

## **Joint Grid Code Review Panel Meeting**

Belfast  
3<sup>rd</sup> May 2007



## **Joint Grid Code Review Panel Meeting**

**Welcome to Members and Introductions**



## Joint Grid Code Review Panel Meeting

### Update on Grid Code Harmonisation for the SEM

- Ø General Overview
- Ø Project Plan

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## Comments Received from Users

- Ø Comments were received from Users following the previous meeting in March
- Ø Responses sent to individuals
- Ø Consolidated Response Document being prepared to circulate to the Panel members

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## Operational Issues

- Ø Within-Day Testing
- Ø Availability Re-Declarations
- Ø Dispatching MW in Exported terms, and Mvar at the Generator Terminals
- Ø Minimum MW Threshold for CDGUs
- Ø Demand Side Units

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## Within-Day Testing

- Ø Need proposals for managing short notice/short duration tests that are requested by generators
- Ø Overriding principle is that the SMP and transmission system constraint costs should not unduly increase as a result of a Participant requested test
- Ø Intend to use EDIL test flag to highlight instructions issued as part of a test
- Ø These instructions would be filtered out of the overall Dispatch Instruction file sent to the SMO i.e. the unit would be subject to un-instructed imbalances.
- Ø Exception would be a unit that wants to come off load in order to test. These units would be expected to declare themselves unavailable for the duration of the test.

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### Availability Re-Declarations

- Ø For units declaring themselves available from zero the effective time for the availability change will be when the unit is capable of being synchronised (equal to the time at which they are available to commence start-up plus the relevant start-up period to synchronise as submitted in offer data for that heat state) [Change for ROI]
- Ø All plant including CCGT would be responsible for declaring their availability for the ambient conditions that persist at the time [Change for SONI Grid Code]
- Ø For plant that fails to synchronise a zero MW availability declaration will have to be made if the plant is late by a prescribed length of time (not yet decided but maybe something along the lines a Max[5 minutes, 10% of run up time, 1.5 hours]. [Change for both Grid Codes]
- Ø If a unit starts earlier than requested they will only receive uninstructed imbalance energy payments. The dispatch instruction will remain effective from the original requested time.

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### Exported vs Generated

- Ø All Dispatch Instructions that are transferred to the SMO for settlement are in Exported (net) values
- Ø From November 1<sup>st</sup> both System Operators will dispatch units in exported MW. Units will be expected to comply with the exported dispatch quantity
- Ø EAFs, declared by units in EDIL, will be applied to the exported MW value and will also be displayed in the dispatch instruction
- Ø No changes to Mvar instructions are proposed at this time

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## Demand Side Units

- Ø No units less than 4MW will be centrally dispatched - by definition in the T&SC units that are less than 4MW and not part of an aggregated unit will not be able to participate in the market
- Ø Aggregation is allowed (as long as same supplier) – this should facilitate market participation for units less than 4MW
- Ø All DSUs must install EDIL
- Ø Arrangements for transition from DSM schemes are being drafted
- Ø TSOs will set out provisions for determining compliance with dispatch instructions.

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## Minimum MW Threshold for CDGUs

- Ø TSOs will not centrally dispatch units less than 4MW in nameplate rating
- Ø Generation Unit Aggregation will be permitted but no component unit can be greater than 10MW
- Ø SOs will reserve the right to give detailed instructions that apply to component parts
- Ø Units less than 4MW can participate as autonomous units
- Ø All Transmission System connected units will have obligations to the TSO in respect to system security. These will include requesting permission to sync and desync and making reasonable endeavours to respond to SO requests in times of emergency

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### Grid Code Amendments User Paper

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### SDC 1 – Key Changes

- Ø Further references to “All-Island” factors
- Ø WFPS terminology changes
- Ø New references to “aggregators” and “Interconnector Units”
- Ø Other changes

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### SDC 1 – Key Changes

More references to “All-Island” factors

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### SDC 1 – Key Changes

Changes to WFPS terminology

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## Joint Grid Code Review Panel Meeting

### SDC 1 – Key Changes

References to “Aggregators” and “Interconnector Units”

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### SDC 1 – Key Changes

Other changes

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### SDC 2 – Key Changes

- Ø Changes similar to SDC1
- Ø Amendment at SDC2.4.1.3: no more references to “Tie Break” situations
- Ø Re-introduction of Dispatch Instructions for “Mvars” (mostly EirGrid)
- Ø Other changes

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### SDC 2 – Key Changes

Similar changes to SDC 1

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### SDC 2 – Key Changes

#### Modifications to SDC2.4.1.3

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## Joint Grid Code Review Panel Meeting

### SDC2 – Key Changes

Re-introduction of Dispatch Instructions in respect of  
Mvars (mostly EirGrid)

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## Joint Grid Code Review Panel Meeting

SDC2 – Key Changes

Other changes

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## Joint Grid Code Review/Panel Meeting

SDC New Definitions Glossary

Update

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## Joint Grid Code Review/Panel Meeting

SONI SDC3 v EirGrid OC4.3

Update

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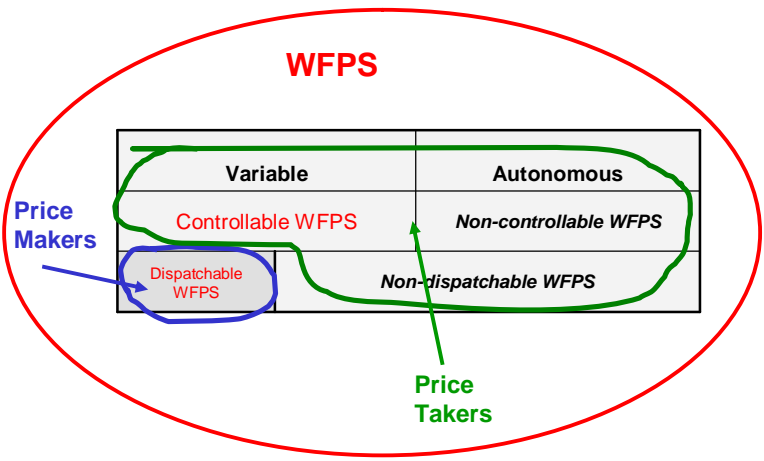
## Joint Grid Code Review Panel Meeting

EirGrid WFPS 1 Code

Amendments following change in WFPS  
terminology

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### Summary of new WFPS Nomenclature



### Summary of New Terms - WFPS

- For SEM, all wind farms will be categorised as **WFPS**.
- The SONI code defines wind farms in this way at present and this **WFPS** definition includes wind farms that are less than 5MW and those that pre-date the revised code.
- No similar category exists or is necessary in the EirGrid code at present but the Distribution Code will need to be changed to align it with the new categorisations.
- This can be done once all SEM-related changes are agreed for the EirGrid code and the SONI code.

### Summary of New Terms – Controllable WFPS

- If a wind farm needs to be controllable then it will be bound by all the terms covering **WFPS** and by the additional requirements set out for **Controllable WFPS**.
- A **Controllable WFPS** (a wind farm that can automatically act upon a remote signal to adjust its **Active Power** output) is a wind farm that can comply with the EirGrid code at present.
- **Controllable WFPS** are equivalent to the **PD WFPS** in the existing SONI code.
- For the avoidance of doubt, all references to **Wind Farm Power Station** in the EirGrid code will be changed to **Controllable WFPS** and all references to **PD WFPS** in the SONI code will be changed to **Controllable WFPS**.

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### Summary of New Terms – Dispatchable WFPS

- If a wind farm needs to be dispatchable then it will be bound by all the terms covering **WFPS** and by the requirements for **Controllable WFPS** and by the requirements for **Dispatchable WFPS**.
- A **Dispatchable WFPS** (a wind farm that can act upon a dispatch instruction to adjust its output) is a wind farm that can comply with the EirGrid code at present and will have to comply with the new revised EirGrid and/or new SONI code.
- This category does not exist in either code at present.

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### New Definitions

- 2 new terms need to be defined for the new EirGrid code ( & remove existing **WFPS** definition):

- **Controllable WFPS**: A site containing at least one **WTG** which can automatically act upon a remote signal from the **TSO** to change its **Active Power** output.

- **Dispatchable WFPS**: A **Controllable WFPS** [with a *Registered Capacity greater than 4 MW*] which must have a **Control Facility** in order to be dispatched via an **Electronic Interface** by the **TSO**.

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### Proposed Modifications to SDC1 and SDC2

- The proposed modifications to the SDCs ensure that any Grid Code User, including **Dispatchable WFPSs**, that register under the Trading and Settlement Code as a Price-Maker,
  - Are required to submit the relevant data to enable the TSOs to produce the Indicative Operations Schedule
  - Under SDC2 the User can receive a dispatch instruction from the TSO via an electronic interface, which is currently EDIL.

- **Controllable WFPSs** will be also bound by SDC1.

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## Changes to WFPS1

- All instances of Wind Farm Power Station to be changed to **Controllable WFPS**
- In order to align WFPS1.7.5 and WFPS1.7.6 with both the new rules in the T&SC and the proposed SDC1, it is proposed to remove the words “*with a MEC in excess of 30 MW*” from WFPS1.7.5 and WFPS1.7.6.

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EirGrid – OC4.6.3.7 (Operating Margin)

Insertion of the words “following an event” at end of new proposal for “Substitute Reserve”

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EirGrid OC2

All-Island flavour changes

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## Joint Grid Code Review Panel Meeting

- OC2.2 - The primary objective of OC2 is to promote the development and implementation of a **co-ordinated Generation Outage Programme**, consistent with security of supply and requirements for the secure and economic operation of the **Transmission System** and the **NI System**, and with the needs of **Generators** in respect of **Plant** maintenance requirements and resource limitations.

- OC2.2 c) - the co-ordination of **Outage** planning and the interchange of **Outage** schedules with the **Other TSO**.

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•OC2.4.7 - Between March and June of year 0, the **TSO** shall carry out a security analysis of years 1 to 7 in light of proposed **Outages** and other relevant matters including **Outages of other Generation Units, Outages of Generation Units in the Other System**, interconnection, transmission outages, load growth and fuel security. In the event that **Generator's Outages** as proposed have a detrimental effect on **Capacity Adequacy** or system security in the **Transmission System or in the Other System**, the **relevant TSO** will highlight the shortfall to all **Generators** and **Suppliers**.

•OC2.4.11 - Information relating to the **COP, POP and IOP** shall be exchanged on a regular basis with the **Other TSO**.

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## Joint Grid Code Review Panel Meeting

EirGrid Planning Code and Planning Code Appendix

Update

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### SONI Planning Code

- Ø Change in WFPS terminology
- Ø Other changes following the comments received

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### SONI Planning Code

Changes in WFPS terminology: “PD WFPS”  
becomes “Controllable WFPS” and “D WFPS”  
becomes “Dispatchable WFPS”

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## Joint Grid Code Review Panel Meeting

### SONI Planning Code

Insertion of explanatory notes and changes following comments received

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## Joint Grid Code Review Panel Meeting

### SONI Connection Conditions

- Ø Changes to scope (CC3)
- Ø Licence Standards
- Ø Safety section changes
- Ø WFPS terminology changes

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### SONI Connection Conditions

Changes to scope to now also include  
“Interconnector Owner”

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### SONI Connection Conditions

Restricting references to Licence Standards rather  
than TO/TSO Licence Standards

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### SONI Connection Conditions

Changes to safety sections (CC10.2 and 10.3)

- Ø References to the “TSO” are being replaced by references to “TO” to reflect the TO’s role in appointing safety staff and carrying out safety procedures
- Ø Similar changes will be made to OC6 (Safety Co-ordination)

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### SONI Connection Conditions

Changes in WFPS terminology as explained in relation to the Planning Code

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## Joint Grid Code Review Panel Meeting

### SONI OC2

- Ø Changes to reinforce the “All-Island flavour” of OC2
- Ø WFPS terminology changes

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### SONI OC2

Changes made to make more references to co-ordination between TSOs (similar to changes made in EirGrid's OC2)

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SONI OC2

WFPS terminology changes

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Other SONI Sections

Overview

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Conclusion

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Future Work

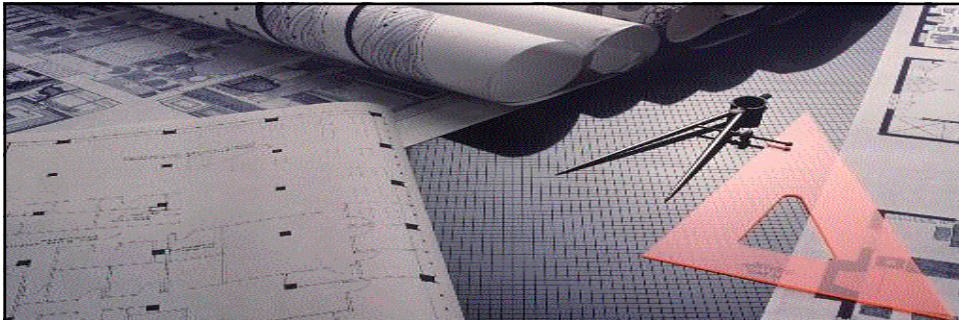
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Any Other Business

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