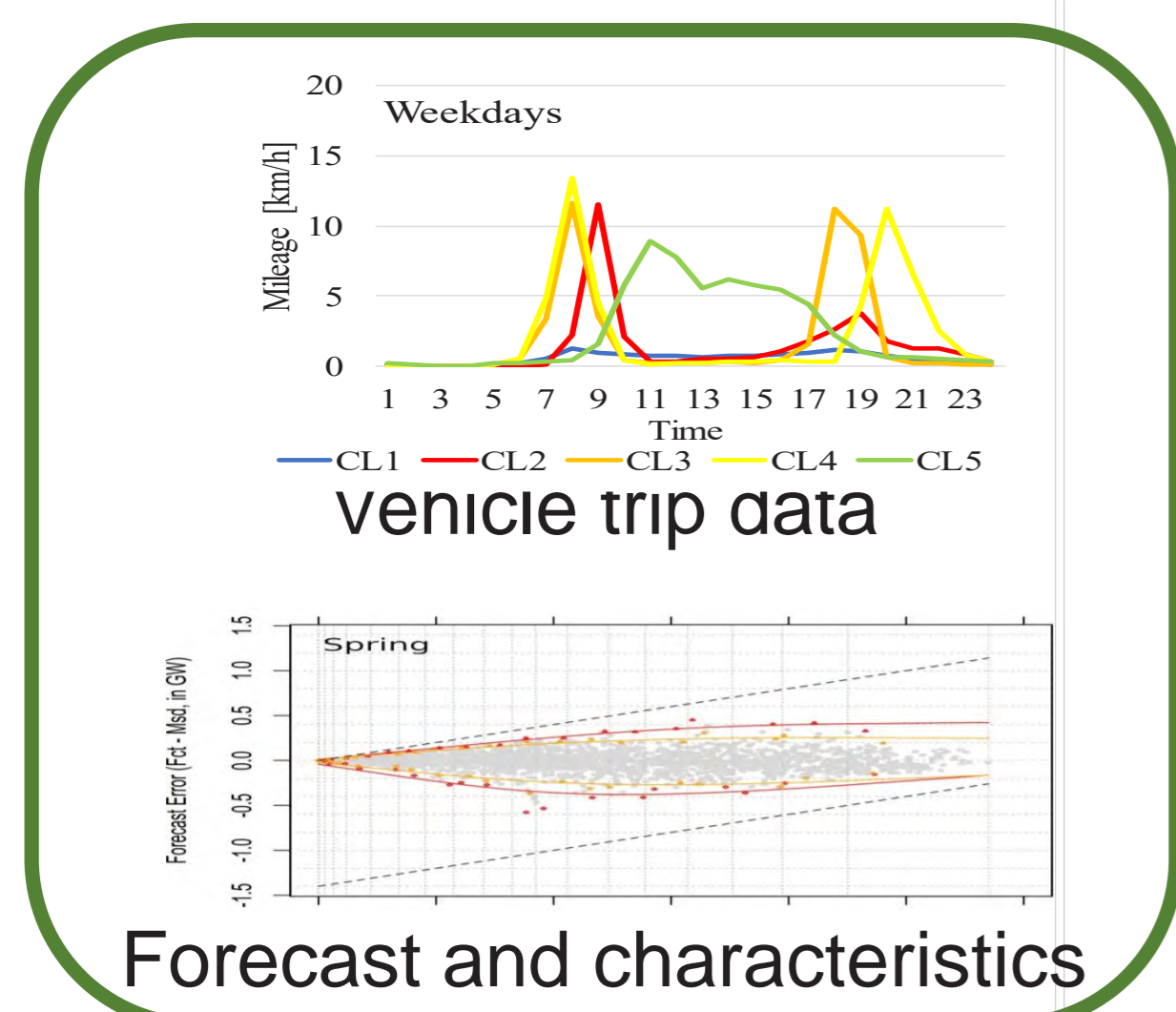
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Thermal Energy Engineering
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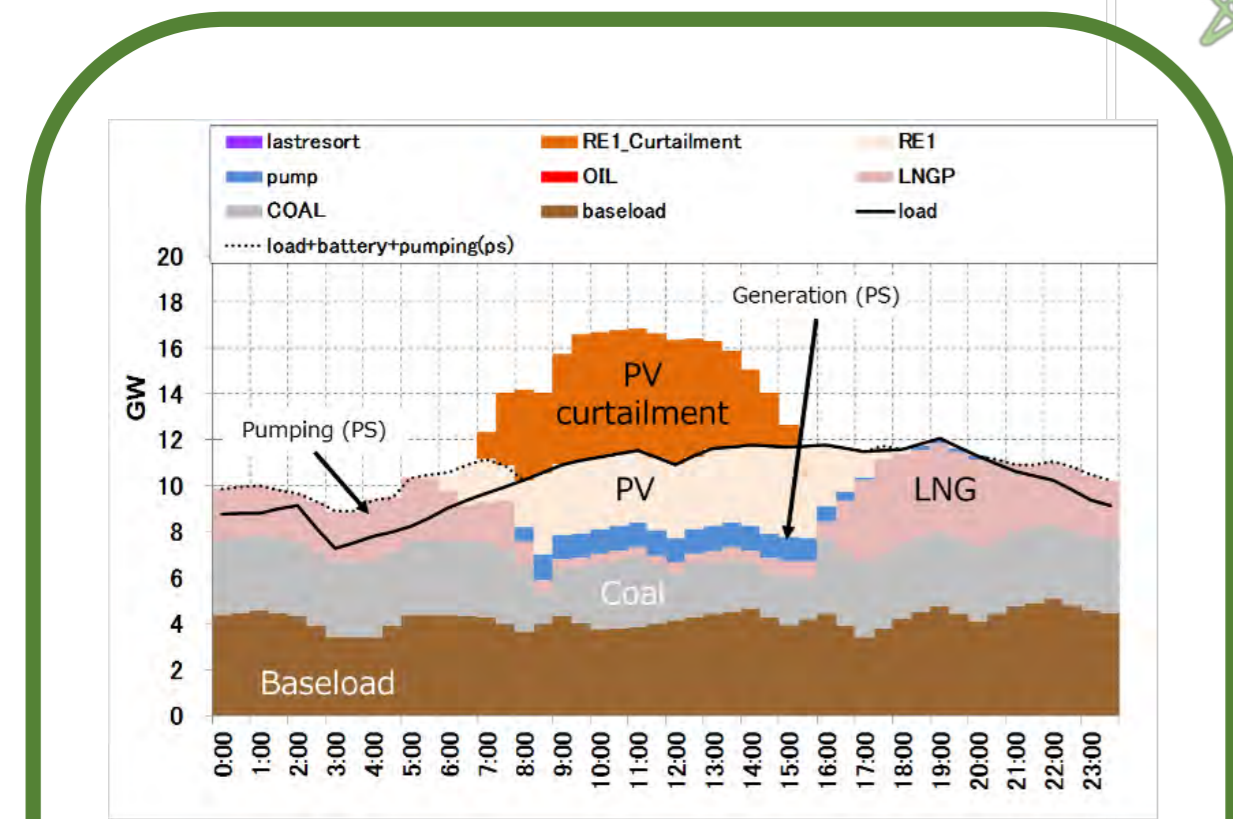
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Analysis and forecast
of renewable energies
and services

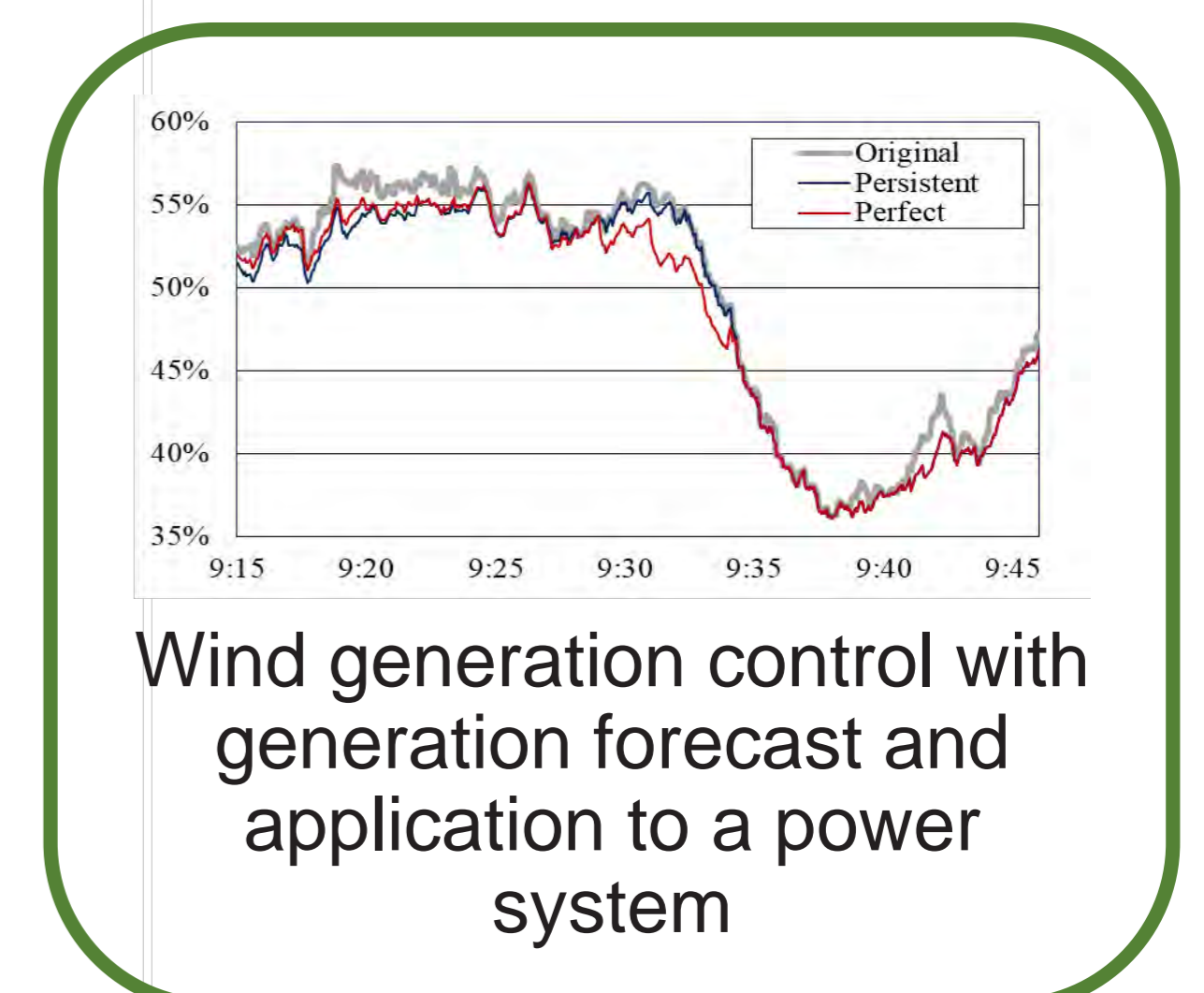


System operation based on
day-ahead and intraday
generation forecast

Optimum operation
and risk evaluation

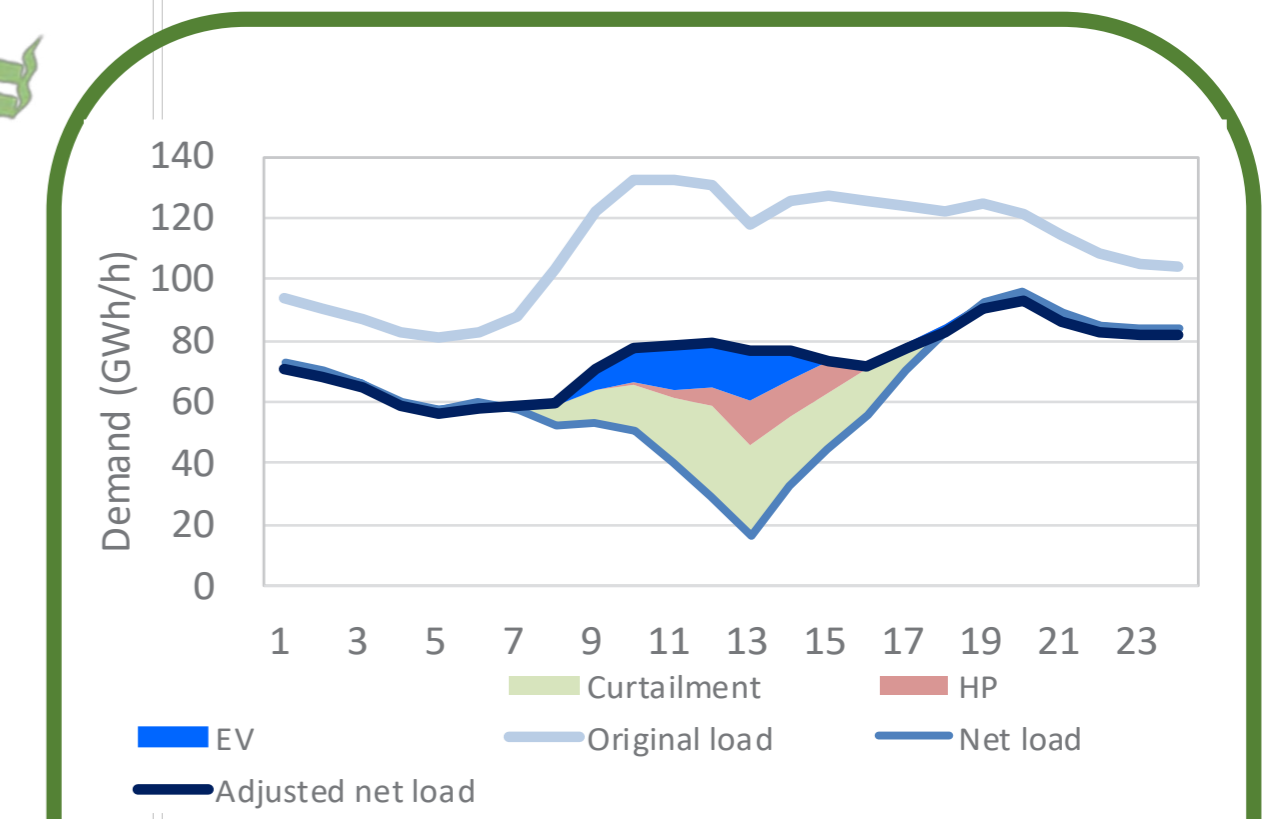


Strategy of energy system integration



Wind generation control with
generation forecast and
application to a power
system

Methodology of
management and
control



Optimum operation of
charge/discharge and heat
pump water heaters

Evaluation of
values/Scenarios

Participating entities

Electric Power Development Co.,Ltd., The Kansai Electric Power Co., Inc., Osaka Gas Co., Ltd., Loop Inc., IoT-EX Inc., Hitachi Mitsubishi Hydro Corporation, Toyota Central R&D Labs., Inc., Nissan Motor Co., Ltd., ENERES Co.,Ltd., Panasonic Corporation, Toshiba Mitsubishi-Electric Industrial Systems Corporation, Sumitomo Heavy Industries, Ltd., SEKISUI CHEMICAL CO.,LTD, Hitachi Power Solutions Co., Ltd, Toyota Motor Corporation, Toshiba Energy Systems & Solutions Corporation, DAIKIN INDUSTRIES,LTD.,TOHO GAS Co.,LTD. , NICHICON CORPORATION, Hitachi, Ltd.

We, in the area of power and energy sector, do researches on optimization of total system operation and asset planning, development of operation and control, value evaluation and dissemination strategy of individual systems and technologies, and human development, and human development through development and utilization of simulation and evaluation tools by university and participating entities

