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7 November 2019

Mr John Pierce
Chair
Australian Energy Market Commission
PO BOX A2449
Sydney South NSW 1235

Via online submission

Dear Mr Pierce,

RE EPR0073 – COORDINATION OF GENERATION AND TRANSMISSION INVESTMENT INFRASTRUCTURE PROPOSED ACCESS MODEL

TasNetworks welcomes the opportunity to make a submission to the Australian Energy Market Commission's (**AEMC**) consultation paper on the proposed access model for the Coordination of Generation and Transmission Investment (**CoGaTI**) review.

TasNetworks is the Transmission Network Service Provider (**TNSP**), Distribution Network Service Provider (**DNSP**) and Jurisdictional Planner (**JP**) in Tasmania. TasNetworks is also the proponent assessing the business case for Marinus Link, a new National Electricity Market (**NEM**) interconnector between Tasmania and Victoria. The focus in all of these roles is to deliver safe and reliable electricity network services to Tasmanian and NEM customers at the lowest sustainable prices. TasNetworks is therefore appreciative of the AEMC's efforts to review access arrangements to coordinate future generation and transmission investment.

TasNetworks supports Energy Networks Australia's (**ENA**) submission and would like to make several further comments with a particular focus on the Tasmanian context. The key points in this submission are:

- In general, TasNetworks is supportive of the changes that have been made to the proposed access model since publication of the directions paper. In particular, the decision to drop the third pillar of the reform which would have seen transmission hedges drive the network planning framework with deleterious consequences for network investment and the energy transition more broadly.
- TasNetworks strongly supports the introduction of Dynamic Loss Factors (**DLFs**) and methods for hedging them in the proposed access model but notes there are implementation challenges to overcome. Given the value DLFs and the DLF hedges would provide, however, TasNetworks considers that the CoGaTI deadline be extended as required to facilitate their inclusion.
- TasNetworks strongly agrees with the AEMC that TNSP risk profiles should not be adversely affected by any enhanced incentive scheme given the risks that might otherwise retard network investment required to facilitate the NEM transition.

- TasNetworks also strongly supports customer Transmission Use of System (**TUoS**) charges being offset by Financial Transmission Right (**FTR**) auction proceeds and excess settlements residues where possible. TasNetworks agrees that these payments should be managed by the Australian Energy Market Operator (**AEMO**) as part of market settlement processes to reduce TUoS volatility in customer bills.
- TasNetworks agrees that FTRs should be sold to align with the existing and committed network capacity as determined by TNSPs and AEMO as part of their planning processes. TasNetworks also considers that all power flow constraints should be included in the FTR market settlement calculus and that non-scheduled generators should be settled at the Locational Marginal Price (**LMP**). These design elements will ensure optimal efficiency and revenue adequacy of the proposed access model.
- TasNetworks supports the AEMC's pragmatic approach of limiting FTR instrument characteristics to reduce implementation complexity in the short term. The one exception is hedge tenure which TasNetworks considers should be lengthened to increase FTR value. Moreover, in the longer term, TasNetworks considers that flexibility must be afforded to market participants to determine how the FTR market evolves.
- TasNetworks agrees with the proposal to use a simultaneous feasibility auction to determine the quantum of FTRs to be sold. TasNetworks considers this will be the most efficient method of initially allocating FTRs and maximising the revenue from their sale such that TUoS charges to customers are minimised.
- TasNetworks welcomes the AEMC's proposals for better quantifying the costs and benefits of the proposed access reform. However, as stated previously, TasNetworks considers the reform should only proceed if it can be robustly demonstrated that changes will be in the long term interests of customers. In this regard, TasNetworks considers the multi-modal approach could be usefully supplemented with an agent-based simulation and nodal modelling.
- Despite the positive developments noted above, TasNetworks still considers that the current implementation timeframe is challenging and sees risks of poor market outcomes. In particular, if implementation is rushed, tried on a piecemeal basis and/or without appropriate consideration of other ongoing market reforms. It remains critical that stakeholder concerns continue to be addressed such that a new framework can be pragmatically implemented in a realistic and efficient timeframe.

TasNetworks responses to individual questions are provided below and we welcome the opportunity to discuss this submission further with you. Should you have any questions, please contact Chantal Hopwood, Leader Regulation, via email (chantal.hopwood@tasnetworks.com.au) or by phone on (03) 6271 6511.

Yours sincerely,

Wayne Tucker

General Manager, Regulation, Policy and Strategic Asset Management

QUESTION 1: SCOPE OF DYNAMIC REGIONAL PRICING

Do stakeholders consider that the scheduled / non-scheduled distinction offers a sensible basis for determining which parties should face local or regional pricing? Is the proposed waiting period of 12 months to reverse a change to a participant's categorisation workable and appropriate?

TasNetworks has raised concerns with the scheduled/non-scheduled distinction in previous submissions to the Coordination of Generation and Transmission Investment (**CoGaTI**) review. These have primarily related to issues of revenue adequacy. TasNetworks considers the introduction of Volume Weighted Average Pricing (**VWAP**) is a positive step which will go some way to addressing this issue.

Nevertheless, and although recognising that non-scheduled generators are a small proportion of the entire NEM generation fleet, TasNetworks still considers that non-scheduled generators should be settled at the Locational Marginal Price (**LMP**). This is rather than the VWAP. Allowing optionality to some generators in being scheduled could have implications for revenue adequacy and distortion of investment signals given the potential for gaming. That is, generators will tend to pick whichever price is best for them at a given location. Whilst favourable for the individual generator, this may not be the optimal arrangement from an overall market efficiency perspective.

TasNetworks understands that the AEMC's reason for favouring the distinction between the treatment of scheduled and non-scheduled generation rests on the complexity with which LMP outcomes for non-scheduled generation can be represented in the NEM Dispatch Engine (**NEMDE**). If the costs to remedy this are as substantial as previously indicated, TasNetworks would support the alternative approach recommended in the consultation paper. However, in lieu of a 12 month waiting period, TasNetworks favours allowing generators an initial and irrevocable decision on scheduling status given a 12 month waiting period may still provide an inefficient gaming incentive.

Beyond these concerns, TasNetworks notes that there has so far been little discussion of how and if the proposed changes would apply to generators connected at the distribution level. TasNetworks therefore calls on the AEMC to clarify how distribution connected generation will be impacted by the proposed reforms.

QUESTION 2: CONSTRAINTS IN PRICING

Do stakeholders agree with characterisation of the constraints that would be reflected in locational marginal prices?

TasNetworks considers that, ideally, all power flow constraints should be reflected as faithfully as possible within NEMDE. This is to ensure that LMPs accurately reflect the marginal local cost of generating and supplying electricity to customers. To the extent that some constraints are not included, or are more complex to accurately include than others[1], TasNetworks considers these might be aligned with other related Australian Energy Market Operator (**AEMO**) work streams. That is, with a move to include Dynamic Loss Factors (**DLFs**) likely requiring significant changes to NEMDE, this may also present a timely opportunity to improve how constraints are represented.

QUESTION 3: REGIONAL PRICING METHOD

Do stakeholders agree with characterisation of the benefits and costs of moving to a volume-weighted average price? What other costs and benefits do stakeholders think should be taken into account?

TasNetworks agrees with the AEMC's characterisation of the costs and benefits of VWAP and considers that it is the only method that will ensure revenue adequacy under the proposed system of Financial Transmission Rights (**FTRs**). This is on the assumption that all scheduled and non-scheduled generation along with scheduled load face the LMP whilst non-scheduled load faces the VWAP. If this

[1] For example, various power system stability limits that are expressed as power flow limits across the network.

does not hold then revenue adequacy cannot be guaranteed with the potential commensurate negative impacts on FTR firmness and their value to participants.

QUESTION 4: LOSSES UNDER DYNAMIC REGIONAL PRICING

Do stakeholders agree with the Commission's qualitative analysis of the potential dispatch efficiency benefits that could result from adopting dynamic loss factors? What other costs and benefits do stakeholders think should be taken into account? Do stakeholders agree that the alternative *ex ante* approach to incorporating dynamic loss factors should not be pursued further at this stage?

TasNetworks strongly supports the introduction of Dynamic Loss Factors (**DLFs**) as part of the AEMC's proposed model. However, as TasNetworks has highlighted in earlier submissions to the CoGaTI review, it is not without challenges. A move to DLFs would increase accuracy in the physical calculation of losses at the expense of certainty to generators in terms of their bidding and settlement outcomes. It is therefore critical that the introduction of DLFs is paired with a mechanism by which generators can hedge against changes in loss factors. Failure to do so will likely only result in an uncertainty premium being built into wholesale market pricing thus negating efficient market dispatch outcomes.

In this respect, TasNetworks notes that the pairing of DLFs with FTRs has been the subject of academic study[2]. However, TasNetworks is unaware of any jurisdiction internationally that has successfully combined option FTRs with DLFs in one instrument. Indeed, the paper referenced in the footnote cites 'unresolved complexities' with such an approach. TasNetworks therefore urges caution in attempting to shoe-horn FTRs and DLFs into one instrument despite the potential administrative efficiencies.

Beyond this concern, TasNetworks notes that AEMO has indicated implementing DLFs would require a full rewrite of NEMDE. This may take up to two years and could be pushed farther out due to work on existing projects such as Global and 5 Minute Market Settlement. This would seemingly conflict with the AEMC's desired implementation deadline for CoGaTI access changes of July 2022.

To avoid this, the consultation paper raises other options for incorporating DLFs into the dispatch process such as on an ex-ante basis. This may have the advantage of faster and cheaper implementation but is unlikely to capture the full efficiency benefits of near real time DLFs. Moreover, if the intent is to ultimately move to real time DLFs anyway, any interim step to an ex-ante calculation process would simply represent further change and development costs. To minimise the risks, and maximise the utility, associated with a full rewrite of NEMDE, TasNetworks suggests the CoGaTI implementation date be postponed until such time as DLFs can be appropriately integrated into NEMDE.

QUESTION 5: MITIGATING MARKET POWER

Do stakeholders agree with our characterisation of how market power issues may arise under dynamic regional pricing? Do you agree with our proposed response to market power issues? What other costs and benefits may result from this response to market power issues?

TasNetworks agrees with the AEMC's conceptual characterisation of the market power concerns with Dynamic Regional Pricing (**DRP**). Given the size of the problem likely to be seen in practice under DRP is currently unknown, TasNetworks supports further investigation and modelling to attempt to quantify it.

Even if modelling indicated issues of market power were likely to be a legitimate concern, however, TasNetworks would urge caution in applying blanket market interventions to resolve this. As noted in

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[2] For one example, see Harvey and Hogan's 2002 paper on Hedging Financial Transmission Rights available from https://sites.hks.harvard.edu/fs/whogan/Harvey_Hogan_Loss_Hedging%20_FTRs_011502_.pdf

the consultation paper, periods of higher prices are an inherent part of an energy only market and provide signals to participants to address the supply-demand imbalance. Anything that interferes with investment signals, such as local price caps, could therefore have the perverse effect of entrenching market power over longer time frames. That is, by stifling investment which would otherwise work to mitigate such concerns.

QUESTION 6: TYPE OF FINANCIAL TRANSMISSION RIGHTS
Should financial transmission rights be limited to options instruments?

TasNetworks supports limiting FTRs to options instruments, at least initially. This is on the basis that payment volatility, financial market reporting obligations and associated market settlement complexity would be reduced compared with both swaps and futures alternatives. With that said, TasNetworks considers that there remain many options FTR design elements that could impact the relative attractiveness and efficiency of the FTR framework to stakeholders. In this respect, TasNetworks urges further consultation with market participants to ensure the FTR characteristics most desired by the market are faithfully represented in the initial market design.

QUESTION 7: LIQUIDITY
Do stakeholders agree with our characterisation about how the financial transmission rights should support liquidity?

TasNetworks agrees that FTRs should support contract market liquidity by providing a mechanism to generators to hedge congestion risk. TasNetworks notes, however, that this rests on the key premise that the design of FTRs will be sufficient to incentivise generators to purchase them. As highlighted above, design choices may mean this does not hold in all places at all times.

QUESTION 8: PRICES THAT CAN BE HEDGED
Have we appropriately identified the pairs of prices that can be hedged through the instruments? Would more or less flexibility than that recommended be preferred?

TasNetworks considers that allowing LMP-VWAP and VWAP-VWAP hedging is a pragmatic first step in implementing FTRs. TasNetworks acknowledges that LMP-LMP hedging would provide extra risk management flexibility but notes that it may also increase market complexity and liquidity risks. However, if it is strongly desired by participants, and if the computational complexity can be reduced such that it results in increased FTR sale proceeds to offset customer TUoS charges, TasNetworks suggests LMP-LMP hedging should also be adopted.

QUESTION 9: WHEN FINANCIAL TRANSMISSION RIGHTS ARE ACTIVE
Are continuous and time of use rights appropriate, given the trade-offs identified above? Are more bespoke products desirable through the auction, and how might they be accommodated? What are your expectations of a secondary market emerging to provide bespoke products, if desired by the market?

As above, TasNetworks considers that the design elements could have a large impact on the relative attractiveness and efficiency of the FTR framework. For example, it may be that more bespoke FTRs are preferred to the extent that additional market complexity is warranted. That is, by increasing overall FTR revenues which can be used to offset customer TUoS charges. In this respect, TasNetworks considers the questions above are best answered by FTR market participants.

QUESTION 10: REVENUE TO BACK FTRS
How the number of FTRs sold should be determined? How, specifically, might this be achieved/targeted? How should excess settlement revenue not required to fund financial transmission rights be treated? Who should pay for any shortfall in settlement revenue? Should the revenue from the sale of the financial transmission rights be used to back the FTRs?

TasNetworks agrees that FTRs should be sold to align with the existing and committed network capacity. Further, that this capacity level should be jointly determined by NSPs and AEMO as part of their planning processes. TasNetworks also agrees that excess FTR settlement residues should accumulate in an AEMO administered fund and be used to offset shortfalls across geographies and time intervals. This is so that revenue adequacy is maximised.

TasNetworks does not, however, agree that the fund should be indefinite in size. Instead, TasNetworks favours capping the fund with excess residues above the cap being returned to customers to further reduce their bills. The size of the fund cap should be reviewed to determine it remains fit for purpose in striking an appropriate balance between providing hedge firmness and offsetting customer costs.

In the event that there is a shortfall in settlement revenue, TasNetworks considers that hedges be scaled back commensurately. This is so that the fund does not go 'negative' and customers do not face increased TUoS charges in order to 'firm up' FTRs. For similar reasons, TasNetworks does not support revenue from the initial sale of FTRs to be used to firm FTRs and instead favours these funds being returned to customers to offset TUoS costs via the AEMO auction settlement process.

QUESTION 11: NON-THERMAL CONSTRAINTS

Has the Commission identified the challenges relating to non-thermal constraints? How might these challenges be accommodated in the design of the FTRs?

TasNetworks agrees with the AEMC's analysis of the challenges relating to non-thermal constraints and supports further investigation into its possible effect on FTR firmness.

QUESTION 12: LOSSES

Has the Commission identified the challenges relating to losses? How might these challenges be accommodated in the design of the FTRs?

TasNetworks agrees with the AEMC's analysis of the challenges relating to losses and agrees that further consideration is required. Chief amongst these is ensuring sufficient revenue adequacy if DLFs are combined in one FTR instrument. As noted in the answer to Question 4, combining option based FTRs and DLFs in one instrument has not been successfully implemented internationally to date. However, TasNetworks does not consider that difficulties with an 'all in one' instrument approach should be grounds for not introducing congestion and loss hedging capabilities at all. Separate instruments or other mechanisms should be sought to maximise the value from these critical and necessary design elements.

QUESTION 13: METHOD OF SALE

Do you agree with the proposal to use a simultaneous feasibility auction to determine the quantity and combination of financial transmission rights to be sold? Should AEMO be responsible for this auction? Should the reserve price be zero? What other insights do you have on the design of the auction?

TasNetworks agrees with the proposal to use a simultaneous feasibility auction to determine the FTRs to be sold. TasNetworks considers this will be the most efficient method of initially allocating FTRs and maximising the revenue from their sale such that TUoS charges to customers are minimised. TasNetworks supports a zero reserve price if option FTRs are the only FTR instrument used and agrees with AEMO being responsible for the auction process. This is likely to reduce implementation complexity and administration costs. Beyond this, TasNetworks suggests allowing previously allocated FTRs to be sold back into future auctions given it would increase flexibility and liquidity to participants.

QUESTION 14: TENURE AND LEAD TIME

What is the appropriate tenure for the financial transmission rights? How far in advance should the financial transmission rights be made available? What factors should the Commission take into consideration when determining the lead time?

TasNetworks considers that the tenure and lead times proposed will be unlikely to maximise FTR auction proceeds. Feedback at earlier CoGaTI technical working group meetings, and our own Tasmanian Generator Forums, indicates that longer term FTRs would be valued higher by generation proponents. This is consistent with international experience where FTRs of up to 10 years are offered. TasNetworks suggests these insights be incorporated into the proposed access model to increase FTR sale proceeds.

QUESTION 15: AUCTION PARTICIPANTS

Should participants to the auction be limited to physical market participants in the case of financial transmission rights between local and regional prices? Should non-physical participants be allowed to buy financial transmission rights between regional prices?

TasNetworks agrees that auction participation for LMP-VWAP FTRs should be limited to physical market participants, at least initially. This is on the basis of mitigating market power concerns and allowing physical participants to appropriately manage their risks. However, as the market develops and sophistication increases, TasNetworks considers that these concerns may subside. If so, then allowing non-physical participants to purchase LMP-VWAP FTRs may increase overall auction revenues and thereby lower costs to customers.

QUESTION 16: FINANCIAL TRANSMISSION RIGHTS TRANSPARENCY

What information relating to the sale of financial transmission rights should be made transparent?

TasNetworks considers that transparent auction information will be a key lever in promoting efficient price discovery. TasNetworks therefore supports AEMO maintaining and publishing a public record of FTR auction results and current holdings.

QUESTION 17: COSTS OF IMPLEMENTING THE PROPOSED MODEL

Do stakeholders agree with our proposed approach to ascertain estimates of the costs of implementing the proposed model?

TasNetworks supports the proposed approach for estimating the costs of implementing the proposed model.

QUESTION 18: ADDITIONAL BENEFITS

Beyond the benefits identified, are there additional benefits that stakeholders think should be taken into consideration?

TasNetworks considers the benefits identified are appropriate for inclusion in the Cost Benefit Analysis (**CBA**). TasNetworks notes there are likely to be other informational benefits accruing from the proposed model but their materiality may be hard to quantify. For example, the information underpinning the FTR dispatch and settlement process would have to take into account flows on all line segments if DLFs are included. This could provide useful information to participants in valuing and providing ‘stripped FTRs’ or other bespoke hedge products. Beyond this, such information would also be valuable for determining the beneficiaries from inter-regional transmission flows. This would provide a solid quantitative foundation upon which to create a more equitable and transparent transmission pricing framework, namely, a beneficiary pays approach.

QUESTION 19: BETTER RISK MANAGEMENT

What additional implications from better risk management do stakeholders think should be considered, beyond a lower cost of capital?

TasNetworks considers that the materiality of this benefit will turn on FTR tenure. That is, given the long lifetimes of generation assets, it may make little difference to a generator's overall cost of capital if only 3 or 4 year hedges are offered. However, if longer term FTRs were introduced, this benefit may be more substantive. TasNetworks suggests the AEMC investigate this possibility as part of the CoGaTI analysis.

QUESTION 20: BENEFITS OF REFORMS OVERSEAS

What overseas markets or studies could be relevant? What important differences should be taken into account?

TasNetworks considers elements from both the New Zealand and the Electric Reliability Council of Texas (**ERCOT**) electricity markets can provide valuable information to inform AEMC's deliberations. The New Zealand market possesses a number of innovative market arrangements including full nodal pricing, a FTR hedging regime and a National transmission demand response programme. It is also in the midst of implementing a benefits based transmission pricing system to recover the costs of new grid investment[3]. The ERCOT market provides an excellent case study on the successful integration of significant new quantities of Variable Renewable Energy (**VRE**) in an islanded grid[4]. Amongst other things, this has included changes to transmission planning to facilitate the creation of Competitive Renewable Energy Zones (**CREZs**) and to market pricing in a move from a zonal model to a nodal one.

QUESTION 21: IMPROVED OPERATING INCENTIVES

What literature in relation to race to the floor behaviour and bidding unavailable behaviour do stakeholders think should be taken into account?

No comments.

QUESTION 22: IMPROVED DISPATCH EFFICIENCY

Is the proposed methodology in relation to the efficiency gains from adopting dynamic loss factors likely to capture all the benefits from such a change?

TasNetworks agrees with the proposed approach but considers that it will only capture some of the benefits if DLFs are incorporated in the FTR regime. That is, in providing a hedge against changes in loss factors that is not currently available, investment risk will be reduced. All other things being equal, this should lead to increased availability and lower cost financing for generation investment.

QUESTION 23: BETTER LOCATIONAL INCENTIVES TO INVEST

Do stakeholders agree with the methodology described in relation to using the estimated historic cost of congestion as a basis for an estimate of the 'size of the prize' of better locational signals for investment that would be provided under the proposed model?

TasNetworks considers that an historical approach may significantly underestimate the 'size of the prize' of the congestion efficiencies to be had. Until recently most congestion was typically the result of thermal constraints. However, with the increasing penetration of VRE, system security constraints have become much more prevalent and are only expected to increase in future. TasNetworks acknowledges the difficulty with accurately forecasting impacts from system security constraints. Nonetheless, some form of forward looking, scenario based, Monte Carlo simulation may be useful for informing this analysis.

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[3] For more information please see https://ea.govt.nz/development/work-programme/pricing-cost-allocation/transmission-pricing-review/

[4] A summary and economic analysis of the ERCOT changes can be found at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3059760.

QUESTION 24: ADDITIONAL POLICY DESIGN AREAS

Are there areas of policy design in addition to the three identified that stakeholders consider should be included in the quantitative modelling exercise?

TasNetworks has no additional comments to add beyond the answers to Questions 25, 26 and 27 below.

QUESTION 25: MARKET POWER

What issues should be taken into account in the proposed modelling of the impact of dynamic regional pricing on market power?

TasNetworks supports the AEMC's proposal to investigate market power concerns but has no additional comments on the best mechanism for achieving this.

QUESTION 26: REVENUE ADEQUACY OF FINANCIAL TRANSMISSION RIGHTS

What factors do stakeholders think should be taken into consideration in modelling the demand for financial transmission rights at each point in the network?

The consultation paper states that the adequacy of the revenue required to back financial transmission rights will help to determine the volume of financial transmission rights to be sold under the proposed model at each location in the network. However, TasNetworks understands that it is the auction mechanism itself which will guarantee the revenue adequacy. That is, by representing the transfer capability of each element of the transmission network and allocating FTR rights accordingly to maximise the auction proceeds. If this understanding is correct, there would seem to be little need to make any specific assumption about the level of demand for FTRs at each point in the network.

QUESTION 27: THE EFFECT OF VWAP PRICING

What impacts do stakeholders see from the introduction of volume weighted average pricing in place of the existing regional reference price? What considerations do stakeholders think should be taken into account in modelling the effect of volume weighted average pricing?

TasNetworks does not see how the full impacts of VWAP pricing can effectively be quantified without nodal modelling. Although cognisant of the risks of reform being slowed from 'analysis paralysis', TasNetworks considers this exercise would offer critical insight on the benefits of the proposed access model even if limited to only one or two regions of the NEM. TasNetworks therefore encourages the AEMC to undertake nodal modelling to inform its deliberations.

QUESTION 28: DISTRIBUTIONAL IMPACTS

What issues should be taken into account in the proposed modelling of distributional impacts?

TasNetworks supports the modelling of distributional impacts, particularly for customers. In this respect, and as stated previously, TasNetworks considers the proposed access model should only be implemented if it can be robustly demonstrated to improve customer outcomes over the long term in line with the National Electricity Objective (**NEO**).

QUESTION 29: COMMUNICATION

What particular aspects of the operation of the model would stakeholders like to see in operation in a paper trial?

TasNetworks supports the use of paper trials to better understand how the proposed access model might operate under different circumstances. TasNetworks considers that bidding behaviour from such a trial might help inform other modelling. For example, any agent based modelling undertaken to assess benefits of the proposed access model.

QUESTION 30: ALTERNATIVE APPROACHES
Are there alternative approaches to a full quantitative model that stakeholders think should be considered that might avoid the pitfalls identified in the three approaches?

TasNetworks agrees that no one modelling technique will comprehensively cover all objectives identified for analysis. TasNetworks therefore supports the multimodal, multi-method approach the AEMC has proposed for estimating costs and benefits of the reform. Although cognisant of the costs in time and resourcing of CBA, TasNetworks suggests that nodal modelling and agent based modelling could provide useful reform insights. TasNetworks therefore encourages the AEMC to consider the merits of facilitating smaller scale versions of these approaches. For example, as noted above, using bidding behaviour from the paper trial to inform a small agent based simulation and using a smaller NEM nodal model for analytical purposes.

QUESTION 31: GRANDFATHERING OF ACCESS
Do stakeholders agree with the proposed principles and approach?

TasNetworks considers grandfathering of FTRs to be an issue of paramount importance and one that is fraught with issue and complexity. If not set at an efficient level, incumbent generators will be advantaged at the expense of future generators or vice versa. To the extent that scheduled load will face the LMP, grandfathering consideration would also seem to be relevant for those participants. Moreover, the duration of grandfathering will also impact customers in terms of the lowering FTR auction proceeds that might otherwise be used to offset TUoS charges. In this respect, although the transitional principles appear reasonable, TasNetworks agrees that it is difficult to determine exactly what form grandfathering should take without a full and final access model being specified. As such, TasNetworks considers there is not enough information at this stage to accurately evaluate the merits of the proposed approach.

QUESTION 32: TRANSITION FOR TRANSMISSION NETWORK SERVICE PROVIDERS
Do stakeholders agree with our considerations for transmission network service providers in relation to transition?

TasNetworks considers that historic and persistently low inflation and bond yields are already impacting network investability considerations via the Rate of Return determination. To impose additional risk on TNSPs via changes to the Service Target Performance Incentive Scheme (**STPIS**) would only exacerbate this and potentially lead to a 'drought' in network investment. This would not be in customers or generators long term interests, nor facilitate the timely transition from the current to the future NEM. TasNetworks therefore agrees with and supports the AEMC's principle that TNSP risk profiles should be no different under any enhanced incentive scheme. Without further information on the proposed scheme, it is difficult to make further comment except that it is TasNetworks' expectation that a full Australian Energy Regulator (**AER**) consultation process will be employed to work through the specifics of any changes to the current scheme.

QUESTION 33: IMPLEMENTATION
In light of the proposed access model specification put forward in this paper, do stakeholders have views on an appropriate implementation date?

TasNetworks agrees that the proposed model is now simpler given the proposal to have FTRs directly inform transmission planning has been dropped. As set out in TasNetworks' earlier submission to the CoGaTI reform directions paper, such an approach had no international precedence, would not have resulted in efficiency and investment gains envisioned and would have needlessly complicated the planning and investment framework. Despite this, TasNetworks still considers that the current implementation timeframe is challenging and sees risks of poor market outcomes if implementation is rushed, done on a piecemeal basis and/or without appropriate consideration of other ongoing reforms such as 5 Minute Market Settlement. As above, if FTRs, LMP and DLFs cannot be delivered concurrently in a realistic timeframe then TasNetworks suggests extending the July 2022 deadline. This is so that the full benefits of the model can be maximised whilst implementation risks are minimised.