



# ENARD:- IEA Implementing Agreement on Electricity Networks Analysis, Research and Development

## Newsletter No 7 - January 2010

### Plans announced for joint ENARD/IEA Grid Policy Workshop, Paris, Wednesday 28th April 2010

The ENARD Executive Committee (ExCo) is pleased to announce its plans for this topical Grid Policy Workshop, entitled "Electricity Networks – a key enabler in the delivery of a sustainable energy policy", to be held in conjunction with the Electricity Co-ordination Group (ECG) and the IEA Secretariat, in Paris, 28<sup>th</sup> April 2010.

The Workshop has been developed with the objective of presenting a series of emerging policy messages and highlights, from ENARD's first 4 years of operation. It will also feature a series of complementary presentations, from key stakeholders in the electricity supply chain. It will aim to stimulate discussion in terms of the future role and development of electricity networks, in meeting energy policy and sustainable economic development objectives.

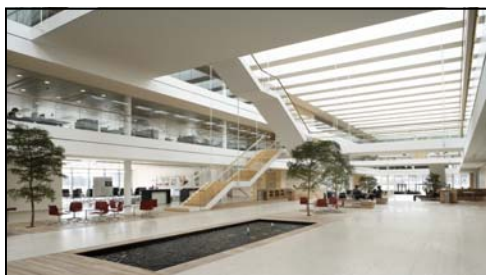
The conclusions and recommendations from the Workshop will form a key input in relation to future international collaborative activities in this area, including those under the auspices of the IEA and beyond.

Further information on this Workshop, including full programme and registration details, may be obtained from the ENARD web-site, or from the ENARD Secretariat, as described overleaf.

#### Fredericia Meetings Programme, October 2009

ENARD's Autumn 2009 meetings programme took place in Fredericia, Denmark, hosted by Energinet.dk, the Danish Transmission System Operator. The meetings programme itself comprised a highly topical Annex I Workshop on the theme of "Balancing the Variability in Renewable Electricity Supplies – new challenges and opportunities", followed on by the convening of the 7<sup>th</sup> ENARD Executive Committee Meeting.

The hosting of the Workshop by Energinet.dk was particularly appropriate, a fact brought home by Dorthe Vinther, Vice-President, Power Systems Development, in her keynote address. Here, she highlighted the challenges that Energinet.dk is already having to address, to satisfy Denmark's present commitment to renewable energy and, furthermore, with some 50% of total generation anticipated to be from wind, by year 2020.



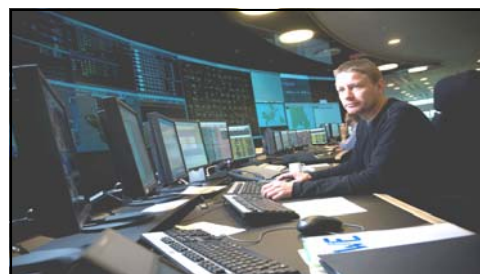
Energinet.dk Headquarters, Fredericia.  
Photo © Ole Christiansen

The Workshop drew the support of some 50 participants from 13 countries and opened with a top level IEA Office perspective on the future requirement for Energy Storage for system balancing applications, followed by a series of themed presentations in relation to system level solutions, electrical energy storage, advanced network solutions and demand side developments.



NGK 1.2MW / 7.4MWh NaS Battery  
Installation at AEP, Charleston, WV.  
Photo © John Baker

A series of Working Group sessions then further developed the core Workshop theme, prior to reporting back, with conclusions and recommendations for future actions. Here, a clear consensus emerged in terms of the requirement to adopt a truly holistic approach, embracing the most appropriate solution mechanisms and fully exploiting the complementarities between supply side and demand side measures. In the latter context, it was recognised that various specific market and regulatory challenges will require attention, in order to realise the full potentials of some of the solutions proposed, in practice. The Workshop concluded with a technical visit to the Energinet.dk control room, where delegates were briefed on the operational management of the Danish System.



Energinet.dk Control Room. Photo © Palle Peter Skov

The follow-on 7<sup>th</sup> ENARD ExCo Meeting was able to review and consider such messages emerging from the Workshop, in the context of the overall development of the Implementing Agreement. The ExCo also devoted time and attention to the planning of the forthcoming joint ENARD/IEA Grid Policy Workshop, to be held in Paris, April 2010, and received reports on the progress within ENARD's series of four operational Annexes. The value and benefit to be obtained from the developing relationship with the IEA Secretariat's work in these areas was also noted.



## Membership and Participation

South Africa formally joined the Implementing Agreement, October 2009, to become ENARD's 14th participating country and first participant from the Southern Hemisphere. South Africa will be represented on the ENARD ExCo by SANERI, the South African National Energy Research Institute.



The South African membership and participation in the Agreement is warmly welcomed by the ENARD Executive Committee, with South Africa expected to play a full and active role in ENARD's future programme activities.

## Ongoing Progress in Annexes II, III and IV

Annexes II, III and IV continue to develop and work on their respective work programmes, with the emerging policy messages from these to form an important input to the joint ENARD/IEA Grid Policy Workshop, to be held in Paris, April 2010, as previously described.

Annex II, addressing DG System Integration, held the latest in its series of Experts' Meetings in Zurich, December 2009, with its National Experts working with the Annex II Operating Agent, Austrian Institute of Technology (AIT, formerly Arsenal Research) and the sub-Task leaders, to collate the findings from the work to date and agree, in principle, on the key messages emerging from the Annex. The Annex II Operating Agent and sub-Task leaders will now refine and further develop these, in advance of and during the next Annex II Experts' Meeting, scheduled for March 2010. The subsequent findings, conclusions and recommendations will then be encapsulated in a series of reference reports, to be made available to the Annex participants.

Annex III, on Infrastructure Asset Management, concluded the first phase of its activities, in relation to Distribution Asset Management, November 2009. The Annex III Operating Agent, EA Technology, was therefore able to report to the 7<sup>th</sup> ExCo Meeting in Fredericia on the principal high level findings and conclusions from the Phase 1 work programme and also table a series of recommendations, to be addressed in a possible Phase 2 work programme.

Experts from Annex IV on Transmission Systems, which represents the most recent in ENARD's series of operational Annexes, met with the Annex IV Operating Agents, SINTEF Energy Research and ERSE SpA, in Leuven, Belgium, 11<sup>th</sup>-12<sup>th</sup> January 2010. Here they reviewed the progress achieved in the Annex, since its inception, April 2009, and agreed on the principal priorities, to be addressed in the next phase of its activities.

## Associated Dialogue and Liaison

ENARD continues to engage with a range of complementary organizations and initiatives in relation to electricity networks. Particular highlights over the past six months have seen the Implementing Agreement providing input and comment to the Major Economies Forum Technology Action Plan (MEF TAP) on Smart Grids and also contributing to the activities of the IEA Secretariat, in relation to the latter's own work on electricity network issues.

ENARD is an International Energy Agency (IEA) Implementing Agreement which provides an international forum for information exchange, research, analysis and collaborative research and development across a range of electricity transmission and distribution (T&D) network issues. Its vision is to facilitate the uptake of new operating procedures, architectures, methodologies and technologies in electricity T&D networks, such as to enhance their overall performance in relation to the developing challenges of network renewal, renewables integration and network resilience.

## Further information

Further information on ENARD, including participation in the Implementing Agreement and its activities, may be obtained from the ENARD web-site, at [www.iea-enard.org](http://www.iea-enard.org) or from the ENARD Secretariat at EA Technology:-

e:mail: [enquiries@iea-enard.org](mailto:enquiries@iea-enard.org)

or

Tel. +44-(0)151-347-2425

ENARD, also known as the IEA Implementing Agreement on Electricity Networks Analysis, Research and Development, functions within a framework created by the International Energy Agency (IEA). The views, findings and publications of ENARD do not necessarily represent the views or policies of the IEA Secretariat or of all its individual member countries.