CS Energy response to OFA Design and Testing: AEMC Draft Report

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Optional Firm Access, Design and Testing

Summary

CS Energy thanks the Australian Energy Market Commission (AEMC) for consulting on the development of Optional Firm Access, Design and Testing.

We hope the AEMC find this response helpful in finishing the design of Optional Firm Access (OFA) and in considering the implications of the design choices on generators, monopolies, regulators and the consumer in fulfilling the National Electricity Objective (NEO).

Our response is structured in the format of the Draft Report. We first comment on the assessment against the NEO, which includes discussion of Volume I of the Draft Report.

We then provide comment on design choices for OFA, as described in Volume II of the Draft Report and compare these choices to recommendations CS Energy made in responding to the previous consultations on OFA and Access Pricing.

Assessment against the National Electricity Objective, Volume I Draft Report

As a general comment we believe the AEMC's assessment of OFA is premised on it working perfectly. We do not share the confidence of the AEMC that the real life application of OFA will be superior to the current National Electricity Rules. The benefits identified by the AEMC's consultants Ernst and Young (EY) has been described by Frontier Economics as '*enumeration of the starting assumptions*[1]', with the key assumption being that the current arrangements had no co-optimisation of transmission and generation investment, and that transmission follows generation investment. We consider this to be untrue and as a result the benefit of implementing OFA would be marginal. Furthermore, if we assume OFA does not work perfectly in real life and has some flaws, we believe there could be inefficiency compared to the current Rules.

We disagree with the recommendation that the AEMC should review conditions for OFA as an adjunct to the annual Last Resort Planning Powers under the Rules. This follows our view that not only the timing for the implementation of OFA is "not right" but that there are valid reasons why the OFA may not be the correct model.

The Transmission Framework Review and the development of OFA should serve as an example for the development of regulations in the National Electricity Market (NEM). Prior to commencing significant reviews the problem and its materiality should be clearly identified before resources are invested into developing solutions. We can then focus our resources on regulations where there are clear benefits. If we take OFA as an example, the cost benefit analysis by EY (which CS Energy previously raised issues with) was only conducted well after the development of OFA.

Allocation of Risk	
CS Energy recommendation	Allocating the stranding risk of existing stranded assets is solely a transfer of wealth from generators to consumers.
AEMC Draft Report	Allocating stranding risk onto generators will lead to more efficient decisions.
CS Energy final position	Allocating the stranding risk of ***existing*** stranded assets is solely a transfer of wealth from generators to consumers. We note the AEMC has recognised this by considering Transitional Access and Renewal Rights (to which we provide supportive comments later in this response). Even if there was a need for incremental transmission, this would not be a free-lunch: incremental generators would apply a higher risk premium and require greater returns than under the existing Rules, where network monopolies invest and consumers bear the stranding risk.

[1] Frontier Economics – OFA Design and testing – Response to the AEMC First Interim Report – March 2015, p64

	There is no evidence that the present regime is inefficient. The current oversupply of generation in the NEM shows that private investors have not accurately predicted future demand.

Optimisation of generation and transmission investment	
CS Energy recommendation	There is circularity with the roles of the monopoly and the generators, whereby the monopoly's price schedules may lead the generator's decisions. In particular, the role of the network monopoly is pivotal in setting the price and volume signals for the generator; it will also be heavily involved in assuming future usage of the network in setting Long Run Incremental Cost (LRIC) prices; and also provision of and resale of Reliability Access. Notwithstanding this, the monopoly can be expected to extract as much money as possible from the incentive schemes it has negotiated with the Regulator (without the involvement of the generator). On that basis, CS Energy does not consider that it is correct to say that OFA is market-led as it does not really involve the generators. Instead we recommended that generators be granted access and have ability to trade this access. If anything the initial allocation should be free or by auction with no exposure to regulated prices.
AEMC Draft Report	AEMC has a view that the existing arrangements leave the potential for investment in generation and transmission assets to be poorly coordinated. The AEMC asserts OFA will more effectively coordinate transmission investment with generation because generators will provide a signal where and when to invest by underwriting the investment in new firm capacity.
CS Energy final position	CS Energy disagrees with the AEMC's view on the optimisation of generation and transmission investment. The incremental benefit of OFA is based on it working perfectly. CS Energy argues the present Rules are efficient and OFA may not be, in practice, any more efficient. Given the imperfections in the access allocation process, LRIC pricing schedules, access settlement and TNSP incentive schemes, much of the benefits ascribed to OFA may not occur.

Firm access, generator bidding and dispatch efficiency	
CS Energy recommendation	OFA is supposed to concentrate the change in dispatch on a few generators and then compensate them. In practice, this has the effect of increasing the change in dispatch for some participants, possibly in exchange for less volatile pricing. The less volatile pricing is not guaranteed and so if we are concentrating the risk on those participants closest to the constraint (in volume terms) the effectiveness of the compensation arrangements is crucial to providing the financial certainty which should be the primary objective of the OFA. CS Energy's view is that the more stable pricing outcomes under OFA could result in generators being able to optimise access and energy settlement. In particular the removal of offers priced at the floor will create more stable local prices on the sending end of the constraint and reduce the chance of low or negative prices at the node, yet on the receiving end generators may still offer prices that could result in high flowgate costs under fully constrained pricing.
AEMC Draft Report	AEMC highlights reduced incentives to "race to the floor" and to "game" congestion at present. Where generators and interconnectors are located around loops, potential efficiency gains are larger due to different coefficients in a constraint equation. For example, it is possible for a generator to constrain off a competing interconnector by a factor of fifteen to one by increasing its own dispatch. This underutilises the network's capacity, paradoxically increasing the regional spot price. Access settlement element of optional firm access is likely to change incentives on generators with the effect that "race to the floor" bidding under congestion conditions would be reduced. However, optional firm access does not (and was not designed to) change other "disorderly bidding" behaviours. While optional firm access would remove some of these dispatch inefficiencies, the benefits across the NEM would be small. The Commission notes that AEMO has not been able to assess the effects of access settlement in the presence of portfolio bidding.
CS Energy final position	CS Energy disagrees with the AEMC's position. AEMO and AEMC's work on dispatch and generator bidding has regressed since the Technical Report (section 11.6) published with the Final Report of the Transmission Frameworks Review. It was clear from the Technical Report that there are different incentives under the existing Rules to OFA for generators on the sending and receiving end of a constraint. Less floor priced bidding may improve interconnector flows and reduce immediate price volatility, yet also reduces occasions where floor bidding reduced prices: the rub is that more stable pricing outcomes could allow participants to maximise access and energy settlement, especially if there is an inefficient or unbalanced allocation of access holdings. AEMC and AEMO's argument is essentially that other "dispatch inefficiencies" exist. We agree OFA will not, and is not supposed to, solve them, but we disagree as to whether they are really as inefficient as suggested by AEMC and AEMO, because the NEM's allocative process is unlikely to result in theoretically perfect merit order dispatch.

CS Energy has raised the concern that neither AEMC or AEMO have assessed whether OFA could make these 'dispatch inefficiencies' more prevalent than today.

Assessment of final design choices (Volume 2 of the Draft Report)

Although CS Energy does not share the confidence of the AEMC that OFA is superior to the existing Rules, we have aimed to be constructive in our response to the AEMC's consultation. We are pleased that the AEMC has responded to some of our feedback, especially with the final design choices made regarding allocation and pricing of access to incumbent generators.

We do however believe there are other options that should be considered for access settlement, negative access quantities, interregional access and the network monopoly incentive schemes.

Access Settlement	
CS Energy recommendation	Requested non-credible contingencies or other major outages be funded by consumers (through access settlement going into deficit) through TNSPs.
AEMC Draft Report	Access settlement will be self-funding, including the funding of the incentives under the TNSP incentive scheme.
CS Energy final position	CS Energy disagrees with this point. It counters the "firm" in OFA.

Marginal Loss Factors	
CS Energy recommendation	Unsure about the application of Marginal Loss Factors (MLFs) to quantities in energy and access settlement, given MLFs are applied to prices, not quantities.
AEMC Draft Report	To apply MLFs to energy and access quantities.
CS Energy final position	There is a discrepancy between the Draft Report and the OFA Technical Report (page 197 and 198). CS Energy raises this as an issue to be resolved in the OFA design. The Draft Report assumes generators are paid = LMP x G + (RRP – LMP) x A Hence, you scale both G and A "legs" of the calculation. Technical Report 12.15 and 12.16. In the formula 2.16 the adjustment for losses is made to the RRP, but not the participation factor multiplied by the flowgate price (FGP) in order to calculate the local price. Should 2.16 be changed to be (RRP - ∑aik x FGP) x MLF?

Metering	
CS Energy recommendation	Recommended 5 minute settlement for access payments based on SCADA, due to transmission access being rationed 5min dispatch. Similar to FCAS markets.
AEMC Draft Report	30 minute averaging based on metered energy.
CS Energy final position	Dispatch and settlement will always have some approximations; CS Energy agrees that this should be reconsidered if implementation of OFA occurs.

Firm Access Standard and Planning	
CS Energy recommendation	Recommended TNSP obligated to expend revenue to maintain standards, rather than not invest and run the risk in incentive scheme. This reduces inactive for the TNSP to game the access provision and shortfall costs, but provides no spare cash to fund TNSP incentive scheme.
AEMC Draft Report	TNSPs must commit capital (capex, opex, network support) to maintain Firm Access Planning Standard (FAPS).
CS Energy final position	CS Energy agrees, but notes the AEMC does not recognise this obligation creates a "missing-money" problem for the incentive scheme.

Negative access quantities	
CS Energy recommendation	CS Energy recommended TNSPs pay LRIC to flowgate support generators to encourage these participants to increase flowgate settlement amounts. Consistently stated that flowgate support generators need to be rewarded in some way to stabilise dispatch under OFA.
AEMC Draft Report	The TNSP can maintain the FAPS by paying Network Support Agreement payments (bilateral off-market arrangement).
CS Energy final position	CS Energy disagrees with this position. We remain of the view that negative access quantities may be a more efficient way of entering into Network Support Arrangements. This is because these participants would have to schedule generation in order to offset access payments to other generators.

Network operation and incentive scheme	
CS Energy recommendation	CS Energy highlighted 'missing-money' and incentives come at the cost of generators. Worried this could become a zero sum game between generators and TNSPs run by the AER. Concerned there are too many protections for the TNSP at the expense of generators. Recommended the incentive be linked to costs, not flowgate prices, to reduce overpaying for the change in outages and to reduce the chance of gaming by the monopoly.
AEMC Draft Report	Annual dollar shortfall amount (therefore linked to constraint prices) to incentivise TNSP to make capacity available. Shortfall is capped to protect TNSP. Carve outs for abnormal conditions, protecting TNSPs but not generators.
CS Energy final position	This remains a point of contention as the AEMC has not recognised the "missing money" issue. We request the AEMC to explain in more detail where the additional access capacity is to come from in the final report.

Interregional access	
CS Energy recommendation	CS Energy considered that the proposals for inter-regional access and auctions may be unnecessary. We suggested the AEMC investigate if these inter-regional constraints can be treated as any other flowgate in the OFA design and generators in the neighbouring region have access settlement in the adjacent region. This would leave no auction surplus to be paid to customers. In any case any surplus may accrue from participants buying interregional access to affect a wealth transfer.
AEMC Draft Report	Inter-regional access allocated by auction. Pricing for thermal and stability constraints based on LRIC and Deep charging methods respectively. Deep charging considered appropriate in this instance due to multiple purchasers and likelihood of reduced free-riding of other users.
CS Energy final position	CS Energy requests the AEMC to consider CS Energy's recommendation in more detail in the final report.

Transitional access	
CS Energy recommendation	CS Energy recommended incumbent generators should be granted access and never face the LRIC pricing schedule. Given the surplus of capacity, its value is low thus forcing generators to pay for access is solely a wealth transfer from existing generators to consumers. An immediate auction would be more palatable than facing the LRIC regulated rate as generators can express the value of the network. Recommend generators have the ability to sell back access to the TNSP or other generators.
AEMC Draft Report	Existing generators will have free access and auctioned access up to maximum of unit capacity, for 5 years. Free access based on share of existing peak demand. Auctioned capacity is the remainder to unit capacity. Held for 5 years at 100% then scaled back over 10 years. This free and auctioned access cannot be sold back to TNSP, but can be sold back to other participants.
CS Energy final position	CS Energy agrees. The AEMC's proposals are welcome and recognise some of the genuine concerns CS Energy has raised. It is sensible to limit access to existing capacity to prevent any gaming of auctions and hoarding of capacity. In any case, additional capacity can be purchased as short term access by auction. It is difficult to see why the AEMC has not allowed the selling back of transitional access to networks if it would minimise costs - we would argue the generator is missing ongoing profits and needs to be compensated and irrespective of this consumers will have to pay for the transmission replacement so should be indifferent.

Secondary trading of access	
CS Energy recommendation	CS Energy recommended that Incumbent generators should have the ability to secondary trade capacity. Considered secondary trading more efficient than regulated rates of the LRIC charging model.
AEMC Draft Report	Incumbent generators can sell access as ST access to other generators.
CS Energy final position	CS Energy agrees.

Access pricing	
CS Energy recommendation	CS Energy thought the only reason for the LRIC pricing model to be included in OFA is to provide a pricing signal for new entrant investors that are requesting additional access incremental to the access already allocated from the existing network. Otherwise, access should be traded between generators on the secondary market. Reliability Access appears to be a way of creating an absolute pricing signal to incremental generators, yet Reliability Access inefficiently creates an absolute pricing signal to existing generators for sunk investments.
AEMC Draft Report	LRIC is efficient price signal and price is change to reliability baseline. Note for incumbent generators there is the option for renewing without Reliability Access called "Renewal Rights".
CS Energy final position	Agree with the final principle. Focus on using LRIC as efficient prices to new entrants (not incumbents) is a welcome change from the AEMC. Agree LRIC, as designed, is irrelevant to incumbents who do not represent incremental investments in generation or transmission.

Access pricing for incumbent generators	
CS Energy recommendation	CS Energy thought there was no reason as to why incumbents are to be exposed to the LRIC pricing model, bar possibly the treatment of replacement capital expenditure. We had explained the Reliability Access in the access pricing model acted as a distortion to efficient pricing for incumbent generators. We recommended that instead of including Reliability Access in LRIC (reliability transmission augmentations in the baseline and incremental expansion plans), the consumer load can instead be supplied by existing generators as non-firm access. If there are no existing generators to meet the reliability standards then Reliability Access or future access requests can be added to the baseline. As a result of this dynamic, CS Energy concluded that the inclusion of Reliability Access prior to including existing non-firm generators is designed to create high LRIC prices. These high prices do not reflect incremental investments in transmission and are therefore inefficiently high. They could result in an inefficient transfer of wealth from existing generators to consumers.
AEMC Draft Report	AEMC has developed the concept of "Renewal Rights" where generators are exposed to the cost of only replacement capital expenditure. Renewal rights are priced at Long Run Decremental Cost (LRDC), which reflects cost of replacement capex.
CS Energy final position	Agree with this principle. This is very similar to what CS Energy argued for in the previous consultation. We thank the AEMC for changing their position on pricing for incumbent generators.

Procurement of Long Term and Short Term access	
CS Energy recommendation	CS Energy expressed concern over TNSPs double-dipping by reselling access quantities at the expense of generators. If the network monopoly manages to extract some of the revenues as profits, and need not discount the charges it levies on consumers, then it will be a transfer from generator participants to the network monopoly. We did not want a design that has the potential for such transfers, given they constitute nothing to improving economic efficiency.
AEMC Draft Report	All spare capacity is ST access that is not required under the Firm Access Planning Standard (FAPS), issued under LT access procurement (charged at LRIC) can be resold. Believe adequate governance can protect generators from TNSPs, importantly TNSPs do not benefit from the revenue, which is used to discount Transmission Use of System (TUoS) charges, as this may create poor incentives for the monopoly network.
CS Energy final position	CS Energy agrees in principle. It has become apparent (through work completed by AEMO, AEMC and the prevalence of constraints on the network today) that the network is overcapitalised. Given this, it is therefore inappropriate for the full capacity to be allocated to incumbent generators, (as implied by CS Energy's earlier recommendations) either free or in the first Transitional access auction. Therefore we agree spare capacity above the free and auctioned Transitional Access should be made available through ST access auctions.