

21 June 2017

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1 (10)

eSett Customer Committee meeting

| Date | 21.6.2017 12:00 -17:30 EET | |
|---------|-------------------------------|---------------------|
| Place | Helsinki Hilton Airport hotel | |
| Present | Espen Fjeld | Energi Salg Norge |
| | Lars Ellingsgard | Hafslund Nett AS |
| | Trond Søreide | Mørenett AS |
| | Tom Backman | Fortum Markets Oy |
| | Tommi Pyhähuhta | Caruna Oy |
| | Teija Pelkonen | UPM Energy Oy |
| | Samuli Saine | Satapirkan sähkö Oy |
| | Johan Hagsten | Vattenfall AB |
| | Heidi Sundin | E.ON Elnät AB |
| | Emelie Ekman | LOS Energy AB |
| | Kristian Bernseter | Statnett SF |
| | Jani Piipponen | Fingrid Oyj |
| | Heikki Raatikainen | Fingrid Oyj |
| | Liv Marie Butveit | Markedskraft ASA |
| | Birger Fält | Svenska kraftnät |
| | Robert Thelander | Svenska kraftnät |
| | Håkan Eriksson | Ellevio |
| | Uy Tran | NVE |
| | Tor Ny | EI |
| | Suvi Lehtinen | Energiavirasto |
| | Ulf Möller | Energi Norge |
| | Heidi Lilleby | Hafslund Hedging AS |
| | | |

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| Pasi Lintunen | eSett Oy |
|------------------------------------|----------|
| Minnakaisa Ahonen (Chairman) | eSett Oy |
| Niko Jauhiainen | eSett Oy |
| Anna Kirkland-Kaukinen (Secretary) | eSett Oy |

| Absent | Morten Torgalsbøen | Statnett SF |
|--------|--------------------|---------------------|
| | Tania Pinzon | Svenska kraftnät |
| | Margit Helene Moen | Hafslund Hedging AS |
| | Lena Ingarda | Vattenfall AB |
| | Mari Salo | Energiavirasto |
| | Erik Blomqvist | EI |

1 Minutes of the NBS Reference group meeting 4.4.2017

1.1 Opening the day and introductions, recap of NBS Reference group meeting held on 4th of April (agenda topic 1)

eSett CEO and chairman of the meeting Minnakaisa Ahonen welcomed all members to the first customer committee meeting and initiated participant introductions. NBS reference group was thanked for the contribution and support it has provided regarding the NBS commissioning and model development. From now on reference group will be replaced with customer committee, which will continue as a supportive group during the post go-live period. It was agreed that the minutes of the meetings will be attached to the next meeting's agenda. In the future, all presentation materials will be distributed 1-2 weeks beforehand and will also be published on eSett's website https://www.esett.com/customer-committee/.

2 Nordic Imbalance Settlement – Go-live experiences

2.1 eSett's own experiences after go-live (agenda topic 4)

eSett operation manager Pasi Lintunen summarized eSett's own experiences from the post Go-live period. It was announced that eSett has signed all necessary agreements with respective balance responsible parties and all BRPs have placed sufficient collaterals.

From the imbalance settlement system's point of view, settlement has been calculated correctly and invoicing has been carried out successfully for weeks 18-22/2017.



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Regarding settlement calculations (volumes and amounts) there have been no errors, but few issues were encountered regarding invoicing. Errors were presented according to the presentation material.

Market participant question:

- Could eSett explain in more detailed level what was the problem with the negative prices in Finland and VAT during the first invoicing week?

eSett answer:

 Problem was in eSett's billing and accounting system, which could not handle negative prices correctly. Breakdown of VAT was incorrect, but that problem is fixed now.

It was mentioned that some market participants have asked eSett to verify the settlement results against TSOs systems. Pasi Lintunen reminded that eSett is not able to do this, since eSett has no access to TSOs systems.

2.2 Summary of received feedback from customers (agenda topic 4)

Customers have provided feedback to eSett regarding NBS commissioning, NBS model, eSett customer service and usability of Online Service. Pasi Lintunen presented the feedback according to the presentation material.

Market participant question:

- Automatized processes are needed for managing the structure changes efficiently. Can structures be sent via message exchange systems automatically in the future?

eSett answer:

- Yes, development work starts from some of DSO structures which will be sent via message exchange systems in the future, but minor production changes will not be automatized.

Market participant question:

- Some messages sent by eSett (e.g. BICOs) are sometimes difficult to read in to market participants own systems.

eSett answer:

- eSett has published a document on its website which describes the message content and how delta values are presented in message files.

It was proposed that eSett should create guidelines on how PU capacities should be updated by the DSOs. This information was proposed be added to the next version of the NBS handbook, which will be published during autumn 2017.



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Next question raised by the market participants was regarding the usage of PU capacity information in general. Where is that information used and why DSOs need to update it?

eSett answer:

 eSett uses PU capacity information when checking and verifying input data quality. We receive an alarm from the system if pre-defined value limits are exceeded. We use those also in KPI reports.

Some of Online Service export functionalities will be improved; MGA codes can be exported to excel with respective MGA names.

It was asked if personalized, frequently used views could be saved in Online Service near future.

eSett answer:

- Unfortunately no, at least not near future, because eSett needs to prioritize the development requests.

Pasi Lintunen presented the retailer balance responsibility structure in Online Service and how it will be improved. The overall need of the RBRs is based on the fact the all BRPs are not willing to add additional retailers under their own responsibility.

It was mentioned that selecting MGAs one by one in DSOs MGA imbalance view is time consuming in situations when there are multiple MGAs. Dashboard for all MGAs would be a good idea, and this is already under construction.

Market participant question:

- Why exchange rates are not visible on eSett webpages or Online Service? If currencies SEK or NOK are used, this information is needed. Could there be a small adjustment for publishing this information somewhere? And is it possible to have currency fee automatically?

eSett answer:

- We hedge the amounts every Monday by using separate bank platform. We publish the exchange rate only in invoices where exchange rates are used. The possibility for BRPs to receive currency fee automatically will be investigated by eSett.

Market participant question:

- Is it possible in the future to log in to multiple Online Service accounts with same credentials?

eSett answer:

- Unfortunately it will not be possible.

Market participant question:



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- Aggregated bilateral trade view is needed per BRP and MBA, is it possible to have it?

eSett answer:

- Yes. Currently we calculate imbalances to the past but later also to the future. Then the possibility to view these is to use BRP consumption imbalance view in the Online Service.

Market participant question:

- How eSett verifies the accuracy and correctness of the data which is sent by the DSOs?

eSett answer:

- Currently we have limited possibilities to verify the data accuracy sent by the DSOs. We monitor MGA imbalances and use input data qualification controls in Basse.

Market participant question:

- How unnecessary MECs are possible to delete easily from Online Service if counterparty has created them incorrectly?

eSett answer:

- eSett cannot delete MECs on behalf of market participants but it would be a good idea to create general guidelines how structures should be managed by the DSOs. At the moment, we recommend discussion between the respective market parties to avoid confusion.

Market participant question:

- Responsibility of Bilateral trade reporting and manual corrections in Sweden is transferred from Svenska kraftnät to the BRPs. Can this be a risk for the quality of the data?

eSett / regulator answer:

- Respective market participants are responsible for their own data. In Norway, there are sanctions if market participant cannot send accurate data, but in Sweden there are not. It would be a good idea for regulators to harmonize the rules in the future.
- 2.3 Summary of imbalance settlement system failures and issues encountered after go-live
 - 1. Failure in messaging 9.5 2017, issues with handling FTP messages caused incorrect message rejections. Messages were reprocessed in a wrong and eSett corrected invoices bilaterally with respective BRPs
 - 2. Failure with handling negative prices caused incorrect VAT breakdown during invoicing week 18



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- 3. Failure with manual acceptance of bilateral trades 1.6.2017. Due to this error, gate closures were extended temporarily. Root cause was identified as a failure in evaluation algorithm for single value acceptance, which was fixed in Basse.
- 4. Failure in the settlement system 6.6.2017. Collateral demands and balance report values were missing, also some of message were rejected during this failure. Root cause was identified within Basse component which distributes jobs across processing servers.

Market participant question:

- Would it be possible to extend bilateral trade gate closures? It has been experienced that the schedule of manual bilateral trade corrections is too tight. For instance, if the BRPs need to agree together which values they should use, it takes time to reach the correct persons to initiate the discussions.

eSett answer:

- eSett needs to investigate that possibility.

Market participant comment:

- The acceptance mechanism for two MGA Exchange values causes confusion in situations if counterparty sends zero values, because system accepts the lowest values. It would be a good idea to improve the functionality.

3 Market development plans from the Nordic TSOs

It was agreed that agenda topic number 9 (Market development plans from the Nordic TSOs) is handled before the rest of the day's topics. Kristian Bernseter from Statnett presented the plans TSOs have prepared for the future market development.

The commissioning of the common intraday platform XBID is proceeding, go -live will take place in Q1 2018. New platform enables multiple nominated market operators (NEMOs) and eSett will receive trades and flows from several NEMOs. 11 European countries will be involved to the new integrated cross-border intraday market.

The new period of 15 minutes imbalance settlement will affect all NBS countries, as the new balancing guideline has been approved by the regulators. The plan is to implement 15 min settlement by the end of the year 2020.

TSOs will provide incentives to BRPs how to manage imbalances in the future in a harmonized way. TSOs have currently an on-going project "full-cost balancing" which analyses the impacts of electricity balancing guideline. Guideline proposes one balance and one-price settlement.

Market participant question:

- Finnish DSOs might find it difficult to implement 15 minutes metering period, because electricity meters installed in Finland have been programmed to measure hourly values. Do we have a common understanding of 15 min settlement and what that



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means? In metering level, it will take a long time to make the system measure the values every 15 minutes.

TSO answer:

 Only high level plans and definitions have been made so far. TSOs and other stakeholders will prepare a detailed concept and implementation plan. Technical measurement - level definitions are not done yet. It is also possible that data hub calculates the values in the future. Project is ongoing and eSett will be involved in it.

15 minutes settlement will affect balancing market and intraday market, which will use 15 min resolution. Day-ahead market will continue on hourly basis.

Market participant comment:

- Regarding 15 minutes settlement period, the regulations are still under construction, and there are many unclarities and regulatory issues to be discussed.

Next presented topic was an overview of datahub commissioning schedules in the Nordics. Datahubs will take over the responsibilities of settlement from the DSOs.

Bilateral trade reporting in Sweden will be changed during autumn 2017. Reporting will be on RE -level and it will be carried out directly from Swedish BRPs to eSett. Instructions for BRPs will be published by eSett during week 25.

4 Online Service improvements

eSett has received lots of Online Service improvement requests from the market participants and those have been introduced to eSett's imbalance settlement system supplier. Pasi Lintunen presented what improvement requests have included. No delivery schedule has been agreed yet.

| | Development area | Description |
|---|-----------------------|---|
| 1 | General MEC Overviews | Online Service Paging functionality is difficult to use, page numbers should be removed |
| 2 | General MEC Overviews | Fixed column width in all windows should be removed |
| 3 | General MEC Overviews | Should be added in all MEC views |
| 4 | Notifications | Alarm/Notification when new market participants are added e.g new retailer |
| 5 | Invoices | Add field "Customers reference" to debit invoices |



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| 6 | Retailer Balance Responsibility | Mass update of MGA changes (now they need to be added one by one) |
|----|--|--|
| 7 | Messages Overview | It should be possible to filter on the field ACK status to see rejected messages |
| 8 | MGA Imbalance Retailer | It should be mandatory to have a Retailer in MGA Imbalance Retailer |
| 9 | Bilateral Trade (Approvals needed) | Counterparty should approve new bilateral trade after it has been created |
| 10 | Status of Reporting functionality | Possibility to export reporting statistics to excel with DSO details |
| 11 | MGA Imbalance (View Drill Downs) | Possibility to drill down from Input aggregated MGA Exchanges to the single MGA Exchanges related to the respective MGA |
| 12 | Aggregated Balance Reports | Balance reports aggregated for all MBAs and MGAs, since it's time consuming to look through all of them |
| 13 | New status filter of Not Matching MGA Exchanges | Overview of MGA exchanges with non- matching values in ONLS. |
| 14 | Notification when PU is without RO | New notification when PU is without RO. It's time consuming to go through the list |
| 15 | New status filter for MGA Imbalances (filter for MGAs which have imbalances) | One dashboard for multiple MGAs where imbalances can be viewed quickly |

It was asked if it would be possible to have a notification when structures are ended, not only when they have started.

- Yes, that is possible.

5 Customer Committee Rules of Procedures

5.1 Customer Committee rules of procedures, competition law presentation

Minnakaisa Ahonen announced that eSett has published customer committee member names and companies on eSett website https://www.esett.com/customer-committee/. She requested and received permission from the customer committee members that it is ok to publish their names, companies and also contact information (e-mail addresses without hyperlink format) on eSett's website.



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Minnakaisa Ahonen presented rules of procedures according to the presentation material. Competition law and customer committee meeting rules were introduced. All participants agreed to obey the rules.

6

Preparing a yearly plan for the Customer Committee (agenda topic 7)

Customer Committee members agreed the meeting dates and times.

Minnakaisa Ahonen asked Customer Committee members and Reference group members to propose regular agenda topics and yearly topics for the upcoming meetings.

| Date and time | Main Topics | Notices |
|------------------------|--|--|
| 14.11.2017 Helsinki | Status of eSett Online Service improvements TSO Presentations eSett KPIs Development issues Operational issues of MPs | Follow up presentation, including feedbacks from customers 15 minutes settlement, other current topics Encountered challenges, deviations Current topics on regular basis |
| 10.4.2018 Helsinki | Customer Satisfaction survey results Regular topics | Yearly topic, results for previous year eSett presentations, TSO presentation etc. |
| 6.11.2018 Helsinki | Regular topics | Will be decided later |

Following topics were proposed:

7 Other business

Regulator raised a question if members are familiar with independent aggregator model and how it affects NBS model. What might be the impacts? It was discussed among the market participants that it might mean increased risks for the BRPs. At the moment, independent aggregator model or it's affects are not clear within the members. TSOs and regulators should decide the rules and define the model.



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No more topics were raised at this point. Chairman ended the meeting.

8 Next meeting

Next customer committee meeting will be held 14.11.2017 in Helsinki eSett office.

Attachments:Online Service Improvements – Pasi Lintunen
Nordic Imbalance Settlement experiences – Pasi Lintunen
Market development plans from the Nordic TSOs – Kristian Bernseter
Rules and procedures and Competition Law – Minnakaisa Ahonen
Customer Committee Rules of procedures – Minnakaisa AhonenDistribution:Customer Committee members, NBS Reference Group members

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