

Summary of Meeting and Actions

Meeting Name	Black Start Working Group
Meeting No.	1
Date of Meeting	Wednesday, 4 th April 2007
Time	10:00am – 2:45pm
Venue	Courtyard Marriott Hotel, Leamington Spa

This note outlines the key action points from the first meeting of the Black Start Working Group.

1) Apologies for Absence

Apologies were received from Steve Cox (United Utilities), Garth Graham (SSE), John Morris (British Energy), Wayne Oxborough (Central Networks) and Malcolm Taylor (AEP).

2) Overview of E3C Black Start Review Report Recommendations

The Working Group noted and discussed the E3C Black Start Review Report summary which highlighted five key areas for further development:

- Governance
- Telecommunications
- Gas Supply
- Investment
- Consequence Identification and Management

The Working Group had been tasked by the Grid Code Review Panel (GCRP) to review the existing governance process with the aim of developing and introducing a more robust approach to governance.

The Working Group noted that any proposed changes to the existing Black Start procedures may require changes across different industry codes primarily the Grid Code and potentially the Distribution Code and STC.

The completed E3C Black Start Review Report and associated Exercise Report will be circulated to the Working Group for reference.

Action: JH and LM

3) Working Group Terms of Reference

The Working Group agreed to the Terms of Reference, which would be submitted to the Electricity Task Group for reference purposes.

Action: JH

The Working Group noted the anticipated timeline for the review, the Working Group recommendations would be formally presented to September's 2007 GCRP meeting.

4) Working Group Discussions

The Working Group discussed the limitations of the current Black Start processes. It was noted that Black Start obligations were specified in Grid Code Operation Code 9 (Contingency Planning), with associated provisions in Grid Code Operation Code 5 (Testing and Monitoring). The Working Group acknowledged that the Distribution Code and the STC also had specific Black Start provisions. All Working Group members are to review the existing code obligations regarding Black Start:

- [Grid Code - Operating Code 5 and 9](#)
- [STCP06-1 \(Black Start\)](#)
- [Distribution Code – Operating Code 9](#)

Action: All

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Local Joint Restoration Plans (LJRP)

The Working Group noted that LJRPs did not provide information on testing and exercising regimes e.g. frequency of testing, level of testing i.e. practical, desktop simulations. Phoenix Modules 5 and 6 looked at this issue and it was noted that the participants found these exercises particularly beneficial in building more effective working arrangements between DNO and power station control room staff.

The Working Group agreed that it would be beneficial if the Grid Code specified high level obligations on LJRP signatories regarding testing and exercising of LJRPs. Further consideration required on the provisions of appropriate Grid Code obligations, initial proposals to be presented and discussed at the next Working Group meeting.

Action: SS

The Working Group noted that test exercises had been conducted between the relevant parties via desktop exercises and making use of the simulator at National Grid's training facility. The Working Group noted that the simulation exercises were well received by the industry, however it was accepted that a significant amount of planning and resources were required to organise such events.

The Working Group noted that the simulator facilities were prominently used by National Grid to train its Control Room engineers. National Grid to investigate the future availability of the simulator facilities for similar industry Black Start exercises.

Action: JH

Zonal Restoration Plans

The Working Group agreed that the first phase (Power Islands) of any Black Start restoration was well documented via the LJRPs and there was a high level of understanding between National Grid, the DNO and the relevant black start Generator. It was accepted that there was lack of clarity regarding the second (Zonal Restoration Plans) and third stage (restoration of complete transmission system) of the Black Start restoration process.

The Working Group agreed it would be beneficial if the concept of Zonal Restoration Plans was developed and clarified. The Working Group acknowledged that Island Growth could form an important stage around the cusp of LJRP completion and Zonal Restorations. It was accepted that the communication of Zonal Restoration Plans would be important as it would involve multiple parties, including non Black Start Power Stations.

It was acknowledged that National Grid would be responsible for the co-ordination of Zonal Restoration Plans. NG informed the Working Group that National Grid did have indicative Zonal Restoration Plans. It was noted that the documentation was internal to National Grid and not formally agreed with industry participants.

The Working Group was informed that the concept of Zonal Restoration Plans was already utilised within Scotland i.e. each Scottish Transmission Owner had a restoration plan which was inclusive of their transmission area. It was acknowledged that there were no formal restoration plans for the re-energisation of the whole of Scotland and/or GB Transmission System i.e. joining up the two Scottish Transmission areas.

Examples of Scottish Restoration Plans will be circulated to Working Group members for reference, which may be used to assist the development of Zonal Restoration Plans.

Action: DO and AM

The Working Group discussed and agreed some underlying principles of Zonal Restoration Plans:

- Extends restoration to include Non Black Start Stations
- Avoid problematic feeder/loads (e.g. cables/railways)
- Clarity on issues around Embedded Generation/Self Despatch

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- Clarity on role of HVDC Interconnectors
- Clarity on responsibilities for Control and Despatch
- Record Zonal Restoration Plan objectives, indicative sequence and timescale
- Record duty to “prepare” and to “communicate readiness”
- Balance between Generation and Demand (move to larger block loads)

The principles will be further developed and discussed at the next Working Group meeting.

Action: NG

The Working Group was informed of STCP06-1 (Black Start), which describes the planning and procedures required by NGET and the TOs to manage the Black Start recovery of Total System in an efficient manner. It was noted that STCP06-1 may be of use when defining/specifying Zonal Restoration Plans. The Zonal Restoration Plans will be cross referenced against existing National Grid and STC documentation.

The Working Group noted that the electricity trading market would be suspended during a Black Start. The Working Group discussed how the relevant parties would be notified of the market recommencing and what information would traders require in order to recommence market trading.

The Working Group will discuss ‘Back to Normal’ issues and principles at the next Working Group meeting.

Action: CM

5) Next Meeting

The next meeting of the Working Group will take place on Wednesday, 2nd May 2007 at National Grid House, Warwick commencing at 10am.

6) Next Steps

The following points will be discussed at the next Working Group meeting:

- Further refinement of Zonal Restoration Plan principles (NG)
- Example of Scottish Restoration Plans to be circulated to Working Group members (AM and DO)
- LJRP Training Requirement to be developed (SS)
- Review of existing Black Start provisions across all industry codes (All)
- Availability of National Grid’s simulator for national tests to be investigated (JH)
- Development of ‘Back to Normal’ principles (CM)

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Appendix 1 – Working Group Attendance

Members Present:

Jonny Hosford	JH	Chairman
Lilian Macleod	LM	Secretary
Nilton Green	NG	National Grid
Campbell McDonald	CMcD	SSE Generation
Ham Hamzah	HH	RWE
Allan Macleod	AM	Scottish Power Transmission Ltd
Claire Maxim	CM	E.ON UK
Phil Nicholson	PN	Central Networks
David Osborne	DO	Scottish Hydro-Electric Transmission Ltd
Steve Saunders	SS	EDF Energy
Steve Argent	BM	Ofgem