

APPROVAL OF SYSTEM CONTROL CHARGES FROM 1 JULY 2019

In accordance with section 39(2) of the *Electricity Reform Act 2000*, the Commission hereby approves the 2019-20 charge to be applied by the power system controller to retailers from 1 July 2019, and indicative 2020-21 to 2023-24 charges, based on the revenue amounts in Table 1 adjusted by the recommended revenue cap formulae (Appendix A), with a five per cent materiality threshold for the unders and overs account (Appendix B) as set out in Table 2 below.

Table 1: Approved smoothed and unsmoothed revenue, Real \$2019, and X-factor

	System control		Market operator	
	Unsmoothed revenue	Smoothed revenue	Unsmoothed revenue	Smoothed revenue
2019-20	\$8,873,858	\$8,787,141	\$832,440	\$821,515
2020-21	\$8,732,767	\$8,698,607	\$817,787	\$808,320
2021-22	\$8,524,438	\$8,610,965	\$780,608	\$795,336
2022-23	\$8,476,419	\$8,524,207	\$774,851	\$782,561
2023-24	\$8,438,322	\$8,438,322	\$769,992	\$769,992
NPV	\$37,099,156	\$37,099,156	\$3,429,255	\$3,429,255
X-factor		1.02%		1.63%

Table 2: Approved system control charge (Real \$2019, excludes GST)

Component	2019-20	2020-21 ²	2021-22 ²	2022-23 ²	2023-24 ²
System control (\$/kWh)	0.0048	0.0048	0.0047	0.0047	0.0046
Market operator (\$/kWh) ¹	0.00052	0.00051	0.00050	0.00049	0.00048

¹Market operator component to only be paid by customers supplied by the Darwin-Katherine regulated system, with the charge determined based on the total energy consumption in that system only

²Indicative charges

Lyndon Rowe
Utilities Commissioner

30 July 2019

Appendix A: Revenue cap formulae

The formulae to implement a revenue cap form of price control mechanism for the system control (or market operator) charge is set out below.

The adjusted annual revenue requirement in the first year of the period in which the charge is to be determined is the forecast total costs for the system control and market operator functions for that year, subject to any smoothing of the revenue.

$$AAR_t = AR_t$$

where:

AAR_t is the adjusted annual smoothed revenue requirement for year t

AR_t is the annual smoothed revenue requirement for year t, including any overs and unders carried over from the previous period

The adjusted annual smoothed revenue requirement in the subsequent years of the period is the adjusted annual revenue requirement in the previous period year escalated by Consumer Price Index (CPI) and an "X-factor".

$$AAR_t = AAR_{t-1} \times (1 + \Delta CPI_t) \times (1 - X_t)$$

where:

ΔCPI_t is the annual percentage change in the ABS CPI All Groups, Weighted Average of Eight Capital Cities from the December quarter in years t-2 to the December quarter in year t-1, calculated as follows:

$$\Delta CPI_t = \frac{CPI_{t-1}}{CPI_{t-2}} - 1$$

X_t is the X factor so that the Net Present Value (NPV) of the smoothed revenue requirement over the period is equal to the NPV of the unsmoothed revenue requirement over the period

The total allowable revenue in each year is the adjusted annual smoothed revenue requirement and, when the materiality threshold of the overs and unders account has been exceeded, the balance of the overs and unders account. It also includes the costs associated with the proposed new Control and Administrative Centre, any costs associated with additional market operator functions, and any consequent change in the direct costs and corporate overheads.

$$TAR_t = AAR_t + B_t + C_t$$

where:

TAR_t is the total allowable revenue in year t

B_t is the true-up in year t for any under or over recovery of actual revenue collected through the system control or market operator charge

C_t is:

- a. the costs in year t associated with the proposed new Control and Administrative Centre, when approved by the Commission
- b. the change in costs in year t associated with a change in the market operator functions
- c. a change in the allocation of direct costs and corporate overheads in year t arising from these events.

The total allowable revenue is converted to a system control (or market operator) charge which is calculated in accordance with the following equation:

$$TAR_t \geq \sum_{i=1}^n p_t^i q_t^i$$

where:

p_t^i is the system control (or market operator) charge i in year t

q_t^i is the forecast quantity of system control (or market operator) charge i in year t

Appendix B: Overs and unders account

The overs and unders account balance for each of the system control charge and the market operator charge is determined using the following approach:

1. The under/over recovery of revenue in the first year is the revenue recovered through the system control (or market operator) charge less the total allowable revenue for that year.
2. The under/over recovery in item 1 is adjusted by 18 months of interest, with the interest rate to be the nominal weighted average cost of capital (WACC) for each year approved by the Australian Energy Regulator for the purposes of the regulated Power and Water Corporation Power Networks business. The under/over recovery item will be adjusted by the WACC in year t-2 for half a year and the WACC for year t-1 for a year.
3. The sum of items 1 and 2 is the closing balance for the first year of the period (year t-2).
4. If the closing balance exceeds the materiality band of five per cent of the total allowable revenue for that year, it is applied in year t.
5. If the closing balance is less than the materiality band of five per cent of the total allowable revenue for that year, it is the opening balance for the next year.
6. The under/over recovery of revenue in the next year (which is now year t-2) is the revenue recovered through the system control (or market operator) charge less the total allowable revenue for that year.
7. The under/over recovery in item 6 is adjusted by 18 months of interest (WACC in year t-2 for half a year and WACC in year t-1 for a year) and the opening balance is adjusted by 12 months of interest (WACC in year t-1).
8. The sum of items 5 to 7 is the closing balance for the next year of the period.
9. Items 4 to 8 are repeated each year.