Reporting WG SO 06.03.2015

UG Plenary 19/3/2015

Working Group System Operation

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WG SO 20150306

1. Status Winter 2014-2015
2. Solar Eclipse 20150320
3. Status of Network Codes “Operational Planning” and “Operational Security”

1. Status Winter 2014-2015

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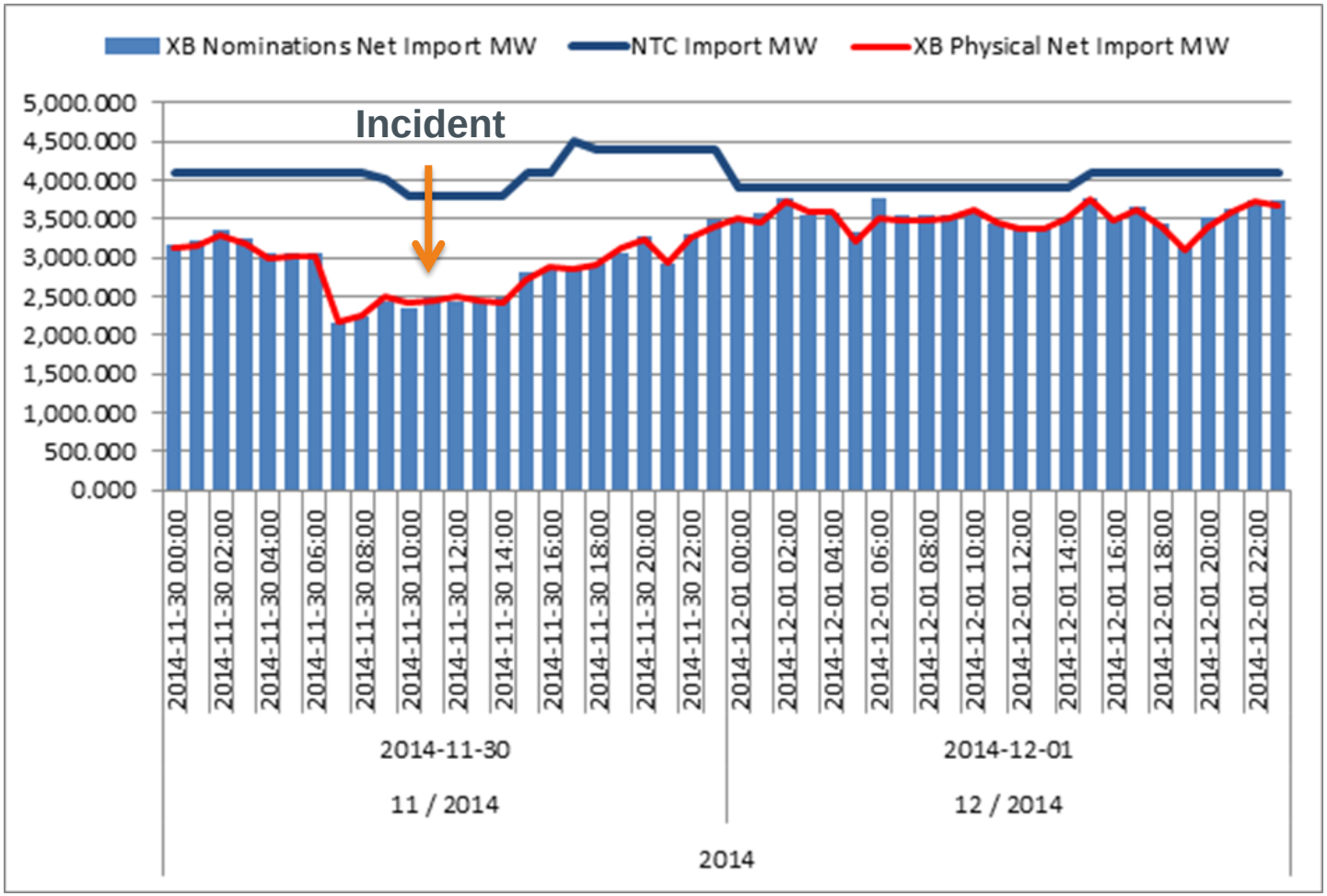
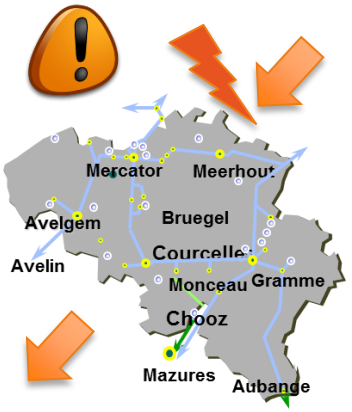
Werden besproken :

1. Samenvatting productiepark voor en begin van de winter
2. Intensiever gebruik importcapacitteit tijdens stilstand Doel4 (5/8 =>19/12)
    1. Netto import energie +72% in 2014 t.o.v. 2013
3. Trends van klimaat, zon, wind, prijzen over 2014
4. Na 4 maanden “winter”:
    1. Normaal tot mild, niet extreem dus
    2. Hoge beschikbaarheid van net (import) en overig park (weinig pannes)
5. Use case : onvoorziene uitschakeling Tihange 3 op 30/11-1/12 (volgende slide)
6. Van noord naar zuid hoog belaste nettoestanden week van 3 februari (FR import, NL export)

Incident Tihange 3 – Import maandag 1/12





2. Solar Eclipse 20/03/2015

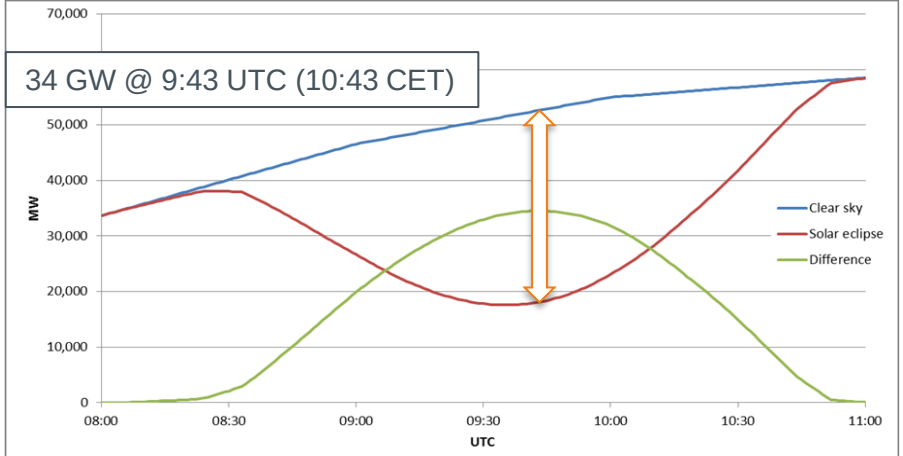
Taskforce Solar Eclipse => Results

Assumptions

- Installed PV capacity in Belgium: 3.245MW
- PV generation is concentrated in one spot per country: Brussels for Belgium
- The duration of the eclipse is considered in each country from its beginning on the western border to its end on the eastern border of the country : in Belgium, start 08:27 UCT (09:27 CET) – end 10:45 UCT (11:45 CET)
- No change of system load is considered (i.e. people stopping work to view the eclipse).

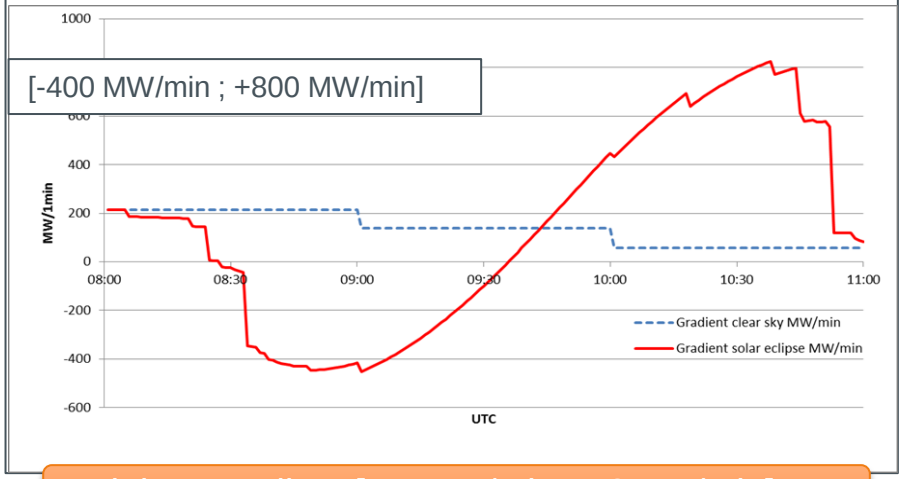
Results

Comparison of expected infeed from solar power during clear sky conditions with and without solar eclipse (Cont. Europe)



Belgium max reduction 1.383 MW

Expected power gradient in MW per minute from solar power during clear sky conditions with and without solar eclipse (Cont. Europe)



Belgium gradient [-17MW/min ; 40MW/min]

50% of the infeed reduction is expected in Germany and 21% in Italy

Countermeasures foreseen by Elia

1. Elia has requested **BRPs to carefully and proactively analyse this special event and take all necessary preventive measures** (e.g. in relation with the behaviour of their solar forecasting tools) to be able to balance their portfolio during the eclipse.

2. Elia will make sure that **our own forecasts** of PV are as accurate as possible for the 20th of March, including the effect of the solar eclipse.

3. **The residual imbalance** we estimate to handle in the Belgian control area is expected to be in the range of common changes (i.e. to handle RES forecasting errors and/or power plants connection/disconnection), nevertheless, we do foresee the strategic use of pump storage power plants as an additional back-up measure.

    - Based on our D-1 forecasts we will request pumps and/or turbines to be available at the most critical times for switching ON/OFF.

4. **Coreso** will be requested in D-2, D-1 and ID to anticipate for potential constraints.

5. Elia will participate in **online teleconferences** between operational managers of Continental Europe to allow a fast coordination in case, despite all precautions taken, critical frequency deviations would occur.

3. Status of Network Codes

Microsoft
verPoint Presentat

3. Status of Network Codes “Operational Planning” and “Operational Security”

Werden besproken :

1. Overview progress all codes
2. Timeline of codes OPS and OS
3. Overview chapters code OPS
4. Overview chapters code OS
5. Developments after ACER’s positive opinion

High level:

- Few deviations from current practice in Belgium
- Voltage control at connection point
- Information exchange

- May 2014 Florence Forum invited ENTSO-E, ACER and EC to verify whether the System Operation NC can be modified in a way that would allow the adoption as Network Codes + June 2014 EC asked ENTSO-E to replace the provisions which refer to future decision making procedures by legally binding rules
- October 2014 ENTSO-E proposals for the changes with the goal of adoption as Network Codes
- January-June 2015 Trilateral meetings for each System Operation Network Code
- *June 2015* ***Texts of the merged Network Codes finalised***
- *September 2015* ***Comitology begins***

Many thanks for your attention!

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