CONSUMER CHALLENGE PANEL

Submission to the Australian Energy Regulator (AER)

Consumer Challenge Panel Sub Panel 4 (CCP4)

Response to the AER Draft Decision and Revised Proposal to Powerlink's electricity transmission network for a revenue reset for the 2017-2019 regulatory period

Report by

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Sub Panel CCP4

CCP4 also includes:

- Jo de Silva who has provided a separate report
- Hugh Grant who is providing a separate report

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PUBLIC VERSION

1. Introduction

The purpose of this document is to deliver the views to the Australian Energy Regulator (AER) of the Consumer Challenge Panel (CCP) charged with providing input into the revenue reset for the 2017-2019 regulatory period for the Powerlink electricity transmission network service (PLQ).

CCP Sub Panel 4 (CCP4) has carried out this review, although this report is provided by CCP4 member David Headberry as the other members of CCP4:

- Jo de Silva is providing a separate report and
- Hugh Grant is providing a separate report.

Throughout this report, reference to CCP4(DH) refers to the views of David Headberry in his role as a member of CCP4. Also throughout this report is made reference to the report CCP4 (comprising Hugh Grant and David Headberry) provided to the PLQ proposal – this is referred to as the "earlier report" throughout this submission.

This report only provides input in passing regarding those aspects of the review where the AER has implemented a "mechanical" approach to setting the outputs Such aspects include the approach to the roll forward of the regulatory asset base, escalation and growth factors, and other areas where the AER has what could almost be termed automatic processes.

CCP4(DH) has instead focused on aspects of the draft decision and revised proposal where it considers that there are significant issues to be addressed that will have considerable impact on the outturn assessments made by the AER in its role of establishing a "bucket of money" sufficient for the efficient distribution network services provider to deliver the services required by consumers.

It is also noted that although Hugh Grant and David Headberry had intended to provide a single report on the draft decision and revised proposal, timing has prevented this from occurring. As a result, this report addresses only a few aspects which will not be part of the separate Hugh Grant report.

The AER draft decision utilises the suite of guidelines established by the AER as part of the Better Regulation program that arose from changes to the National Electricity Rules. In many cases, the proposal from PLQ followed these guidelines so there are a number of aspects where the AER has effectively accepted the PLQ proposals relating to these aspects. This report does not address aspects where there is congruence of the PLQ proposal and the AER draft decision other than to highlight where the AER guideline might be considered to be excessively conservative. This report also notes the outcomes of the Competition Tribunal decisions on the NSW distribution businesses and of the SA distribution business.

This report notes that the driving issue is that the final decision from the AER must be in the long term interests of consumers while, of course, acting within the requirements of the Rules. In its response to the PLQ proposal, CCP4(DH) noted that the long term interests of consumers must embrace the fact that the actions of current consumers responding to the impacts of the current review will have a significant impact on future consumers. In this regard, the costs and tariff structures that are put in place as a result of this revenue reset must provide an outcome that is efficient now as well as into the future.

CCP4(DH) notes that the report by Hugh Grant will address in detail the proposed PLQ regulatory asset base, capex and opex, and this report does not address these aspects.

1.1 Impact of the PLQ proposal on consumers

In its proposal, PLQ advised there would be a reduction in the revenue it sought. The AER draft decision further reduced the revenue to be allowed and PLQ basically accepts the AER draft decision in many aspects.

The major differences between the PLQ proposal and the AER DD lie with

- the rate of return on capital (where the AER uses a lower risk free rate as does PLQ in its revised proposal)
- a reduction in capex (some of which PLQ accepts in its revised proposal)
- an adjustment to the tax allowance

At a high level, PLQ sought a lower revenue than it forecast it would receive in 2016/17, the last year of the current period. This reduction is primarily driven by a lower cost of capital, although reductions in capex and opex also contributed to this reduction.

PLQ had accepted the AER assessment for “gamma” and this was noted in the AER draft decision.

In its revised proposal, PLQ now expresses a desire to benefit from a lower value for gamma if this is the result of the full bench of the Federal Court upholding this element of the AER appeal process. This decision by PLQ has been made despite the decision of the Competition Tribunal in the SA Power Networks appeal case to support the AER decision for gamma.

2. Consumer Engagement

In the response to the PLQ proposal, CCP4 reported some misgivings about the PLQ consumer engagement program, predominantly with regard to the implementation.

This report recognises that CCP4 member Jo de Silva is providing a more detailed review of the PLQ consumer engagement program subsequent to the earlier report provided by this CCP member and the comments by the AER in its draft decision, so this report does not specifically address this aspect of the AER draft decision.

However, it is important to note that the consumer engagement carried out by PLQ to date has clearly identified that consumers have focused their views to three key aspects, viz:

- That prices need to reduce
- Current levels of reliability are generally acceptable
- Consumers do not want to pay for increased reliability.

These three overarching considerations have been used to base the observations made in this report.

3. Benchmarking

3.1 Benchmarking cost of debt

CCP4(DH) comments that the AER had not implemented any benchmarking regarding the cost of debt and that such benchmarking would provide valuable input into assessing whether the earlier view of CCP4 view that the AER guideline delivers a higher allowance for the cost of debt than is efficient.

The rate of return objective requires that rate of return for a network service provider

> "... is to be commensurate with the efficient financing costs of a benchmark efficient entity with a similar degree of risk as applies to the [network service provider] ..."

CCP4(DH) questions how the AER can assess whether its return on debt allowance is efficient without assessing what actual costs of debt are incurred by network service providers and comparing these to the assessed costs of debt used by the AER in setting an allowance.

In its draft decision (attachment 3) the AER comments (page 3-77)

> "We are satisfied that using a third party data series (or multiple series), appropriately chosen, is commensurate with the efficient debt financing costs of a benchmark efficient entity."

It is clear that there is significant disagreement (by CCP members and consumer groups) with the AER contention that it can set an efficient cost of debt by merely assessing independent third party data. The AER avers that its approach (page 3-77) conforms with the Rules because:

- The use of third party data can be practically applied
- It is independent from the regulatory process
- It reduces the scope for debate,
- There is no consensus amongst regulators about the best method to estimate the return on debt.

This report does not dispute each of these reasons, but highlights that they only cover part of the story. The fact that the actual costs of debt incurred by networks is significantly lower than the costs of debt estimated by the AER implies that the AER approach does not ensure the allowances are efficient – a requirement of the rate of return objective.

The National Electricity Objective (NEO) requires the revenue allowances for networks be set at levels which are in the long term interests of consumers. If it can be demonstrated that consistently the return on debt allowances exceed the actual costs of debt incurred by networks, then the AER has failed to comply with the requirements of the NEO

because it will be not be basing its assessment of a reasonable revenue stream based on providing an efficient allowance.

In the development of the cost of capital guideline, the AER used the actual performance of the networks in the assessment of the gearing and equity beta. It is therefore inconsistent that the AER does not use the actual costs of debt incurred by the network businesses to inform the efficient cost of debt for the benchmark entity when there is no assessment of the cost of debt by actual entities with a similar risk profile and similar credit rating.

A concern consistently raised by consumers is that the AER has identified that the benchmark credit rating data is for BBB+ rated acquirers of debt. However the actual costs of debt for entities with the same credit rating shows a significant variation, with energy networks with a credit rating of BBB+ actually acquiring debt at lower rates than other entities with the same credit rating. This implies that credit rating might not be the prime driver behind the cost of debt[1].

If there is variation between the actual costs of debt for entities with the same credit rating, then the AER needs to benchmark the actual costs of debt incurred by the networks so that it can demonstrate that they are allowing returns on debt which are consistent with those applying to an benchmark efficient entity with a similar degree of risk.

As there are few examples of monopoly entities with a similar degree of risk to energy networks, the AER must commence benchmarking the actual costs of debt incurred by the networks to ensure that their independent third party sources of costs of debt actually do deliver outcomes that are efficient.

This report considers that undertaking detailed benchmarking of actual costs of debt is in the long term interests of consumers. This benchmarking should be used in the future to assist in identifying the most cost efficient approach to debt provision.

3.2 Asset benchmarking

In the earlier report to the AER regarding the PLQ proposal, it was highlighted that PLQ is one of the less efficient networks in the NEM with regard to asset productivity. That earlier report also highlighted that the RAB in real and relative terms was increasing. Despite this the AER has permitted the regulatory asset base of PLQ to further increase in nominal terms (although perhaps not in “real” terms). This increase in asset value is despite the fact that PLQ asset utilisation is falling, demand is basically static and consumption flat.

[1] It is also noted that both the USA and Australia both have a credit rating of AAA yet the USA has a much lower cost for its debt than does Australia

It is recommended that the AER should benchmark the RAB for networks over time in relative terms (eg against peak demand and numbers of customers served) to assess the liability that future consumers will incur in terms of capital tied up in the assets used to provide the network services.

In the earlier report, it was noted that reliability of supply was relatively flat (even increasing) and utilisation was falling. These further indicated that there was little need for capex. This led to the conclusion that with such a low productivity of its asset base, great care was needed in assessment of the capex program initiated by PLQ. Despite this it is noted that the AER has accepted much of the PLQ capex program.

While it is accepted that asset benchmarking is in its infancy with regard to the NEM, this should not detract from the need to ensure that the liability for future users is minimised without imposing higher costs on current consumers

3.2 Opex benchmarking

In the earlier report, it was noted that PLQ opex productivity was poor, and was nowhere near the efficient frontier. Despite this, the AER has accepted the PLQ opex proposal. While the AER acknowledges that the PLQ opex is not efficient, it accepts that the revised opex which provided some reduction through improved productivity.

What the AER draft decision also fails to assess is whether the accepted level of opex for the next regulatory period continues moving PLQ to the efficient frontier. The AER assessed opex indicated that the opex forecast by PLQ was lower than the AER would have allowed and, on this basis, it could be assumed that the PLQ forecast opex would reflect greater productivity. However, it is still important that such assessments are demonstrated.

With this in mind, it is considered that an assessment of opex should include extrapolating the benchmarking of the allowed levels of opex into the future to identify if the allowed levels really do result in opex becoming more efficient.

3.3 Conclusions

This report considers that the AER, in its assessments of various inputs to the revenue allowance, has not sufficiently taken into account the outcomes of the benchmarking carried out by it or CCP4 in its responses to the PLQ proposal, and nor has the draft decision demonstrated that the allowances assessed are efficient when extrapolating the allowances and benchmarking these allowances to the end of the next regulatory period.

4. Operating Expenditure (opex)

CCP4(DH) is concerned that the PLQ proposed opex has been accepted by the AER despite the fact that benchmarking of PLQ has shown it to be quite inefficient. In the earlier report, CCP4 provided a view that the AER should undertake a rigorous approach to setting the PLQ opex

In the earlier report, it was identified that PLQ repex in the past was significant. What has not been recognised by the AER is the impact of this significant historic repex and the expectation that as a result of increased repex, there should be increased opex productivity. Repex impacts opex by reducing maintenance costs through replacement of old with new. This impact of previous high levels of repex does not seem to have had significant impact on the AER assessment of opex.

The AER draft decision, based on its base-step-trend analysis considered that as the PLQ proposed opex was less than the AER might otherwise have allowed, it would accept the PLQ proposed opex.

There is a specific assumption by AER (and PLQ) that the opex for year 2014/15 is efficient as it is the result of a program to incentivise increasing efficiency in opex (via the Efficiency Benefit Sharing Scheme - EBSS). A key observation arises from this assumption – to what extent does the EBSS incentivise a network to maximise efficiency and whether the base year opex is efficient.

PLQ has stated that its existing opex is not efficient and proposed an opex reduction from current levels and even less than the opex the AER would probably have accepted based on its base-step-trend approach; both of these make it clear that PLQ considers that its opex is not efficient. The benchmarking carried out by the AER implies that PLQ current opex productivity is one of the worst in the cohort of all NEM transmission businesses. Despite that PLQ is in this position, it is assumed that PLQ opex has responded to the EBSS incentive yet, even so, PLQ considers that they can be more productive and have proposed an opex lower than that which assumes they are already near the efficient frontier. This report considers that the AER assumption that the EBSS drives a network to efficient opex, is not supported by the actions of PLQ.

On this basis, this report considers that the AER needs to assess more closely the degree to which the EBSS is actually achieving significant productivity improvements. As a point of comparison, the earlier report commented that capital intensive firms operating in a competitive environment are reducing their opex in nominal terms to stay competitive.

The AER approach to identifying whether a deeper investigation is warranted into the proposed opex through comparisons with its base-step-trend approach is not supported by PLQ actions as it is patently obvious that PLQ does not consider that it did deliver an efficient opex allowance through this process.

What the AER approach has shown is that if PLQ can reduce its opex below that forecast generated by the AER using its base step trend approach highlights that the AER assumption that the EBSS drives networks to the efficient boundary through the incentive, may well be overstated. That PLQ, already ranked poorly in terms of productivity for electricity networks, can reduce its opex below that which is generated by the AER approach, indicates that there may well be a flaw in the AER approach.

This report also considers that the AER base-step-trend approach needs to incorporate a productivity improvement for all networks to incentivise networks to redress the consistent decline in productivity observed by the AER benchmarking of opex over the past decade.

5. Capital expenditure (capex)

This report does not address the capex that is inherent in the allowed revenue stream as that aspect is being addressed comprehensively in a separate report by Hugh Grant.

However, this report is concerned about the contingent projects proposed by PLQ.

5.1 Contingent capex projects

PLQ initially sought approval for seven contingent augmentation projects totaling some $590m.

Table 5.7: Proposed contingent projects

Project name	Indicative capital cost ($m, nominal)
North West Surat Basin Area	147.2
Central to North Queensland Reinforcement	55.1
Southern Galilee Basin connection shared network works	116.9
Northern Bowen Basin area	55.7
Bowen Industrial Estate	42.9
QNI upgrade (Queensland component)	66.7
Gladstone area reinforcement	105.5
Total indicative cost	590.0

Source: PLQ initial proposal

In its revised proposal, PLQ has accepted the AER draft decision to exclude the North West Surat Basin project as a contingent project but rejected the AER draft decision on the Southern Galilee Basin project. PLQ has also added another project – the Queensland to South Australia Interconnection (Queensland component) for an additional $120m to be added.

CCP4 notes that in its revised proposal PLQ has reduced its proposed capex to $886m and withdrawn the North West Surat Basin contingent project but replaced this with another contingent project – Queensland SA interconnector – reducing the contingent project allowance to $563m.

The amount of the proposed contingent capex needs to be seen in context with

- The initial proposed capex of $960m in that contingent projects would be a 60% increase in capex if all proceeded
- The revised proposed cape of $886m in that the revised contingent projects would be a 64% increase in capex if all proceeded

- The AER draft decision allowed capex of $765m in that the contingent projects would be a 43% increase in capex if all proceeded

The AER draft decision rejected two of the contingent projects (North West Surat Basin and Southern Galilee Basin projects) on the basis that neither were likely to proceed in the period due to insufficient certainty as to what demand might be required when considering the status of the projects and their likelihood of commitment . On this basis the AER has approved $325.9m for contingent projects.

For the five projects allowed in the draft decision, the AER considers that the triggers for these projects to be initiated, should be modified from those triggers proposed by PLQ.

Specifically, the AER has amended the triggers to reflect clarification of the amount and location of the additional loads so that the project can be proven to be necessary, evidence that the PLQ Board has approved the project and acceptance by the AER that the project satisfies the RIT-T.

CCP4 agrees with the AER that the minimum requirement to trigger any of the contingent projects is for (draft decision page 6-79):

1. "Specific detail about the amount and location of additional load required to trigger the contingent project;
2. Successful completion of the regulatory investment test for transmission (RIT-T) demonstrating positive net market benefits;
3. Determination by the AER under clause 5.16.6 of the NER that the proposed investment satisfies the regulatory investment test for transmission (compliance review); and
4. PLQ Board commitment to proceed with the project prior to submitting an application to the AER seeking an amendment to the revenue determination pursuant to the NER."

Despite the reasonableness of the AER triggers, PLQ, in its revised proposal still wants the triggers to be easier to achieve than those proposed by the AER.

However, as discussed below with regard to these projects and the capital incentive scheme, CCP4 considers there are two additional triggers that should be added to the AER listing.

5.1.1 Ranking of projects leading to the contingency projects

CCP4 is concerned at the extent of the contingent projects retained in the AER draft decision. CCP4 notes that the projects initiating the increased demand are graded by

Ernst & Young (EY) advice to PLQ on the likelihood of projects proceeding. EY has graded projects to proceed within the next regulatory period as:

- Certain
- Probable
- Plausible
- Possible
- No change

CCP4 is very concerned that PLQ has provided a large "grab bag" of contingent projects to minimise its risk exposure. As a result, CCP4 has concerns that the projects accepted by the AER need to be more closely examined.

For contingent projects, those ranked as based on probable and some plausible demand initiating projects are included by PLQ, although the AER draft decision removes two of which are based on demand initiating projects ranked as plausible. CCP4 has concerns about the issues surrounding contingent projects are detailed more fully in the following section below.

CCP4 considers that a more mathematical basis should be used to provide guidance on what individual demand initiating projects should be used to develop the expected likelihood of the contingent project. For example, CCP4 considers that demand initiating projects ranked as certain should get a 100% weighting, with those ranked probable have a 50% weighting, those ranked plausible a 25% weighting and those ranked possible a 12.5% weighting. While such weightings are quite arbitrary, the approach removes much of the subjectivity inherent in the PLQ approach to identifying which projects should be included in the list of contingent projects.

On this basis, CCP4 considers that the listing of contingent projects will be significantly reduced. CCP4 sees this as essential in order to reduce the relativity of contingent projects to allowed capex.

CCP4 notes that PLQ has added the Queensland SA interconnector project as a new contingent project. CCP4 considers that such a project should be ranked "possible" but it requires a number of hurdles to be overcome first, such as reflecting there is an outcome that it will be net beneficial and provide a benefit greater than three other options that are being considered by ElectraNet, and that the project will commence early in the regulatory period.

5.1.2 Contingent projects when there is a capital incentive scheme

The purpose of contingent projects is to highlight that there is some uncertainty about the future of demand growth which would precipitate a need for augmentation of the network. Offsetting this risk, a network can reallocate capex allowed for other works to provide for the new growth in demand. The reallocation approach has been used extensively by all networks because of forecasting errors especially where there was an over-forecasting of demand growth from about in about 2011, where networks reallocated significant amounts of unneeded augex with repex projects that had not been in the forecast capex at the time of the last reset review. As a result, networks have seemingly over invested in replacement assets in recent times – an overinvestment that would not have occurred if the demand forecasts had been right!. CCP4 considers that PLQ could, rather than identify significant augmentation projects as contingent projects, reallocate its allowed capex if so needed to these augex projects. The risk for consumers of not doing this is that they are required to pay a return on the allowed capex (even if the capex is not fully used as occurred in the current period) plus the additional capex that might occur if the demands to in fact increase.

It should also be noted that a network can also spend more that its capex allowance and recover the increased expenditure in the roll forward of the asset base. At most, this means that a network has little long term risk that the forecast of future demand might have underestimated the future need. As PLQ has already gained a significant benefit in the current period by underspending its capex allowance, CCP4 considers that to build significant contingent capex as part of the reset exposes consumers to considerable risk.

The process that the AER has instituted is that consumers face a “heads PLQ wins, tails consumers lose” condition in that if there is an underspend on capex, the network retains the benefit, but to prevent an overspend, PLQ is able to have additional capex approved through the contingent project being added to the allowed capex.

This approach is even more biased in favour of the networks with the introduction of the capital incentive scheme which not only allows the network to retain the benefit of underspending its capex allowance but provides a bonus for the network doing this. Offsetting this risk, under the CESS, if a network exceeds its capex allowance it does suffer some risk exposure, but this is mitigated if the capex is subsequently approved and allowed to be rolled into the asset base.

As a result, CCP4 is very concerned that by including a significant amount of capex as contingent capex, consumers face considerable risk and the process provides a risk reduction strategy for the network. Specifically, and almost by definition, if a contingent project is likely to proceed, it will occur late in the regulatory period and this means that the network's risk is quite minimised as the return capital expenditure on the capex will effectively be low especially because:

- The time taken to get a project to the stage where the network has to start on gaining approval and then proceeding through the regulatory investment test process, means that such a project will not incur significant capital costs until the 3rd or 4th years of the five year regulatory period
- Some of the interest and overhead incurred on the project can be capitalised further delaying any loss faced by the network, noting that at the next reset, the project (plus its overheads and interest cost) can be rolled into the asset based.
- The amount of capex that will be needed in the regulatory period for such a project will be relatively small as the project is unlikely to start before the 3rd or 4th year and is also unlikely to be completed within the regulatory period

With this in mind, CCP4 considers that, in addition to the triggers set by the AER, contingent projects should only be included if:

1. The project must have a very high likelihood of proceeding but that its timing in the next period is unknown but should be seen to commence before the 4th year of the period.
2. All unused allowed capex must have been either spent or committed to other projects before any capital is permitted to be allocated to the contingent project.

These additional triggers, in addition to those included in the AER draft decision, act to prevent consumers paying for any unused capex before any additional capex is approved. This also minimises the ability of the network to "game" the system and using the introduction of the CESS to increase the network's profitability.

5.1.3 Cost allocation for the contingent projects

CCP4 considers that where an augmentation is required for accommodating the needs of a limited number of specific users, there needs to be an assessment as to whether the augmentations are in fact connection assets rather than augmentations necessary for the needs of the consumers already connected. CCP4

notes that most of the contingent projects identified by PLQ are only required because of a very few new large customers potentially seeking to connect to the shared network rather than use their own facilities to provide for their electrical needs.

In this regard, CCP4 observes that if the augmentations do proceed as part of the shared network, then the allocation of costs will result in other customers contributing significantly to assets that are not needed by any other customer than the new customer. This will occurs because under the current pricing rules, notionally only ~45% of the cost will be allocated on a locational transmission use of system (TUoS) basis (ie to the new customer) with all existing users taking supply through the assets to be augmented also contributing to the locational TUoS charges. However, more importantly, the allocation of the non-locational transmission service (again ~45%) will be shared with all Queensland customers. Offsetting this all customers might see a small reduction in the Common Service charge but this will not result is a net benefit to existing customers.

The AER has addressed this issue in its draft decision in seeking advice from PLQ as to how the costs for these augmentations will be allocated and the level of capital contributions that will be required. In its revised proposal, PLQ considers that the AER has erred in seeking explanation as to what the capital contribution should be for the augmentations of the shared network. CCP4 disagrees.

Clause 6A.28.2 of the NER states:

> **6A.28.2 Capital contribution or prepayment for a specific asset**
>
> Where the *Transmission Network Service Provider* is required to construct specific assets to provide *connection service* or *transmission use of system service* to a *Transmission Network User*, the provider may require that user to make a capital contribution or prepayment for all or part of the cost of the new assets installed and any contribution made must be taken into account in the determination of *transmission service* prices applicable to that user.

The clear import of this clause is that any asset that is required to be built by a transmission network service provider (TNSP) as a result of a request from a customer can be subject to a capital contribution. While the clause does not oblige the TNSP to impose a capital contribution, the import of the clause is that this should be done.

CCP4 is also aware that the AER has developed a mechanism for calculating capital contributions for distribution network service providers (DNSPs) which again

provides support that capital contributions should be required to prevent existing customers paying for assets that they will never use or receive a benefit from.

With this mind, CCP4 makes the following observations on each of the proposed contingent projects:

Central to North Queensland reinforcement project

> This project is driven by the contemplated increased demands from five prospective users. There is no reason why all consumers in Queensland should be required to pay any of proposed costs as no other consumer will receive a benefit. This means that the costs should be allocated to the actual users that precipitate the need for the upgrade

Southern Galilee Basin project

> This project is driven by the contemplated increased demands from three prospective users. There is no reason why all consumers in Queensland should be required to pay any of proposed costs as no other consumer will receive a benefit. This means that the costs should be allocated to the actual users that precipitate the need for the upgrade

Northern Bowen Basin project

> This project is driven by potential new mining of metallurgical coal for export and accessing of additional CSG for export. The augmentation costs will provide a benefit to those firms that will increase their exports and, possibly, through increased reliability of supply for existing exporters. However, the large majority of other electricity consumers in Queensland will not gain any benefit so should not be required to contribute to the augmentation.

Bowen industrial estate project

> This project is considered to be plausible because of an expansion of the Abbot Point coal terminal. While the expansion is part of an identified new load (and therefore the cost should be allocated to the single beneficiary) it is also an outcome of the increased coal exports from other regions which have expanded. CCP4 considers that those seeking to increase their exports should fund the expansion rather than a large share of the costs being levied on all consumers who gain no benefit

QNI upgrade

> This project is based on the assumption that increased flows southward will be needed, so the beneficiaries are not Queensland consumers. However, with the introduction of the IRTUoS approach for allocating costs from exporting regions to importing regions, this project could provide a

benefit to all Queensland consumers and so the costs could be allocated into the shared assets.

Gladstone Area reinforcement

The driver for this augmentation is based on [redacted]

[redacted]

QSA interconnection

This project is based on the assumption that increased flows southward will be needed, so the beneficiaries are not Queensland consumers. However, with the introduction of the IRTUoS approach for allocating costs from exporting regions to importing regions, this project could provide a benefit to all Queensland consumers and so the costs should be allocated into the shared assets.

6. Incentive schemes

This report considers that the incentive schemes applying to the PLQ regulatory program reliability (service target performance incentive scheme – STPIS), opex (efficiency benefit sharing scheme – EBSS) and capex (capital expenditure sharing scheme – CESS) provide an inter-related suite of incentives.

In the earlier report, a view was provided that no element of the three schemes should be varied from what is detailed in the guidelines detailing the incentives as they, together, are inter-related and to vary one could impact another. The AER draft decision follows this principle but despite this PLQ still seeks to change the guidelines.

6.1 Efficiency Benefit Sharing Scheme (EBSS)

In its response to the PLQ initial proposal, CCP4 noted that there should be no exclusions when calculating the EBSS but CCP4 notes that the revised proposal still seeks for exclusions to be made although the AER draft decision was to allow only debt raising costs and network support costs as the only exclusions.

While CCP4 is not convinced that even the AER draft decision exclusions should be permitted, CCP4 also notes that the AER has allowed these two exclusions in other network regulatory decisions. CCP4 accepts the AER draft decision exclusions but does not accept the proposed exclusions that are still claimed by PLQ in its revised proposal.

CCP4 considers that the arguments provided by PLQ for the retention of these exclusions do not address the concerns expressed about their inclusion in the AER draft decision and the AER draft decision should stand.

6.2 Service Target Performance Incentive scheme (STPIS)

In its response to the PLQ initial proposal, CCP4 provided some general observations about concerns it has with regard to the incentive programs developed by the AER, and especially the STPIS. These observations arose from the fact the PLQ received some massive bonuses in the period 2010 to 2015.

CCP4 notes that the setting of the targets for the service component of the STPIS is essentially mechanical and the targets are set based on the average performance for the previous 5 years with the caps and floors set at 2 x SD from the targets. The AER has followed this process for its draft decision on PLQ and on this basis CCP4 accepts the targets, caps and floors; PLQ in its revised proposal has also accepted these.

A major issue for CCP4 is the general move amongst networks to significantly increase their repex from previous levels and this will have the effect of improving service

performances. This effectively results in consumers basically funding repex so the network can earn a bonus under the service component of the STPIS.

While PLQ has not sought repex more than it has in previous regulatory periods, what is important to note is that PLQ repex in the 2007-2012 period was significantly higher than in the current 2012-2017 period and it was in the current 2012-2017 period that PLQ was able to acquire considerable STPIS bonuses. This raises the question as to whether the high levels of the 2007-2012 period repex contributed to the significant bonuses paid in the 20132-2017 period and whether the high repex in the 2012-2017 period will likewise generate excessive STPIS bonuses in the 2017-2022 period as well.

CCP4 notes that the AER draft decision to impose a 22% reduction in the amount of repex from that claimed by PLQ would tend to obviate this outcome; the revised proposal from PLQ rejects the AER draft decision and only reduces the repex for the next period by 5%, effectively maintaining the CCP4 concern.

It would appear to CCP4 that the AER repex allowance is more consistent with the revised targets for the service component than the PLQ revised repex proposal. If the AER considers a greater amount of repex should be allowed than is in the draft decision, then CCP4 considers that the targets for the service component should be increased to reflect the additional benefit PLQ will gain from bonuses under the STPIS from the excessive amounts of repex included in the allowance providing the basis for improved service performance and thus an unearned bonus.

6.3 Market impact component (MIC)

It appears to CCP4 that PLQ is attempting to exclude certain outages from the setting of the MIC target on the basis that previous revisions of the STPIS might have allowed for their exclusion. CCP4 points out that STPIS version 5 is the version that will apply for 2017-2022 period and the definitions of what is to be included in setting the target should be as detailed in version 5 when setting the target.

CCP4 points out that the suite of incentives (STPIS, CESS and EBSS) is to operate in concert and that the methodology for setting STPIS targets needs to reflect the latest versions of the schemes, especially as version 5 of the STPIS was developed after the development of the CESS and EBSS version 2

6.4 Network Capability Incentive Parameter Action Plan (NCIPAP)

CCP4 notes that the AER has elected not to approve two of the three projects proposed by PLQ under the NCIPAP. CCP4 agrees with the AER regarding its draft decision to reject these two projects and CCP4 notes that PLQ has accepted this draft decision.

What is concerning to CCP4 is that PLQ, while noting the AER acceptance of project #2 (Increase design temperature on the power lines from Bouldercombe to Calliope River) has increased the cost of the project thereby reducing the payback to consumers for its implementation. While CCP4 still considers the project provides value to consumers, it raises the question as to whether PLQ should be permitted to increase the cost allowance once there is draft acceptance of the cost.

A significant risk for consumers is that once a network can see that the AER would allow a project given its compliance and payback, there is an incentive for the network to increase costs between the draft decision and the revised proposal as this gives a greater reward to the network. While PLQ provides detailed costs for the project in its revised proposal, there is no similar cost breakdown in the initial proposal against which to assess whether the increase in costs is reasonable. PLQ needs to provide more comprehensive details of the cost increase and causes before the increase can be accepted.

7. Weighted average cost of capital

This report notes that the AER draft decision accepts the application by PLQ of the AER guideline on rate of return (including on gamma). The revised proposal accepts the AER draft decision although PLQ had commented that it might apply the outcomes of the current appeal by the AER to the Federal Court regarding the decision of the Competition Tribunal on the NSW distribution networks appeal to the Competition Tribunal in terms of gamma.

However, this report also notes that the risk free rate for cash (the 10 year Australian Commonwealth bond rate) has risen considerably since the AER draft decision and the current rate of above 2.8% is higher than the risk free rate used by PLQ in its initial proposal; this effectively removes a significant portion of the difference in the revenue allowances (and hence the notional tariff) between the PLQ proposal and the draft decision.

There is every expectation that the 10 year bond rate will continue to increase over the coming months further eroding the lower tariffs implied by the PLQ proposal and the draft decision. This also makes the reductions implied by the AER draft decision and the revised PLQ proposal to be non-existent when compared to the PLQ initial proposal.

While this report accepts that the AER is unlikely to change its guideline (and therefore PLQ has no reason not vary from it), the observed increases in the risk free rate have reinforced CCP4(DH) concerns[2] that the parameters used by the AER in its rate of return are too conservative. In the earlier report, gearing, market risk premium, equity beta and gamma were all identified as being more conservative than is considered appropriate by consumers and these are to be addressed in the next AER review of the rate of return on equity parameters. Accepting that this review is to take place within the next 2 years, it is accepted that the current parameters should be applied to the PLQ decision.

However, while the current guideline requirements for assessing the cost of debt are also "locked in" in the guideline, this report reinforces the comment made in section 3.1 that the AER should be carrying out a benchmarking study on the cost of debt for energy network firms to assess whether the guideline is in fact delivering outcomes that reflect an efficient acquisition of debt. The Rules require that the AER should allow for networks to recover the efficient costs for providing the service. An efficient cost should not consistently exceed those actual costs that networks incur. In fact, if networks are

[2] And concerns expressed by other CCP members in their reports to the AER

permitted to consistently recover more than their costs, then the allowance is not efficient.

However, analysis of PLQ financial statement for 2015-16[3] provides an outcome that raises considerable concern. The annual report balance sheet states that PLQ has an asset base of $8,104m of which $1,602m is net assets. Of this $1,602m, $1,126m is the asset revaluation reserve (note 7(b)) and notes 7(a) and &9(c) state there is $476m of retained reserves and contributed equity.

The implication of these numbers is that total borrowings[4] (total debt less net assets) for PLQ is $6,421m implying a debt share of 80% of total assets, an equity share (equity injection plus retained earnings) of 6% and a revaluation reserve which is 14% of total assets.

There is no doubt that the equity share should attract the return on equity calculated via the guideline and probably the debt share might attract the cost of debt at the rate calculated under the guideline[5]. However, the asset revaluation reserve does not impose a cost that PLQ incurs and therefore requires a return on. The revaluation reserve is the outcome of the automatic inflation adjustment applied to the assets each year. It is noted under note 7(b) that the reserve cannot be used to pay dividends except in limited circumstances reinforcing the view that this amount is not a benefit that PLQ can actually realise and is effectively a "paper" entry to the accounts.

This means that the assumption that the RAB is geared to 60% debt and 40% equity is quite wrong on three counts:

Firstly, the debt share is more appropriately assessed at a maximum of 80% of total assets and perhaps as low as 65% when assessing just the debt that PLQ has to pay interest on. While the AER guideline assesses the benchmark entity has 60% debt on which the entity pays interest, in fact the interest bearing debt for PLQ is higher than that assumed for the benchmark entity. While the borrowings that PLQ pays interest on (ie 65%) is still higher than the assumed amount of debt under the guideline gearing (ie 60%). This means the balance of the debt (ie ~20% and much of which PLQ does not incur a cost on) is being reimbursed to it at the same rate of return as applies to the higher risk element of equity.

[3] While 2015-16 AR has been used, it is noted that the issues identified apply equally to previous years
[4] It should be noted that not all of the net debt is interest bearing (eg employee benefits and deferred tax benefits)
[5] This is arguable because PLQ does not pay any cost in relation to a number of debt elements (eg the employee benefits or trade and other payables)

Secondly, the equity share of the total assets that should receive a return on equity is no more than 6%. This compares with the AER guideline assumption that the equity used by the benchmark entity is 40%.

Thirdly, there is 14% of the total assets that is merely a paper entry which does not incur any cost or impose a liability to PLQ – the asset revaluation reserve. This report considers that PLQ should receive no return at all on this element of the total assets as to require consumers to pay a return on an amount that PLQ incurs no cost on is contrary to the Rules which allow PLQ to recover its reasonable costs; certainly the NEO does not contemplate consumers paying for something that PLQ does not incur a cost for.

As PLQ earned a profit of $218m, this implies that the return on equity for the financial year ending 2016, was about 46% based on the equity injection plus retained earnings. While not as extreme as the highest return on equity achieved by PLQ in earlier years[6], it is still very high compared to the returns on equity achieved by firms in the competitive sector, and well above the notional return on equity allowed in the draft decision of 6.5% or even that claimed by PLQ of 7.3% in its initial proposal and the 6.5% return on equity in its revised proposal.

The AER has stated that its assessment of the rate of return it calculates is based on the notion of a benchmark entity operating as a pure-play regulated energy network business. It has derived its assessment of the inputs used for the rate of return guideline from the actual performance of the Australian energy networks and identified the gearing based on what it has observed from these businesses (see appendix F of the AER Better Regulation Explanatory Statement Rate of Return Guideline December 2013).

In its assessment the AER has identified the levels of debt a regulated energy firm has and then assumed that the balance of the capital is all equity. For firms in the ASX, there is no automatic indexation of assets each year by CPI as there is for regulated energy firms as plant and equipment (the bulk of the assets held by energy networks) is considered to reduce in value each year as a used asset most commonly seen to be worth less than a new asset.

This report notes that the increase in asset values required by the regulatory requirement to increase asset values by CPI each year is transferred by PLQ to a "revaluation surplus – property, plant and equipment" in order to balance its books. Under the accounting rules, an asset should only be re-valued if there is every chance that the sale of the asset will

[6] See for example the CCP4 (Grant and Headberry) work carried out on the Powerlink proposal available at https://www.aer.gov.au/networks-pipelines/determinations-access-arrangements/powerlink-determination-2017-2022/challenge-panel

actually result in a sale reflecting the new valuation[7]. However, the assets held by PLQ are unlikely to increase in value if sold. For example, a transformer once bought will normally sell for less than the purchase price as it will have been used and therefore have less residual life. On this basis, PLQ has not followed accounting rules in assessment of the "fair value[8]" of the asset as PLQ has assumed the assets will sell for more than the purchase price – this is demonstrated in the tables in note 7(b) of the accounts where PLQ has increased the value of the assets but effectively ring fenced the amount of the increase.

PLQ has assumed that because the regulatory environment is such that it is permitted by the regulation to index its value of the assets it holds, then it is following accounting guidelines. Furthermore, PLQ has to index the assets otherwise its accounting would be at odds with the regulatory process.

It is noted that PLQ has not declared the revaluation increase in the profit and loss statement (which is what accounting rules require) as if it did so it would have to pay tax on the revaluation; this supports the view that the increase in asset value is merely a paper entry and not a real cost incurred by PLQ.

There are two core issues that need to be further noted:

1. This assessment means that the AER guideline imposes on consumer an obligation to pay PLQ for costs that PLQ does not incur. As the NEO only requires consumers to pay the efficient costs, to require consumers to reimburse PLQ for costs that are not incurred is contrary to the NEO. This report considers that the rate of return on equity should only be applied to the equity that has actually been injected into the business (ie 6% of the RAB) and not a notional 40% as in the guideline.
2. Firms listed on the ASX carry out their accounting with revaluations above (or below) the depreciated purchase price being considered to be profits. The derivation of the market risk premium is from the growth in the accumulation index which reflects the dividends paid and the growth in the value of the stocks listed. This means that the market risk premium reflects the impact of

[7] For example, if a block of land is rezoned, it is likely that the asset will have appreciated in value and the increase in the land value is then taken as an increase in profit and declared in the profit/loss statement. Similarly, if a building has significant vacancy, it will be revalued downwards to reflect the lower cashflow from the significant vacancy

[8] The aspect of the fair value assessment is explained in the PLQ annual report there is reference to 6(a) Property, plant and equipment *(i) Valuation of Property, Plant and Equipment* which then makes reference to note 5(h) Fair value measurements *(i) Fair value hierarchy.* The PLQ approach effectively determines that under the hierarchy, the level 3 used for property plant and equipment is where "If one or more of the significant inputs is not based on observable market data, the instrument is included in level 3".

> revaluations being taken to the profit and loss. In the case of setting the market risk premium applied to regulated entities, this is calculated from data which **includes** revaluations of assets being declared as a profit. This discontinuity effectively results in "double dipping".

This report notes that the rate of return guideline is considered by the AER to be focused the financial practices of the benchmark efficient entity and not about specific networks. What is not identified in this bland assertion is that the inputs to the benchmark efficient entity are all drawn from the practices of the Australian energy networks, with some minor "shading" of the inputs from some international firms. So essentially, the benchmark efficient entity reflects an amalgam of the operations of the Australian regulated energy networks.

As many of the Australian energy networks reflect similar outcomes to that seen of PLQ (ie about 55-65% interest bearing debt and 5-15% of actual injected equity and retained earnings), it is quite clear that the AER guideline fails to reflect the actuality of how the networks are structured financially. A direct result of this is that the networks are extremely profitable (much more so than firms operating in the competitive sector) because of the AER decision to allow the networks to gain a rate of return on equity for the indexation element of the regulated asset base.

This report considers that this aspect is one element as to why energy networks are being sold for significant premiums to the regulated asset base.

8. Pass through events

Despite expressing some reservations on the extent of pass through provisions, the earlier report noted that the pass through provisions proposed by PLQ reflected those that the AER had previously accepted and therefore there would be regulatory inconsistency if the pass through provisions were rejected

This report notes that the AER has accepted the pass through provisions as proposed, although proposed some wording changes to the definitions proposed by PLQ.

It is noted that PLQ has accepted the AER rewording of the pass through provisions