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Electricity Balancing System

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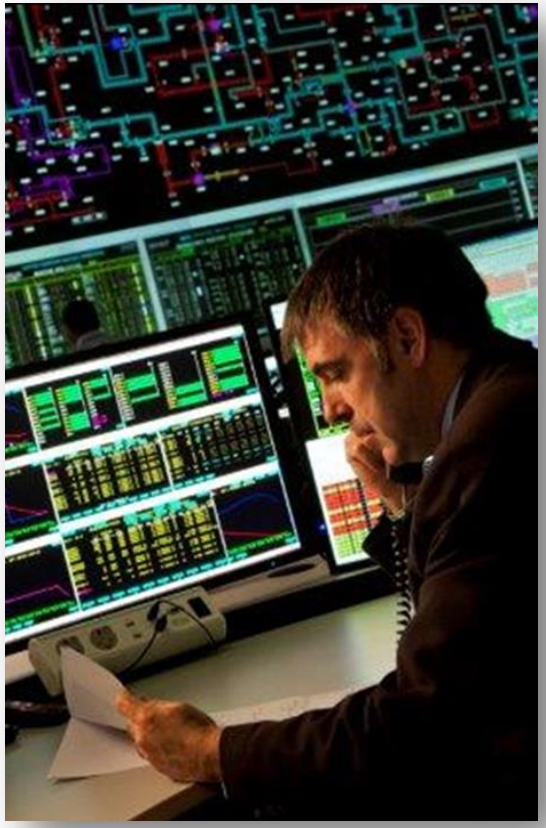
Re-cap What is being changed

The BM system is used for managing frequency and power flow in real time. Originally developed by the CEGB, it has now reached ‘end-of-life’ and is being replaced by the EBS system



The BM is essentially an manual system designed in 1980’s to allow for the control of a handful of coal units

It now has to handle 100s of balancing units so manual balancing can be “difficult” during high wind

The EBS incorporates automated dispatch which will provide significant improvement to frequency control

A key implementation objective for the EBS is not to change existing interfaces to industry participants

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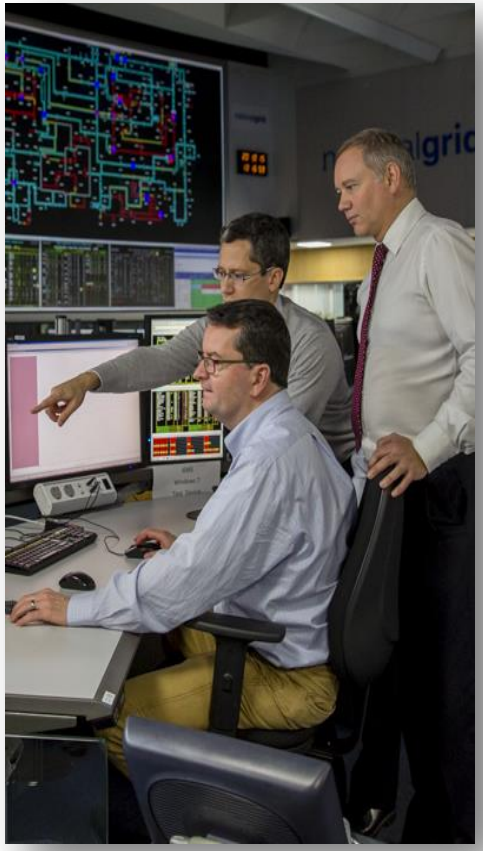
Transition in stages

The project is now at the point of transition from BM to EBS. The transition plan has at its heart the key objective of maintaining real-time control of the power system under all circumstances



A staged approach will be used to transfer control from the BM system to the new EBS system

Day ahead scheduling, Intraday scheduling and Real time despatch will be transferred over in stages

This staged approach will allow for reversion back to the BM system up until the final transition stage

The decision to switch off the BM system will be taken once the new EBS system has been established

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Entry criteria

A number of entry criteria have been developed for EBS Go-live to ensure transfer can be achieved in a smooth way. These criteria are being tracked by three teams

Operational

- Staff trained and authorised to use the system
- Scheduling parallel run has proved process
- Pre-dispatch trials have proved Auto BOA stability

IT Support

- Staff trained and authorised to support the system
- Site failover tests completed to proves system resilience
- Vendor support & escalation process in place

Commercial

- Algorithm analysed to validate economic decisions
- EBS outputs compared with BM to validate variations
- Impact of auto BOA volumes on cash out price assessed

Complex transition

The EBS scheduling parallel run started on 15 August. However, the time required for the transition had been underestimated. As a consequence a new timeline has now had to be developed

Control operators require more time to fully come up to speed with the complexity of the EBS system

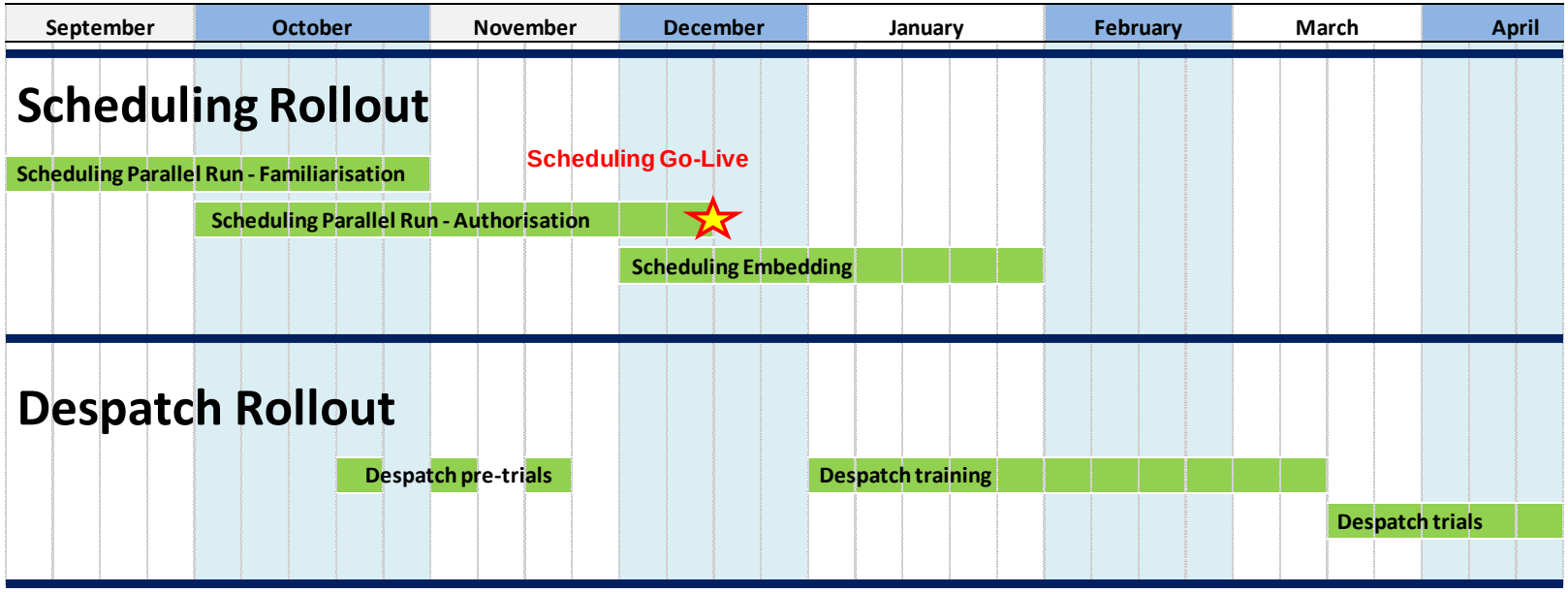
Undertaking scheduling parallel running coincident with despatch training causing learning overload

Some of the technical functionality was still requiring workarounds that were increasing task complexity

Authorisation needs to be delayed to allow control operators to become proficient

Revised Go-live timetable

A revised draft time line has now been developed and is now being validated internally and socialised with industry participants



Staged approach of transfer of control from the BM system to the new EBS system

Scheduling will be undertaken in parallel with the BM until scheduling is established

Short duration dispatch pre-trials to prove the solution will retain BM in fast back-up

Dispatch training will start in the new year with full trials following during the Spring

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Q&A

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