# Addendum to Proposal for Rule on Transmission Entry and Exit Charges

## 1. Costs and benefits of the proposal and the potential impacts of the change on those likely to be affected

The National Electricity Rules (the Rules) can lead to the inefficient shifting of costs from historically shared transmission services, to entry or exit services as a result of a re-allocation of costs or a network reconfiguration undertaken for the benefit of network users generally. The Rule Change proposed by the National Generators Forum aims to address this. The proposed Rule change will increase efficiency in the National Electricity Market (NEM) by removing the price shocks from the shifting of costs and by increasing regulatory certainty.

Our proposal has dealt with the issues which have wide ranging impacts across the market for users of entry and exit services. It is likely that these can be quantified on a case by case basis as examples arise, however, more important to this is to consider the impact on regulatory uncertainty across all connected parties which is more appropriately discussed qualitatively in terms of the economic impacts. In addition, the issue of reconfiguration is likely to be a recurring issue given the ageing network. Therefore the costs and benefits of the proposal are difficult to quantify but can be assessed qualitatively from the point of view of the affected parties and holistically for the market. If required, quantified case studies can be presented to support the proposal.

#### 2. Costs and Benefits – Affected parties

As described in the body of the Rule Change, the change will affect the following parties:

#### 2.1. Users of Entry and Exit Services

The users of entry and exit services are impacted by the Rule change in the following ways:

- They will benefit from increased certainty i.e. reduced regulatory uncertainty; and
- They will benefit by not being exposed to a price shock.

#### 2.1.1. Increased Certainty

The Rule change promotes certainty for generators and customers for the following reasons:

- In the current Rules, changes to the network environment (i.e. reconfiguration) change the price signals that the generator's sunk investment receives. The possibility of such changes increases the level of risk in the generation and customers sectors of the market and hence can provide an increased barrier to entry to the market and a decrease in the productive and allocative efficiency of the market by changing the underlying cost structures of the individual parties and leading to increases in prices. The Rule Change proposal ensures the changes to the network environment without a generator's or customer's agreement do not change the charge a generator or customer receives and hence the uncertainty is reduced;
- The Rule Change proposal prevents the removal of assets from the RAB in a
  reconfiguration situation without generator consent, particularly when a significant
  charge increase is involved. This is not intended to alter the investment decisions of
  the TSNP but rather changes to the method of cost allocation such that it is efficient
  and more consistent with the benefits gained. This increases certainty for generators
  in their investment decisions and hence increases productive and allocative
  efficiency;
- The regulatory Rule review that led to Chapter 6A led to the possibility of price shocks for some generators. In particular, whilst a grandfathering provision was introduced, ambiguity remains over whether costs from historically shared assets can now be shifted to generator connection (entry service) assets or customer connection (exit service) assets that existed prior to 9 February 2006, sit within the RAB and are

therefore grandfathered as prescribed transmission services (see explanation in Rule Change Proposal). When TNSPs undergo a revenue reset they will set their charges according to the new Chapter 6A rules (this has not yet occurred). This opens up the risk of price shocks for some users of connection and exit services. The Rule change proposal prevents the costs from historically shared assets being shifted to grandfathered generation and customer connection assets. As such it removes the possibility of price shocks and hence promotes regulatory certainty.

The Rule Change proposed reduces the regulatory uncertainty (as described above) in the National Electricity Rules and as such benefits users of connection and exit services (and in fact the electricity market as a whole) since the level of risk in the generation and customer sectors of the market is reduced and this leads to removal of barriers to entry to that sector. Reducing uncertainty and risk in a market will also have impact on market clearing prices since generators would need to increase prices due to the additional risk they face.

#### 2.1.2. Price Shock

Under the Rule change proposal, generators or customers who did face the threat of increases in connection (entry / exit) charges due to changes in the shared network beyond their control, will no longer face such price shocks and hence are protected from this risk. The size of the increases that face individual generators / customers varies but are likely to be material – in contrast to the size of the corresponding decreases in TUOS charges paid by network users generally (see below). Generators / customers will therefore no longer face price shocks from which there is no efficiency gain, since market efficiency is not increased by imposing increased locational costs and pricing signals to these "sunk" investments. The proposed rule will ensure that the cost of any investments relating to increasing the reliability of the network, which is typically undertaken to deliver benefit all network users, are appropriately allocated across these users rather than to an individual connected party, thereby increasing the equity of the cost allocation process.

#### 2.2. Transmission Network Service Providers

Transmission Network Service Providers have not yet fully implemented the requirements of new Chapter 6A since they have not undergone a revenue reset since the implementation of the new cost allocation guidelines. TNSPs have likely assessed Chapter 6A and considered how it would affect their charges to different customers but this has not yet been implemented. The Rule Change proposal if accepted prior to any new formal revenue reset would merely impact TNSPs by amending the Rules they must implement – a minor impact.

As can be seen from the Rule Change Proposal, TNSPs will still be able to claim the full value of their revenue requirement, preserving revenue certainty. To minimise any implementation costs, the NGF has also attempted to develop a Rule change that will be simple and straightforward to implement and administer.

#### 2.3. Users charged Transmission Use of System (TUOS)

As discussed above, since TNSPs have not yet implemented the requirements of Chapter 6A - they have not undergone a revenue reset since the implementation of the new cost allocation guidelines - parties who are charged TUOS have not yet experienced the implementation of Chapter 6A. However, as with TNSPs they are likely to have anticipated its effect on them.

Those customers charged TUOS will not see a change from the situation pre Chapter 6A to that of the Rule Change Proposal, providing a seamless transition. However, they would see a minor change from the anticipated implementation of Chapter 6A and the Rule Change Proposal. The impact will be likely small relative increases to TUOS charges (or more specifically, the avoidance of small general reductions in TUOS charges) from a Chapter 6A situation to that of the Rule Change proposal. Whilst the increases in charges anticipated by connection and exit service users is expected to be large in many cases under Chapter 6A,

the relative increase in TUOS charges under the Rule Change proposal will be spread across all TUOS users and hence is likely to be minor for the individual network user (in contrast to the increase in charges to individual generators / exit customers).

### 3. Costs and Benefits – Market

The potential material increase in costs to a specific generator / customer in the current Rules is likely to lead to a loss in economic efficiency. Specifically the current Rules, that potentially allow such an increase, will result in a reduction in productive efficiency and consequently lead to a loss in both the allocative and dynamic efficiencies in electricity related markets.

The benefits of the proposed Rule Change to the market due to the reduced price shock and reduced uncertainty are difficult to quantify but would lead to reduced investment risk in the market compared to the current Rules. The absolute impact of a change to the cost allocation process should be seen on a case by case basis through the specific examples that arise in practice, however, given the complexity of estimating the size and frequency of these impacts across the network they would be difficult to accurately quantify. Due to an ageing network there is likely to be increased demand for network reconfigurations over time which exacerbate these impacts. More importantly, the proposal addresses the uncertainty and risk associated with potential price shock across all connected parties, improving connection charge certainty and stability. This is especially true for generators, and so generators will produce electricity at a lower price than they would if they faced increased uncertainty and price shocks. This ultimately leads to the marginal cost for each generator decreasing and a corresponding increase in the electricity supplied.

This decrease in the marginal price increases allocative efficiency by decreasing the cost of resources which are needed to clear the energy market. This increase in efficiency and consequent energy price reduction is likely to outweigh the effect of any minor increase in global network charges relative to the new Chapter 6A for network users generally. While the cost and risk avoided for individual connected parties under the Rule Change proposal is substantial, the relative increase in global TUOS charges is trivial.

The resulting net decrease in the price of electricity has important dynamic efficiency implications since electricity is widely used as an input to production. The decrease in the marginal costs in these downstream markets, which are likely to have less elastic demand curves, will result in an increase in consumer surplus and a decrease in deadweight loss. This has flow on impacts in the economy since as discussed electricity is a ubiquitous cost in the production cycle.