TRANSCO WORKSTREAM REPORT

"Entry Capacity Allocation where Demand Equals Supply"
Version 1.0

1.0 Background

At the Network Code Modification Panel Meeting held on 21st May some Panel Members felt that Modification Proposal 0695 required further discussion before it could proceed to consultation and therefore voted that it be referred to the NT&T Workstream for further development.

2.0 NT&T Workstream Meeting – 3rd June 2004

Transco advised the meeting that the May Modification Panel had sent Modification Proposal 0695 to Workstream for further explanation and discussion.

Transco explained that the present Network Code rules adequately cover capacity allocation in scenarios where demand for capacity is equal to that available and where demand is elastic but considered the Network Code rules needed to be addressed where demand equals supply and demand is inelastic i.e. demand is constant over a number of price steps. Transco used examples to demonstrate how a change to the Code rules would affect capacity allocation and explained that the change would bring the Incremental Entry Capacity Release Methodology Statement (IECR) and the Network Code into line in the scenario where demand equals supply and would allow allocation where the demand signal perfectly matches supply. Transco explained that the IECR was in the process of being reviewed which included that it should be made clear in the IECR that in considering the level of capacity that should be released it should consider the highest price step at which demand was greater than **or equal** to supply.

The example scenarios as presented at the Workstream are included in this report for information. Tables 1(a), 1(b) and 1(c) refer to an ascending price schedule and Tables 2(a), 2(b) and 2(c) refer to a descending price schedule:

- Tables 1(a) and 2(a) show how capacity would be allocated under the existing Network Code rules with the IECR rules as presently written i.e. by considering the level of capacity that should be released at the highest price step at which demand was (only) greater than supply.
- Tables 1(b) and 2(b) show how the allocation would differ with the IECR rules clarified such it considers the highest price step at which demand was greater than **or equal** to supply.
- Tables 1(c) and 2(c) show how the allocation would differ with the IECR clarified and the Network Code rules changed under this proposal, 0695.

Transco went on to explain that by clarifying the IECR and implementing proposal 0695 it considered that the optimum (maximum) amount of capacity would be considered for release and would be allocated at a price at the level where demand perfectly matched supply i.e. the allocation scenario as shown in Tables 1(c) and 2(c).

A discussion took place on whether it was more appropriate for capacity to be allocated at the lower price where demand is equal to supply in the inelastic demand schedule. For instance under proposal 0695 in Table 1c it is proposed that the allocation price should be P_2, where demand precisely equals supply. A point of view was expressed that allocation should take place at the lower price, P_1, because that is the price that Transco should be willing to accept to make the capacity available. Transco believe that allocation should take place at P_2 because that is the cost reflective price of making that particular incremental volume of capacity available. The lower, P_1 price, is only cost reflective when releasing a smaller increment (30 units).

Transco also stated that capacity allocation in the LTSEC auctions to date were not affected by the proposed rule change - the situation had not yet arisen where demand is inelastic and equals supply and the modification proposal was intended to cover any future situation where such a supply-demand scenario were to arise.

3.0 Conclusion

The workstream concluded that sufficient development had now been undertaken to recommend to the June 2004 Modification Panel that Modification Proposal 0695 should now proceed to consultation.

The workstream also concluded that timescales were short if this proposal was to be implemented prior to the September 2004 LTSEC auctions and that it should be recommended to the Modification Panel that the consultation should take place over a shortened timescale of 10 days to issue the draft modification report, 10 days for Users to respond to the consultation and 10 days for Transco to issue the final modification report.

MODIFICATION PROPOSALS 0695 – ASCENDING PRICES

Table 1a. IECR D>S; Existing Network Code Rules

Available (kWh)	Price Label	Price (p/kWh)	Max Bid Capacity (kWh)
150	P_5	0.05	20
120	P_4	0.04	35
90	P_3	0.03	40
60	P_2	0.02	60
30	P_1	0.01	60
0	P_0	0.00	80

IECR:

Highest price step where D>S

Set Supply = 30

NWC:

Price where D first less than or equal to supply

Price P_5
Allocate 20
Unsold 10

Table 1b. IECR D>=S; Existing Network Code Rules

Available (kWh)	Price Label	Price (p/kWh)	Max Bid Capacity (kWh)
150	P_5	0.05	20
120	P_4	0.04	35
90	P_3	0.03	40
60	P_2	0.02	60
30	P_1	0.01	60
0	P_0	0.00	80

IECR:

Highest price step where D≥S

Set Supply = 60

NWC:

Price where D first less than or equal to supply

Price P_1
Allocate 60 at P_1
Unsold 0

Table 1c. IECR D>=S; Mod 0695 Network Code Rules

Available (kWh)	Price Label	Price (p/kWh)	Max Bid Capacity (kWh)
150	P_5	0.06	20
120	P_4	0.05	35
90	P_3	0.04	40
60	P_2	0.03	60
30	P_1	0.02	60
0	P_0	0.01	80

IECR:

Highest price step where D≥S

Set Supply = 60

NWC:

Price where D equals supply

Price P_2
Allocate 60 at P_2
Unsold 0

MODIFICATION PROPOSAL 0695 – DESCENDING PRICES

Table 2a. IECR D>S; Existing Network Code Rules

Available (kWh)	Price Label	Price (p/kWh)	Max Bid Capacity (kWh)
150	P_5	0.01	60
120	P_4	0.02	60
90	P_3	0.03	60
60	P_2	0.04	60
30	P_1	0.05	50
0	P_0	0.00	80

IECR:

Highest price step where D>S

Set Supply = 30

NWC:

Price where D last equal to or less than supply

D always > S
Price P_1
Pro-rate 50

Table 2b. IECR D>=S; Existing Network Code Rules

Available (kWh)	Price Label	Price (p/kWh)	Max Bid Capacity (kWh)
150	P_5	0.01	60
120	P_4	0.02	60
90	P_3	0.03	60
60	P_2	0.04	60
30	P_1	0.05	50
0	P_0	0.00	80

IECR:

Highest price step where D≥S

Set Supply = 60

NWC:

Price where D last equal to or less than supply

Price P_5
Allocate bids at P_5
Unsold =0

Table 2c. IECR D>=S; Mod 0695 Network Code Rules

Available (kWh)	Price Label	Price (p/kWh)	Max Bid Capacity (kWh)
150	P_5	0.01	60
120	P_4	0.02	60
90	P_3	0.03	60
60	P_2	0.04	60
30	P_1	0.05	50
0	P_0	0.00	80

IECR:

Highest price step where D≥S

Set Supply = 60

NWC:

Price where D equal to supply

Price P_2
Allocate bids at P_2
Unsold =0