

NordREG workshop on the use of flexibility services in the local distribution systems in the Nordic countries

The “Clean Energy for All Europeans” proposals are intended to help the energy sector to become more stable, more competitive, more sustainable and fit for the 21st century. With a view to stimulating investment in the clean energy transition, the package has three main goals: putting energy efficiency first, achieving global leadership in renewable energies, and providing a fair deal for consumers. To integrate renewables and new loads require innovative solutions and an appropriate regulatory framework.

The distribution system operators (DSOs) have an important role in order to reach the goals in the package. One example is to use flexibility services from distributed energy resources (demand response, local generation, storage and EVs) in order to manage local congestions and solve technical problems (e.g. voltage control, reactive power). Flexibility can be defined as the ability of the electricity system to respond to fluctuations of supply and demand while, at the same time, maintaining system reliability. This can improve efficiencies in operation and development of the distribution network and avoid unnecessary grid expansion.

The workshop aims at sharing possibilities and concerns regarding the use of flexibility services. Will the use of flexibility services challenge the current regulatory framework of the DSOs? What barriers and incentives exist for DSOs to use flexibility services and to implement cost-reflective network tariffs? For Nordic regulators, it is important with input and discussion on how to develop an appropriate regulatory framework.

Target group: All interested parties.

When: April 11th 2018, 10:00 - 16:00. Registration and coffee from 09:30.

Where: Norwegian Water Resources and Energy Directorate (NVE), Middelthuns gate 29, 0368 Oslo.

Admission: Free.

Registration: Please register [here](#)* by March 27th. A confirmation email will be sent soon after.

Participation is limited to 50 people and assigned on a first come, first served basis.

* <https://events.provisoevent.no/norgesvassdrags-ogenergidirektorat/events/nordreg-workshop-flexibility-services/register>

PROGRAM OF THE DAY

09:30 **Registration and coffee**

10:00 **Welcome and introduction**

Ove Flataker, Director, Regulatory Authority for Energy (NVE)

10:15 **Demand side flexibility from a Nordic DSO perspective, a report for Nordic Energy Research on behalf of NordREG**

Kjetil Ingeberg, Director, Pöyry Management Consulting (Norway) AS

The report addresses both potential flexibility, and how such flexibility can provide value to the network in the form of reduced or deferred investments, better system reliability or other system cost reductions. The first part of the report covers concepts for utilising demand response, discusses models for how demand response can be realised, and regulatory issues related to these models. The second part of the report is an interview study among selected DSO respondents in the four Nordic countries addresses the current status, how DSOs assess the potential value of flexibility to their business, what they see as major barriers to realisation, and what plans they have for new activity in relation to demand response.

10:45 **Country specific presentations from Nordic regulatory authorities**

What incentives are currently in place for DSOs to engage in demand response in the Nordic countries? Is there a need to adjust or add incentives to realize the full potential for flexibility?

10:45 Denmark

10:55 Iceland

11:05 Sweden

11:15 Finland

11:25 Norway

11:30 **Lunch**

12:00 **NODES - creating an open, integrated market place available to all flexibility providers and grid operators**

Robert Gehrcke, NODES / Nord Pool

The goal of NODES is to create a transparent marketplace open to all potential market participants providing a link between supply and demand, and performing transactions in real time. Using available flexibility can offer an alternative to investments in the grid, integrated in the grid topology and with existing markets. It also creates opportunities for customers by providing new services and enables greater integration of renewable energy.

- 12:30 **Ngenic - creating a platform for the smart home**
Björn Berg, CEO of NGENIC AB
Ngenic is a Swedish company engaged in smart solutions. By controlling parts of household heating, their actions lead to lower costs for the consumers and a flattening of the peak load for the network operator. Here they will tell us about what they do and how they work, as well as giving their perspective on the regulation.
- 13:00 **The Danish Intelligent Energy Alliance, part of the Danish Energy Association**
Helle Juhler-Verdoner, Managing director, The Danish Intelligent Energy Alliance
Denmark is currently implementing market models for aggregators and preparing for the Clean Energy Package (CEP). In this setting, DSOs are focused on how tariffs can support rewarding individual customers demand response. Commercial developers are testing the market framework to improve business opportunities for demand response. E.g. battery storage and vehicle-to-grid (V2G) is in place to deliver frequency stabilization in a small scale commercial activity.
- 13:30 **Regulatory experiences with implementing more cost reflective tariffs**
Andreas Bjelland Eriksen, Regulatory Authority for Energy (NVE)
In 2017, NVE sent a proposal for more cost reflective capacity based tariffs on a public consultation. In general, the consultative inputs finds capacity based tariffs useful, but there is no general agreement on which model to choose. What are the lessons learned so far?
- 14:00 **Coffee break and networking**
- 14.30 **Shall DSOs be allowed to own storage?**
Jørgen Bjørndalen, Principal Consultant, DNV GL
What view should the regulatory authority take on ownership to storage/batteries used for providing services to distribution system operators? This is a concern, as the DSOs are regulated monopoly companies, who have their revenue defined by the regulator and not by customers. DNV GL presents their conclusions based on a report commissioned by NVE.
- 15.00 **Group discussions**
- 15:30 **Summary**
- 16:00 **Closing**