

TASK XIII: MARKETPLACE OVERVIEW

Background:

In October 2003, the Executive Committee of the International Energy Agency (IEA) Demand Side Management Program approved a new project, entitled Task XIII. Twelve countries agreed to participate in the project, with the United States (via the US Department of Energy) in a lead role.

The objective of the project is to deliver necessary methodology, business processes, infrastructure, tools and implementation plans that will facilitate robust demand side participation in participating country electricity markets. The project will produce a “State of the Practice” database, economic valuation tools, and methods to enable participating countries to implement demand response into their market structures.

The objectives of the IEA DRR project are to:

1. Identify and develop the country-specific information needed to establish the potential for demand response.
2. Perform the market and institutional assessments within participating/member countries needed to set realistic goals for the contribution of DRR to sector objectives.
3. Mobilize technical and analytic resources needed to support the implementation of DRR programs within participating/member countries and track their performance.

Marketplace Overview Form Objective:

The enclosed questionnaire will provide the Operating Agent with a brief overview of each participating county’s marketplace structure and demand response history. This will help the Operating Agent better understand the similarities and differences amongst the countries participating in Task XIII. This request is not intended to be an in depth research project. It is simply intended to be a brief overview to provide basic facts and understanding that can orient the project team and help share basic information across participants.

The Operating Agent will use the information develop thoughtful and thought provoking questions during the data gathering phase of the project.



Marketplace Overview Form Organization:

The following Marketplace Overview Form is organized utilizing a question and answer format. We have attempted to provide sample responses to each question so that you can see the type and depth of information desired.

There are three categories of questions:

1. **Electric Industry:** Basic overview of market structure and market actors.
2. **Demand Response:** Basic overview of demand response efforts.
3. **Market Transactions:** Basic overview of electricity market transactions.

We have provided a form with sample answers to guide you as complete the document.

Marketplace Overview Process:

Step 1: Please complete the enclosed form and email it to rmalme@retx.com by May 31, 2004. We realize that some questions may ask for data that are not readily available, and that some questions may not apply to certain countries. In this step 1, we are requesting that you fill out the "market overview" as best as you can, then in Step 2 we will contact you by phone to discuss any missing elements or questions that were difficult to interpret.

Step 2: We will schedule a brief telephone call with each country expert to review your response to ensure understanding. These calls will take place during the first two weeks in June.

Project Representative and Contact for this Overview:

Name: René Kamphuis

Country: Netherlands

Phone: 00-31-224-564544

Email: kamphuis@ecn.nl

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Section I: Electric Industry

1. Does your country operate as one national electricity marketplace or do you have multiple regional electricity marketplaces?

The market consists of bilateral/over-the-counter contracts and central day-ahead and balancing markets.

2. If you have multiple regional marketplaces, how many exist in your country? Please explain.

No multiple markets.

3. What market actors perform the following functions in your marketplace:
(Please list and briefly describe)
 - a. Generation: performed by trading companies
 - b. Transmission: ruled by a central, government controlled institution (TenneT)
 - c. Distribution: ruled by traditional utility company mergers; profit margins are fixed
 - d. Retail customer services: by trading companies and dedicated companies (building management, energy management consulting firms etc.)
 - e. Reliability management: by transmission and distribution companies; criteria are defined by government and checked by benchmarks
 - f. Other (please describe): Metering, in principle, is decoupled as well. There is a place on the market for certified metering companies.

4. What market actors' work directly with the retail consumers (e.g. distribution company, competitive suppliers, energy service companies, etc)? Please provide brief description of their roles.

Distribution companies and competitive suppliers directly work with retail.

5. Please list key regulatory players and their roles.

Market design and key (re-)regulation of the liberalized market is done by the Dutch government.

6. Please list key industry stakeholder groups (e.g. large customer associations, reliability organizations, trade associations, etc.)

Consumer organizations, industry associations, KEMA, APX (Amsterdam Power eXchange)

7. How many commercial, industrial and residential customers exist in your marketplace (add additional customer classes, e.g. agricultural, as needed)? Total yearly demand is 100 TWh. Peak demand 12500 MW. The subdivision between commercial, industrial and residential is about 1/3 in each category.

Customer Class	Number of Customers	Summer Peak Demand (MW)	Winter Peak Demand (MW)	Annual MWHs
Commercial	300.000			
Industrial	20.000			
Residential	6.000.000			

8. How many distribution companies operate in your marketplace? Please list the top five largest distribution companies.

Number of Distribution Companies: _____20_____

Largest Distribution Companies	Number of Customers	Summer Peak Demand	Winter Peak Demand
Essent	2.000.000		
NUON	1.700.000		
ENECO	1.300.000		
Delta	400.000		

9. If you have retail competition, how many competitive suppliers exist in your marketplace?

About 20 companies have a trade-licence

10. If you have retail competition, what percentage of the summer and winter peak demands do competitive suppliers supply?

Via the APX market-mechanism (day-ahead and balancing) about 10-15 of the total demand is supplied.

11. What is the forecasted peak demand growth rate in your marketplace?

The demand growth rate is in the order of 2 percent per annum.

12. What is the projected supply (capacity) growth rate in your marketplace?

During the last years supply has been kept constant or slightly decreasing. As a result the surplus capacity has decreased.

Section II: Demand Response

13. Has demand response been attempted in your market? If so, please provide brief description of relevant successes and challenges.

Demand side management and peak shaving have been performed in the nineties. At the moment demand response has been mobilized in an informal way for wholesale customers during summer peak periods.

14. Which market actors might be most supportive of demand response in your marketplace? Please explain why.

Market actors having a large, elastic demand. E.g. cold stores, central cogeneration plants in urban areas (in connection to heat distribution networks). operators of intermittent distributed energy resources (wind, solar) to (pro-)actively decrease imbalance.

15. Which market actors would be the most likely to offer demand response services to the consumer? Please explain why.

Trading firms with a portfolio of intermittent producers or consumers.
Distribution companies.
Retail sellers exposing consumers to more real time prices.

16. Can demand response resources participate in electric market transactions today? If so, how?

At the moment, there is no market mechanism. Currently, market mechanisms are under construction for providing stimuli to long-timerange investors

17. What are the most important objectives for demand response? Please explain.

For the Netherlands, as a whole, demand response comes in for mitigating price risks during the balancing process and for minimizing transmission and distribution bottlenecks .

For ECN, with a mission of increasing the proportion of renewable energy resources, compensating imbalance due to intermittent, renewable energy resources is most important.

18. Do energy consumers see different electricity prices at different times of the day?
(Please explain in terms of how many and by class or size)

Small consumers see one or dual tariffs. Larger costumers have quarterly interval-metering and more differentiated contracts.

19. Have any energy efficiency and/or a demand response market potential studies been completed in your marketplace in the last ten years? YES / NO

If yes, please provide a reference location or attach the report.

Recently, a study was performed in the Netherlands. Results will be presented on a meeting end september.

Section III: Market Transactions

20. What type of electricity products traded in your marketplace (e.g. 5-minute spinning reserve, 30-minute non-spin, day ahead, capacity, hourly energy/spot, etc.)?

15-min spinning reserve; day-ahead spotmarket; long-term bilateral over-the-counter (OTC)-market.

21. Do you have a central trading exchange in your marketplace?

APX.

22. How are reserve margin targets established in your marketplace? Please explain.

They are set by TenneT (the central TSO).

23. What is the current reserve margin target in your marketplace?

Currently the reserve margin is 5-10 percent.

24. Does your market currently exceed or fall short of the current reserve margin target? Please explain.

In summer and winter-peak periods there the margin is exceeded.