

Electricity Reserve Review

Presentation to DSWG – 2nd August

John Perkins

Contents

- ◆ Background to the reserve review
- ◆ Reserve review process
- ◆ Standing reserve
- ◆ Short term operating reserve
- ◆ Demand Side opportunities in Balancing Services
- ◆ Reserve Review Seminar Details

Why do a reserve review?

- ◆ Balancing Services established when Energy Market rules changed (NETA go-live - 2001)
- ◆ Change to Gate Closure of 1 hour
 - ◆ Pre-Gate BMU Transaction's introduced
- ◆ Reviews of PGBT's and Transparency
 - ◆ Conclusions that wider review of reserve products would be better than specific smaller changes
- ◆ Industry Feedback
- ◆ National Grid decided to carry out a reserve review and engage industry in consultation

Reserve Review Topics

- ◆ What do we procure?
- ◆ How do we procure it?
- ◆ When do we procure it?
- ◆ What is the best/most efficient procurement for National Grid?
- ◆ Single Reserve product or incremental changes to existing products?
 - ◆ Industry view for incremental change

Reserve Review Process

- ◆ Review launched late 2004
- ◆ Industry engagement throughout 2005
 - ◆ Workshops
 - ◆ Bilateral meetings
 - ◆ Update Presentations
- ◆ Conclusions and Consultation Document issued October 2005

Consultation Process

- ◆ National Grid bought forward a set of proposals in consultation document (Oct 2005)
- ◆ Industry support for a number of proposals
- ◆ The most relevant to Demand Side is the changes to Standing Reserve arrangements

Existing Standing Reserve Product

- ◆ At least 3MW (can be aggregated)
- ◆ Response Time of 20 minutes or less
- ◆ Fixed and optional windows
- ◆ Generation or Demand Side
- ◆ User defined recovery period
- ◆ User defined utilisation limits

Existing Standing Reserve Procurement

- ◆ Annual Tender Round
 - ◆ Ad hoc tenders for Supplemental Standing Reserve
- ◆ Contracts for 6 seasons up to 1 year ahead
- ◆ Contractual Process
 - ◆ Standard Contract Terms
 - ◆ Tender Round
 - ◆ Individual Bilateral Contracts

Short-Term Operating Reserve Product

- ◆ Key Change

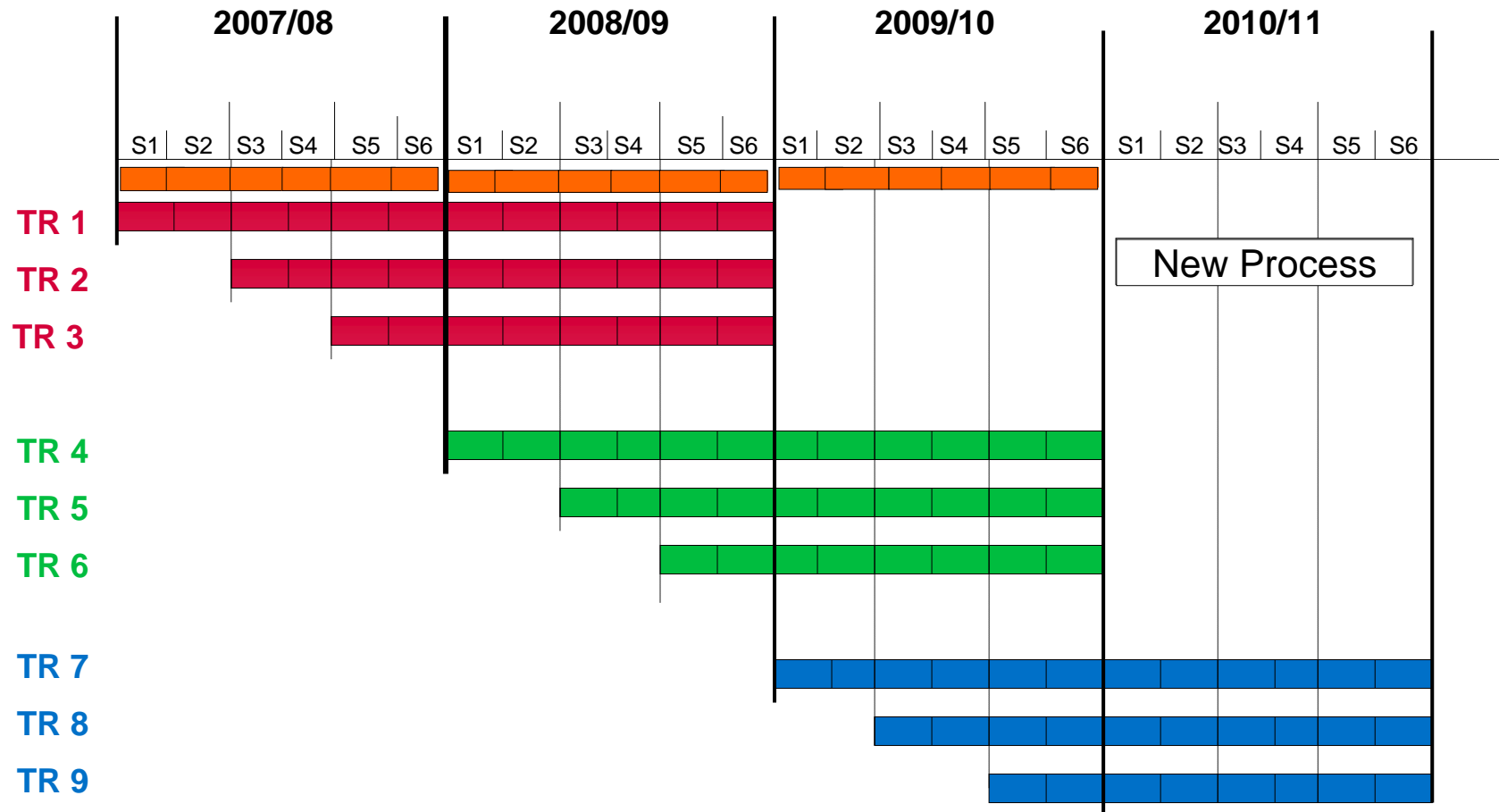
- ◆ Call off in 240 minutes or less
- ◆ Aligns with Operating Reserve Requirement
 - ◆ held from 4hrs ahead to real time
- ◆ Still a requirement for faster more flexible providers
 - ◆ i.e. less than 20 minutes
- ◆ Reduces barrier to participation identified during Demand Turndown trial

STOR Procurement

- ◆ Tender rounds three times/yr
 - ◆ Increased opportunity to participate
- ◆ Contracts for seasons for up to 2 years ahead
 - ◆ Providers can choose between certainty of income vs flexibility
- ◆ Standard set of contract terms
 - ◆ Providers sign up once (i.e. like a pre qualification)
 - ◆ Successful tenders become contractually binding
 - ◆ Reduces time/workload/legal resource for both National Grid and Providers
 - ◆ Reduces time between tender and contract go live
 - ◆ Reduces providers price risk

Differences from Standing Reserve

Tender Round Duration and Process



STOR seminar 5th September 2006

- ◆ **Purpose** - to describe the details of the service and its procurement
- ◆ **Open to all** prospective service providers.
- ◆ **Where** - Ardencote Manor, Claverdon, nr Warwick
- ◆ E-mail : vince.hammond@uk.ngrid.com
Telephone : +44 (0) 1926 653449

Demand Side opportunities in Balancing Services

- ◆ Balancing Mechanism
- ◆ Standing Reserve / Supplemental Standing Reserve
- ◆ Demand Management
- ◆ Fast Reserve
- ◆ Firm Frequency Response
- ◆ Frequency Control by Demand Management (FCDM)