

Upper South Island Security

Winter 08 Planning Update

13 June 2008

TRANSPower



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USI - June Meeting Update

Meeting to update participants of current situation:

- Are now into winter
- Continued planning for USI dry year
- Projects update
- DC South scenario has been studied
- Contingency plans activated



USI - Dry Year Issues

- Currently managing the situation
 - Increased HVDC south transfer
 - Have looked at various scenarios with low Zone 3 generation
 - Other options investigated include:
 - Splitting BEN AVI - approx. 5MW loss for Zone 3 voltage stability limit



USI - May/June Update

- **Current Loads**

- Have experienced several days where Zone 3 loads have been close to predicted 2008 Expected loads
- Power factor on these days has not been as low as assumed in studies
- Top 10 as of 10/6/08 (source Habconnect data)

Date /Time	ZONE 3 MW	p.f
06-May-2008 07:50	1080	0.988
26-May-2008 17:50	1079	0.991
29-May-2008 07:40	1076	0.988
26-May-2008 17:40	1074	0.990
30-May-2008 07:40	1074	0.990
06-May-2008 07:40	1074	0.989
06-May-2008 08:10	1071	0.988
30-May-2008 08:20	1068	0.989
09-Jun-2008 08:10	1068	0.989
26-May-2008 18:10	1068	0.991



Winter 08 – Projects Update

Bussing of Islington Timaru Twizel cct at Ashburton

- Project completed 2 June 08
- Permanent constraints work completed
- Outage constraints some work completed, review of remainder in progress

ISL C27

- Has been delayed due to civil works delays
- Current planned commissioning date 10/9/08

ISL SC4

- Currently out on fault
- Anticipated availability is end July - early August



Winter 08 – Generation Assumptions

- Low generation scenario has been studied with a DC South scenario (200MW)

	Medium Generation (MW)	Low Generation (MW)
Arnold	3	3
Argyle	8	8
Cobb	21	9
Coleridge	28	17
Highbank	20	20
Kumara	6	6
Tekapo A	20	10
Tekapo B	140	70
	246	143

Winter 08 – USI Margins

- Winter AM Peak

- Prudent demand = 1160 MW

- DC North Flow

- Indicative transfer limit (0.98 pf) = 1154 MW (scenario 2,3,5)
 - Margin = -6 MW

- DC South Flow

- Indicative transfer limit (0.98 pf) = 1144 MW (low generation scenario)
 - Margin = -16 MW

- Winter PM Peak

- Prudent demand = 1175 MW

- DC North Flow

- Indicative transfer limit (0.985 pf) = 1160 MW (scenario 2,5)
 - Margin = 1160 - 1175 MW = -15 MW

- DC South Flow

- Indicative transfer limit (0.985 pf) = 1164 MW (low generation)
 - Margin = -11MW

Winter 08 – Contingency Plan Progress

Update on contingency plan for winter 2008



Winter 08 – Summary

- With currently available information studies show that USI peak winter demand will continue to be tight but manageable
- AUVLS have been offered and will give additional 30MW (approx.)
- Based on margins available current requirements:
 - USI Contingency planning work-stream activated
 - Contingency plan for USI prepared and issued to participants
 - Feedback from generators regarding likely generation scenarios