IEA DSM Agreement

Task XVII: Integration of Demand Side Management, Distributed Generation, Renewable Energy Sources and Energy Storages

As countries implement energy policies that promote energy efficiency, distributed generation and renewable energy resources, the share of distributed energy increases, particularly the intermittent type such as wind, solar, small hydro and combined heat and power (small and micro-CHP). Due to the fact that intermittent types of electricity generation are difficult to predict, electrical networks — both local and transmission — are turning to integrated distributed energy resource. By combining distributed generation with energy storage and demand response, countries can decrease problems caused by distributed generation and increase the value of intermittent energy in the market.

The main objective of the Task XVII is to study how to achieve the optimal integration of distributed generation, energy storages and flexible demand, and thus increase the value of intermittent distributed generation (mainly based on RES) in the physical electricity systems and at the electricity market. The Task deals with distributed energy resources both at local (distribution network and customer) level and at transmission system level where large wind farms are connected.

The first phase of the Task is in progress with seven participating countries (Austria, Finland, Italy, Korea, the Netherlands, Spain and USA). It will be finished at the end of September 2008. It will produce the state of the art of the integration and proposal for the further studies.

In the workshop, the preliminary results of the Task will be discussed with some other international activities. Also future research needs will be discussed.
Workshop logistics

LOCATION

The workshop will be arranged in Petten at ECN premises.
Address: Westerduinweg 3, Petten, the Netherlands

The nearest railway station is Alkmaar where also the hotels are locating, more information http://www.ecn.nl/en/corp/travelling-plan/

CONTACT PERSONS

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REGISTRATION

Please fill the attached registration form and send it to Seppo Kärkkäinen (seppo.karkkainen@vtt.fi) at VTT, Finland and Marjon Kuit (kuit@ecn.nl)

(Obs! The registration includes also the project meeting in 10th of July, this is only for the task experts)

HOTELS

An accommodation reservation has been done in Alkmaar. 25 rooms for the 8th of July and 15 for the 9th . The reservation is valid until the 13th of June. The hotel is the Amrath hotel. The link is: http://www.amrathhotels.nl/hotel/alkmaar . The room rate is 70 Euro per night with a breakfast buffet at 15 Euro if the code ECN/IEA is mentioned during booking.

Other possibility would be http://www.goldentulipalkmaar.nl/ or other hotels can be booked via www.bookings.com
Tentative Agenda of the Workshop, July 9

Wednesday, July 9, 9:00 – 17:00

Registration and welcome coffee: 8:45 – 9:00

Opening
René Kamphuis, ECN

Introduction to IEA DSM and Task XVII
Seppo Kärkkäinen, Operating Agent

Driving forces and status in selected countries

- Spain: especially wind and CHP oriented
- Austria: small hydro and bioenergy oriented
- Netherlands:
  - DG-RES Transition technologies and the role of flexibility
  - Electric vehicles and heat pumps providing flexibility to facilitate integration of large amounts of intermittent renewables
- Korea: the grid focused on CHP

Coffee break: 11:15-11:45

International activities in integration

- IEA Wind, Tasks 24 and 25
  Ana Estanqueiro (replaced by Seppo Kärkkäinen)

- IEA ENARD
  Matthias Stifter

- RESPOND-project (EU IEE)
  Frits van Oostvorn

Lunch 12:45-13:30

IEA DSM Task XVII Findings

Content of the state of the art report

Status in participating countries (Austria, Finland, Italy, Korea, Netherlands, Spain, USA)
State of the art in integration: pilots, case studies, research projects, practices

Assessment tools of integration

Coffee break: 15:00-15:30

Discussion and comments

**What is needed in the future to improve integration?**

Round table discussion and feedback

- Comments to the draft report
- Future research topics for Task XVII
- Coordination between IEA DSM, Wind, Enard