



17 May 2010

Dr John Tamblyn  
Australian Energy Market Commission  
Level 5, 201 Elizabeth Street  
Sydney NSW 2000

By electronic submission: [www.aemc.gov.au](http://www.aemc.gov.au)

Dear Dr Tamblyn

Origin Energy Limited (Origin) welcomes the opportunity to contribute to the Australian Energy Market Commission's (AEMC) consultation on the Scale Efficient Network Extension (SENE) Rule change proposal.

As a leading integrated energy company operating across a number of facets of the energy market (including the retail and generation sectors) we are able to provide an informed perspective on the merits of this Rule change proposal.

In our view, recent energy market reforms such as the establishment of a national transmission planning function within the Australian Energy Market Operator (AEMO) signals the market's desire for a more strategic and forward looking approach to transmission planning and investment. The development of the SENE mechanism is a key step toward the realisation of this goal and represents a practical application of this new strategic approach. Given this, Origin is supportive of the SENE and considers that if appropriately designed and applied it will allow for greater efficiency in the network connections regime, which will be critical given that the renewable energy target (RET) is likely to expose a number of weaknesses in the current framework.

The attached submission sets out Origin's views on the key issues outlined in the Consultation Paper.

If you wish to discuss any issues further please do not hesitate to contact me on (02) 8345 5250 or Steve Reid on (02) 8345 5132.

Yours Sincerely,

A handwritten signature in black ink, appearing to read "Tim O'Grady". The signature is fluid and cursive, with a large initial 'T' and 'O'.

Tim O'Grady  
Head of Public Policy



## **1. Executive Summary**

### **Why the SENE satisfies the Rule making Test**

- Origin is supportive of the SENE and considers that it satisfies the National Electricity Objective (i.e. confers net benefits to the market) by: facilitating the meeting of the RET at least cost; and accounting for the current weaknesses in the network connections framework which are likely to be exacerbated by the increased entry of renewables in the market.
- A cost benefit analysis such as the Regulatory Test cannot be appropriately applied to the over-sizing of connection extensions given the difficulty in quantifying the full benefits involved. A well designed SENE mechanism is a better option.

### **Managing risks under a SENE**

- Origin considers that discussions surrounding the potential risk of stranding under the SENE be kept in perspective in that both the magnitude and the likelihood of this occurrence is minimal.
- The oversight of the SENE application process by AEMO and the AER should help minimise any risk of stranding.
- Where a SENE is used to connect renewables, the notion of apportioning the cost of that SENE (i.e. the part that is initially paid for by customers) across the entire market should be explored, given that the RET is a national target.
- The proposal in the Consultation Paper that the connection of one generator should be sufficient to trigger the SENE needs to be clarified.
- At this stage, we are not supportive of the use of tradeable capacity rights as a means of gauging generator interest in a prospective SENE given the inherent difficulties in deciding on the cost of these rights.
- The location of the SENE connection point to the shared network is important to both the SENE and overall network planning. It is therefore important that NSPs have regard to the impacts of different connection points on the shared network in formulating SENE applications.

### **SENE configuration**

- The draft rule should not be limited to a 'hub and spoke' arrangement, but should have the flexibility to accommodate generation and load centres along the length of the SENE transmission line.
- It is appropriate that generators pay their full capacity portion of the line cost irrespective of where they connect on the SENE.
- Interruptible generators should be given scope to negotiate with incumbent generators on the SENE to provide back-up capacity when those generators are not generating at 100%.



### **SENE and the shared network**

- In our view a SENE must have firm capacity rights in much the same way as a connection asset until it becomes a part of the shared network.

## ***2. Does the SENE satisfy the Rule making test?***

The Consultation Paper states that in assessing the Rule change proposal the AEMC will seek to determine if the SENE complies with the National Electricity Objective (NEO), i.e. if it confers net benefits to consumers and the market as a whole. Origin agrees that satisfying the NEO must be the primary criterion in determining if the SENE Rule is made. In our view the SENE satisfies the NEO for the following reasons:

### ***2.1 SENE is an improvement on the status quo***

It has been well documented that the Renewable Energy Target (RET) will lead to a significant increase in renewable energy investment in the market. Origin's internal modelling indicates that to meet this challenging target by 2020, more than 7000 MW of additional wind and potentially 1500MW of geothermal or solar will be required. Origin is concerned, however, that the current energy market framework will not allow for the meeting of this target in the most efficient manner possible.

The reality is that many of the best renewable resources are located in clusters remote from the existing network. This means that with potentially many generators looking to connect in generally the same areas there is a risk of inefficient duplication if each new entrant chooses to build its own connection asset sized only to meet its specific needs.

Another issue is that under the current rules the first connecting generator (first mover) is required to fund any new transmission capacity it needs for connection. Clearly such connection costs are likely to be significant if required to access a remote resource. Whilst the first mover is able to recoup some of these costs when/if other generators connect, it bears the risk that other generators may not turn up. There is therefore an incentive to wait for others to be the first to trigger the investment - which is problematic given that if everyone waits the transmission line will not get built. Where generators do decide to fund the construction of these assets, they again will size them to meet their individual needs.

The current situation, therefore, is not ideal given that transmission investment is most efficiently undertaken in large increments so as to achieve economies of scale. Naturally it could be argued that under the current framework prospective generators could simply organise amongst themselves to build a larger connection asset to reap these scale benefits. Historically, however, there is little precedence of this type of coordination given that projects are generally at different stages along the development pipeline and not in a position to achieve simultaneous financial close, let alone the associated transmission infrastructure. There may also be a general lack of awareness amongst prospective generators regarding the investment intentions of other participants. The SENE accounts for these issues by facilitating a more strategic approach to the building of a connection asset whereby a larger transmission line can be built in advance of all



prospective generators being ready to connect. This helps avoid the duplication and first mover issues inherent under the current regime and allows for the realisation of economies of scale.

Transmission capacity built in larger increments to exploit scale economies will reduce the overall cost of connection, which is ultimately passed through to consumers. Further, building some excess transmission capacity to accommodate future connection may also help address the time lags between transmission and generation development, so that new generation can connect expeditiously (rather than having to wait for new transmission to be built first). This could be of considerable value in allowing climate change policies, such as the RET to be met in the timeframes required.

### *2.1.1 Applying the Regulatory Test in place of the SENE*

It has been argued that the current connections arrangements could be enhanced and made more strategic if NSPs are given scope to apply the Regulatory Test<sup>1</sup> (Test) to justify over-sizing connection extensions, which would effectively preclude the need for the SENE mechanism.

Currently the Test only applies to augmentations on the shared network, the cost of which are wholly borne by consumers. However, even if its scope could be broadened to include connection extensions, it is our view that its efficient application in this instance is unlikely and that the SENE would prove more appropriate. Historically, one of the weaknesses of the Test has been its inherent bias toward reliability based augmentations given the difficulties in justifying augmentations on the basis of market benefits. Even with the inclusion of option value under the new Regulatory Investment Test - Transmission, it would prove complex and most likely contentious to quantify the exact benefits of over-sizing connection extension assets that typically have a life of up to fifty years. A cost - benefit analysis such as the Test is not an appropriate means of achieving strategic outcomes, where ultimately some element of risk is unavoidable, and where future benefits (including broader socio-economic benefits) are unforeseen and not quantifiable. A well designed SENE that seeks to minimise the inherent risk of asset stranding, is a better option.

Another issue with applying the Test to connections is the degree of rigour and time it takes, which in the case of augmentations on the shared network is justified given that the cost is wholly socialised. The implications for connection extensions under the Regulatory Test framework is that it would take longer for these assets to be built. The issue of timing is critical given the long lead time involved in building transmission and the requirement that the RET be met by 2020. It should also be noted that the recent changes to the RET (i.e. the separation of the scheme into two tranches) will bring forward the need for renewable build. This is because RECs from small scale renewables cannot be used to meet the liability under the Large Scale Renewable Energy Target (LRET).

The model envisaged under the SENE is preferable in that it is less onerous and time consuming than the Test, which is reasonable given that it is generators that ultimately fund the cost of the transmission line, and because efficient and timely outcomes are essential, as we will explain below.

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<sup>1</sup> Regulatory Test here refers to both the Test for distribution and the new Regulatory Investment Test for Transmission



## *2.2 SENE is critical in meeting the RET, and at least cost to consumers*

As a major retailer with a significant renewable energy certificate (REC) liability, Origin is looking to source RECs at least cost. This involves both entering into power purchase agreements with renewable generators to enable them to finance construction of their assets and backing our portfolio with options to enable the construction of our own renewable plant.

Whilst the SENE should be designed to facilitate the connection of generation regardless of fuel type and proximity to the grid, we acknowledge that the most compelling argument for its adoption is the connection of remote renewable generation to meet the RET. The SENE will facilitate the unlocking of the optimum renewable resources (both in terms of quality and scale) - which we consider essential in enabling retailers and large customers in meeting their RET obligation at least cost.

### *2.2.1 Small scale build alone is unlikely to meet the RET*

Historically, developers of renewable projects have traditionally selected low to medium yielding resources (which affects the volume of energy output) closer to market, because inherent to all power projects is the technical and economic risk associated with connecting to the market. Developers have also tended to develop projects that are relatively small (~30MW-50MW), given the nature of the targets (MRET previously being 2%), local planning laws (<30MW wind projects fall under local planning regimes) and lower levels of capital expenditure required (~\$90m for a 30MW project).

Whilst smaller scale renewable projects will play an important part in meeting the RET, a reliance on small scale build alone will make the meeting of the target even more challenging given that:

- Wind developers will need to build 7000MW of wind farms by constructing anywhere between 150-250 individual projects (assuming size of ~30-50 MW);
- Local, state and federal planning agencies will have to assess these 150-250 projects (and indeed, depending on the amount of proposals that are assessed and rejected, review perhaps double that amount); and
- TNSPs and DNSPs will have to physically connect this number of projects (and undertake the associated system modelling, transmission planning studies etc).

To meet the RET requirements, companies like Origin will require future wind projects to have large capacity (~300-500MW) and high yield (>40% capacity factor). For the most part (particularly going forward) projects of this size and yield simply do not exist close to the existing network.

For a total portfolio of wind projects under the RET, say 7,000MW, every 1% drop in absolute capacity factor results in an additional cost of over \$0.5B to the portfolio because of the extra wind turbines that need to be built to provide the same amount of energy)<sup>2</sup>. The difference between an average capacity factor of 35% and 40% across a

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<sup>2</sup> Assuming 40% capacity factor \$3/W average investment cost total investment cost. Therefore 7000MW would cost \$21billion. A 1% drop in capacity factor would result in a cost increase of 5% or \$0.5 billion.



7,000W portfolio could be around \$2.5B in extra capital expenditure. This puts into perspective the added costs of developing ‘second tier’ wind sites with lower capacity factors.

### *2.2.2 Benefits of larger renewable projects*

Origin sees a number of benefits to developing and constructing large scale renewable projects and provides the following comments specifically related to wind farm development, construction and operation:

- Long term off-take agreements with wind turbine suppliers may see more competitive pricing arrangements on a unit cost basis (\$/MW);
- A structured, predictable, staged build out of large projects enables economies of scale around balance of system procurement: towers, concrete batching plants, internal wind farm reticulation systems etc;
- Permitting large sites diminishes the significant development costs associated with wind farms. We have observed an escalation in development costs as community concerns to wind farms increases as they increasingly impinge on the visual amenity of communities when located close to the transmission network (and hence, close to users/consumers).
- Unit costs of connection (\$/MW) decrease as the scale of wind farms increase, both for those that are remote and also for those close to market. However, for large remote wind farms, while the unit capital cost may decrease, the absolute connection costs represent a significant capital outlay, potentially in the order of \$100m for one remote generator<sup>3</sup>.
- Unit operating costs diminish as the size of a wind farm increases, given that there is a significant outlay for fixed capital items associated with operating and maintaining wind farms, including spares, equipment such as cranes, infrastructure associated with personnel such as control rooms and even living arrangements for workers.

### *2.2.3 Quantifying scale economies associated with large projects*

- Origin recently completed our 30MW Cullerlin Range wind farm at a capital cost of around \$90m, that is, a unit cost of \$3m/MW including connection costs. For projects of larger scale, (and in light of current market developments which could bring a number of low cost new entrants to the market) this cost could come down to around \$2m/MW in the near to mid - term. Even if the industry could construct a portfolio of over 7,000MW of wind by 2020 in 30MW increments, (and it should be reiterated that we think it’s highly unlikely), a \$1m/MW saving on total installed costs represents a saving of \$7B in capital expenditure, savings that will directly benefit consumers via lower cost RECs.
- Again, following the same argument that if the target was constructed in 30MW increments, the associated development costs add a huge burden to developers (and ultimately consumers). We estimate the current portion of development

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<sup>3</sup> Assuming connection to 500kV circuit, 50km of 275kV transmission line, all development, easement, owners costs during construction included.



costs in a 30MW project at approximately 5%, while for a 300MW site we estimate that these costs equate to around 2% (for the same unit capital cost). Across a portfolio of 7,000MW, development costs of 5% could equate to over \$1B (if attempted in 30MW increments) while larger projects could see a saving of over \$0.5B.

It is Origin's view that the above mentioned economies of scale will not be achieved in the current environment and that, while this is not solely related to the inability of the industry to connect large scale wind farms to the current network, the current transmission connection framework is a significant contributing factor. The SENE process, by enabling the efficient and cost effective expansion of the network into regions of high resource quality and scale, is imperative in creating an environment where these scale economies can be achieved. It is our firm view, therefore, that the costs associated with addressing inefficiencies by unlocking remote renewable resource provinces justify making amendments to the Rules.

### 2.3 SENE principles

There are a number of basic principles that have formed the basis of our views on the various SENE design elements. Origin considers that the reflection of these principles in the final SENE design will help to ensure that it meets the NEO. These principles include:

- **Technology neutrality.** The SENE should not discriminate between fuel sources. Whilst the most compelling case for the SENE is for the connection of renewable generation to meet the Renewable Energy Target, it should equally facilitate the connection of other forms of generation.
- **Regulatory certainty.** The regulatory regime governing the SENE should be clear and transparent. For e.g. issues surrounding the point at which the SENE becomes a part of the shared network and the implications for the charging regime, must be resolved now and remain stable. This will be imperative in providing certainty to prospective investors.
- **Competitive neutrality.** The SENE should not discriminate against generators that do not connect via the SENE; that is, there should be an equivalent cost for equivalent transmission service, regardless of whether a generator connects to a SENE or the elsewhere in the network.
- **Practicality.** It is important from our perspective that the final SENE design allows for a mechanism that is practical and workable. This consultation process is therefore important to ensure key design issues are resolved.
- **Market driven.** As much as possible the SENE must be market driven, in that ultimately for a SENE to proceed there must be a sufficient level of interest from the market, i.e. prospective generators must exhibit a desire to connect to the SENE at some point in the future.
- **Strategic.** A key benefit of a SENE process is that it should lead to more timely or strategic transmission investment and therefore better accounts, than existing processes, for the considerable lags between generation and transmission investment. This will be important in meeting ambitious climate change policy objectives such as the RET.





### ***3. Managing risks under the SENE***

An element of risk is inherent in any forward looking or strategic approach - the SENE mechanism is no different. An overly optimistic view of future generation could expose consumers to the risk of stranding if generators do not connect to the transmission line as forecasted. Similarly an overly conservative assessment of future generation potential would increase the risk of an under sized asset being built which would not deliver the measure of scale-efficiency required to reduce project development and construction costs.

In our view the oversight of AEMO and the AER will be instrumental in the management of any potential risk of stranding. AEMO through its development of the NTNDP will be in a position to assess the credibility of NSP generator forecasts which is critical to the optimal sizing of any SENE line. Whilst the development of some type of efficiency test would help to address this issue Origin does not support this option for the same reasons we consider the application of the Regulatory Test inappropriate in that it is unlikely to fully capture the strategic benefits of the SENE and would prove complex and time consuming.

Going forward in this consultation process it will be important that the decision making rule to be applied by AEMO/AER in evaluating potential SENE is made clear as it will provide guidance to NSPs in formulating their SENE applications.

#### **3.1 Magnitude and likelihood of stranding**

Any discussion of the potential risk of stranding under a SENE must be kept in perspective in that it should be viewed in terms of the potential magnitude and likelihood of occurrence. Origin considers that both are minimal. In terms of the likelihood of stranding it is important to note that:

- There are three levels of review before SENEs are agreed - AEMO, TNSP and AER;
- The shortage of transmission capacity and load growth means that transmission in Australia is under supplied and will be filled (for example, Braemar substation in QLD, 500KV line in Victoria, both of which were overbuilt and both of which have large volumes of generation connected and under construction);
- The demand for renewable energy under the RET is such that huge amounts of generation need to be built; and
- The existence of a SENE asset would increase the probability of success associated with all projects in a particular region by reducing the risk associated with the project's ability to connect to the network, thus increasing the number of generators looking to connect.

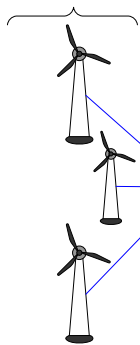
Critical to the size of the stranding risk (on a per customer basis) is how the cost of building the portion of the SENE not firmly committed to by generators is dispersed amongst consumers. In the case of a SENE built to connect renewable energy it could be argued that since the RET is a national target, these costs should be apportioned accordingly and not just to customers within a particular region. The below example shows the indicative stranding risk to an individual consumer where the cost is



apportioned NEM-wide. At less than 0.2% of a typical customer bill for a \$1B asset in this example, we consider this risk low.

### Box [X]: Example of indicative customer stranding risk

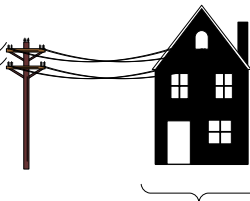
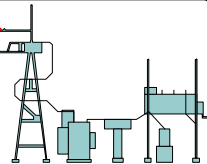
#### Committed generators



#### Description of SENE

1000 MW connection at a cost of \$1 million/MW  
 Total capital cost = \$1 billion (1000 MW x \$1m/MW)  
 Firm generation commitment for 500 MW  
 Customers covering cost of remaining 500 MW

#### SENE



#### NEM customers

#### Value of customer stranding risk for 500 MW:

- Customer exposure is \$500 million (500 MW x \$1m/MW)
- Annual customer exposure is the TNSP annual rate of return for customer SENE share
  - » This is around 10% of capital costs or \$50 million
  - » Capital costs provide a proxy for WACC + O&M costs
- To estimate annual SENE costs per each NEM customer, pro rata costs across total NEM energy:
  - » NEM energy = 200 TWh
  - » annual SENE customer cost = \$50m/200TWh = \$0.25/MWh
- A typical annual residential bill is around = \$150/MWh
- Stranding cost for 500 MW for each customer is therefore:
  - = annual SENE cost/annual residential bill
  - = (\$0.25/MWh) / (\$150/MWh)
  - = **0.16% of typical customer bill**

Note: O&M – operation & maintenance

## 3.2 Deciding on the optimal size and location of the SENE

### 3.2.1 Generator commitment

The draft Rule proposes that at least one generator must agree to connect to the SENE before it can be built. In our view this is somewhat ambiguous. For example it is not clear if commitment on the part of a 50 MW generator could trigger a 1000 MW line. Some clarity surrounding this issue is needed.

The Consultation Paper raises the possibility of prospective generators purchasing tradeable capacity rights to demonstrate their commitment to the SENE. The optionality



that proposed SENE unlock means that capacity rights on a SENE may have significant value to project developers if allocated prior to the signing of a Connection Agreement. This is, however, a double-edged incentive for developers in that it opens any SENE capacity rights allocation process to gaming.

A low barrier to entry on capacity rights (that is, a nominal 'booking' fee payed for by a proponent) could see developers take out a host of options around the country on proposed SENE lines, seeking to on-sell to proponents who have resource rights or land options. The AEMC is correct in identifying that a high barrier to entry on capacity rights (that is, a significant booking fee) may limit the competition in the project development space, competition that Origin is keen to encourage given our position as a significant purchaser of both renewable and fossil fuel generation from third parties.

At this stage, Origin does not support any such capacity rights until such time as a generator has a signed Connection Agreement. It is our view that this encourages proponents to reach financial close as soon as possible, and by driving competition, leads to more efficient and cost effective outcomes.

### *3.2.2 Holistic view of the network*

The economic viability of generators connecting to a SENE zone is contingent on the ability of the shared network to accommodate increased power flows. As such, the location of the SENE connection point is important to both SENE and shared network planning. It is therefore important that NSPs have regard to the impacts of different connection points on the shared network in formulating SENE applications.

Whilst there is an obvious link between the SENE and broader questions surrounding congestion management (which will be tackled in the AEMC's transmission review) it is important that this does not result in a delay in developing the SENE. While AEMO should consider the consequences on the shared network of a SENE connection, it is important to note that the only shared network costs of relevance are those required in ensuring that the connection of a SENE does not undermine the security and reliability of the network.

That is, a SENE's impact on the shared network should be considered in exactly the same way as that of any normal individual connection, consistent with the open access nature of the network. This ensures there is no discrimination between participants connecting to the SENE and those connecting elsewhere in the network. Regardless of their location generators should be given an equal opportunity to contest for the scarce transmission capacity they need for access to their customers.



## **4. SENE configuration and charging regime**

### **4.1 SENE charging regime**

Origin is supportive of the basic charging regime proposed in the draft rule. A key benefit of the SENE approach is that in capturing economies of scale it reduces the stand alone costs of connection for individual generators, thereby removing a significant barrier to new entry. However it still requires individual generators to pay for the proportional transmission capacity they use, thus imparting appropriate locational signals (since this cost will be greater the further away from the shared network the remote resource is located).

It is important that the SENE charge is determined up front and remains stable over time, as reduced uncertainty over future costs encourages investment. Origin is therefore concerned that the proposed Rule allows for a revision of SENE costs to generators if actual forecasts deviate over a five year period. In effect this provision seemingly allows the NSP to increase charges to generators, which therefore transfers stranding risk to generators.

#### **4.1.1 Should the costs of the SENE be spread across all generators irrespective of where they locate?**

One of the key justifications for the SENE is the sharing of the cost of the transmission line; therefore it is appropriate that generators pay their full capacity portion of the line cost irrespective of where they connect.

#### **4.1.2 Discrepancy in the draft rule**

Page 26 (5.5A1, Principles), third point states that the SENE will be characterised as a “negotiated transmission service”, while on page 44, (5.5A.13, SENE charges, b) 1)) the detail states it will be the “permitted rate of return” (that is, the regulated return as if part of the shared network).

At this stage, we seek clarification on this matter.

#### **4.2 Should the draft Rule allow for configurations other than a “hub and spoke”?**

Anything that limits the optionality that project developers and TNSPs have in developing their projects and the associated infrastructure poses a significant risk to the effectiveness of the SENE process and may not achieve the desired efficiency outcomes. The draft Rule should therefore not be limited to a ‘hub and spoke’ arrangement, but should have the flexibility to accommodate generation along the length of the SENE transmission line.

In the specific case of the ‘hub and spoke’ arrangement, it is not clear whether the ‘hub’ portion of the infrastructure is considered as part of the SENE asset. Origin considers it imperative that the ‘hub’ portion be part of the SENE asset base, otherwise the very scale efficiency the SENE process is aiming to address would be compromised in the case where the project developer is required to pay the full cost of a ‘hub’ and ultimately



cross subsidise the second mover for this portion of capital expenditure (despite sharing the costs associated with the transmission line).

#### *4.3 More generally, will the SENEs framework result in efficient outcomes in the wholesale market?*

The SENE's principal benefit in our view is that it lowers barriers to entry for locationally constrained renewable generators, encouraging their entry into the market in an expeditious manner to increase the prospects for delivery of climate change objectives. Moreover, increasing the volume of generator new entry increases competition and thereby lowers wholesale prices. This reduces wholesale purchase costs for retailers, including REC liabilities, which in a competitive market should flow through to lower delivered energy prices.

It is also Origin's view that SENEs will be most effective where significant interregional network connections are constructed. South Australia, Victoria and New South Wales, having the greatest potential wind resource respectively, will require significant interconnection upgrades to fully unlock the potential for SENE zones in the more remote regions of those states. Origin sees this issue as most pertinent for the South Australian region.

#### *4.4 Could an interruptible generator connect to the SENE?*

It is imperative that interruptible generators have the option of connecting to a SENE, particularly where a SENE is used to connect significant volumes of intermittent generation. Interruptible generators should be given scope to negotiate with incumbent generators on the SENE to provide back-up capacity when those generators are not generating at 100%. Origin views the connection of our own interruptible generators, (where we have capacity rights on a SENE) as necessary in ensuring the efficient operation of its generation portfolio. This may avoid the concept of a 'zero power transfer capability' as mentioned in the Consultation paper.



## **5. SENEs and the shared network**

### ***5.1 Should SENEs be "ring fenced" from the shared network? If so, should a time limit apply to such ring fencing arrangements?***

At this point Origin does not consider ring fencing of the SENE as necessary. It should be treated the same as any other connection asset, once it becomes part of the shared network the costs of the SENE should be rolled into the asset base. While generators on the SENE may lose their firm capacity rights at this time (which is appropriate), this will be balanced by removal of requirement to pay SENE charges. This is consistent with the current Rules.

### ***5.2 How could SENEs best be incorporated into the shared network?***

In our view a SENE must have firm capacity rights in much the same way as a connection asset until it becomes a part of the shared network. There has been some concern that if SENEs are given firm capacity rights that it would represent a fundamental departure from the current rules and somehow pre-empt the outcome of the AEMC's broader transmission review which will examine the issue of capacity rights in greater detail. In our view this is not the case, since under the current arrangements connection assets do enjoy firm capacity - SENE connection extensions should be treated in similar manner, particularly given that it is generators that bear the cost.

Once a SENE becomes a part of the shared network it is reasonable that it is subjected to same rules as other generators on the shared network i.e. the open access regime. The loss of firm capacity rights by the rolling of the connection extension into the regulatory asset base would be reflected in a change to the charging regime for the SENE.