Minutes - Project for Nordic (TSO) Energy Market Model for data exchange

(NEMM)

To:

**Date:** Wednesday April 3<sup>rd</sup>, 2013

Time: 10:00-17:30 Place: Copenhagen

April 10<sup>th</sup>, 2013

NEG Nordic Ediel Group

**Participants:** Jan Owe, SvK

Jari Hirvonen, Fingrid Jon-Egil Nordvik (Convenor)

Ole Fredsø Weigelt, Energinet.dk Ove Nesvik, EdiSys (Secretary) Antti Niemi, Nord Pool Spot

Christian Hoang Huy Le, Statnett Christian Odgaard, Energinet.dk Eveliina Ishii, Nord Pool Spot Hanna Blomfelt, Nord Pool Spot

Jan Owe, SvK

Jari Hirvonen, Fingrid

Jon-Egil Nordvik, Statnett (Convenor) Ole Fredsø Weigelt, Energinet.dk Ove Nesvik, EdiSys (Secretary) Roar Grindstrand, Statnett

CC: Jan-Olov Lundberg, SvK

Oscar Ludwigs, SvK

Tor Bjarne Heiberg, Statnett Tor Åge Halvorsen, NordPool

**Attachment:** None

## 0 Summary of action items, conclusion and homework

#### Homework:

- Ove will make MRs for the Business Types (since Business type Detail is rejected by ENTSO-E):
  - **Z38** Hydro production
  - **Z39** Nuclear production
  - **Z40** Thermal production
  - **Z41** Wind production
  - **Z42** Decentralised production
  - **Z43** Gas turbine and diesel production
  - **Z44** Other thermal production
- Jan will verify if the Business Type Code *A23* = *Balance management (Used for operational balance)* is used in Sweden. If not the code will be removed from the Production and consumption schedule in the Schedule BRS.
- Ove will send the BRS for Schedules to NEG for comments for 14 days before publication.
- Jon-Egil will bring up the following question in WG-EDI:

Object aggregation is present in the class Planned Resource Time Series in both the Planned Resource Schedule Document and the Resource Schedule Confirmation Report. However, in the class Unavailable Reserves Time Series, Object aggregation is only present in Resource Schedule Confirmation Report. Why is Object aggregation not present in the class Unavailable Reserves Time Series in the Resource Schedule Document?

#### Conclusions:

• ENTSO-E is positive on making a new Auction Specification Document related to the ERRP process. This is however dependent on a new ERRP project, possibly starting in the autumn 2013.

#### 1 Approval of agenda

The agenda was approved with the following additions:

- How to handle separate distribution NBS information and other information? See 13.1 under AOB
- Preparations for NEG meeting April 16<sup>th</sup>, see 13.2 under AOB
- How to handle new codes used outside the Nordic area, such as SwePol, see 13.3 under AOB

## 2 Approval of previous meeting minutes

The Minutes from previous meeting were approved with the following comments:

- Correction of the "Participant/To" list and in general some spelling errors
- NBS is expected to go-live Q2 2015 (not 2014)

From this meeting and onwards there will be separate agenda and minutes for ordinary NEMM meetings and NEMM/NBS meetings.

#### 3 BRS for Trade and Schedules

Ove had as homework updated the BRSs for Trade and Schedules, but the documents had not been sent on circulation for comments, since there were too many changes and related comments to do the review via mail.

Ole had sent the following comments:

- I have updated the definitions on Z18 and Z17:
  - **Z17** Technical minimum possible, under minimum, facilities having the possibility of using overload areas.
  - **Z18** Technical maximum possible, maximum incl. overload, facilities having the possibility of using overload areas.

This is based on the definitions in our Market Regulations.

Status: Updated

- Further, I have found that the primary reserve bid in DK1 is MW (not Freq. bias MW/Hz). And we should take a review on Nordic trading system 6.5.3, and the naming:
  - **Z03** Frequency activated normal reserve (FNR)
  - **Z06** Frequency activated disturbances reserve (FDR)

(activated in a bid?)

Status: The comment was noted in the BRS for trade and will be discussed at the next NEMM meeting.

In addition, Ove had noted some questions:

• In the classes Planned Resource Time Series and Unavailable Reserves Time Series, Object aggregation is present in both the Planned Resource Schedule Document and the Resource Schedule Confirmation Report. All classes except Unavailable Reserves Time Series in the Resource Schedule Confirmation Report contain the attribute Object aggregation. Could this be an error?

Action: Jon-Egil will bring up the question in WG-EDI.

 The NEMM Auction Specification Document is based on the ENTSO-E ECAN Auction Specification Document, but is related to the ERRP process. In the MR NEMM 2011/58, we have asked for a new document. What is the status?

**Conclusion/Action:** ENTSO-E is positive, but it is dependent on a new ERRP project, possibly starting in the autumn 2013.

- Should we make MRs for addition of the following elements in the ECAN Allocation Result Document?
  - o Portfolio Identification
  - o Selling Quantity
  - o Buying Quantity

Conclusion/Action: Postponed until NPS is participating

The Schedule BRS was reviewed, updated and will be sent on circulation for comments to NEG for 14 days before publication.

A review of the Trade BRS was started, but because of lack of time, the review will continue on the next NEMM meeting.

#### Homework:

- Ove will make MRs for the Business Types (since Business type Detail is rejected by ENTSO-E):
  - **Z38** Hydro production
  - **Z39** Nuclear production
  - **Z40** Thermal production
  - **Z41** Wind production
  - **Z42** Decentralised production
  - **Z43** Gas turbine and diesel production
  - **Z44** Other thermal production
- Jan will verify if the Business Type Code *A23* = *Balance management (Used for operational balance)* is used in Sweden. If not the code will be removed from the Production and consumption schedule in the Schedule BRS.
- Ove will send the BRS for Schedules to NEG for comments for 14 days before publication.
- Jon-Egil will bring up the following question in WG-EDI:

Object aggregation is present in the class Planned Resource Time Series in both the Planned Resource Schedule Document and the Resource Schedule Confirmation Report. However, in the class Unavailable Reserves Time Series, Object aggregation is only present in Resource Schedule Confirmation Report. Why is Object aggregation not present in the class Unavailable Reserves Time Series in the Resource Schedule Document?

#### 4 NBS and BRS for Nordic settlement system

Distributed in separate minutes.

## 5 Review of updated "Nordic TSO Common rules and recommendations"

Changes were reviewed and a few corrections were made. The updated document will however not be published before better definitions is received from ENTSO-E or NBS documents are ready for publication.

#### 6 Maintenance requests to ENTSO-E

The homework from earlier meetings were gone through:

• Jon-Egil will present the "NEMM Currency Exchange Rate Document" at the next ENTSO-E meeting, asking if ENTSO-E will make an "ENTSO-E Currency Exchange Rate Document". Jon-Egil will also ask how to handle Nordic codes if ENTS-E not will make an "ENTSO-E Currency Exchange Rate Document".

Status: Postponed, since next ENTSO-E/WG-EDI meeting is next week (April 9-10)

• Ove will inform Antti that his homework for submission of a request for an EIC code for the Nord Pool spot market area has been removed from the NEMM agenda.

Status: Antti has been informed

Jon-Egil will clarify the need for a NEMM Area Specification Document with NPS

Status: Postponed until next NEMM meeting where NPS probably will participate.

• Ove will update the MRs, send on circulation for comments to NEMM participants (Ole, Jari, Jan and Jon-Egil) before end of week 1, who should reply before end of week 2.

Status: Done

Jon-Egil will send the MRs to ENTSO-E in due time before the next meeting, January 29<sup>th</sup>.

Status: Done

Error! Reference source not found. was reviewed, see Error! Reference source not found. Jon-Egil informed that the content of the MR already has been discussed within WG-EDI and that the result was; Bid ID will be put in Allocation Identification and Activation ID will be put in the Order Identification.

Thereafter the MRs missing a solution were reviewed:

• *NEMM 2011/83*:

From ENTSO-E/ERRP Minutes December 11th 2012:

JN explained the requirement for requesting new codes for the process type that had been added to the allocation result document. This is similar to the request for emergency reserves.

GB explained that this was carried on outside the scope of the existing defined processes. He felt that this was not to be considered by the ERRP guide.

**ACTION 05-05:** JN to look into the redispatch process which seems equivalent to satisfy the NEMM 83 request.

Is the ENTSO-E redispatch process relevant for the Nordic market (Instead of using *ERRP*, *Reserve allocation result document* and Process Type **Z05**, *Bilateral trade*)?

Status: Postponed

#### NEMM 2010/46

**Z02**, "frequency bias" is rejected. ENTSO-E proposes to use **A11**, Primary control (A time series concerning primary reserve) with a measurement unit of MW/Hz instead. However all the following markets will fit into *A11*, *Primary control*:

- **Z02** Frequency bias
- **Z03** Frequency Containment Reserves, Normal (**FCR-N** earlier **FNR**)
- **Z06** Frequency Containment Reserves, Disturbance (**FCR-D** earlier **FDR**)

Should we use A11 or continue using Z02 as a Nordic code, as we already have decided for Z03 and Z06?

Status: We continue using **Z02** until a decision regarding FCR-N and FCR-D have been made by ENTSO-E

#### NEMM 2011/57 and 2011/68:

From ENTSO-E/ERRP Minutes December 11th 2012:

The following Process type codes will be added by ENTSO-E:

- 1. Reserve resource process (not used in the Nordic countries?)
- 2. Primary reserve process (instead of **Z01**, Frequency controlled reserves market)
- 3. Secondary reserve process (instead of **Z02**, FRR-A market)
- 4. Tertiary reserve process (instead of **Z03**, Balance regulation market)

*Status:* The code **Z04**, *Reserve option market* is proposed kept as a Nordic code. The following codes have been allocated by ENTSO-E:

- **A28** Primary reserve process
- **A29** Secondary reserve process
- **A30** Tertiary reserve process

*Homework:* Ove will update the BRS for Trade and Schedules with **Z04**, **A28**, **A29** and **A30** 

#### • *NEMM 2011/69:*

From ENTSO-E/ERRP Minutes December 11th 2012:

"Concerning the auction identification it was not necessary to change since there is a coming request for an auction specification. The request was withdrawn."

**Status:** If there is no Auction Specification Document an Auction ID should be specified by the implementation project.

#### • NEMM 2011/76

From ENTSO-E/ERRP Minutes December 11th 2012:

"JN indicated that this was requesting the change to the allocation result document to make a number of attributes optional. The main question concerned the need where there were no bids".

Status: Content to the elements was added to the BRS for Trade

#### NEMM 2011/81

From ENTSO-E/ERRP Minutes December 11th 2012:

"MC indicated that he didn't have a copy of this request. JN presented the request which was to add an additional attribute to the activation document. After a short discussion it was agreed that the use of the *activiation identification* would be sufficient to satisfy this requirement.

There are however no "activiation identification" in the document, only an "Order Identification" on header level (only used in responses) and a "Contract Identification" on time series level that we need as the Activation ID. I.e. no place for the Bid ID

From the BRS; ERRP Activation Document time series level				
Contract	Used as an Activation id. The same Activation id is used in the request			
Identification	and the response.			
Bid Identification	Reference to relevant bid. A bid identity will be used to identify bids in			
	the activation document in the future system of Sweden.			

Status: Bid ID will be put in Allocation Identification and Activation ID will be put in the Order Identification

#### NEMM 2011/83

**MR**: Add the Process Type code: **Z05**, Bilateral trade From ENTSO-E/ERRP Minutes December 11th 2012:

"JN explained the requirement for requesting new codes for the process type that had been added to the allocation result document. This is similar to the request for emergency reserves.

GB explained that this was carried on outside the scope of the existing defined processes. He felt that this was not to be considered by the ERRP guide.

**ACTION 05-05:** JN to look into the redispatch process which seems equivalent to satisfy the NEMM 83 request.

*Status:* Postponed, however it is proposed (to be discussed):

Keep Z05, Bilateral trade as a Nordic code in the BRS

#### NEMM 2011/86

**MR**: Add the code **Z17-Z18** to the *Business Type code list* 

**Z17**, Technical minimum production

**Z18**, Technical maximum production

**Status:** Postponed Jon-Egil will verify.

NEMM 2011/94

**Status:** Postponed – Jon-Egil will verify

NEMM 2011/95

*Status:* The MR is rejected. Business Types should be used instead.

The description of the codes **Z17** and **Z18** were updated:

- **Z17** Technical minimum possible, under minimum, Resource Object having the possibility of using overload areas.
- **Z18** Technical maximum possible, maximum incl. overload, Resource Object having the possibility of using overload areas.

Homework: Ove will update the BRS for Schedules with the new definition...

## 7 Status for implementation verification

Nothing new reported.

#### 8 tWG

The request from the NEG for how to handle missing values will be put on the next tWG agenda and in addition be put on the next ebIX® ETC meeting.

#### 9 Status and information from "EMFIP"

Jon-Egil informed that it is expected a Nordic decision on how "EMFIP will be fed with data" by the May 2013, i.e. what to send from the TSOs, NOIS or NPS.

### 10 Meteorological information

There was no news since previous meeting. The item will be skipped from coming agendas, unless anything new turns up.

#### 11 Information (if any)

Jan informed that there have been received EU requirements for models related to intraday trade and that Energinet.dk already has made some comments to a solution from the PXs.

Jan informed that ebIX® and IEC has started a cooperation.

A slightly updated Harmonised Role Model from ebIX®, EFET and ENTSO-E is planned published in May 2013.

## 12 Next meeting

- Tuesday May 21<sup>st</sup> 2013, Arlanda NEMM/NBS
- o Monday May 27<sup>th</sup> 2013, in Oslo (BRS for Trade)

#### **13 AOB**

#### 13.1 How to handle separate distribution NBS information and other information?

From Jan:

Dear friends,

Ten days ago I wrote a document, a sort of input to the NBS work, describing (some of) the different attributes that are sent in ebIX® and ENTSO messages intended for settlement.

The background was an internal NBS document being a sort of early version of a requirement specification for the new NBS-system.

Reading that NBS document I felt that it could be necessary to identify data that needs to be sent or received from others – and therefore needs to be handled in a new balance settlement system.

And since ebIX and ENTSO-E has different attributes (data elements or what we should call them) in their messages, I wanted to compare the two standards to see how similar the standards are and what data we need to have in a system being able to send/receive such messages.

So, here I send you a document where I have compared attributes in ebIX and ENTSO-E messages. The document can also be seen as a little step towards a later study that I want to do: can the present attributes be used to uniquely identify a Time series. I.e. can we manage "without the time series id"? But, in order to do that study, I need a concrete list of time series.

The document is intended for the NBS work. I sent it to Mats Elmér here at Svenska Kraftnät that has sent it further to his colleagues in NBS. And it is intended for our work within NEMM.

But bits and pieces from the document may also be used in our other international work with standardisation, especially in our relations and the cooperation between ebIX and ENTSO-E. At least as an input to future work.

One thing that we have noted before in our NEMM work regarding the NBS data is the lack of the actor Balance supplier in a ENTSO-E settlement result message. I.e. if the Imbalance settlement responsible not only will handle the settlement per Balance responsible, but also per Balance supplier there is no attribute for the Balance supplier. There is just a "party". Even if it would be possible to send more than one party in an ENTSO-E message you don't know the role of that party.

Here I see a disadvantage with the ENTSO-E standard: it is of course focusing on what is needed to and from a "TSO" (in some different roles), and in many cases just to/from a Balance responsible party. The need for a "DSO" to send data to a "BRP" or a supplier – or the need for a BRP to send settlement results to a "retailer" as NBS calls it, is not covered by the ENTSO-E standard – however the exchange from the "DSO" is covered by ebIX.

And that is the reason why we in the NEMM work suggest using both standards, and that is why I want to make a document like this – the standards are a bit from each other.

The referenced document was reviewed and was seen as good basis for a more complete comparison between ebIX® and NETSO-E documents.

## 13.2 Preparations for NEG meeting April 16th

Ove will make a proposal for a presentation, among others including:

- BRS for schedules v 2.0 sent on circulation for comments to NEG
- BRS for trade awaiting input from NPS
- BRS for settlement will be split into two parts; a NBS part and a part for settlement processes not related to NBS
- Further NBS work

# 13.3 How to handle new codes used outside the Nordic area, such as SwePol From Ian:

Dear friends,

With the Polish TSO we will start to exchange several different time series. For some we can use existing codes for Business Types, for others we can't. It is of course not easy to see if an existing code describes (in other words) the same thing as what we want exchange, so there might be some existing code to use.

The present list of Business types without ENTSO-E codes is the following:

- Technical Minimum Power
- Disturbance on the link
- Agreed Supportive Power (requested by receiver)
- Agreed Supportive power (requested by sender)
- Agreed Supportive power special
- Loop Flow

The Polish TSO suggested that we should use the codes Z01-Z06 for this – but I disagree since those codes means something else in the Nordic Area. We can use totally other codes, or we can "integrate" them into our Nordic list of codes.

NEMM proposes to use Nordic codes, which mean that the NEMM code list must be cleaned-up and published on <a href="https://www.ediel.org">www.ediel.org</a>.

The following codes were proposed:

Z17 or A60 Technical Minimum Power

A21 Inadvertent deviation (Disturbance on the link)

**Z45** Agreed Supportive Power, Normal – Use In Party or Out Party for specification of "Requested by sender/receiver

A45 or Z46 Agreed Supportive power, Special

A46 or Z47 Loop Flow

#### Homework:

• Ove will clean up the NEMM code list and put a review on the next NEMM agenda.

## Appendix A TO BE DISCUSSED AND AGREED

- 1. Follow up on Special rules related to NOIS:
  - Reason codes have to be sent in a separate time series. The related quantities must always have a dummy value, but the value will be ignored by NOIS.
- 2. Follow up on question to the HG on how to handle a *Quantity quality* (metered, estimated...) and "no-value" or "nill".

## Appendix B EXTRACT OF THE OVERALL PROJECT PLAN

The following 5 phases have been identified in the *Nordic TSO Market model project for data exchange*:

#### **Phase 1** Determine transfer capacity process

Phase 1 was finalised spring 2009 regarding documents from the project group. However Maintenance Requests (MR) to ENTSO-E/WG-EDI is still in progress.

## Phase 2 Scheduling and Ancillary Services Process covered by the ENTSO-E ESS and ERRP IGs

- operational and financial
- balancing and reserves
- In addition phase 2 include:
  - A document containing common rules and recommendations, *including* detailing of a communication platform
  - o A document covering a common Domain model for the Nordic market.

Phase 2 was finalised spring 2010 regarding documents from the project group. However Maintenance Requests (MR) to ENTSO-E/WG-EDI is still in progress.

#### **Phase 3** Nordic trading system

- Bid to the Balance regulation market
- Prices from the balancing market and spot market, and other Nord Pool messages
- Activation messages
- Bid process to the Spot market (dependent on NordPool)

Phase 3 started autumn 2009 and is still in progress. It is mainly processes related to Nord Pool Spot that are left.

#### Phase 4 Settlement process

Phase 4 started in spring 2010, but is currently awaiting the Nordic Balance Settlement (NBS)

**Phase 5** Preparation for implementation verification of the documents between the Nordic TSOs and Nord Pool Spot.

The Customer switching (CuS) process is a potential additional phase, dependent on political decisions, i.e. a common Nordic end user market.

For each of the phases mentioned above, a BRS will be made for the relevant business process. Change requests will be submitted for all identified differences between the Nordic processes and ENTSO-E/ebIX<sup>®</sup> standards.

Activity	2009	2010	2011	2012	Spring 2013	Autumn 2013	Spring 2014	Autumn 2014
Phase 1, Determine transport capacity	,							
BRS								
Change request: ENTSO-E								
Phase 2, Scheduling process								
BRS version 1								
BRS version 2								
Change request: ENTSO-E								
Phase 3, Nordic Trading System								
BRS								
Change request: ENTSO-E								
Phase 4, Settlement process								
BRS for NBS								
BRS for other settlement areas								
Change request: ENTSO-E/ebIX®								
Phase 5, implementation verification								