

”DRR- Norway” project

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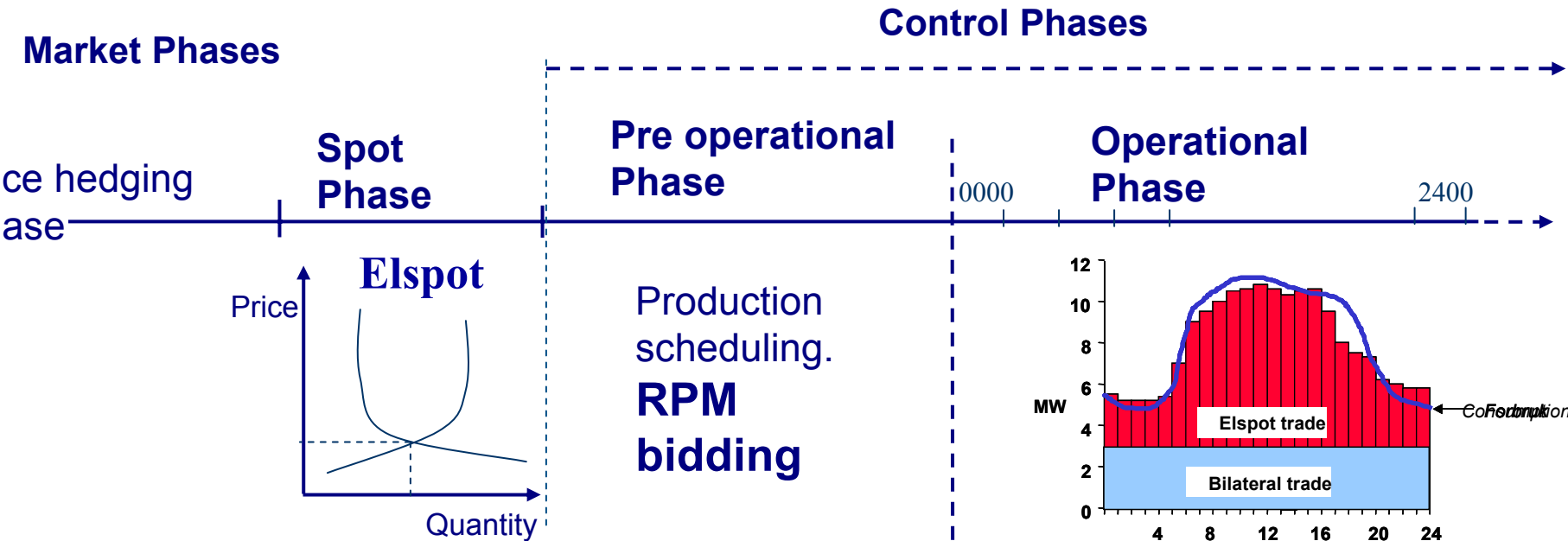
Vision

To improve **Demand Side price sensitivity** and to create **“Regulation objects”** from consumption as alternatives to investments in new production/ transmission capacity.

Requirements:

- Real time pricing
- Controllability

Market based Demand Response



Improved utilization of reducible loads.

Main aspects (Norwegian case)

- Hourly metering
 - Remote and/or local load control
 - Improvement in data management procedures
 - Improvement in End User markets
- } **Direct Communication**
- MVS/CIS**
- Market Design**

Values for Norway

- Potential improvement of demand response in the Nordic Elspot and Balancing Market
- Improved business models
- Development of new technology and tools for DRR
- Information exchange and access to professional network

Norwegian projects of relevance

- **End-user Market (“Effekt sluttbrukermarked”) (1996-2000)**
- **Implementation of Demand Side Management in Oslo (1998-2001)**
- **IEA/DSM annex “DSB” (1998-2001)**
- **End user flexibility by efficient use of ICT (2001-2004)**
- **EU/SAVE - EFFLOCOM (2002-2004)**
- **Improving end user knowledge for managing energy loads and consumption (2003-2005)**
- **Load control in the balancing market – RKOM (2001-2006)**
- **Controlling power load in Oslo (2001-2004)**

DRR-Norway

Participants - contributors

- ENOVA
- Statnett (Norwegian TSO)
- Statoil
- Norwegian Hydro
- Skagerak Nett
- Norwegian Electricity Industry Association (EBL)
- Troms Kraft
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- Technology Vendors
 - Elink
 - Powel

DRR-Norway

Project group

- SINTEF Energy Research (project management)
- E-CO Tech
- Elink
- Powel