Constituent decisions

Draft distribution determination

Aurora Energy Pty Ltd

2012–13 to 2016–17

November 2011

AUSTRALIAN ENERGY REGULATOR

1.1 Introduction

The National Electricity Rules (NER) require the AER to make a draft distribution determination for Aurora predicated on several constituent decisions.[1] This document sets out the AER's constituent decisions for the draft distribution determination for Aurora.[2] The AER's draft distribution determination sets out the AER's reasons for these decisions.

1.2 Service classification

The AER's draft decision on the classification of services for Aurora for the 2012–13 to 2016–17 regulatory control period is set out in Table 1.1.[3]

Table 1.1 AER constituent decision on the classification of Aurora's distribution services

Service category	Direct control services: standard control	Direct control services: alternative control	Negotiated distribution services	Unregulated services
Network services	Standard network services			
Metering services		Type 5–7 metering services		Type 1–4 metering services PAYG metering services provided by Aurora Retail
Public lighting		All public lighting services (except new public lighting technology and alteration and relocation of public lighting assets)	New public lighting technology	
Connection services	Standard connection services and connections requiring augmentation			Capital contributions component of connections requiring augmentation
Fee based services		All fixed fee special services except 'new connection–install services & meters'		
Quoted services		All quoted (non-standard) services including above standard network and metering services Alteration and relocation of public lighting assets		

Source: AER analysis.

1 National Electricity Rules (NER), clause 6.10.1 and clause 6.12.1.

2 Clause 6.12.1 of the NER sets out the constituent decisions that the AER is required to make as part of a distribution determination.

3 This is the AER's constituent decision under clause 6.12.1 (1) of the NER.

1.3 Building block determination

The AER refuses to approve Aurora's proposed annual revenue requirement for each regulatory year of the forthcoming regulatory control period.[4] The AER's draft determination on Aurora's revenue requirements is set out in Table 1.2.

Table 1.2 AER draft decision on Aurora's annual revenue requirement ($million, nominal)

	2012–13	2013–14	2014–15	2015–16	2016–17	Total
Return on capital	116.3	121.0	125.6	130.5	135.5	628.9
Regulatory depreciation	46.6	52.9	49.1	42.2	42.1	232.9
Operating expenditure	66.6	68.8	71.4	74.0	76.3	357.1
Corporate income tax	16.9	18.7	17.8	17.6	17.5	88.6
Annual revenue requirement (unsmoothed)	246.4	261.5	263.9	264.2	271.4	1,307.5

Source: AER analysis.

The AER approves the regulatory control period of five years, commencing on 1 July 2012 and ceasing on 30 June 2017 for Aurora.[5]

1.4 Capital expenditure

The AER does not accept Aurora's forecast capex for the forthcoming regulatory control period.[6] The AER's estimate of Aurora's total capex requirement for the forthcoming regulatory control period is set out in Table 1.3. The AER's reasons for its decision on Aurora's capex are set out in attachment 5 to the draft determination.

Table 1.3 AER draft decision on Aurora's total forecast capex ($million, 2009–10)

	2012–13	2013–14	2014–15	2015–16	2016–17	Total
Total capex	109.4	112.6	109.3	102.2	102.3	535.8

Source: AER analysis.

1.5 Operating expenditure

The AER does not accept Aurora's forecast opex for the forthcoming regulatory control period.[7] The AER's estimate of Aurora's required opex for the forthcoming regulatory control period is in Table 1.4. The AER's reasons for its decision on opex for Aurora are set out in attachment 6 to the AER's draft determination.

4 This is the AER's constituent decision under clause 6.12.1(2)(i) of the NER.
5 This is the AER's constituent decision under clause 6.12.1(2)(ii) of the NER.
6 This is the AER's constituent decision under clause 6.12.1(3) of the NER.
7 This is the AER's constituent decision under clause 6.12.1(4) of the NER.

Table 1.4 AER draft determination on Aurora's forecast opex ($million, 2009–10)

	2012-13	2013-14	2014-15	2015-16	2016-17	Total
Total opex	61.1	61.6	62.3	62.9	63.2	311.0

Source: AER analysis.

1.6 Rate of return

The AER has decided to depart from values in the statement of regulatory intent (SRI)[8] for the market risk premium and the gamma values in the SRI. The AER's draft decision on the WACC parameters is in Table 1.5.

Table 1.5 AER draft decision on WACC parameters

Parameter	AER determination
Nominal risk free rate	4.28%
Equity beta	0.8
Market risk premium	6.00%
Gearing level (debt/debt plus equity)	60%
Debt risk premium	3.14%
Assumed utilisation of imputation credits (gamma)	0.25
Inflation forecast	2.62%
Cost of equity	9.08%
Cost of debt	7.42%
Nominal vanilla WACC	8.08%

Source: AER analysis.

1.7 Regulatory asset base

The AER decides that the opening asset base for Aurora as at 1 July 2012 is $1,439.0 million (nominal) for standard control services.[9] The AER's forecast roll-forward of Aurora's RAB for the forthcoming regulatory control period is set out in Table 1.6.

[8] This is the AER's constituent decision under clause 6.12.1(5) of the NER.
[9] This is the AER's constituent decision under clause 6.12.1(6) of the NER.

Table 1.6 AER forecast roll-forward of Aurora's RAB for the forthcoming regulatory control period ($million, nominal)

	2012–13	2013–14	2014–15	2015–16	2016–17
Opening RAB	1,439.0	1,497.1	1,554.2	1,613.8	1,675.6
Capital expenditure[a]	104.8	110.1	108.6	104.0	107.2
Inflation indexation on opening RAB	37.7	39.2	40.7	42.3	43.9
Straight-line depreciation	–84.2	–92.2	–89.8	–84.5	–86.0
Closing RAB	1,497.1	1,554.2	1,613.8	1,675.6	1,740.7

Source: AER analysis.
(a) Net of disposals and capital contributions. In accordance with the timing assumptions of the PTRM, the capex includes a half-WACC allowance to compensate for the average six-month period before capex is added to the RAB for revenue modelling purposes.

1.8 Corporate income tax

The AER's draft decision on Aurora's corporate income tax allowance for the forthcoming regulatory control period is set out in Table 1.7.[10]

Table 1.7 AER draft decision on Aurora's corporate income tax allowance for the forthcoming regulatory control period ($million, nominal)

	2012–13	2013–14	2014–15	2015–16	2016–17	Total
Tax payable	22.6	24.9	23.8	23.4	23.4	118.1
Less value of imputation credits	5.6	6.2	5.9	5.9	5.8	29.5
Net corporate income tax allowance	16.9	18.7	17.8	17.6	17.5	88.6

Source: Aurora.

1.9 Depreciation

The AER accepts Aurora's proposed asset classes, standard asset lives and straight-line method of depreciation to calculate the depreciation allowance. However, the AER does not accept Aurora's proposed forecast depreciation allowance of $231.9 million ($nominal) for the forthcoming regulatory control period.[11] The AER's draft decision on the depreciation allowance for Aurora is set out in Table 1.8.

[10] This is the AER's constituent decision under clause 6.12.1(7) of the NER.
[11] This is the AER's constituent decision under clause 6.12.1(8) of the NER.

Table 1.8 AER draft decision on Aurora's depreciation allowance ($million, nominal)

	2012–13	2013–14	2014–15	2015–16	2016–17	Total
Straight-line depreciation	84.3	92.2	89.8	84.5	86.0	436.7
Less: indexation on opening RAB	37.7	39.2	40.7	42.3	43.9	203.8
Regulatory depreciation	46.6	52.9	49.1	42.2	42.1	232.9

Source: AER analysis.

1.10 Schemes

EBSS

The AER's *Electricity distribution network service providers, Efficiency benefit sharing scheme*, June 2008 (EBSS) will apply to Aurora for the forthcoming regulatory control period.[12] The AER's determination on the detailed application of the EBSS is set out in attachment 11 to the AER's draft determination.

Table 1.9 shows the total controllable opex forecasts that the AER will use to calculate efficiency gains and losses for the forthcoming regulatory control period, subject to adjustments the EBSS requires.

Table 1.9 AER draft determination on Aurora's forecast controllable opex for EBSS purposes ($million, 2009–10)

	2012–13	2013–14	2014–15	2015–16	2016–17
Total forecast opex	60.4	60.8	61.5	62.1	62.4
Adjustment for excluded cost categories	–7.1	–7.2	–7.3	–7.5	–7.6
Forecast opex for EBSS purposes	53.3	53.6	54.2	54.6	54.8

Source: AER analysis.
Note: Both the total forecast opex and the adjustment for excluded cost categories exclude debt raising costs and the demand management incentives scheme allowance.

STPIS

The AER's *Electricity distribution network service providers, Service target performance incentive scheme*, November 2009 (STPIS) will apply to Aurora in the forthcoming regulatory control period.[13] The AER's decision on the detailed application of the STPIS is set out in attachment 12 to the draft determination.

The AER will apply the System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index (SAIFI) reliability of supply parameters. The AER will apply the telephone answering parameter. The STPIS GSL scheme will not apply to Aurora. Aurora must comply with the existing TEC GSL scheme.

---

12 This is the AER's constituent decision under clause 6.12.1(9) of the NER.
13 This is the AER's constituent decision under clause 6.12.1 (9) of the NER.

The AER's draft determination on the SAIDI and SAIFI targets to apply to Aurora in the forthcoming regulatory control period are set out in Table 1.10. The incentive rates are set out in Table 1.11.

Table 1.10 AER draft determination of Aurora's SAIDI and SAIFI targets

	Critical infrastructure	High density commercial	Urban	High density rural	Low density rural
SAIFI (number of interruptions)	0.22	0.49	1.01	2.66	2.97
SAIDI (minutes)	20.79	38.34	84.04	272.74	331.34

Source: AER analysis.

Table 1.11 AER draft determination on incentive rates to apply to Aurora's STPIS targets (%)

	Critical infrastructure	High density commercial	Urban	High density rural	Low density rural
SAIFI	0.4772	0.5488	4.2050	1.3691	1.0836
SAIDI	0.0056	0.0080	0.0489	0.0123	0.0089

Source: AER analysis.

DMIS

The *Demand Management Incentive Scheme, Aurora Energy, Regulatory control period commencing 1 July 2012, October 2010* to will apply to Aurora without amendment.[14] The AER's decision on the application of the DMIS is set out in attachment 13 to the AER's draft determination.

1.11 Other amounts, values or inputs

In accordance with clause 6.12.1(10) of the NER, the AER has determined other values, amounts and inputs. These other values, amounts and inputs relate to Aurora's demand forecasts. The AER's draft decision on a realistic expectation of demand is shown in Table 1.12.

[14] This is the AER's constituent decision under clause 6.12.1(9) of the NER.

Table 1.12 AER draft decision on demand forecasts for Aurora

	2010–11	2011–12	2012–13	2013–14	2014–15	2015–16	2016–17
Net new customer connections (#)	3,000	3,000	3,000	3,000	3,000	3,000	3,000
Gross new customer connections (#)	3,150	3,133	3,133	3,142	3,152	3,160	3,171
	2011	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Maximum demand (MW)	1,082	1,098	1,115	1,132	1,149	1,165	1,182

Source: AER analysis using data from Aurora's regulatory proposal, data provided by Aurora in response to AER request, and data from the ABS.
Note: 1. Net new customer connections is difference in connections measured as at 30 June of current year and 30 June of previous year.
2. Maximum demand measured in calendar years because Aurora experiences winter-peaking demand.

1.12 Control mechanism – standard control services

In accordance with the AER's framework and approach paper for Aurora[15] the AER has decided to apply a revenue cap control mechanism to Aurora's standard control services in the forthcoming regulatory control period.[16] The formula for Aurora's revenue cap is:

$$MAR_t = AR_t \pm passthrough_t \pm ESISC_t \pm NEMC_t \pm transitional_t$$

where:

t is the regulatory year

MAR_t is the maximum allowed revenue for each year of the forthcoming regulatory control period

AR_t is the allowed revenue for regulatory year t. For the first year of the forthcoming regulatory control period, this amount will be equal to the smoothed revenue requirement for 2012-13. The subsequent year's allowed revenue is determined by adjusting the previous year's allowed revenue for actual inflation, the X factor and the other following adjustments:

$$AR_t = AR_{t-1} \times (+\Delta CPI_t) \times (-X_t) \times (+S_t)$$

where:

CPI_t is the annual percentage change in the Australian Bureau of Statistics (ABS) Consumer Price Index All Groups, Weighted Average of Eight Capital Cities from March in year t–2 to March in year t–1

15 AER, *Framework and approach paper, Aurora Energy Pty Ltd, Regulatory control period commencing 1 July 2012*, November 2010, pp. 62–85. (AER, *Framework and approach paper*, November 2010)

16 This is the AER's constituent decision under clause 6.12.1(11) of the NER.

X_t is the X factor for each year of the forthcoming regulatory control period as determined by the PTRM.

S_t is the STPIS factor sum of the raw s-factors for all reliability of supply and customer service parameters (as applicable) to be applied in regulatory year t as calculated in appendix C of the AER's STPIS. Note that the above formula is expressed as the sum of s-factors for the previous year, hence calculations of S_t in appendix C should be read as calculations of for S_{t-1} when applying the control mechanism.

$passthrough_t$ is the approved pass through amounts with respect to regulatory year t, as determined by the AER

ESISC is the actual overs or unders from the estimated ESISC costs in regulatory year t-1 if Aurora wins the contract to undertake the electrical safety inspection services

NEMC is the actual overs or unders from the estimated NEMC costs in regulatory year t-1

Transitional is the remaining under or over non-ongoing revenue adjustments to be made for TMR and GSL in 2012-13, and for FRC and NEM in 2013-14, in relation to unders or overs from the last year of current regulatory period

Aurora will be required to demonstrate in their pricing proposal that proposed DUOS prices for the next year (t) will meet the following side constraints formula (expressed in percentage terms) for each tariff class:

$$\frac{\sum_{j-1}^{m} d\frac{j}{t} \times q\frac{j}{t}}{\sum_{j-1}^{m} d\frac{j}{t-1} \times q\frac{j}{t}} \leq (1+ \ \Delta CPI_t \times (1-X_t) \times (1+2\%) \pm passthrough_t \pm ESISC_t \pm NEMC_t \pm DUOS_t \ \pm transitional_t$$

where each tariff class ‘j’ has up to ‘m’ components, and where:

$d\frac{j}{t}$ is the proposed price for component ‘j’ of the tariff class for year t

$d\frac{j}{t-1}$ is the price charged by the DNSP for component ‘j’ of the tariff class in year t–1

$q\frac{j}{t}$ is the forecast quantity of component ‘j’ of the tariff class in year t

ΔCPI_t is the annual percentage change in the ABS Consumer Price Index All Groups, Weighted Average of Eight Capital Cities from March in regulatory year t–2 to March in regulatory year t–1

X_t is the X factor for each year of the regulatory control period. If X>0, then X will be set equal to zero for the purposes of the side constraint formula

$passthrough_t$ is an annual adjustment factor that reflects the pass through amounts approved by the AER with respect to regulatory year t

ESISC is the actual overs or unders from the estimated ESISC costs in regulatory year t-1

NEMC is the actual overs or unders from the estimated NEMC costs in regulatory year t-1

$DUOS_t$ is an annual adjustment factor related to the balance of the DUOS unders and overs account with respect to regulatory year t.

$transitional_t$ is a transitional factor revenue adjustments from the current regulatory period that will not be ongoing in the forthcoming regulatory period

With the exception of the CPI and X factors, the percentage for each of the other factors above can be calculated by dividing the incremental revenues (as used in the MAR formula) for each factor by the expected revenues for regulatory year t–1 (based on the prices in year t–1 multiplied by the forecast quantities for year t).

The AER's decision on the P_0 and X factors to apply to Aurora for the forthcoming regulatory control period are set out in Table 1.13.[17] The P_0 represents the initial increase in 2012–13, and the X factors are the real price changes in each year thereafter.

Table 1.13 AER draft decision on Aurora's X factors

	2012–13	2013–14	2014–15	2015–16	2016–17
AER draft determination (X factors)	2.62	2.62	1.77	1.00	1.00
Expected revenue (smoothed) ($million, nominal)	257.5	257.3	259.4	263.5	267.7

Source: AER analysis.

1.13 Control mechanism – alternative control services

In accordance with the AER's framework and approach paper for Aurora,[18] the AER decides to apply a price cap control mechanism for the forthcoming regulatory control period[19] to:

- standard metering services[20]
- public lighting services[21]
- fee based services[22]

17 This is the AER's constituent decision under clause 6.12.1(10) of the NER.
18 AER, *Framework and approach paper*, November 2010, pp. 17.
19 This is the AER's constituent decision under clause 6.12.1(12) of the NER.
20 The AER's draft decision on the price caps for individual metering services is set out in appendix C of the AER's draft determination.
21 The AER's draft decision on the price caps for individual public lighting services is set out in appendix D of the AER's draft determination.
22 The AER's draft decision on the price caps for individual fee based services is set out in appendix E of the AER's draft determination.

- unit costs of inputs for quoted services.[23]

The AER has determined price caps for individual alternative control services for each year of the forthcoming regulatory control period. These prices have been calculated based upon the AER's forecast of inflation. These prices will be adjusted annually to account for the difference between forecast and actual inflation.

1.14 Compliance with control mechanisms

The AER determines that compliance with the relevant control mechanisms for direct control services is to be demonstrated as follows:

- Standard control services—compliance with the control mechanism will be monitored through the annual pricing proposal process[24]
- Alternative control services—compliance with the control mechanisms will be demonstrated through the annual pricing proposal process.[25]

1.15 Pass through events

The AER has decided to nominate the following as pass through events for Aurora for the forthcoming regulatory control period:[26]

- natural disaster event
- insurer credit risk event
- liability above insurance cap

Definitions of these pass through events are set out in attachment 14 to the draft determination.

1.16 Negotiating framework

The AER is not satisfied that Aurora's proposed negotiating framework adequately complies with the requirements of Part D of the NER. The AER has proposed some variations to Aurora's proposed negotiating framework.[27] The AER's consideration of and proposed variations to Aurora's proposed negotiating framework is set out in attachment 16 to the draft determination.

---

23 The AER's draft decision on the price caps for unit costs of inputs for quoted services is set out in appendix E of the AER's draft determination.
24 This is the AER's constituent decision under clause 6.12.1(13) of the NER.
25 This is the AER's constituent decision under clause 6.12.1(13) of the NER.
26 This is the AER's constituent decision under clause 6.12.1(14) of the NER.
27 This is the AER's constituent decision under clause 6.12.1(15) of the NER.

1.17 Negotiated distribution services criteria

The AER has decided that the proposed negotiated distribution services criteria (NDSC) published on 26 June 2011 will to apply to Aurora in the forthcoming regulatory control period.[28]

1.18 Assigning customers to tariff classes

The AER's draft decision on the procedures for assigning customers to tariff classes, or reassigning customers from one tariff class to another, is set out in appendix F to the draft decision.[29]

1.19 Depreciation for establishing the RAB as at the commencement of the following regulatory control period

The AER has decided that depreciation based on actual capex will be used to determine Aurora's regulatory asset base as at the commencement of the 2017–22 regulatory control period.[30]

1.20 Recovery of TUOS charges

The AER's draft decision on how Aurora is to report to the AER on its recovery of TUOS charges for each regulatory year of the forthcoming regulatory control period is set out in attachment 2 of the AER's draft distribution determination.[31]

1.21 Jurisdictional scheme amounts

There are no jurisdictional scheme amounts relating to Aurora.[32]

---

28 This is the AER's constituent decision under clause 6.12.1(16) of the NER.
29 This is the AER's constituent decision under clause 6.12.1(17) of the NER.
30 This is the AER's constituent decision under clause 6.12.1(18) of the NER.
31 This is the AER's constituent decision under clause 6.12.1(19) of the NER.
32 This is the AER's constituent decision under clause 6.12.1(20) of the NER.