



**NATIONAL ELECTRICITY CODE
ADMINISTRATOR LIMITED**

ACN 073 942 775

Level 5, 41 Currie Street

Adelaide SA 5000

Telephone (08) 8213 6322

Facsimile (08) 8213 6300

9 February 2001

FILE No

DOC:

Mr M Rawstron
General Manager
Regulatory Affairs - Electricity
ACCC
PO Box 1199
DICKSON ACT 2602

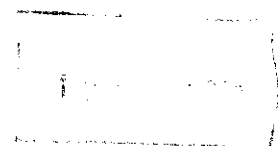
Dear Mike,

SNOWY HYDRO TRADING PTY LTD: EXTENSION OF NOTIONAL UNIT DEROGATION

This letter recommends a conditional, up to six month extension of the existing chapter 8 derogation that allows Snowy to bid its generation capacity as if from a single (notional) generating unit, rather than having to place separate bids for each unit. The detailed terms of the derogation are enclosed. The ACCC initially approved the derogation, including on the advice of the consultant it engaged to assess the case for this amongst other proposed derogations, on the basis that it was satisfied that Snowy would otherwise be unable to comply with the Code until it had time to upgrade its control and communication systems.

The Snowy is currently in the process of replacing its data acquisition (DAC) and automatic generation control (AGC) systems, and its IDP communications link with NEMMCO. It is also developing an aggregate unit planning and bidding (AUPAB) system. Delays have, however, been encountered in that programme. Snowy Hydro Trading Pty Ltd (SHTPL) has therefore asked for a six month extension to the derogation, from its existing expiry date of 31 March to 30 September 2001. It argued in support of the proposed extension that it will not impact other market participants nor put system security at risk. Conversely, however, it argued that for the Snowy to be required to operate on an aggregate unit basis without the necessary systems in place would pose considerable risk to its ability to provide ancillary services and would significantly impact on its operational efficiency and on its ability to meet its water inflow management and diversion obligations.

We received three comments in response to consultation on the proposed extension: from Enron Australia Finance Pty Limited, NEMMCO and Southern Hydro Partnership. Copies of those comments are enclosed. Enron argued that SHTPL would be afforded a market advantage as a result of extending the derogation because of its ability to bid significantly more than ten price bands. NEMMCO challenged each of SHTPL's arguments in support of the derogation and reiterated the reasons for its consistent opposition in principle to notional units. It also foreshadowed that, if the derogation is extended, it may need to revisit the terms of its existing notional unit agreement with SHTPL in the light of planned changes to the market and its operational experience. Southern Hydro Partnership pointed out that it had changed its own procedures and systems, rather than seek an equivalent derogation, ahead of market launch. It expressed concern about the lack of transparency as a result of the derogation for SHTPL. It argued that SHTPL had had ample time already to upgrade its control and communication system, and that the derogation should not therefore be extended.





The ACCC's authorisation of the existing derogation expressly recognised the potential competitive advantage it affords SHTPL to which Enron has again drawn attention in its comments. SHTPL effectively has 50 bidding bands available to it under the terms of the derogation. Conventionally, however, it makes use of only 20 of those bands. This compares to, for example, the 40 bands Loy Yang Power has available for its 2,000 MW of capacity across four units and the 300 bands SHTPL itself will have available for its almost 3,700 MW across its 30 units once the derogation expires.

Much more substantive are the uncertainties the current arrangements create, in particular in short-term PASA and pre-despatch, for forecasting power transfer capabilities across the Snowy. We drew attention to those uncertainties in inviting comments on the proposed extension of those arrangements and all three comments we received underlined those concerns. NEMMCO's comments also drew attention to occasions in November 2000 and January 2001 when those concerns became real. The derogation was, however, authorised in the first instance only because NEMMCO was satisfied that adequate safeguards could be put in place through what became the notional unit argument between it and SHTPL. NEMMCO has said it will wish to revisit that agreement in the light of experience, including of last November and this January, to improve its operation if the derogation is extended. Whilst less than ideal, we are satisfied that a renegotiated agreement can provide appropriately enhanced safeguards.

We are satisfied that the delays to the replacement of Snowy's data acquisition and other relevant systems are genuine and genuinely outside SHTPL's control. It is not an option simply to insist that the new systems should nonetheless be in place by the existing expiry date for the derogation of 31 March. We therefore recommend that the ACCC should agree to an extension to that existing derogation on condition that:

- ◆ SHTPL and NEMMCO negotiate the necessary amendments to the notional unit agreement so that it provides appropriately enhanced safeguards for the market; and
- ◆ in order to ensure that the derogation does not remain in place longer than is absolutely necessary, SHTPL should report to us monthly from 31 March on progress with acceptance testing of the new systems. Those reports should include an assessment of the scope for introducing those systems in advance of an absolute deadline of 30 September.

I am sending copies of this letter to Terry Charlton (SHTPL), Raymond Yeow (Enron Australia Finance Pty Ltd), Brian Spalding (NEMMCO) and Rob Jackson (Southern Hydro Partnership). I am also placing a copy on our website (www.neca.com.au).

Yours,

Stephen Kelly
Managing Director



**Extract from National Electricity Code
Derogation granted to Snowy Hydro Trading Pty Ltd**

1. Continuing Effect

In this *derogation*, a reference to a particular *Generator* in relation to a *generating unit* at any time after the *Code commencement date* is to be taken as a reference to the person or persons who is or are (or who is or deemed to be) from time to time registered with *NEMMCO* as the *Generator* in respect of that *generating unit* for the purposes of the *Code*.

2. Notional Unit Derogation for Snowy Hydro

For the purposes of Chapter 3 of the *Code* (with the exception of clause 3.8.3) and Chapter 4 of the *Code* (except for clause 4.11.1), Snowy Hydro Trading Pty Ltd ("**Snowy**") shall be entitled to submit *dispatch offers* on the basis of notional units agreed with *NEMMCO* and each such notional unit shall, for those purposes, be deemed to be a *scheduled generating unit*, subject to Snowy agreeing with *NEMMCO* in writing the basis upon which each such notional unit is to be offered and treated for the purpose of *dispatch* and the procedures to be followed concerning the operation of Snowy *generating units*, and Snowy complies with such agreement.

3. Cessation of derogation

This derogation will cease to apply in relation to Snowy:

- (a) after the end of 31 March 2001; or
- (b) the day which is, agreed in writing between *NECA*, *NEMMCO* and Snowy as the day on which the control system to be installed by Snowy to enable it to submit offers for *scheduled generating units* on the basis of the *generating units* in respect of which Snowy is registered with *NEMMCO* as a *generator* becomes operational,

whichever is earlier.



Enron Australia Finance Pty. Limited
ACN 082 245 921

Level 21
9 Castlereagh Street
Sydney NSW 2000
Australia
Tel: 61 (02) 9229 2300

31 January 2001

Mr Alex Cruickshank
NECA
Level 5, 41 Currie St
Adelaide SA 5000

By e-mail: acruickshank@neca.com.au

Dear Mr Cruickshank

Snowy Hydro Trading Pty Ltd – Extension of Notional Unit Derogation

Enron Australia welcomes the opportunity to provide comments to NECA on the proposed conditional extension of the existing derogation to Snowy Hydro Trading Pty Ltd (“Snowy”).

Enron is of the view that the extension of the unit aggregation derogation is questionable in light of recent market events and the future market implementation of ancillary services.

Market Risk

We are of the opinion that aggregation of multiple units constitutes a market risk to Snowy and other market participants.

This market risk has been highlighted by recent events. In January 2001, there was a separation of the NSW region from the Victorian region which appeared to occur in the middle of the notional aggregated unit. Effectively, the line between the two main grid connection points to which Tumut and Murray are connected to the network was unavailable to transfer energy.

This event shows that due to the current derogation it was not possible for the market systems to dispatch correctly regardless of how many constraints had been imposed. Had the Snowy units not been aggregated, it could well have been possible to overcome the transmission failure by bidding to one of the other connection points which form part of the aggregated unit.

Bidding Advantages

The aggregation also affords Snowy with certain bidding advantages that are not available to other market participants, namely the ability to bid its capacity using any one of 5 different bid curves, each with 10 price bands.

Unit aggregation at other stations has resulted in one notional unit that is allowed to bid in 10 price bands per day. Currently, the bid prices submitted for dispatch by Snowy have a very high degree of flexibility such that they effectively have 50 price bands. For example, on 28 January 2001, 42 price bands were specified, as indicated in Figure 1.0:

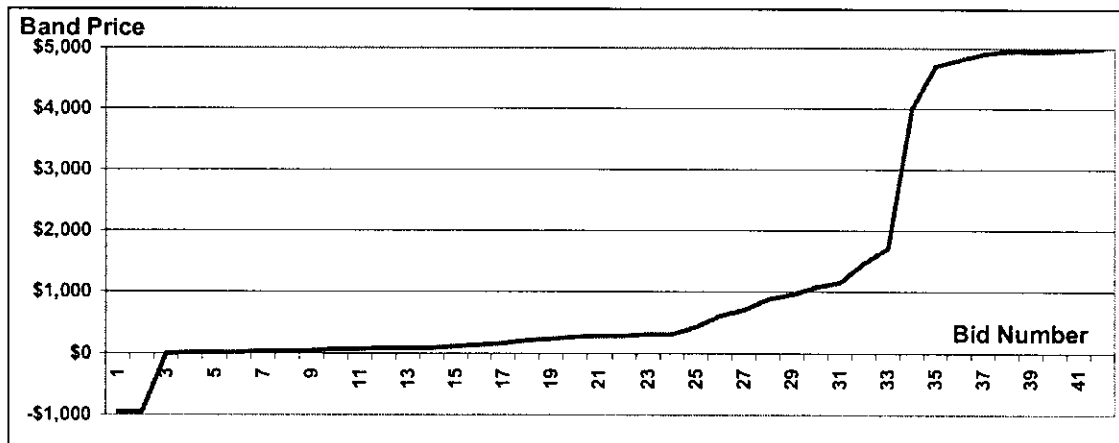


Figure 1.0

In addition, the price bands in the normal dispatch range have a number of small variations between units with 3 primary steps, which allows for fine control of maintaining dispatch at a higher price than with fewer bid bands. See Figure 2.0.

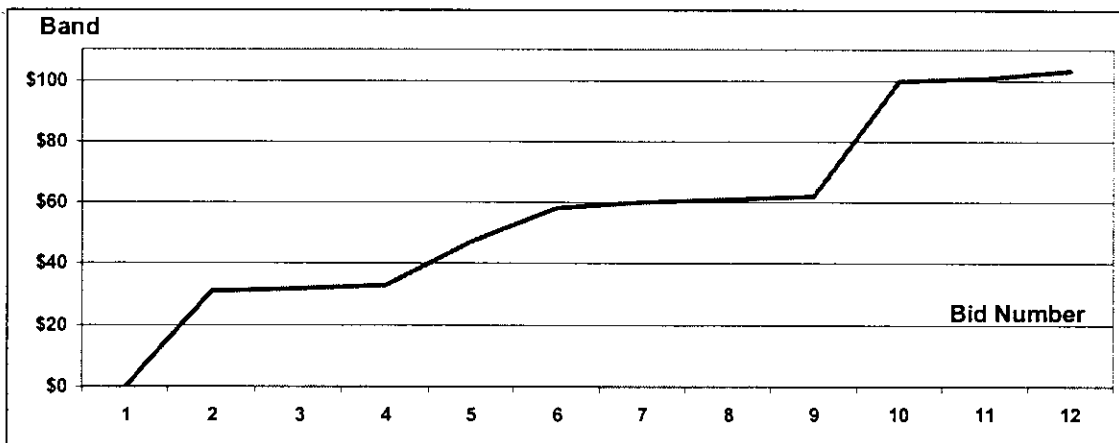


Figure 2.0

The market advantage afforded to Snowy as a large single notional unit with the capability to bid significantly more than 10 price bands is an advantage that other market participants do not possess because a higher priced dispatched volume can be obtained through the finer granularity of its bid prices.

Ancillary Services

Ancillary services are currently scheduled to be market dispatched by July 2001 with a period of time allocated for a participant trial of 2 months starting on 16 March 2001.

Under the current dispatch arrangements the participant trial will not be reflective of the final implementation as the aggregated units will become disaggregated some time after the market implementation. This may not be seen as an issue as in theory it should be the equivalent of new market entrants, however the large size of Snowy's ancillary service capabilities questions the capability of dispatch into the market under the new ancillary service market arrangements. This issue could be partially addressed by ensuring that any extension to the derogation would not extend beyond the implementation date of the ancillary services market.

Within the proposed ancillary service market a generator has the capability of dispatching ancillary services in a similar manner to energy. However, the capabilities of a notional unit with 30 physical generators would be problematic to verify post dispatch and would decrease the transparency of this new market.

Additionally, the bidding advantage of aggregation would also be applicable to the ancillary services market.

Conclusion

For the reasons stated above, Enron is of the view that the derogation detrimentally affects the efficient operation of the market. Accordingly, we question whether an extension to the derogation should be granted. Should NECA decide to grant an extension, we believe it is important to ensure that any time extension should be for only such period of time as is absolutely necessary.

Should you wish to discuss any of the above matters further, please do not hesitate to contact me on (02) 9229 2407.

Yours faithfully

Raymond Yeow
Director Structuring



National Electricity Market
Management Company Limited
ACN. 072 010 327

1 February 2001

Mr Stephen Kelly
Managing Director
NECA
Level 5, 41 Currie St
Adelaide SA 5000

Dear Stephen

EXTENSION OF NOTIONAL UNIT DEROGATION

Thank you for your letter of the 15 January on this subject. This letter responds to your letter and also forms NEMMCO's formal response to your consultation on the proposed extension to the Snowy notional unit derogation.

NEMMCO has always had a significant number of concerns and continues to have these concerns regarding the Notional Unit Derogation. Based upon our current understanding of Snowy Hydro Trading Pty Ltd's (SHTPL) position and our system operation responsibilities we oppose the extension of the derogation. It is essential that fully reasoned arguments be put forward to justify requests for an extension of this derogation in order to provide for an effective and balanced consultation process.

NEMMCO continues to fail to understand why SHTPL cannot operate its generators as aggregated units until its control and communications systems are replaced. SHTPL's present facilities appear to provide the flexibility to dynamically allocate dispatch targets for any notional generating unit among its physical generating units in an optimal way. NEMMCO believes that arguments should be provided to demonstrate why these existing systems could not be configured to allocate generation into aggregated units based upon transmission connection points.

NEMMCO does not accept that this extension would not "put system security at risk". Whilst NEMMCO has been able to satisfactorily maintain system security, the arrangements are not optimal, particularly as far as the transmission system within the Snowy Region is concerned. Under normal conditions this limitation can be managed but under the emergency conditions that existed on 2 November 2000 and 15 January 2001, the notional unit arrangement caused delays which could well have proved very significant and could have resulted in widespread impacts. Although NEMMCO has SCADA data on the physical generation, we do not have direct dispatch of the loadings at the main connection points. The individual loadings at these points cannot be directly set to control the transmission loadings and to satisfy constrained operation.

NEMMCO is unable to see how having the Snowy generation operate on an aggregate basis would "pose considerable risk to its ability to provide ancillary services". Our current ancillary services agreement with SHTPL already provides for ancillary services to be provided on an aggregated basis.

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Level 24, Santos House
91 King William Street
Adelaide SA 5000
Telephone: (08) 8233 5890
Facsimile: (08) 8233 5858

Carlingford Office
241-245 Pennant Hills Road
Carlingford NSW 2118
Telephone: (02) 8858 5100
Facsimile: (02) 8838 5260

Mansfield Office
311 Wecker Road
Mansfield QLD 4122
Telephone: (07) 3347 3100
Facsimile: (07) 3347 3200

Melbourne Office
Level 16
461 Bourke Street
Melbourne VIC 3000
Telephone: (03) 9648 8777
Facsimile: (03) 9648 8778

Sydney Office
Level 12, Hudson House
131 Macquarie Street
Sydney NSW 2000
Telephone: (02) 9240 9100
Facsimile: (02) 9251 6380

No convincing arguments have been offered to demonstrate that by requiring Snowy generation to operate on an aggregated basis would "significantly impact on its operational efficiency and on its ability to meet its water flow management and diversion obligations". Have interim measures been explored that could be put in place by Snowy to meet these objectives until its new aggregate unit planning and bidding system is in place? There have been a number of cases where NEMMCO has had to establish interim systems to address Code Changes.

Accepting an argument on the grounds of impacts on operational efficiency runs the risk of creating a situation where this derogation might be seen as being extended to maintain a participant's commercial advantage. Similarly using an argument of necessity to meet water inflow management and diversion obligations runs the risk of being seen to be favouring a particular energy source or technology. The efficiency of the market as a whole needs to be balanced against the continuing commercial interests of any one party.

NEMMCO has consistently argued against the concept of notional units, its arguments are based upon the following concerns:

1. *NEMMCO's ability to maintain power system security may be compromised.* The use of notional units, particularly across connection points as is the case at Snowy, reduces the ability of NEMMCO to accurately forecast power system security violations in pre-dispatch which will in some instances hamper NEMMCO's ability to manage power system security. For instance SHTPL could rearrange the physical distribution of its generating output whilst still meeting the notional unit dispatch targets. In some cases this could create without warning an insecure operating state. In other cases throughout the NEM the dispatch process will attempt to automatically address this at the next dispatch interval. However in the case of Snowy this needs to be detected by NEMMCO and then for NEMMCO to address this situation via verbal communication with Snowy with resulting delays. This risk became quite real during the operational emergency on 2 November 2000.
2. *Management of Power Flows on Snowy Lines.* Loadings on Snowy lines cannot be directly managed through the dispatch process, as can be done everywhere else. This creates an inherent weakness in the dispatch process as additional analysis and communication is required. Under normal conditions and for isolated cases this is not a major issue but in emergency conditions, or if notional units become more widespread, this could become a critical issue. This risk was particularly emphasised in the case of the operating emergency on 15 January 2001.
3. *Limiting Competition in the NEM.* The use of notional units within the Snowy Region means that NEMMCO must use conservative assumptions when forecasting interconnector limits in pre-dispatch. Feedback from Participants to NEMMCO has indicated that this is at times is a significant issue to them in managing their contract positions, and on the transparency of the operation of the market and power system.
4. *Effect on Loss Factors.* Use of Notional Units for the Snowy region means that the effect of intraregional losses is not properly accounted for in the Snowy region in the same manner as it is for all other regions.

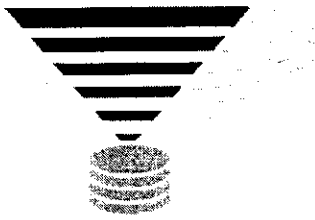
Thus in summary NEMMCO remains opposed to this derogation and to any proposed extension of it. NEMMCO also believes that there has been a lack of information provided to the market regarding any substantive arguments as to why the derogation should be extended.

A final issue is that the agreement between NEMMCO and SHTPL, which is a requirement under the derogation, was entered into by NEMMCO on the understanding that the derogation would cease on or before 31 March 2001. If this derogation is extended then NEMMCO may need to reconsider the present Notional Unit Agreement with SHTPL in light of the changes to the Market that are due in mid 2001 and recent experience on operational issues.

Yours sincerely


Brian Spalding
General Manager Power Exchange

c.c. Alex Cruickshank – NECA



Southern Hydro

30 January 2001

Alex Cruickshank,
NECA,
Level 5,
41 Currie Street,
Adelaide SA 5000

By Email acruickshank@neca.com.au

Dear Alex,

Snowy Hydro Trading Pty Ltd: extension of notional unit derogation

Prior to market launch Southern Hydro was bidding into the market as notional units. Southern Hydro also had the same issues of water management as Snowy Hydro Trading and requested that the Code be amended to allow for notional units. For reasons of market transparency this was not accepted and rather than ask for a derogation we made the necessary changes to our procedures and systems to enable us to meet the Code requirements.

Snowy Hydro Trading Pty Ltd (SHTPL) were aware that they could not meet Code requirements well before Market start and hence chose to request a derogation that would allow them to operate as Notional Units until such time as their systems could be updated.

Southern Hydro is concerned with the lack of transparency in the market with such a large participant located in such a strategic spot in the network bidding as a number of notional units and not being required to disclose its actual physical operating intentions. Southern Hydro is concerned with the impact of this derogation on short-term PASA, pre-dispatch and interconnector constraints. Southern Hydro's ability to manage its position in the market is limited by the lack of transparent information on the SHTPL physical generation units and how they are performing.

SHTPL have had ample lead-time to upgrade its control and communication systems and should not be given any extension to their derogation.

Regards

Rob Jackson
Manager Market Development and Regulation
Southern Hydro
Phone (03) 9616 1011
Fax (03) 9616 1029

Southern Hydro Partnership (ABN 86 076 691 481)

[a partnership comprising Alliant Energy Hydro Pty Ltd (ACN 080 429 901),

Alliant Energy Southern Hydro Australia Pty Ltd (ACN 080 810 546) and SSAU Hydro Holdings Pty Ltd (ACN 080 735 815)]

Level 13, 500 Collins Street, Melbourne Vic 3000 Telephone (03) 9616 1020 Facsimile (03) 9616 1029

FORM E

COMMONWEALTH OF AUSTRALIA

Trade Practices Act 1974 - Sub-section 88(8)

EXCLUSIVE DEALING:

APPLICATIONS FOR AUTHORISATION

To the Australian Competition and Consumer Commission:

Application is hereby made under sub-section 88(1) of the *Trade Practices Act 1974* for an authorisation under that sub-section to engage in conduct that constitutes or may constitute the practice of exclusive dealing.

-
1. (a) **Name of applicant** (*See National Electricity Code Administrator Direction 2*) Limited (ACN 073 942 775) (**NECA**)
- (b) **Short description of business carried on by applicant** Administration of the National Electricity Code.
- (c) **Address in Australia for service of documents on the applicant** Mr Stephen Kelly
Managing Director
National Electricity Code Administrator
Limited
Level 5
41 Currie Street
ADELAIDE SA 5000
Phone: (08) 8213 6321
Fax: (08) 8213 6300
2. (a) **Description of the goods or services in relation to the supply or acquisition of which this application relates** The goods or services in relation to the supply or acquisition of which this application relates is electricity sold into the National Electricity market, as affected by the derogation set out in the NECA letter submitted with this Form E, regarding operation of all Snowy generating plant as a single notional unit
- For the avoidance of doubt, this application relates only to the listed derogation and not to

the Code as a whole.

- (b) **Description of the conduct that would or may constitute the practice of exclusive dealing (See Direction 4)**

The supply of electricity or provision of network services on condition that both the acquisition and resale is in accordance with the Code.

The acquisition of electricity or network services on the condition that the supply is in accordance with the Code.

Refusing to supply or acquire electricity or network services because the supplier/acquirer has failed to comply with the Code.

Aiding, abetting, procuring, counselling or inducing any corporation to engage in any of the above-mentioned conduct.

3. (a) **Class or classes or persons to which the conduct relates**

The classes of persons are:

- (i) the applicant;
- (ii) Code Participants, being the National Electricity Market Management Company Limited (ACN 072 010 327) ("NEMMCO") and every person registered with NEMMCO as a Code Participant and whose names and addresses are listed in Appendix A to this Form E; and
- (iii) any other subsequent parties to the Code, being all parties who register with NEMMCO under the Code as a Code Participant.

This application is made on behalf of each person identified in Appendix A to this Form E. In addition:

- (a) the authorisation being applied for by this application is, in accordance with section 88(8AA) of the Act, to be expressed so as to apply to the

applicant and every person who is registered with NEMMCO as a Code Participant as at the date of this application (being the persons identified in Appendix A to this Form E), and in relation to each other person who becomes a party to the Code by registering with NEMMCO as a Code Participant; and

- (b) this application is expressed to be made also in relation to other proposed contracts , industry codes of practice, arrangements or understandings that will be in similar terms to the Code within the meaning of sections 88(13), 88(14) and 88(15) of the Act, being each of the proposed contracts, industry codes of practice, arrangements or understandings to be made between a person who registers with NEMMCO under the Code as a Code Participant, the applicant, and each existing participant under the Code at that time.

The names of the parties to each other proposed contract, industry code of practice, arrangement or understanding which are known at the date of this application are the applicant and Code Participants (being NEMMCO and each person who is registered with NEMMCO as a Code Participant as at the date of this application and identified in Appendix A to this Form E). Other than to state that the other parties to each proposed contract, industry code of practice, arrangement or understanding for the purposes of section 88(13), (14) and (15) of the Act will be persons who register with NEMMCO under the Code as a Code Participant and each existing Participant under the Code at that time, the names of

those other parties are not known as at the date of this application.

(b) Number of those persons

(i) At present time

NECA	1
NEMMCO	1
Generators	30
Customers	38
Network Service Providers	21
Special Participants	18

(ii) Estimated within the next year

Unknown

(c) Where number of persons stated in item 3(b)(i) is less than 50, their names and addresses

Not applicable

4. (a) Grounds for grant of authorisation

Authorisation is sought on the grounds set out in the NECA letter submitted with this Form E (and the accompanying Forms A and B) (the "NECA letter").

(b) Facts and contentions relied upon in support of those grounds (See Notice)

The facts and contentions relied upon in respect of the Code changes are set out in the NECA letter.

5. (a) Does this application deal with a matter relating to a joint venture (See section 4J of the *Trade Practices Act 1974*)?

No.

(b) If so, are any other applications being made simultaneously with this application in relation to that joint venture?

Not applicable.

(c) If so, by whom or on whose behalf are those other applications being made?

Not applicable

6. Name and address of person authorised by the applicant to provide additional information in relation to this application. Mr Stephen Kelly
Managing Director
National Electricity Code Administrator
Limited
Level 5
41 Currie Street
ADELAIDE SA 5000
Phone: (08) 8213 6307
Fax: (08) 8213 6300

Date: 9 February 2001

Signed on behalf of NECA

.....
(Signature) Stephen Kelly

Mr Stephen Kelly
Managing Director
National Electricity Code Administrator Limited

* **Note:** References in this application to the Act are references to the *Trade Practices Act 1974* and also include the Competition Codes of New South Wales, Victoria and the Australian Capital Territory as defined in the Competition Reform legislation in force in each jurisdiction.

Appendix A

to

**Form A Application for Authorisation in respect of
Exclusionary Provisions**

**Form B Application for Authorisation in respect of
Agreements Affecting Competition**

**Form E Application for Authorisation in respect of
Exclusive Dealing**

List of Code participants



List of code participants as at 9 February 2001

Company Aliases	Street Address	City	State	Postcode
ACTEW Corporation Ltd	ACTEW House	CANBERRA	ACT	2601
ACTEW Energy Ltd	Level 2 ACTEW House 221-223 London Circuit	CANBERRA	ACT	2601
Advance Energy	Cnr Littlebourne Street and Hampden Park Road	KELSO	NSW	2795
AES Transpower Holding Pty Ltd	Level 5 416 Collins Street	MELBOURNE	VIC	3000
AGL Electricity Ltd	Level 2 333 Collins Street	MELBOURNE	VIC	3000
AGL Electricity Ltd	AGL Ctre, 111 Pacific Highway	NORTH SYDNEY	NSW	2060
ALISE Energy Australia Pty Ltd	Level 6 De La Sala House 30 Clarence Street	SYDNEY	NSW	2000
AQC (Kogan Creek) Pty Ltd	Level 11 Westpac Building 260 Queen Street	BRISBANE	QLD	4001
Australian Inland Energy	Administrative Building 160- 162 Beryl Street	BROKEN HILL	NSW	2880
BIEP Pty Ltd	PO Box 4	PINKENBA	QLD	4008
Boral Energy Electricity Ltd	Level 39 AMP Centre 50 Bridge Street	SYDNEY	NSW	2000
Boral Energy Ltd	Level 39 AMP Centre 50 Bridge Street	SYDNEY	NSW	2000
Callide Power Trading Pty Ltd	Central Plaza 2 21st Floor 66 Eagle Street	BRISBANE	QLD	4000
Central Electricity Retail Corporation Ltd	Ground Floor 61 Mary Street	BRISBANE	QLD	4000
CEPA (Kogan Creek) Holding	GPO BOX 2256	BRISBANE	QLD	4001

Company Aliases	Street Address	City	State	Postcode
Citipower Pty	Level 15 Citipower House 628 Bourke Street	MELBOURNE	VIC	3000
CS Energy Ltd	Level 21 66 Eagle Street	BRISBANE	QLD	4000
CSR Limited	Pioneer Mill	BRANDON	QLD	4808
Delta Electricity	Level 12 Darling Park 201 Sussex Street	SYDNEY	NSW	2000
Duke Energy Australia Trading & Marketing Pty Ltd	Level 17, 1 Castlereagh St	SYDNEY	NSW	2000
Eastern Energy Ltd	Level 18 452 Flinders Street	MELBOURNE	VIC	3000
Eraring Energy (formerly Pacific Power)	GPO Box 5257	SYDNEY	NSW	2000
Edison Mission Energy Australia Ltd	Level 20 HWT Tower Southgate	SOUTH MELBOURNE	VIC	3205
EDGE Cap	Level 8 IBM Bld, 60 City Rd	SOUTH BANK	VIC	3006
EDL Plant Services Pty Ltd	Level 2 199 Toorak Road	SOUTH YARRA	VIC	3141
ElectraNetSA	PO Box 7096	ADELAIDE	SA	5000
EMMLINK Pty Ltd	Level 24 AMP Place 10 Eagle Street	BRISBANE	QLD	4000
Energex Ltd	150 Charlotte Street	BRISBANE	QLD	4000
Energex Retail Pty Ltd	Level 6 Anzac Square Building Commercial Towers	BRISBANE	QLD	4006
Energy 21 Pty Ltd	Level 6 45 William Street	MELBOURNE	VIC	3000
Energy Australia	Level 22 570 George Street	SYDNEY	NSW	2000
Energy Brix Australia Corporation Pty Ltd	Hazelwood Drive	MORWELL	VIC	3840
Enron Australia Energy Pty Ltd	Level 21 9 – 11 Castlereagh Street	SYDNEY	NSW	2000
Ergon Energy Corporation Ltd	30 Marble Street	DALBY	QLD	4405
ESIPC	GPO BOX 2010	ADELAIDE	SA	5001

Company Aliases	Street Address	City	State	Postcode
ETSA Corporation	Level 21 9-11 Castlereagh Street	SYDNEY	NSW	2000
ETSA Power Corporation	Level 21 9-11 Castlereagh Street	SYDNEY	NSW	2000
ETSA Power Corporation (Victoria) Pty Ltd	Level 21 9-11 Castlereagh Street	SYDNEY	NSW	2000
ETSA Power Pty Ltd	1 Anzac Highway	KESWICK	SA	5035
ETSA Transmission Corporation	1 Anzac Highway	KESWICK	SA	5035
ETSA Utilities Pty Ltd	Level 6 1 Anzac Highway	KESWICK	SA	5035
Ferrier Hodgson Electricity Pty Ltd	Level 17 2 Market Street	SYDNEY	NSW	2000
Flinders Power Pty Ltd	168 Greenhill Road	PARKSIDE	SA	5063
GPU PowerNet Pty Ltd	25 Flinders Lane Milton House	MELBOURNE	VIC	3000
Great Southern Energy	Level 1 30 Morrisset Street	QUEANBEYAN	NSW	2620
Hazelwood Power	Brodribb Road	MORWELL	VIC	3840
Hong Kong Electric International Ltd	Level 28 Rialto, 525 Collins St	MELBOURNE	VIC	3000
HQI Australia Limited Partnership	Level 24 AMP Place 10 Eagle Street	BRISBANE	QLD	4000
Integral Energy Australia	51 Huntingwood Drive	HUNTINGWOOD	NSW	2148
Kinetik Energy Pty Ltd	Level 19 East Tower 40 City Road	SOUTHBANK	VIC	3006
Loy Yang Power Management Ltd	Bartons Lane	TRARALGON SOUTH	VIC	3844
Macquarie Bank Ltd	GPO Box 4294	SYDNEY	NSW	1164
Macquarie Generation	34 Griffiths road	LAMBTON	NSW	2299
Millmerran Energy Trading Pty Ltd	Level 24 10 Eagle Street	BRISBANE	QLD	4000
Morgan Stanley Dean Witter Australia Finance Ltd	1585 Broadway 4 th Fl,	NEW YORK	10036 -8293	USA
Murraylink Transmission Co Pty Ltd	GPO Box 7077 Riverside Centre	BRISBANE	QLD	4001

Company Aliases	Street Address	City	State	Postcode
NRG Flinders Operating Services Pty Ltd	GPO Box 2535	ADELAIDE	SA	5000
National Power Synergen Pty Ltd	Level 26 Australia Squ 264-278 George St	YDNEY	NSW	2000
National Power South Australia Investments Ltd	Level 2, 122 Frome Street	ADELAIDE	SA	5000
National Electricity Market Management Company Limited	Level 16 461 Bourke Street	MELBOURNE	VIC	3000
NGIL	Level 52 Rialto Sth Tower, 525 Collins St	MELBOURNE	VIC	3000
NorthPower	9 Short Street	PORT MACQUARIE	NSW	2444
NSW Electricity Transmission Authority	Cnr Park and Elizabeth Streets	SYDNEY	NSW	2000
Optima Energy Pty Ltd	168 Greenhill Road	PARKSIDE	SA	5063
Powercor Australia Ltd	Level 8 40 Market Street	MELBOURNE	VIC	3000
Pulse Energy Pty Ltd	Shell House, 1 Spring St	MELBOURNE	VIC	3000
QTSC (Victoria) Pty Ltd (Ergon Energy)	Ground Floor 61 Mary Street	BRISBANE	QLD	4000
Queensland Electricity Transmission Corporation Ltd	33 Harold Street	VIRGINIA	QLD	4104
Queensland Transitional Power Trading Corporation	15th Floor 61 Mary Street	BRISBANE	QLD	4000
RMB Australia Ltd	Level 5 37-49 Pitt Street	SYDNEY	NSW	2000
Rocky Point Green Energy Pty Ltd	Mill Road	WOONGOOLBA	QLD	4207
SA Generation Corporation	168 Greenhill Road	PARKSIDE	SA	5063
SG Australia	Level 21, 400 George St	SYDNEY	NSW	2000
Sithe Australia Power Services Pty Ltd	Level 12 The Chifley Tower 2 Chifley Square	SYDNEY	NSW	2000
Sleiman Trading Pty Ltd	PO Box 334	POTTS POINT	NSW	2001
Snowy Hydro Trading Pty Ltd	Level 17 Bligh House 4 Bligh Street	SYDNEY	NSW	2000

Company Aliases	Street Address	City	State	Postcode
Snowy Mountains Hydro-Electric Authority	Monaro Highway	COOMA	NSW	2630
Southern Hydro Ltd	Level 13 500 Collins Street	MELBOURNE	VIC	3000
Stanwell Corporation Ltd	Level 13 199 Charlotte Street	BRISBANE	QLD	4000
State Electricity Commission of Victoria	Level 5 452 Flinders Street	MELBOURNE	VIC	3000
Synergen Pty Ltd	168 Greenhill Road	PARKSIDE	SA	5063
Tarong Energy Corporation Ltd	Level 10 AMP Place 10 Eagle Street	BRISBANE	QLD	4000
TransEnergie Australia Pty Ltd	Level 24 AMP Place 10 Eagle Street	BRISBANE	QLD	4000
TXU (Sth Aust) Pty Ltd	Level 17, 452 Flinders St	MELBOURNE	VIC	3000
United Energy Ltd	Level 13 101 Collins Street	MELBOURNE	VIC	3000
VENCORP	PO Box 1721	COLLINGWOOD	VIC	3066
Victorian Power Exchange Pty Ltd	433 Smith Street	NORTH FITZROY	VIC	3065
Wambo Power Ventures Pty Ltd	Level 1 Princeton Court Three 13 Princeton Street	KENMORE	QLD	4069
Yallourn Energy Pty Ltd	Eastern Road	MOE	VIC	3825
Yamasa Seafood Australia Pty Ltd	20 Gilbertson Road	LAVERTON NORTH	VIC	3026

Known intending participants

Hydro-Electric Corporation	4 Elizabeth St	Hobart	TAS	7000
Aurora Energy Pty Ltd	4 Elizabeth St	Hobart	TAS	7000
Transend Networks Pty Limited	1 Bowen Rd	Moonah	TAS	7009