

# Pricing Process Improvement Project (PPIP)

## Presentation to WMAG

14 June 2007

# Background

- Participants have raised a number of concerns regarding the pricing process since the Rules came into force in March 2004.
- Specific events that have raised concerns include the following:
  1. An undesirable trading situation (UTS) claim regarding prices in trading period 36 on 24 April 2004 in the Bay of Plenty after a high spring washer occurred as a result of errors in the pricing process.
  2. A UTS claim relating to events on 29 June 2004 regarding removing reserves from the dispatch objective.
  3. An alleged rule breach leading to debate over whether the inputs into final prices that are based on the 'initial conditions' at the start of each trading period also need to be based on an actual dispatch schedule (a schedule from which dispatch instructions were issued).
  4. A UTS claim regarding prices in trading period 35 on 28 April 2006 as a result of incorrect constraints being modelled in SPD for Wilton T8 interconnecting transformer.
  5. Final prices for trading periods 35 and 36 on 19 June 2006 were delayed as a result of model infeasibilities occurring in provisional prices.
  6. Final prices for trading period 37 on 29 April 2007 were delayed as a result of extreme high spring washer pricing situation (HSWPS).
- Another issue resulting from these events is that the process for identifying and resolving UTS claims is somewhat unclear, as is the relationship between the UTS provisions in the Electricity Governance Regulations 2003 (Regulations) and the Rules.

# Pricing Process Improvement Project (PPIP)

## Objectives

The following objectives are listed in the PPIP project plan presented to WMAG on 17 Aug 2006 and 5 Oct 2006:

1. Clarify the inputs into final prices;
2. Clarify obligations for providing inputs into the pricing process;
3. Develop a process whereby input errors into the pricing process can be corrected, keeping in mind the trade-offs between certainty and accuracy of wholesale electricity (spot market) prices;
4. Develop a methodology for providing better forecasts of final prices, both in advance of, and during, a trading period;
5. Document the process for resolving infeasibilities;
6. Make the pricing rules more understandable; and
7. Review the UTS provisions in the Regulations and improve consistency with the pricing process, system security and the rule breach process.

# Background

The project objectives were grouped under the following workstreams:

- ① Workstream 1: Process improvements and documenting infeasibilities
- ② Workstream 2: Market Design
- ③ Workstream 3: UTS provisions

The workstreams outlined above have been addressed in the order they are listed in

The Market Design Review project should capture the issues identified in workstream 2

# Workstream 1

## Key Objectives and associated PPIP issues

## Direction

## Status

### 1. Understanding the pricing process (Project objective 5 & 6)

-Educational material and communications plan	Awaiting completion of PPIP review	Pending
-New framework/structure for pricing rules	Some drafting has been completed.	In progress
-Paper to explain process for resolving infeasibilities	Paper completed and being internally reviewed by System Operator	Complete

### 2. Resolving ambiguities in input information (Project objective 1 & 2)

-Review the inputs into the pricing process	Table of issues finalised	Complete
-Conceptual analysis of pricing inputs and options	<ul style="list-style-type: none"><li>• Initial conditions vs Dispatchable solution</li><li>• Proposed changes to metering triggers and data estimation</li><li>• Changes to treatment of IG offers in final pricing</li><li>• Availability of pricing inputs</li></ul>	Complete

# Workstream 1 (Continued)

## Key Objectives and associated PPIP issues

## Direction

## Status

### 3. Correcting input errors (Project Objective 3)

-Conceptual analysis of price certainty vs. accuracy

Introduction of interim price period where pricing mistakes can be identified by participants and corrected by the Board.

Complete

### 4. Accurate advance price signals (Project Objective 4)

-methodology for identifying infeasible prices

Limited by software. May provide link to COMIT infeasibilities page

In progress

-Conceptual analysis of use of forecast/dispatch/provisional/final prices as price signal

Significant issues are addressed through DSBF. Revisit after a review of DSBF implementation

In progress

-Conceptual analysis of effectiveness of 5 minute prices as price signal

Initial analysis suggests OK. Further work required on broader range of nodes

In progress

### 5. 5 minute pricing

-Conceptual analysis of use of 5 minute prices as Final Pricing

Review paper complete. Previous barriers to implementation still remain

In progress

# Workstream 2

## Key Objectives and associated PPIP issues

## Direction

## Status

### Workstream 2 - Market Design

- Consider whether it would be appropriate to use price caps and, if so, what the appropriate level of such price caps would be
- Review the mechanism by which reserve and energy prices are co-optimised
- Consider publishing sensitivities of forecast prices (i.e. a deviation schedule)

These issues are more appropriately considered under the Market Design Review project

Pending Market Design Review work

# Workstream 3

## Key Objectives and associated PPIP issues

## Direction

## Status

### Workstream 3 - UTS

- Draft scope for external resource to perform review	Aligned with PPIP plan and work team has completed	Complete
- UTS review by external resource	Seeking external legal advice	In progress
- PPIP team review output of review and draft recommendation for Board		Pending

# Timeline

Key Milestones	Target Dates	WMAG input
PPIP concept paper to the Board	August 2007	✓
Approval to proceed with rule development	August 2007	
Paper informally reviewed by market participants	September 2007	✓
PPIP paper ready for consultation	November 2007	
Industry consultation	November 2007	
Submissions reviewed	February 2008	
Rework (if required)	March 2008	✓
Process improvements rule changes to the Minister	June 2008	
Effective date for revised pricing rules	July 2008	

# Advice from WMAG

- The project team's approach to achieve the project objectives
- Initial feedback on the proposed initiatives to improve the pricing process
- Questions?