CitiPower, Powercor Australia and

SA Power Networks

RESPONSE TO THE DRAFT CAPITAL EXPENDITURE INCENTIVES GUIDELINES AND PROPOSED EFFICIENCY BENEFIT SHARING SCHEME

20 September 2013

CONTENTS

1 OVERVIEW

CitiPower Pty, Powercor Australia Ltd and SA Power Networks (**the Businesses**) welcome the opportunity to make this submission to the Australian Energy Regulator (**AER**) in relation to its Draft Capital Expenditure Incentive Guidelines and Proposed Efficiency Benefit Sharing Scheme and the associated explanatory statements which were released on 9 August 2013.

The AER seeks to introduce mechanisms for capital expenditure (**capex**) and operating expenditure (**opex**) that:

- incentivise Distribution Network Service Providers (**DNSP**) to pursue efficiency improvements in capex and opex; and
- share efficiency gains and losses between DNSPs and network users.

This is to be achieved through ex ante measures which reward DNSPs that outperform the capex or opex allowances and penalise DNSPs that overspend against the allowances.

The AER also aims for consumers to pay for only efficient capex undertaken by DNSPs through the use of ex post measures which review the efficiency and prudency of any capex being rolled into the Regulatory Asset Base (**RAB**).

In relation to these measures, the Businesses consider that:

- the AER has made a positive step in changing its position to a symmetric capex sharing scheme (**CESS**) which allows equal penalties/rewards from spending above/below the AER allowance;
- the tax impacts reduce the incentive power of the CESS and the Efficiency Benefit Sharing Scheme (**EBSS**);
- the AER must set out its methodology to adjust the revenue in the subsequent regulatory period resulting from the CESS;
- reliability improvement capex will be more heavily penalised if included in the CESS;
- the circumstances in which the AER would not apply a CESS must be specified;
- the AER should be open to providing appropriate incentives for DNSPs near or at the efficiency frontier;
- the opex productivity adjustment undermines the EBSS incentives; and
- the AER should maintain appropriate use of discretion in relation to the carryover calculation for the EBSS.

The specific concerns that the Businesses have with these elements of the proposed CESS and EBSS are set out below.

The Businesses are also broadly supportive of the submission made by Energy Network Association (**ENA**).

2 EX ANTE CAPEX MEASURES

The Businesses support the introduction of a CESS with greater incentives than the current arrangements.

2.1 Symmetry

The AER's movement to a symmetric CESS which proposes a 30 per cent benefit for spending less than the AER allowance, and a 30 per cent penalty for spending more than the AER allowance, is a positive step. In response to the AER's Issues paper, the Businesses raised many concerns regarding the AER's asymmetric CESS which proposed a relatively higher penalty for spending above the AER allowance compared with the benefit from spending less than the allowance, including that:

- the AER forecast capex allowance is a forecast that is inevitably imperfect;
- the higher penalty will skew behaviour away from spending more than the AER capex allowance even when that overspend is the efficient level of investment required; and
- DNSPs are not sufficiently protected through the regulatory regime from unforeseen and uncontrollable events.[1]

Many of the Businesses' concerns are addressed by the AER now proposing a symmetric CESS.

2.2 Tax impacts

The proposed methodology for the operation of the CESS should be simple and transparent, to ensure that all DNSPs are able to understand and respond to the incentives. However, the incentives that are provided through the CESS are generally stated on a pre-tax basis, and the actual reward that can be achieved by a DNSP is reduced by the tax impact. Further, the extent to which tax costs affect the incentives that the CESS provides to a DNSP depends on the year in which the under or overspend occurs. The AER should adjust the CESS to recognise tax cost implications of an under or overspend so that the incentive rate on a post-tax basis is 30 per cent.

Tax costs materially affect the incentives that the CESS provides to a DNSP. The example below shows how the inclusion of tax reduces the sharing ratio to the DNSP where an underspend occurs in the first year of a regulatory period. Assuming an underspend of $100 in year 1 and a rate of return of 6 per cent, then using the AER's CESS model the DNSP is assumed to obtain 30 per cent of the benefit of the underspend, as shown in the figure below.

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[1] CitiPower, Powercor and SA Power Networks, *Response to the expenditure incentives guidelines for electricity network service providers – Issues paper*, 10 May 2013, pp 4-5.

WACC	6%				
Year (p)	**1**	**2**	**3**	**4**	**5**
Forecast capex allowance (F)	100	100	100	100	100
Actual capex (A)	0	100	100	100	100
Underspend (F-A)	100	0	0	0	0
Year 1 benefit	2.96	6.00	6.00	6.00	6.00
Year 2 benefit		0.00	0.00	0.00	0.00
Year 3 benefit			0.00	0.00	0.00
Year 4 benefit				0.00	0.00
Year 5 benefit					0.00
Total benefit					
Benefit/ Carry over	2.96	6.00	6.00	6.00	6.00
Discount factor (to end of year 5)	1.26	1.19	1.12	1.06	1.00
Discount factor (middle of year)	1.30	1.23	1.16	1.09	1.03
NPV underspend	129.98	0.00	0.00	0.00	0.00
NPV financing benefit	3.73	7.15	6.74	6.36	6.00
Total underspend	129.98		**Share**		
Relevant sharing ratio	0.30				
Customer share	90.99		70%		
NSP share	38.99		30%		
Total NPS financing benefit (NPV)	29.98				
CESS benefit	9.01				

Figure 1 CESS model showing a $100 underspend in year 1

The AER's CESS model fails to take into account the tax impact. The Businesses show the tax impact in the three steps below.

First, assume the tax depreciation rate is 4 per cent, reflecting the Victorian predefined rate for demand-related capex. For the $100 underspend in year 1, the tax depreciation for capex incurred mid-year is $2, and $4 for each subsequent year as shown in Figure 2 below.

Tax depreciation rate	4%				
Year 1	-2	-4	-4	-4	-4
Year 2		0	0	0	0
Year 3			0	0	0
Year 4				0	0
Year 5					0
Total	-2	-4	-4	-4	-4

Figure 2 Calculating incremental tax depreciation

Second, assume that the tax interest deduction rate is 7 per cent, reflecting the tax deduction obtained on interest costs. Also assume the debt to be 60 per cent of incremental capex. For the $100 underspend in year 1, the tax interest deduction for the capex incurred mid-year is $2.10, and $4.20 for each subsequent year. This is shown in Figure 3 below.

Tax interest deduction rate	7%				
Debt proportion	60%				
Year 1	-2.10	-4.20	-4.20	-4.20	-4.20
Year 2		0.00	0.00	0.00	0.00
Year 3			0.00	0.00	0.00
Year 4				0.00	0.00
Year 5					0.00
Total	-2.10	-4.20	-4.20	-4.20	-4.20

Figure 3 Calculating tax interest deduction

Third, the incremental tax depreciation and tax interest deduction are summed together, and tax is assumed to be paid on these elements at the corporate tax rate of 30 per cent. The tax is offset by the imputation credits which are assumed to be at the rate of 0.25, reflecting the recent Australian Competition Tribunal decision on gamma. This is shown below.

Tax rate	30%				
Imputation credit	0.25				
Total incremental tax deduction	-4.10	-8.20	-8.20	-8.20	-8.20
Total incremental tax	1.23	2.46	2.46	2.46	2.46
Value of imputation credits	0.31	0.62	0.62	0.62	0.62
Net incremental tax	0.92	1.85	1.85	1.85	1.85
NPV incremental tax	1.16	2.20	2.07	1.96	1.85

Figure 4 Calculating the incremental tax to shareholders

Given the above calculations, the total Net Present Value (**NPV**) of incremental tax is $9.24, which is paid by the DNSP to the Australian Tax Office (**ATO**). Given the total underspend of $129.98 established above in Figure 1, the DNSP's share of the efficiency gain is reduced from 30 per cent to 23 per cent, as shown in Figure 5 below.

Total underspend (**NPV**)	129.98		**Share**
Customer share	90.99		70%
ATO share	9.24		7%
NSP share	29.76		23%

Figure 5 Impact of tax on the sharing ratio for an underspend in year 1

The extent to which tax affects the incentives that the CESS provides to a DNSP depends on the year in which the under or overspend occurs and the type of expenditure. Using the above example with an assumed rate of return of 6 per cent, the table below shows that a DNSP has an incentive to underspend later in the regulatory period and thus obtain a higher sharing ratio. Conversely, a DNSP has an incentive to overspend earlier in the regulatory period.

	Year 1	Year 2	Year 3	Year 4	Year 5
NSP share (demand related capex)	23%	24%	26%	27%	29%
NSP share (IT capex)	6%	7%	7%	16%	25%

Figure 6 Impact of tax on sharing ratio in each year of the regulatory period

The above example highlights how the tax impact can reduce the sharing ratio of the CESS and how it may vary depending on the timing and type of expenditure.

Please find attached a CESS model which the Businesses used to calculate the sharing ratios presented in Figure 6. This model also proposes how the CESS carryover can be modified to correct for the tax impact.

2.3 Building block

The AER states that the CESS penalty or reward will form a separate building block for the DNSP's revenue allowance in the following regulatory control period.[2]

It is unclear whether or not the AER intends to add the reward or penalty as a building block only into the first year of the subsequent regulatory period, or whether it will smooth the impact. The AER should provide an example in the final guideline to clarify its methodology to adjust the revenue in the subsequent regulatory period resulting from the CESS.

Additionally, the CESS reward or penalty should be included as taxable income and not included as a tax deduction in the building block for benchmark tax calculation to mirror how a benchmark DNSP would be taxed by the ATO. A DNSP's taxable income will include the effect of the CESS reward or penalty but a DNSP is not able to claim the CESS reward or penalty as a tax deduction.

2.4 Exclusions

The AER does not propose to allow for any exclusion from the CESS, which the Businesses broadly support so as to maintain the CESS incentives. That said, the Businesses are concerned that the balance of incentives between the CESS and other incentive schemes may be distorted by the operation of the CESS.

The CESS does not take into account efficient expenditure to provide reliability and quality improvements, which is separately encouraged via the service target performance incentive scheme (**STPIS**). Expenditure to improve reliability and quality is not funded on an ex ante basis but instead is rolled into the RAB on an ex post basis.

As a result, the CESS and the STPIS provide competing incentives. That is, where the Businesses undertake reliability and/or quality improvements, they will be:

- penalised under the CESS for overspending the AER capex allowance;
- rewarded under the STPIS for the improved reliability.

Consequently, the inclusion of STPIS related expenditure in the CESS diminishes the incentives for the Businesses to pursue reliability improvements.

To address this issue, the Businesses propose that the AER either:

- excludes STPIS related expenditure from the CESS and roll this expenditure into the RAB using forecast depreciation; or
- includes STPIS related expenditure in the CESS but apply a lower sharing ratio to this type of expenditure.

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[2] AER, *Better regulation: Draft capital expenditure incentive guidelines*, August 2013, page 9.

Where capex is rolled into the RAB using forecast depreciation, the Businesses acknowledge that the DNSP's benefit share of any overspend declines over the period, such that it creates an incentive to defer expenditure until the latter years of the regulatory period.

The second option listed above provides an opportunity for the AER to provide a continuous incentive for STPIS expenditure, for example by using the average of the sharing ratio provided by forecast depreciation over the regulatory period. The use of a lower sharing ratio would also recognise the uncertainty associated with the forecasting of the benefits of any STPIS related capex. This uncertainty derives mostly from the weather.

Rather than lock in a specific approach to address this issue in the final guideline, the Businesses suggest that the AER should consider how STPIS related expenditure should be treated under the CESS on a case-by-case basis during the Framework and Approach stage.

Finally, the AER has made it clear that it proposes that capex associated with contingent projects, pass through events and re-openers will be added to the original AER allowance for the purposes of the CESS, so that DNSPs have the opportunity to benefit from efficiencies against those capex categories. The Businesses support the AER's clarity on this matter, and its proposed approach.

2.5 Application of the CESS

The AER notes that forecast depreciation should be the default approach for rolling forward the RAB except where:

- a DNSP is not subject to a CESS; or
- a DNSP has persistently overspent on capex or persistently incurred inefficient capex.

The decision on whether to apply the CESS to a particular NSP will be made by the AER as part of the usual regulatory determination process undertaken before the commencement of each regulatory period.[3] However, the AER has failed to identify the circumstances or criteria which it will use to determine whether or not the CESS applies to a DNSP. The Businesses seek clarity from the AER on this matter in its final guideline.

2.6 Other comments

The AER has indicate in its Draft Expenditure Forecast Assessment Guideline that in assessing forecast capex it will consider the actual expenditure level relative to what was funded in previous regulatory periods and the rewards or penalties under the CESS.[4]

While it is unclear as to what the AER is suggesting that it may do, the Businesses consider that the AER should not be able to reduce the CESS on the basis of the efficient deferral of capex. To provide certainty to DNSPs, the AER must clarify whether or not it intends to review the benefit or penalty accrued to the DNSP under the CESS at the end of the regulatory period.

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[3] AER, *Better Regulation: Draft Capital Expenditure Incentive Guideline*, Explanatory Statement, August 2013, page 21.

[4] AER, *Better Regulation: Draft Expenditure Forecast Assessment Guidelines for electricity transmission and distribution*, Explanatory Statement, August 2013, page 65.

3 EX POST CAPEX MEASURES

This section discusses the AER's ability to remove capex which it considers problematic from entering the RAB, in particular:

i. inefficient capex above the AER allowance;

ii. inflated related party margins; and

iii. capitalised opex resulting from an amended capitalisation policy.

3.1 Capex above the AER allowance

The Businesses are broadly supportive of the two stage assessment framework that the AER has set out in its decision tree relating to the removal of inefficient capex above the AER allowance.

In addition, the AER's methodology appears sound for ensuring that DNSPs are not subject to a double penalty where it proposes to remove capex from the CESS that is also excluded from the RAB roll forward.

3.2 Related party margins and change of capitalisation policy

The Businesses appreciate the AER setting out its decision tree for consideration of related party margins and changes to capitalisation policy.

However, there appears to be an inconsistency between the Draft Expenditure Forecast Assessment Guideline and this guideline in relation to the consideration of a related party margin that has not passed the presumption threshold. In particular, the AER outlines that it will investigate in more detail any outsourcing arrangements that fail the presumption threshold in the former guideline,[5] but that it will not carry out this step in the latter guideline. The Businesses propose that the AER adds an additional step into the Capital Expenditure Incentive Guideline to further investigate any contract that does not pass the presumption threshold, prior to determining the costs to be included in the RAB.

For the changes to capitalisation policy, the AER's first step is to consider whether the incentives for capex and opex are relatively balanced. The Businesses consider that the AER should be mindful of the impacts of tax, or changes to the base year of opex, on the relative level of the incentives.

The AER's methodology for ensuring that DNSPs are not subject to a double penalty appears sound where:

- the AER proposes to remove capex from the RAB roll forward on the basis that it is an inflated related party margin, it also amends the CESS; and
- the AER proposes to remove capex from the CESS and the RAB roll forward on the basis of a change in capitalisation policy, it also amends the EBSS.

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[5] AER, *Better Regulation: Draft Expenditure Forecast Assessment Guidelines for electricity transmission and distribution*, Explanatory Statement, August 2013, page 27.

4 EX ANTE OPEX MEASURES

The Businesses continue to support maintaining the existing EBSS, and the use of the base-step-trend approach to forecasting opex.

4.1 Higher rewards for efficient firms

The AER states that it has considered whether the incentive power from the current EBSS may be insufficient to drive efficiency improvements for relatively efficient DNSPs.[6] However, the AER proposes to maintain the status quo on the basis that:

- there is limited evidence to assess whether the current incentive power for opex is too low, making it difficult to assess these claims; and
- it maintains the balanced incentives across all incentive schemes.

While the AER notes that the data that it will gather for benchmarking purposes will assist in assessing future claims from relatively efficient DNSPs regarding the EBSS incentive power, it appears that it is not minded to consider such claims. The Businesses encourage the AER to be open to increasing the power of the incentives, for example by increasing the carryover period or using a multiplier. The Businesses note that the AER stated that they will reassess these claims after gathering data for the purposes of benchmarking.

Furthermore, the Businesses encourage the AER to revisit the EBSS guideline on this issue within the next five years.

4.2 Productivity factor

In the AER's Draft Expenditure Forecast Assessment Guideline, it has allowed provision for a productivity factor to be included in the rate of change parameter, which is proposed to be used to derive opex forecasts under the base-step-trend approach.[7]

The Businesses consider that adjusting operating expenditure for expected productivity growth will reduce the EBSS incentives. Furthermore, such an approach is not consistent with the symmetric incentive properties of the EBSS.

In light of the above, the Businesses seek the AER to remove the productivity factor from the methodology for determining opex forecasts.

4.3 Benchmarking

In the AER's Proposed Efficiency Benefit Sharing Scheme, it no longer proposes the fixed sharing scheme which it proposed in the Issues Paper.

The fixed sharing scheme was proposed for DNSPs subject to the new exogenous forecasting methodology for the setting of the opex allowance. Under this scheme, DNSPs would have received 30 per cent of the NPV of the difference between actual opex and the forecast opex – with customers receiving the remaining share of the benefits or costs, as applicable.

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[6] AER, *Better Regulation: Proposed Efficiency Benefit Sharing Scheme,* Explanatory Statement, August 2013, page 22.

[7] AER, *Better Regulation: Draft Expenditure Forecast Assessment Guidelines for electricity transmission and distribution*, Explanatory Statement, August 2013, page 36.

The AER no longer proposes the fixed sharing scheme as it now considers "it less likely that fully exogenous benchmarks will be used to forecast opex in the near future".[8] However, the AER states in the Draft Expenditure Forecast Assessment Guideline that "[i]f, on the balance of evidence… we consider economic benchmarking provides the most appropriate forecast, then we will use it to set expenditure allowances". [9]

The Businesses seek clarity and consistency from the AER in relation to its proposed use of benchmarking. To be clear, the Businesses support the use of revealed costs as the basis for the setting of the opex forecast, and previous statements by the AER that benchmarking techniques would not be used deterministically.

4.4 Excluded costs and calculation of the carryover

In calculating the carryover amounts for the EBSS, the AER will adjust:

- forecast opex allowance to add approved pass throughs and opex for contingent projects;
- actual opex to add any "capitalised opex" that has been disallowed from the RAB;
- forecast and actual opex to adjust for inflation; and
- forecast and actual opex to remove excluded categories of opex where these costs would better achieve the requirements of clause 6.5.8 of the National Electricity Rules (**NER**) for DNSPs (e.g. debt raising costs that are forecast using benchmarking techniques); and
- we also understand that the AER retains discretion to make ex post adjustments or exclusions.

In terms of the final category regarding ex post adjustments, the AER may exclude costs from the current period. One circumstance where the AER may make such an adjustment is where it changes a definition of a regulated service. The Businesses generally accept that changes of a definition of a regulated service would mirror in principle a regulatory change event and as such it may be reasonable to exclude these costs. However, the AER's proposed adjustment is based on an unfounded concern as DNSPs would not be able to readily anticipate any change in an AER service classification.

The other circumstance where the AER suggests that it could make an ex post adjustment is where it changes its approach to forecasting a cost category between regulatory periods. The Businesses are strongly of the view that such an ex post adjustment, which changes the incentives that have been incorporated in a determination, must not be allowed. The example given by the AER to support the justification of allowing this ex post adjustment lacks credibility. The example suggests that the DNSP will target a base year's opex outcome on the basis that the AER will not use revealed cost but a bottom-up approach to determine the next period's allowance. However, the base year's opex would already be committed by the time that the AER determines the basis for determining the forthcoming period's opex allowance.

It appears that the AER only intends to use this discretion where it considers that the exclusion of such costs would better achieve the requirements of clause 6.5.8 of the NER. In particular, the AER would exclude costs in circumstances where the EBSS may not provide for fair sharing. As those

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[8] AER, *Better Regulation: Proposed Efficiency Benefit Sharing Scheme,* Explanatory Statement, August 2013, page 7.

[9] AER, *Better Regulation: Draft Expenditure Forecast Assessment Guidelines for electricity transmission and distribution*, Explanatory Statement, August 2013, page 82.

clauses of the NER are extremely broad, the Businesses seek that the AER provide as much certainty as possible to DNSPs that it will only use such discretion in a limited and appropriate manner.

4.5 Tax impacts

The incentives that are provided through the EBSS are generally stated on a pre-tax basis, and the actual reward that can be achieved by a DNSP is reduced by the impact of tax.

Tax materially affects the incentives that the EBSS provides to a DNSP. The example below shows how the inclusion of tax reduces the sharing ratio to the DNSP where an underspend occurs in the first year of a regulatory period. Assuming an underspend of $10 in year 1 and a rate of return of 6 per cent, then using the AER's EBSS model the DNSP is assumed to obtain 30 per cent of the benefit of the underspend, as shown in the figure below.

Forecast base year:	4															
Year	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**Perpetuity**
Forecast opex before adjustments (F)	100	100	100	100	100	90	90	90	90	90	90	90	90	90	90	90
Actual (A)	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90
Cumulative saving (F-A)	10	10	10	10	10	0	0	0	0	0	0	0	0	0	0	0
Incremental saving (E)	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Carry-over of gains made in																
1		10	10	10	10	10										
2			0	0	0	0	0									
3				0	0	0	0	0								
4					0	0	0	0	0							
5						0	0	0	0	0						
6							0	0	0	0	0					
7								0	0	0	0	0				
8									0	0	0	0	0			
9										0	0	0	0	0		
10											0	0	0	0	0	
Carry-over, (B)						10	0	0	0	0	0	0	0	0	0	0
Forecast opex + Carry-over (F+B)	100	100	100	100	100	100	90	90	90	90	90	90	90	90	90	90
Discount factor	1.00	0.94	0.89	0.84	0.79	0.75	0.70	0.67	0.63	0.59	0.56	0.53	0.50	0.47	0.44	

Figure 7 EBSS model

Similar to the CESS, the impacts of tax must be considered. Tax is incurred on the cumulative savings made by the DNSP, at the corporate tax rate of 30 per cent. The tax is offset by the imputation credits which are assumed to be at the rate of 0.25, reflecting the recent Australian Competition Tribunal decision on gamma.

Efficiency saving	10															
Year	1															
Real WACC	6%															
Tax rate	30%															
Value of imputation credits	0.25															
Cash flow																
Year	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**Perpetuity**
Allowance less cost	10	10	10	10	10	0	0	0	0	0	0	0	0	0	0	0
Carryover	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0
Incremental tax expense	-3	-3	-3	-3	-3	-3	0	0	0	0	0	0	0	0	0	0
Value of imputation credits	0.75	0.75	0.75	0.75	0.75	0.75	0	0	0	0	0	0	0	0	0	0
Total	7.75	7.75	7.75	7.75	7.75	7.75	0	0	0	0	0	0	0	0	0	0

Figure 8 Calculating the tax impact on the EBSS

The total savings obtained by the DNSP reflects the saving of the $10 into perpetuity, i.e 10/6 per cent. The DNSP's share reflects the NPV of the cash flows after tax. The ATO's share is the NPV of the tax expense less the imputation credits. The remainder is shared with customers. As per Figure 9 below, the DNSP obtains only 23 per cent of the benefit of the saving.

Total underspend (NPV)	166.67		Share
Customer share	117.49		70%
ATO share	11.06		7%
NSP share	38.11		23%

Figure 9 Calculating the share of savings

Unlike the CESS, the DNSP's share remains the same irrespective of the year in which the saving is made. This is shown in the figure below.

	Year 1	Year 2	Year 3	Year 4	Year 5
Customer share	70%	70%	70%	70%	70%
ATO share	7%	7%	7%	7%	7%
NSP share	23%	23%	23%	23%	23%

Figure 10 EBSS sharing ratio after tax

The EBSS sharing ratio after tax varies with the rate of return used, much like the EBSS sharing ratio pre-tax.

The AER should correct the EBSS for the impact of tax incurred during the regulatory period, and it should also correct for the tax incurred by the DNSP on the carryover that is included in the subsequent regulatory period.