

15 June 2011

Mr John Pierce
Chairman
Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

AEMC Reference: ERP0019

Dear Mr Pierce

Re: ERP0099 Transmission Frameworks Review – Directions Paper

Please find attached Alinta Energy's (AE) second submission as part of the Australian Energy Market Commission's (the Commission) Transmission Frameworks Review (TFR). The submission addresses those work streams and issues identified by the Commission to be the focus of further analysis in the review.

AE commend the Commission on the work performed to date, and is pleased to have the opportunity for further participation in the review. As noted in our submission to the Commission's Strategic Priorities Discussion Paper, AE considers the TFR as an immediate policy priority for the Commission ensuring the transmission framework delivers timely and efficient investment. This is heightened by the breadth of issues currently facing the energy supply sector and its ability to continue to meet the National Electricity Objective. Ensuring the transmission frameworks suitably incentivise market participants not only to invest, but to operate in an efficient manner will ensure the long term economic efficiency of the market.

AE note the work program for the remainder of the review remains extensive. As a result the TFR Directions Paper has been provided by the Commission in order to generate greater focus on those key themes warranting further analysis. Where AE has not provided a response to the Commission with regard to a particular issue it should not be taken as support for a particular view.

Should the Commission wish to discuss the contents of this submission please contact James Reynolds on 07 3011 7646 or Lance Brooks on 07 3011 7667.

Yours sincerely,

A handwritten signature in blue ink, appearing to read "Gary Stanford".

Gary Stanford
Executive Director Wholesale Energy
Alinta Energy

Transmission Framework Review – Directions Paper

Alinta Energy (AE) has a proud history within Australia's energy markets and through its various subsidiaries is a Market Participant within the National Electricity Market (NEM) and the South-West Interconnected System (SWIS) in Western Australia. AE has established a significant portfolio of generation assets diversified by geographic location, fuel type and operating mode. In addition, AE provides gas and electricity to over 600,000 retail, commercial and industrial (C&I) and small to medium enterprises (SME) customers in Western Australia, Victoria and South Australia.

AE regards the Transmission Frameworks Review (TFR) as an immediate policy priority for the Australian Energy Market Commission (the Commission). The review presents an opportunity for the industry to complete a wide ranging assessment of the existing framework, and its ability to continue to meet the National Electricity Objective (NEO) as the NEM responds to market and policy developments. A wholesale review of the existing framework ensures that the transmission framework is suitably calibrated to incentivise market participants: to invest; operate in an efficient manner; and be responsible for the management of market risks that they are best able to manage.

In its Directions Paper the Commission highlight its findings in its Review of Energy Market Frameworks in light of Climate Change Policies where it found that *"the 'unconstrained' transmission planning approach employed in Western Australia's South West Interconnected System was likely to result in inefficient over-investment in the transmission network"*. In dismissing the SWIS approach, it is important to highlight that the key elements of the WA SWIS arrangements includes:

- firm access rights – for generators and market customers, guaranteed at the connection point for entry and exit services
- generator and end user transmission use of system charging – where exit and entry charges contribute around 25% of the Maximum Allowed Revenue allocated to Western Powers transmission network
- congestion management regime – whereby some users and generators are provided non-firm offers and subsequently constrained off as a first priority where there are network constraints
- generator connection queuing policy – adopted by Western Power and approved under the access arrangement process.

AE notes that despite making this statement, the Commission's TFR has canvassed specific elements of an unconstrained transmission planning approach, for instance charging generators, as a means of amending the current TFR. AE finds this focus curious given the Commission's statement, and suggest that the Commission needs to be careful to ensure that the TFR does not result in a hybrid framework that incorporates the worst elements of both approaches.

AE is disappointed at the Commission's decision to remove the role of transmission, economic regulation and network operation as separate work streams from the scope of the review. These key work streams are crucial elements to considering the transmission framework and the commercial incentives and behaviour of Transmission Network Service Providers (TNSPs). Failing to appropriately address these important work streams may result in disjointed and sub-optimal outcomes from the review.

Role of transmission

AE notes the Commission's view regarding the role of a TNSP is specifically, *"to provide services to competitive and regulated sectors of the electricity market in a manner that is in the long term interests of consumers of electricity"*.¹ Further to this, AE understands the Commission, for the purposes of this review when making a reference to minimising total system costs *"may be considered equivalent to minimising the combined costs of investment in, and operation of, generation and transmission"*.²

In order to achieve a minimisation of total system costs Australia's energy market frameworks must facilitate competition in both the generation and retail sectors whilst providing for a robust economic framework for the delivery of network (monopoly) services. It has been well documented Australia's wholesale and retail energy markets are some of the most competitive in the world. These markets require a sufficiently robust transmission (and by extension network) framework that provides the necessary support and incentives in order to generate future competition and lowest cost energy supplies.

Whilst the current arrangements provide for the provision of services to end users, AE maintains the existing framework does not explicitly provide for a defined minimum level of service to be offered to generators. As a result generators face a series of conflicting arrangements in dealing with jurisdictional TNSPs.

As first noted in our submission to the TFR Issues Paper, AE considers the current arrangements require a TNSP to perform multiple roles, in some instances, there is an overlap of roles and responsibilities with the Australian Energy Market Operator (AEMO), which affects the predictability of delivered transmission services. AE considers there are likely to be substantial benefit in:

- identifying these overlaps
- examining the best model for oversight of the transmission systems operation and transmission service provision to ensure the integrity of regulatory processes within the NEM.

Where the Commission requires evidence of this role overlap it should examine the 1994 agency arrangement between AEMO (then NEMMCO) and each jurisdictional TNSP, and determine whether this type of role overlap, and whether the use of an "agency model" is providing a least cost of electricity supply in the long term interest of users.

AE recognise that despite what the NER requires of TNSPs, their primary role which drives TNSP decisions and commercial behaviour is as an asset owner and operator. It is this role, and the incentives of this role, that potentially distorts the TNSPs additional responsibilities, including network planning, the setting and monitoring of progress in meeting reliability standards, and undertaking their own approval processes for new investments on their own network. AE notes that these incentives are likely to result in unnecessary market distortions as the TNSP respond to asset owner / operator commercial incentives rather than delivering least cost transmission services. AE subsequently support the Commission

¹ AEMC Transmission Frameworks Review – Directions Paper page 21

² AEMC Transmission Frameworks Review – Directions Paper page 15

reviewing the existing role of TNSPs, in particular with regard to those additional responsibilities and the feasibility that the responsibilities with a national focus be moved to an independent body such as AEMO.

Economic Regulation

AE is concerned the Commission, by not examining economic regulation of TNSPs within the TFR risks reaching incomplete conclusions on transmission's role in the NEM. The economic framework provides for how TNSPs earn money from their investment and operational decisions in response to the environment and its regulatory obligations. To de-couple these issues increases the risk of the TFR being ineffective.

In AEs submission to the TFR Issues Paper, we question the economic efficiency achieved in the market whereby five network service providers are responsible for the delivery of a natural monopoly technology. This is likely to be a poignant issue for Australia's energy market over the current regulatory revenue period and for future regulatory determinations given the forecast investment to be undertaken by TNSPs, and the subsequent increase in retail electricity costs required in order to recover such investments.

Without careful review and reform the Commission will struggle to sustain the conceptual inconsistency of arguing that the current economic model for transmission business provides the least cost of supply when Australia has five separate businesses delivering the same services (not the same transmission assets) to effectively five separate geographic natural monopolies. If the NEM is a single market, a view supported by recent Australian court cases, then AE considers that the Commission should at least review the current economic arrangements to determine the best approach to minimise the cost of network supply.

Furthermore, whilst the Commission noted our support for a single TNSP, which it subsequently excluded as an option on grounds of practical challenges to implementation, it seemed to gloss over AE's suggestion to examine whether the existing framework could be altered to allow greater TNSP on TNSP competition. AE considers that the Commission, by excluding these options from further review and analysis, have effectively accepted that the current trajectory for electricity network tariffs is up and that these costs are the least cost solution that the market and the economy must bear for the next 40 or so years.

AE considers that there is substantive merit, particularly for the economy's sake, that we do have a framework that delivers the least cost of supply from transmission (and the broader network in general) services and this can only be achieved by the Commission reviewing:

- the potential bargaining power / influence a potential single Australian TNSP may have on domestic and global capital markets; or
- whether the facilitation of greater TNSP on TNSP competition or the entry of non-government owned business would provide the necessary incentives for competitive TNSPs to achieve dynamic efficiencies in response to the above challenge.

Moreover, AE considers the Commission's decision not to include this key issue on the grounds the review may become unmanageable is not warranted. The Commission as the National Electricity Rule (NER) maker and developer and advisor to the Ministerial Council on Energy (MCE) is well placed to identify potential amendments to the rules and therefore changes to the economic framework. AE urge the

Commission to continue to examine the effectiveness of the economic regulation of TNSPs as a core component of the TFR.

AE note the Australian Energy Regulators (AER) intent to review the framework under which the previous revenue and pricing determinations were made. At the time of writing this submission the AER had not released this information to the market, nor provided an indicative timetable for the review. AE considers such a review is best undertaken by the Commission in its role as rule maker, with support and input to be provided by the AER in its role as rule enforcer.

If the Commission still can not justify a full scale review of the economic regulatory framework within the TFR, then AE encourages the Commission to consider examining the merits of re-introducing the AER's power to undertake ex-post reviews of transmission businesses capital investments as part of the economic regulatory framework. AE considers that while this is a second best option to AE's other suggestions it would provide a counter-balance to TNSPs commercial incentives as an asset owner, and notes that when the ex-post review mechanism was available to the ACCC and the AER it was rarely applied (i.e. on a Final Decision optimisation of asset valuation has been a rare occurrence).

Network Operation

The Commission's decision to limit its consideration of network operation by TNSPs to the impact of network availability on congestion appears limited in scope. AE note the AER expect to commence a review of the Service Target Performance Incentive Scheme in the second quarter of 2011.³ Any review of the scheme by the AER would be restricted to its implementation and enforcement (by the AER), taking into account market participants' participation and overall results of the scheme, ultimately identifying whether or not the scheme as implemented has achieved its objectives. Again, AE recognise that any such review of the network's operation and incentive schemes applicable to TNSPs should be completed by the Commission and not the AER as part of the broader TFR.

The remainder of this submission presents AE comments in response to the Commissions key work streams and issues.

Nature of Access

Differing interpretations of the current arrangements

AE supports the Commissions decision to, at a minimum provide for clear and prescriptive articulation of the current arrangements regarding a generators' access to the shared network and in doing so defining the level of service to be provided by a TNSP. AE notes providing clarity regarding the existing arrangements will require the Commission to perform assessment of the differing frameworks under which jurisdictional TNSPs develop their individual network.

In addition, AE supports the Commission in further reviewing the operation of Rule 5.4A and its ability to facilitate meaningful commercial negotiations between TNSPs and generators for defined levels of transmission services.

³ AEMC Transmission Frameworks Review – Directions Paper page 11

Potential reliability standards for generation

AE support the Commission's consideration of reliability standards for generation. In establishing reliability standards for generators, the Commission in effect would be required to answer a number of those questions which form critical issues to be assessed as part of this review including:

- the level of access rights of market participants
- the charging implications as a result of introduction of a standard and its contribution to supporting the long term economic efficiency of the market
- a TNSPs response to meeting a generator standard under differing jurisdictional planning frameworks
- governance principles maintaining compliance with an agreed standard.

In developing a reliability standard for generator's AE considers any such standard must be applied on a NEM-wide basis and therefore established and assessed by an independent body such as AEMO. Importantly, given the current tripartite process applied by TNSPs and AEMO when reviewing and approving generator network access standards AE considers that the NEM would benefit greatly by an independent agency, such as AEMO setting NEM-wide reliability standards. AE notes the development of a reliability standard framework must offer a degree of flexibility in order to be implemented within the existing (or amended) NEM framework, without creating distorting incentives for the over build of the transmission network.

Selective negotiated or enhanced rights for generators

As highlighted in AE's submission to the TFR Issues Paper, we consider any enhanced rights to be provided to a generator firstly requires the Commission to clearly define what constitutes a minimum or base-line level of service under the existing arrangements. The current uncertainty surrounding the existing framework ensures any discussion is clouded when regarding what constitutes an 'enhanced' right to generators.

On this basis, AE considers the Commission must first explore the existing service provisions under the current arrangements and subsequently the likely impacts and efficiencies in providing enhanced rights selectively to generators. The Commission, in providing for enhanced rights must not create a negotiation framework of enhanced rights between a generator and TNSP coming at the expense of incumbent users of the system.

Furthermore, AEL is of the belief any costs incurred in increasing the rights of a generator must subsequently be borne by the generator to benefit from such changes, and more critically, this right needs to be firm in nature otherwise it is difficult to sustain the argument that generators should pay for this right.

Potential for a financial access rights regime

AE supports the Commission reviewing the merits of financial access rights regime. AE notes that financial transmission rights or FTRs have been debated since NEM start. FTRs are a potential important means of complementing physical transmission rights or services, but we note that international experience would

suggest that there may be little benefit in an FTR regime beyond the NEM's current Settlement Residual Auction regime.

Some key considerations that the Commission will need to consider around FTRs include:

- firmness of FTR and the need for physical backing to improve effectiveness of right
- the model expressed by the Commission represents a right that would exist at the time of planning rather than being dynamic around market operations
- there would need to be greater nodal definition to ensure price separation in the NEM – a subject that has had little support by rule makers in the NEM
- is the problem of sufficient scale to warrant a solution as far reaching and complex as an effective FTR regime.

Network Charging

Access Arrangements and Costs Imposed by Generators

AE notes the Commission's desire to provide a settled view on the service that should be delivered and the costs of providing this service. AE welcomes this view in providing certainty to the market. AE maintain that the Commission must explore the efficiency properties associated with a range of access arrangements (explicit rights or implicit protection). In doing so the Commission must have regard to the NEO and articulate where such fundamental changes to the existing framework are likely to improve the operation of the NEM.

Critically, AE is of the belief any decision by the Commission to introduce an additional charge upon generators in order to better signal its cost to the market must also provide for some level of firm access rights. Moreover, in introducing a charge there appears no efficiency benefits from imposing additional costs on to incumbent generators given the investment costs incurred by those participants are now sunk.

Design issues for generator charging

Prior to implementing a generation charging mechanism it is clear the Commission must first identify the service to which the charge corresponds and the basis for implementing the charge. In doing so the Commission would be required to demonstrate how a charge would contribute to the long term economic efficiency of the market, in effect contributing to the NEO. AE considers the discussion regarding implementing such a charge to date has failed to appropriately address this basic performance hurdle to justify change.

AE note the Commission's focus in implementing a generation charge is designed predominately to provide a locational signal for a new generator entering into the market. Under the existing arrangements AE considers there to be a number of issues requiring further attention by the Commission, namely:

- whilst a generator does not pay a deep connection charge, it does face un-hedgable congestion risk. An additional generator charge for connection to the network subsequently warrants consideration of

firm-access rights to the generator. A TNSPs response to providing the necessary firm-access may result in increased investment costs, which will eventually be borne by end users

- it remains unclear whether the implementation of a generator charge is likely to provide a more suitable locational signal for new entry than the current direct and indirect locational signals
- any levying of a generator charge on existing generators will pave the way for use of change of law clauses to pass on to retailers and end users. As well as claims of financial compensation where these pass throughs do not keep existing generators whole
- any additional charge to be incurred by incumbents will not provide the necessary signal to participants as any final investment (and subsequently locational) decision has been made.

Congestion

As an outcome of the review AE are mindful of the difficulty in gaining industry agreement when defining the costs of congestion within the market and the likely impact on future charging arrangements for the market. Furthermore, AE understands the ability to forecast future congestion of the network diminishes greatly in the longer term and given this uncertainty understanding the future implications of congestion and its role in the existing arrangements proves difficult.

Moreover, in making a final investment decision a significant portion of a generators cost become sunk, under the existing framework this results in no efficiency gains where an incumbent is to incur additional locational charges in light of congestion.

Materiality of congestion

AE understands the issues identified by the Commission with regards to the level of network congestion facing market participants and its perceived impact on the wholesale energy market through; mis-pricing the cost of energy, the potential dispatch risks faced by market participants and their response to such risk in the form of disorderly bidding. Given stakeholder feedback to the TFR Issues Paper and the Commission's own views we are still concerned that the debate and analysis has not progressed beyond the Commission's Congestion Management Review.

In order to accurately account for the level of congestion on the network the Commission must firstly address the existing network operation prior to consideration of forecast congestion. In saying that AE understands some level of accuracy may be achieved in reviewing the impacts of congestion in the future where market participants have publicly committed to future developments, but this type of review will only prove reliable within the planning stage of transmission network development. Beyond this time horizon, AE considers the Commission need to take into account the dynamic nature of network operations – which can only be solved with TNSPs making investments in technology that looks to measure and monitor congestion. Given the forecast level of transmission investment AE concedes that having TNSPs make further investments in appropriate technology to measure and monitor congestion may be costly when compared to the expected benefits of such a scheme.

Network availability

In its submission to the TFR Issues Paper AE considered there to be several conflicts of interest, distorted incentives and inefficient outcomes remaining within the current framework, predominately as a result of the multiple roles and responsibilities of a TNSP. AE support further consideration by the Commission of the incentive regime applied to TNSPs and the potential market benefits established through enhanced network availability and minimising the market impacts of congestion.

Additionally, AE recommend the Commission as part of the TFR review the existing arrangements regarding the 'real-time' operation of the network by TNSP's and the likely efficiency benefits in moving this role to AEMO. In doing so, the Commission will in effect, at a minimum, ensure their remains clear lines of communication and governance over the operation of the network. This is particularly important given the future role of renewable generation within the market in light of the Commonwealth Government's Renewable Energy Target Scheme and price on carbon.

Generator behaviour

Often a generator has little flexibility to respond to certain market outcomes other than to reduce its total capacity offering or to reduce the rate of change in which it responds to dispatch targets. These changes to the operating profile of the generator are subject to its contract, finance and fuel supply arrangements and the operating and maintenance schedule of the plant. Importantly, as real time market with 30 minute prices, based on 5 minute demand and supply data, the structure of the NEM is always to clear based on the price offered into the market.

AE therefore supports that where a generator operates within the bounds of the NER in revising its offering to the market, any loss of efficiencies or resulting higher costs of supply, is a reflection on the existing frameworks. AE is concerned that the Commission's approach of focusing on the "market design" to address any uneconomic or security of supply impacts from generator behaviour misses the point. The Commission's focus should be how the TFR should work to provide transmission services that minimise the extent of generators' having to respond to the available and reliability of transmission services.

Congestion management mechanisms

In response to the TFR Issues Paper, AE considered their merit in reviewing the introduction of a congestion management regime. AE maintains this position and consider when implementing such a regime it must provide coverage to all generators within the market, should be permanent in nature and be simple in its application. Additionally, introduction of a regime must have the necessary flexibility where congestion risk is no longer prevalent to a predefined level within the market, account for this change and reduce its costs and burden to the market.

Planning

Regulatory Investment Test for Transmission (RIT-T)

The recent amendments to the RIT-T are likely to provide greater scope for the approval of transmission investments that provide market benefits. For AE, the concern is despite the amended test there remain risks regarding its application by a TNSP in light of their commercial incentives and the resources available to the AER in its assessment.

In principle, new generation and network investments are substitutes in achieving a minimum efficient scale across the electricity supply chain over the asset life of these assets. AE considered the former RIT did not provide a framework to allow power generator projects as alternatives to network investments.

Whilst AE understands no RIT-T assessment has been completed since its inception in August 2010 it is not yet convinced this issue has been resolved in the development and application of the RIT-T. As a result of this infancy, AE considers it to early to consider wholesale changes to the RIT-T framework however it is mindful of the potential continuation for alternative non-network options to be excluded from the development process.

National Planning / Institutional Arrangements and Planning Information

In its response to the TFR Issues Paper AE notes the current disconnect between the NER and jurisdictional planning and reliability standards has created a number of inconsistencies whereby individual TNSPs are required to respond to separate service quality and reliability performance standards as set by State jurisdictions. This has led to the adoption of differing planning approaches in the build, operation and maintenance of individual TNSP networks.

AE subsequently welcomes the Commission's view to consider "...the concept of a single transmission owner and operator across the NEM might have merit in terms of realising scale economies and promoting national consistency." Whilst AE agrees with the Commission in that implementing such a model is not without its challenges it considers that it is an issue that clearly should be addressed in the TFR.

Furthermore AE have noted above, and in previous submissions to the Commission, its concern regarding the current overlapping roles and responsibilities of TNSPs and AEMO and the impact of differing jurisdictional planning arrangements. AE consider separation of those roles and responsibilities currently performed by a TNSP represents a critical element for the review.

Connections

AE support the Commissions' decision to review the current connection arrangements given stakeholders concerns regarding their ability to meet the needs of the market. AE note the experience of many stakeholders and the subsequent issues apply equally to new network connections as well as the re-negotiation of connection agreements and generator performance standards between parties in light of major capital works to the system or plant.

AE endorse those comments regarding the existing connection arrangements provided by the National Generators Forum in its submission to both the TFR Issues and Directions Papers. As an industry the issues identified in the existing arrangements and echoed in the submissions of market participants are likely to be further exacerbated as a result of an increase in the number of network connections.

Issues relating to the connection arrangements are predominately the result of:

- clarity and ambiguity in the NER regarding the negotiation and connection process
- differing jurisdictional planning frameworks
- a lack of transparency and consistency from TNSPs in both the costs associated with connection to the network and the sharing of information.

A significant number of those issues identified can be traced back to the TNSPs position as a monopoly service provider and asset owner. As a result market participants, generators and large end users, are required to rely on a TNSP to provide, at a 'reasonable' cost, key information / analysis pertaining to its connection to the network. Given this dependence, it is essential the connections arrangements provide the necessary support to market participants through prescriptive obligations upon TNSPs, ensuring the market is not faced with distorting outcomes as TNSPs respond to commercial incentives rather than the needs of market participants.

Furthermore, AE notes many market participants have commercial interests in more than one NEM jurisdiction. As a result a market participant is likely to be exposed to multiple planning frameworks as TNSPs respond to meet their service quality and reliability performance standards. Given the frequency in which a market participant uses such processes there is little opportunity to optimise the connection process for a market participant, leaving a participant further exposed the TNSP 'expertise' with regards to the process timing and costs.

Moreover, AE's own experience has highlighted the existing resource constraints of TNSPs in progressing through a new connection and limited governance arrangements surrounding the process. This has resulted in key personnel of the TNSP performing the bulk of the modelling and analysis whilst at the same time having responsibility for reviewing and approving the analysis outcomes and ultimately a participant's connection to its network.

AE considers in light of the number of new connections currently forecast, establishing an efficient and effective connection arrangement, providing the necessary incentives to TNSPs and support for market participants, forms a critical element of the review.