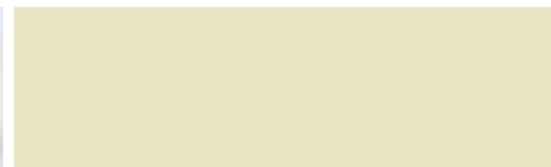
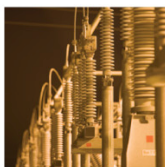


South Transfer Briefing

11 April 2006

TRANSPower



Transfer Limits in South Flow

- Current Situation
 - High Situation
 - Maximise net energy transfer, likely to be 9-10 GWh a day
- Taranaki Export
 - Unlikely to be a major issue with current generation
- Bunnythorpe to Haywards
 - Was the main “pinch point” on flow in 2001
 - Uprating will allow higher rating of 890 MW 24/7 & avoids complexity of runback

Transfer Limits in South Flow

- Wellington and Wellington Load
 - Maybe some BPE and HAY flow restrictions at peak times
 - HVDC transfer difference between BPE to HAY flow and Wgtn load
- HVDC
 - Limit is 626 MW, including one half pole out
 - Reserve requirement vary according to HVDC configuration

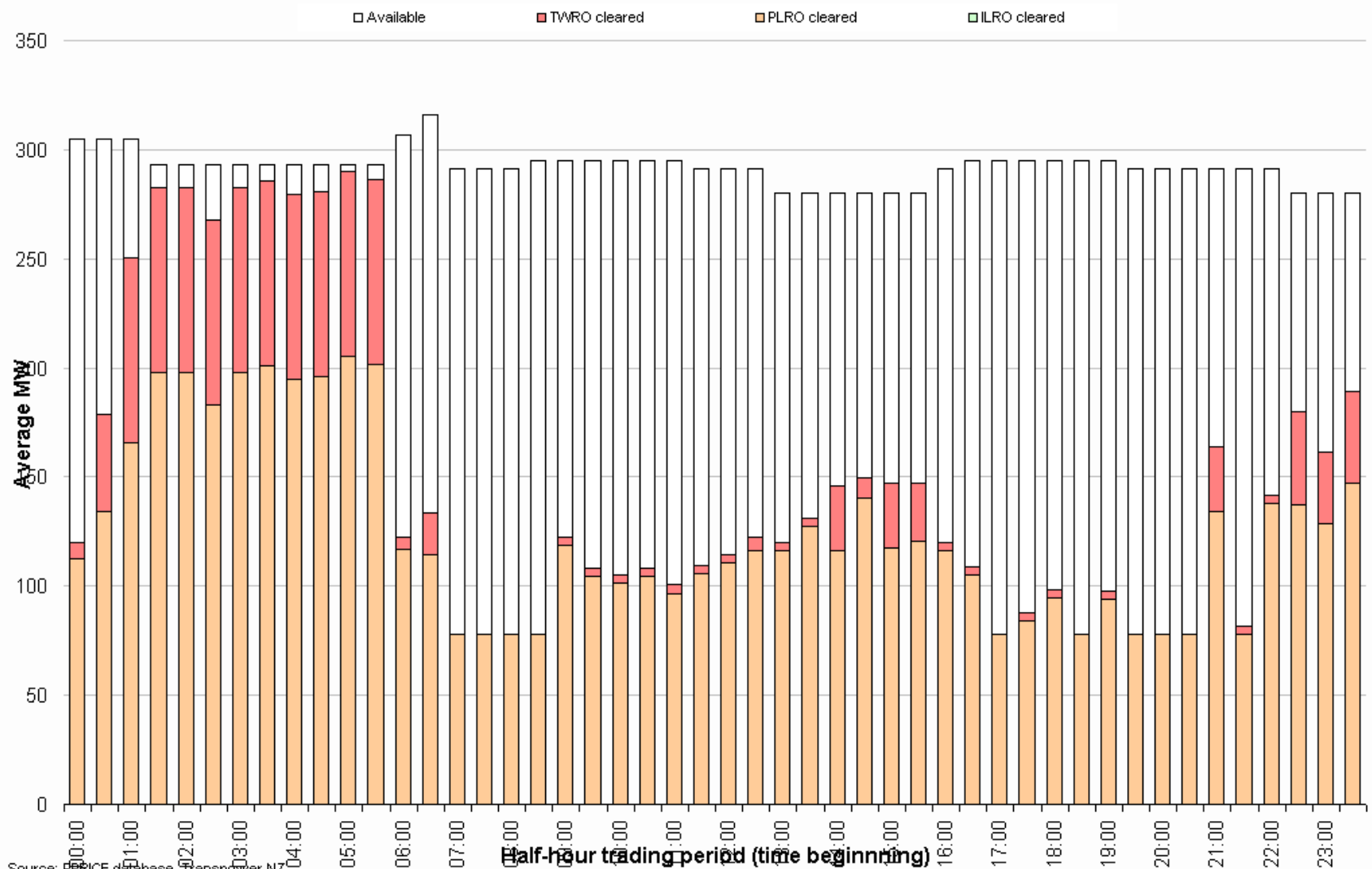
Transfer Limits in South Flow

- Information to aid ability to transfer energy to SI
 - <http://www.transpower.co.nz/?id=4457>
 - HVDC transfer and BPE to HAY flow to come

Reserves

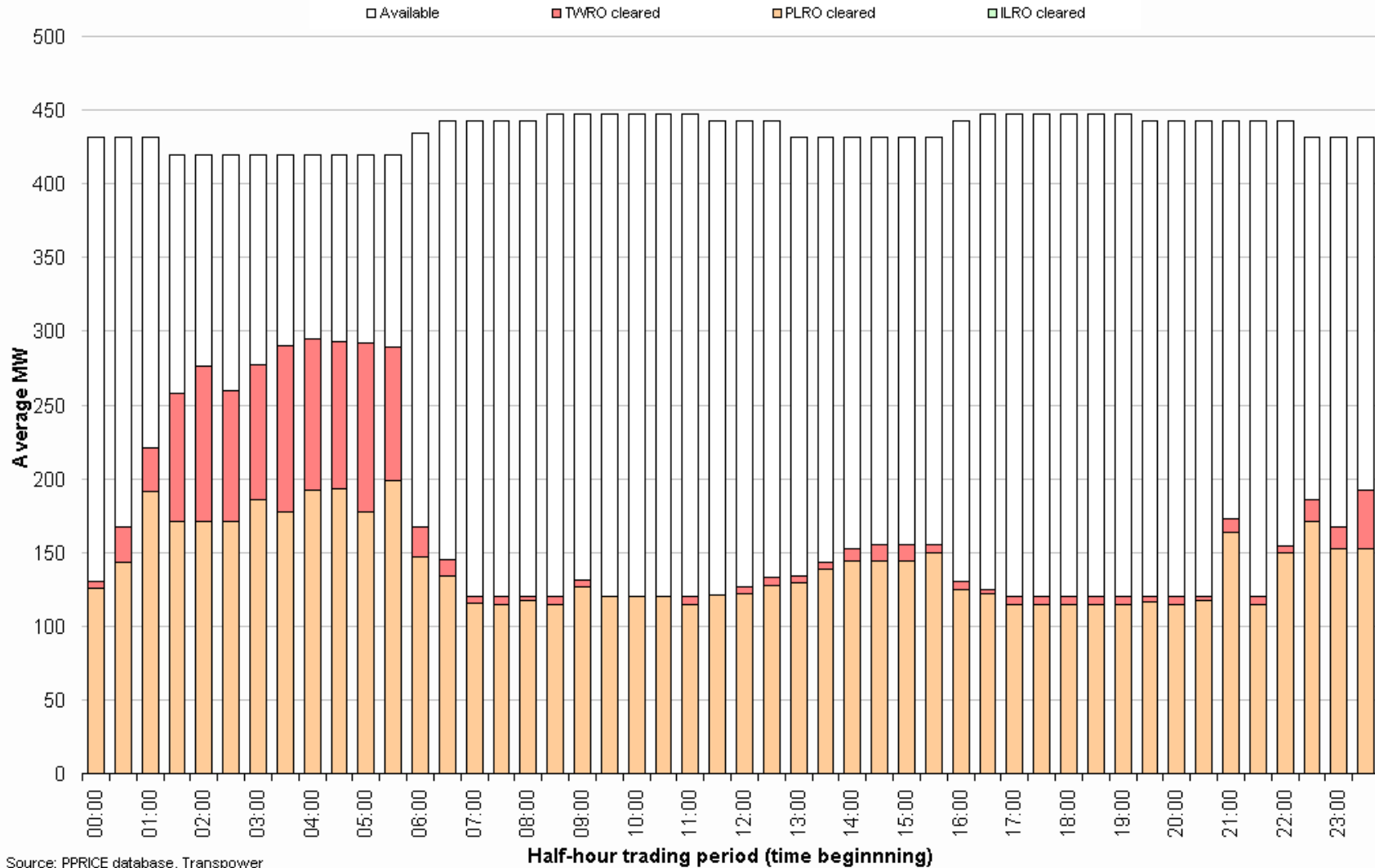
- FIR can be greater than SIR
 - Nature of SI system
- AUFLS now in SI
 - CE risk binding rather than ECE in 2001
- Quantities will change
 - As Pole 2 and half poles switched in/out with change in transfer
 - At high levels of transfer reserves increase due to reduced ramp up of Pole 1

Fast Instantaneous Reserve in the South Island for Sunday, 9 April 2006



Source: PRICE database, Transpower NZ

Sustained Instantaneous Reserve in the South Island for Sunday, 9 April 2006



Source: PPRICE database, Transpower

Outage Planning

- HVDC outages have been reviewed
 - Important that critical maintenance and project work continues.
 - South transfer can lead to a higher incidence of mercury valve arc-backs.
 - A half pole outage (626MW) does not currently impact on south transfer, apart from possible higher reserve requirements with higher transfer levels.
- Future AC outage plans.
 - Outages are being rescheduled to minimise the impact on south transfer whilst still ensuring that essential maintenance or project upgrades continue i.e. BPE-HAY 1 & 2, BRK-SFD
 - For any outage concerns use normal processes i.e. Field Services planners

BPE- HAY 1 & 2 Tactical Upgrade

- As covered in GO CAN on Friday, rating change in early May.
- Thermal rating raised from 530/647 to 807/880 amps.
- Transfer into Wellington over the Bunnythorpe to Haywards route will increase by approx 90 MW.
- SO is reviewing south transfer capability with this increased capability.

Managamarie 110kV Split

- Managamarie ABSS already in service.
- Managamarie 110kV Split will place this GXP on N security.
- We are in discussion with Powerco, seeking their formal agreement for this initiative.