

**National Grid Transco**

**Operational Forum 6th October 2004**

## **BETTA Transition**

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**NGT's BETTA Project**

# AGENDA

- **State of play**

- **Transition**

- Connection Agreements
- Network Investment
- Transmission Charging
- Balancing Services
- OC2 data submission via web
- Market data provision
- Balancing Mechanism cut-over
- Transmission Despatch cut-over

- **What Next**

# BETTA

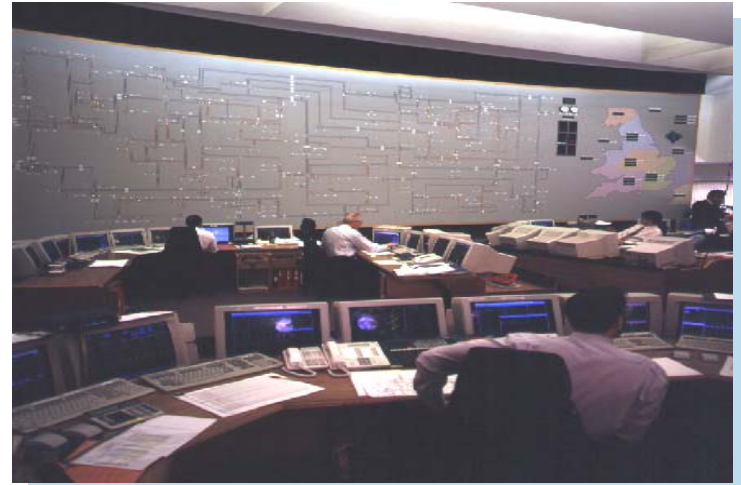
## State of Play

# GBSO - TO interface



## Scottish Transmission Owner

- Own, builds and maintains
- operates assets to GBSO direction



## GB System Operator

- Operates the GB system
- Provides Customer Interface

New SO -TO Code

'Contract' between Scottish TOs & GBSO

National Grid Transco

# State of play

- Go-Active on 1/9/04
  - NGC formally appointed as GB System Operator
  - GB Grid Code, CUSC and new SO-TO Code (STC) Designated
  - CUSC remains sole interface for user (users not party to STC)
- Drafting detail of c. 40 STC sub documents (STC-Ps)
- Transitional licence obligations on GBSO, TOs and Users
- Baseline plan to deliver **Go-live on 1 April 05** agreed
- Large amount of data collected, testing SCADA and other data links
- Much still to do (eg: several hundred user agreements to execute)

# Progress with new GBSO Interfaces

- New GBSO operational interfaces in Scotland include:
  - Generators, Distributors, Moyle Interconnector Parties, Directly Connected Customers, Suppliers, the Northern Ireland System Operator (SONI)
- Frequent bi-lateral meetings with key new users covering:
  - Generator technical data and compliance issues and contract data
  - Grid Code data submissions for Distribution Network details
  - Registering BMUs, including Cascade Hydro BMUs
  - Bilateral testing and trialling
  - Creation of Connection and Use of System Agreements
  - Balancing Services and Mandatory Services Agreements

# BETTA Transition

# Connection and Use of System Agreements with GBSO

- Transition Issues in Scotland
  - Consultations on access concluded by Ofgem in August 2004
  - Transitional (Section E) licence obligations on NGC, SP and SSE
  - New NGC GB Offers to be made to all Scottish existing users
  - New NGC GB Offers to be made to all Scottish existing applicants
- Transition Issues in England and Wales
  - Consultations and transmission licence obligations cover whole of GB
  - No significant change for majority of existing E&W connected users
  - Amend NGC agreements with E&W existing users to GB agreements
  - A single queue of GB Offers to both E&W and Scottish applicants

# Network Investment: Current Focus

- Statement of Opportunities (Interim SYS)
  - Baseline for studies, model creation
  - Agreeing form and content with Ofgem
  - Publication 1st November 2004
- Supporting work for transition of access
  - Determination of internal processes for studies
  - Underpins the production of GB Offers for Users and Applicants
- Boundary of Influence being developed to identify where issues cross into other transmission licensee areas

# GB Transmission Charging: Indicative Timetable

- End September 04 – Final proposals Conclusion report & draft statements of charging Methodology sent to the Authority
- October 04 – Ofgem Impact Assessment on Proposals
- November 04 - Authority decision
- End December 04 – Indicative Connection charges
- January 05 – Indicative tariffs
- 31 January 05 - Final Tariffs/Connection charges published
- 1 April 2005 - Commence charging

# Balancing Services

- **Same Services, More Providers, More Volume**
- Consultations due on GB SL C16 Documents in Oct/Nov 04
  - Procurement Guidelines, BPS, BSAD and ABSVD
- Mandatory Services, nothing changing, rolling out to new Scottish providers
- Other BS in E&W also being rolled out to new providers
- BS tender processes
  - Reactive - New Scottish providers invited to tender
  - Standing Reserve - As above, seminar held in Glasgow on 14 Sept
  - Fast Reserve - As above, but later, as it's a monthly tender

# OC2 Data exchange via Web

## (Generator Outage, Margins,...)

- **Same Process - New Web tool, then add new users**
- Plan to introduce web tool into E&W, circa Dec 04
  - Discussing with lead person in each organisation, testing Nov
- Enable generators to submit data and receive OC2 reports:
  - Bulk upload, view previous availability and generation outage submissions
  - Update current position and just flag changes to make a new submission.
  - Down load data eg. view the transmission outages that may affect a User.
  - Elect to receive reports via e-mail
- Parallel GB environment early 05 for new Scottish data

Username: Administrator  
 Role: SUPERROLE  
 User type: SO

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### 2-14 Days Ahead Output Usable Forecast

BMU: XXXX-1

#### Availability

	25-Sep	26-Sep	27-Sep	28-Sep	29-Sep	30-Sep	01-Oct	02-Oct	03-Oct	04-Oct	05-Oct	06-Oct	07-Oct	08-Oct
Time	12:01	12:01	12:01	12:01	12:01	12:01	12:01	12:01	12:01	12:01	12:01	12:01	12:01	12:01
Availability	0	200	560	500	500	500	500	500	500	500	500	500	500	500

Cancel

Submit

  Weekend  
   Public Holiday  
   NGrid Altered Value

#### Generating Unit Outages

NGrid-ID	Generator	MW Loss	Start Date	Start Time	End Date	End Time
5989	XXXX-1	556.0	17/09/2004	00:00	26/09/2004	00:00

- ▼ GOAMP
  - ☐ Availability
    - ☐ Daily
      - Submit
      - Upload
    - ⊕ Weekly
    - ⊕ Yearly
      - View
  - ⊕ Goamp basic data
  - ⊕ Generator outages
  - ⊕ Goamp reports
  - ⊕ Verification
- ▼ TOPAM
- ▼ ADMIN

# GB Market Data - Transitional provision

- 2-52 week data currently displayed is E&W only, even beyond 1 April 05
  - ref Elexon and BMRA websites areas, and will be until point of GL

## 2-52 Week Ahead Data

Note that from 18/7/03 the numbers included in the calculation of the Surplus assume a float (i.e. zero MW) transfer across the French Interconnector. The actual transfer could be anything between 2000MW import to England & Wales and 2000MW export from England & Wales dependent upon the price differential between England & France. Prior to this date a 2000MW import to England & Wales had been assumed.

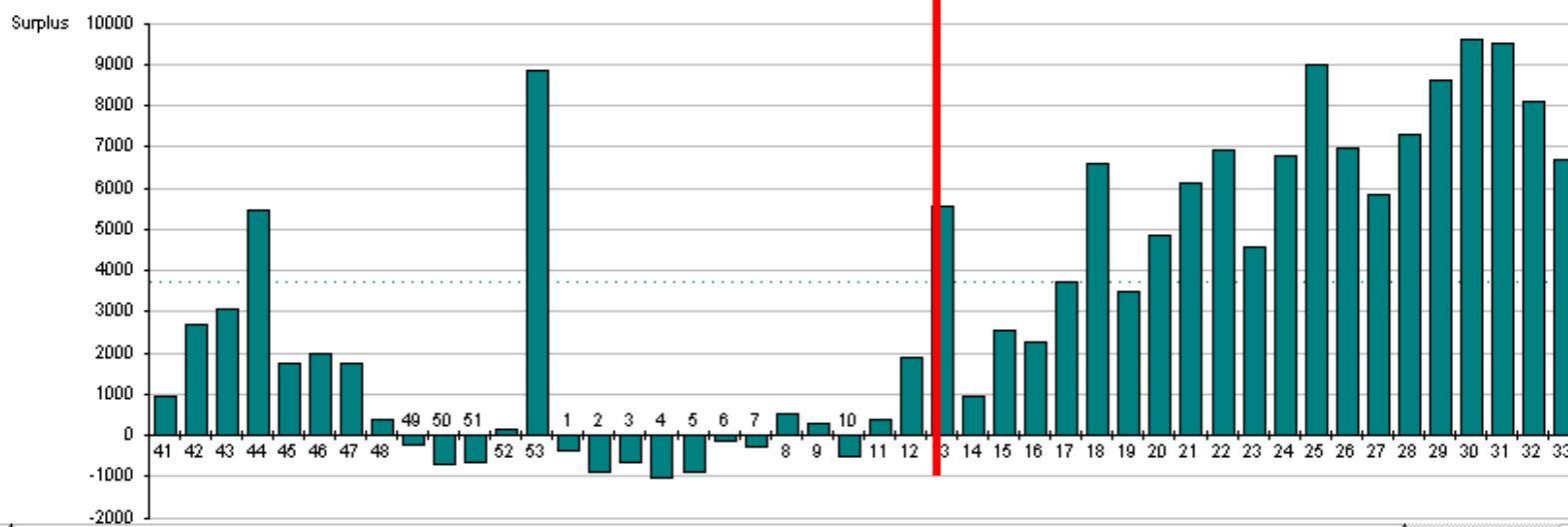
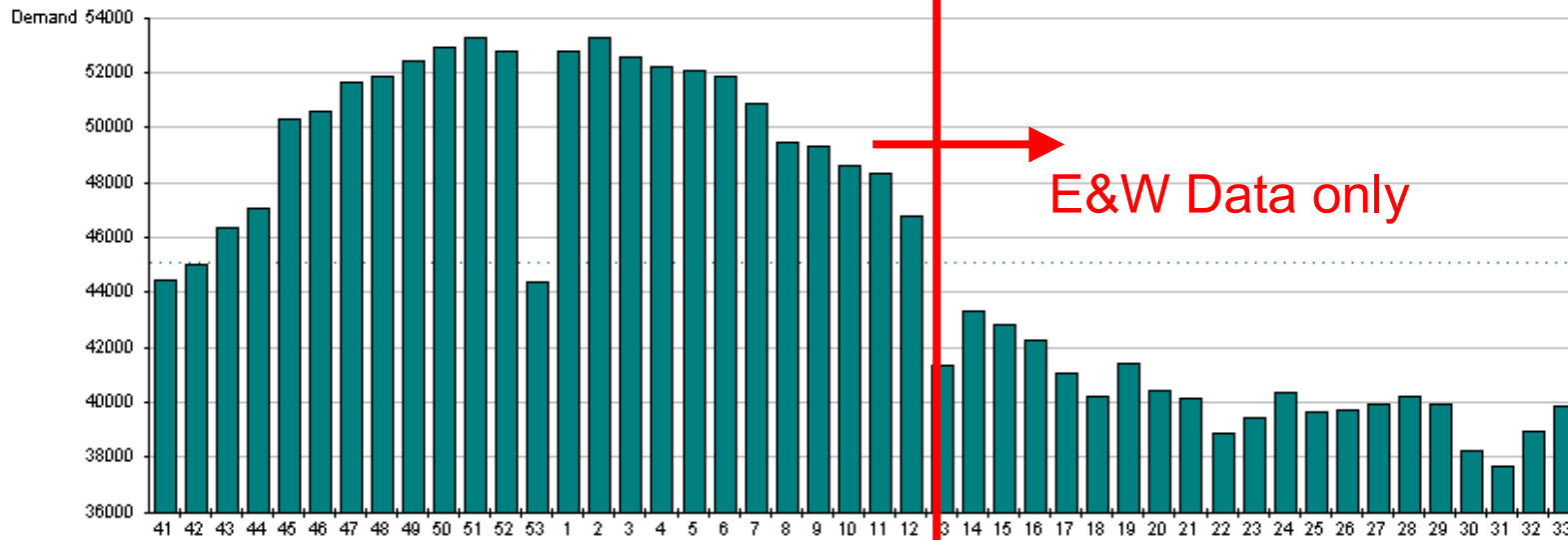


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BETTA Go-Live



Current data in CSV format



# GB Market Data - Transitional Provision

- Plan to commence GB reporting in parallel from late Jan 05 using Elexon website only (separate area) , ref recent Elexon consultation
  - Relies on NGC receiving Scottish User data (OC2) + Moyle data
  - NGC process, historic demand and IT readiness
  - Reduced frequency reporting, manual workaround by NGC and Elexon
- Day ahead & Gate Closure GB data not on BMRA on 31 March
  - NGC require dual E&W and GB system, Single BMRA system
  - BMRA style GB data to be put on Elexon website (subject to conclusion)
- Go-live, switch across NGC BMRA feed from E&W to GB machine

# Balancing Mechanism - Cut over

## Outline Plans

- Virtually no impact on E&W BMUs, dual NGC systems (GB and E&W)
- Tuesday 29th March 04, NGC IT systems outage (EDT)
- Enduring data for Scottish and Moyle BMUs can now be submitted
- NGC staff still using E&W machine, continues to provide BMRA data
- Wednesday 30th March, GB Grid Code BC1 day ahead obligations start
- 2300 hrs first GB gate closure
  - no BMRA gate closure info, GB Bid-Offer acceptances can commence
- 2400 hrs, GB BMRA feed starts, data catch-up
  - GB Bid-Offer acceptances delivery by BMUs starts, **BETTA is Live**

# Transmission Despatch - Cut over

- No impact on E&W users expected
- Working on detail with Scottish TOs in coming months
- Cut-over impact on users in Scotland - expect minimal impact and only in last few hours of pre-BETTA arrangements
- Will be communicating with Scottish users about new switching arrangements and cut-over plans
- GBSO shift staff planning to shadow/role play GB actions in last few days, but with current Scottish Licensee fully responsible for all operational matters and liaison with users to point of Go-live
- **Any cut-over impact on users to be covered in Grid Code consultation early next year**

# What Next

# Further consultations and related work areas

- Implementation of Embedded Exemptable Large Power Stations Conclusions (expected October 2004)
- Further Grid Code consultations expected on OC7 & OC9 (Operational Liaison, Contingency Planning)
  - Guidance note for Scottish users on switching / safety, plus training
  - Black start / Temporary Power Islands, role of TO
- Consultation on turning on GB GC OC2 for Scottish users
- Finalise NGT plans on details of BM Cut-over
- Grid Code consultation on transitional requirements on Users re cut-over (eg. last few days/hours before GL)

# Key activities - coming up

- Testing and Trialling new processes and facilities between GBSO and TOs
- Staff training
- NGC IT interface testing with new BMUs, including testing with Elexon
- Contractual Arrangements being finalised

# Summary

- Major operational impact on Transmission Licensees
  - Over 100 people in NGT project teams, working on detail for 18+ months
  - NGC staff have been training at the Scottish Grid Control Centres
  - 50 staff in Operations need detailed training, most are across 5 shift teams
  - GB transmission system includes Scottish 132kV networks
  - Scottish network and User technical data gathering, models creation/expansion is significant (50% data increase for NGT)
  - Every Operational IT system affected
- Minimal operational impact on E&W users from NGT project
- Bi-lateral discussions with Scottish users on operational issues
- On target for 1 April 2005 Go-Live

# Q&A

Further information:

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