SPECIAL SUPPLEMENT

I P A R T
New South Wales

Independent Pricing and Regulatory Tribunal

Prices for Sydney Desalination Plant Pty Limited's Water Supply Services

Determination No. 2, 2011

Contents

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1   Application of this determination

This determination sets a methodology for fixing the maximum prices that Sydney Desalination Plant Pty Limited (ACN 125 935 177) (**SDP**) may charge for the Water Supply Services.

2   Commencement and term of this determination

(a) This determination commences on the later of 1 July 2012 and the date that it is published in the NSW Government Gazette (**Commencement Date**).

(b) The methodology for fixing maximum prices set out in this determination applies from the Commencement Date to 30 June 2017 (**Term**).

3   Declaration

(a) Section 51 of the WIC Act provides that the Minister for Finance and Services may declare that a specified licensed retail supplier or licensed network operator is a monopoly supplier in relation to:

     (1) a specified water supply service;

     (2) a specified area; and

     (3) a specified class of customers.

(b) On 2 May 2011, the Minister for Finance and Services, under section 51(1) of the WIC Act, declared SDP to be a monopoly supplier in a network operator and retail supplier capacity:

     (1) for the purposes specified in SDP's Network Operator's Licence and Retail Supplier's Licence; and

     (2) for distribution within the area of operations as specified in SDP's Network Operator's Licence and Retail Supplier's Licence; and

     (3) to specified persons or classes of persons as specified in SDP's Retail Supplier's Licence.

4   Referral to IPART

(a) Under section 52(1) of the WIC Act, the Minister for Finance and Services may refer to the Independent Pricing and Regulatory Tribunal (**IPART**), for investigation and report, the determination of the pricing for any service in respect of which a declaration is in force under section 51 of the WIC Act.

(b) On 2 May 2011, IPART received a referral from the Minister for Finance and Services (**Referral**) requiring IPART to determine the pricing for the following services provided by SDP (**Water Supply Services**):

(1) the supply of non-rainfall dependent drinking water to purchasers; and

(2) the making available of the desalination plant to supply non-rainfall dependent drinking water.

(c) By virtue of section 52(2) of the WIC Act, the provisions of Part 3 of the IPART Act in relation to government monopoly services apply to and in respect of matters referred to IPART under section 52(1) of the WIC Act.

(d) In investigating and reporting on the pricing of the Water Supply Services, IPART has had regard to a broad range of matters, including:

(1) the matters it is required to consider under the Referral in accordance with section 13(1)(c) of the IPART Act; and

(2) the matters set out in section 15(1) of the IPART Act.

(e) This determination is made under section 52 of the WIC Act, pursuant to the Referral.

5   Methodology for fixing the maximum price

In accordance with section 13A of the IPART Act, IPART has established a methodology for fixing the maximum price that SDP may charge for the Water Supply Services. Reasons for the use of a methodology are set out, as required by the IPART Act, in schedule 6.

6   Pricing Schedules

(a) Schedule 1 and the tables in that schedule set out the methodology to be applied to determine the maximum prices that SDP may charge for the Water Supply Services during a Plant Operation Period.

(b) Schedule 2 and the tables in that schedule set out the methodology to be applied to determine the maximum prices that SDP may charge for the Water Supply Services during a Shutdown Period.

(c) Schedule 3 and the tables in that schedule set out the methodology to be applied to determine the maximum prices that SDP may charge for the Water Supply Services during a Restart Period.

(d) Schedule 4 and the table in that schedule set out the maximum pipeline charge.

7   Customer charges

(a) This clause applies in respect of charges levied under schedule 2 of this determination.

(b) Where:

  (1) the total duration of a Shutdown Period is longer or shorter than SDP had expected; and

  (2) SDP charges a customer more than it is entitled to under this determination,

  SDP must refund or allow a credit to the customer for an amount equal to the amount of that excess, together with interest calculated on that amount.

(c) Where:

  (1) the total duration of a Shutdown Period is longer or shorter than SDP had expected; and

  (2) SDP charges a customer less than it is entitled to under this determination,

  SDP may require the customer to pay an amount equal to the amount of that deficiency, together with interest calculated on that amount.

(d) Interest under this clause must be calculated from the date on which the relevant charge was due to the date of the refund, credit or payment (as the case may be) of the amount referred to in paragraph (b) or (c) calculated daily at the Interest Rate on the date of the refund, credit or payment.

8   Compliance with this determination

(a) Under section 52(3) of the WIC Act, it is a condition of any licence held by a monopoly supplier that the supplier must comply with IPART's determination in relation to a matter referred to IPART under section 52 of the WIC Act.

(b) SDP must comply with this determination in pricing the Water Supply Services during the Term.

9   Monitoring

(a) Under section 85(1) of the WIC Act, IPART may monitor and report to the Minister administering the WIC Act on the extent to which SDP complies or fails to comply with the conditions in SDP's Retail Supplier's Licence and SDP's Network Operator's Licence.

(b) Under section 87 of the WIC Act, IPART may require SDP to keep specified records and provide IPART with specified information for the purpose of IPART monitoring and reporting on SDP's compliance with the licence conditions.

(c) Under clause 1(1) of schedule 1 and schedule 2 of the *Water Industry Competition (General) Regulation 2008* (NSW), SDP must provide IPART with such information in relation to SDP's activities under its Retail Supplier's Licence and Network Operator's Licence as IPART may direct within the time specified by IPART.

10   Definitions and Interpretation

Definitions and interpretation provisions used in this determination are set out in schedule 5.

11   Simplified outline

The following is a simplified outline of this determination:

Broadly, the applicable charges in the different modes of operation consist of the following:

During a Plant Operation Period:

▼ water usage charge (volumetric charge including variable network costs component) ($/ML);

▼ water service charge (fixed daily charge including fixed and variable network costs component) ($/day); and

▼ pipeline charge from the Date of Operation ($/day).

During a Shutdown Period:

During a Short Term Shutdown:

▼ water usage charge (volumetric charge including variable network costs component) ($/ML);

▼ daily shutdown charge (including fixed and variable network costs component) ($/day); and

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 ▼ pipeline charge from the Date of Operation ($/day).

During a Medium Term Shutdown, a Long Term Shutdown or a Water Security Shutdown:

 ▼ water usage charge (volumetric charge including variable network costs component) ($/ML);

 ▼ transition to shutdown charge (one off per event charge) ($);

 ▼ daily shutdown charge (including fixed and variable network costs component) ($/day); and

 ▼ pipeline charge from the Date of Operation ($/day).

During a Restart Period:

Following a Short Term Shutdown:

 ▼ water usage charge (volumetric charge including variable network costs component) ($/ML);

 ▼ daily restart charge (including fixed and variable network costs component) ($/day); and

 ▼ pipeline charge from the Date of Operation ($/day).

Following a Medium Term Shutdown, a Long Term Shutdown or a Water Security Shutdown:

 ▼ water usage charge (volumetric charge including variable network costs component) ($/ML);

 ▼ transition to restart charge (one off per event charge) ($);

 ▼ daily restart charge (including fixed and variable network costs component) ($/day); and

 ▼ pipeline charge from the Date of Operation ($/day).

Schedule 1   Maximum prices for the Water Supply Services during a Plant Operation Period

1   Application

(a) This schedule specifies the methodology for determining the maximum prices that SDP may charge for the Water Supply Services provided during a Plant Operation Period.

(b) This schedule 1 does not apply to Water Supply Services provided during:

(1) a Shutdown Period; or

(2) a Restart Period.

2   Maximum prices for the Water Supply Services during a Plant Operation Period

The maximum price that SDP may levy on a customer for the Water Supply Services provided during a Plant Operation Period is the sum of the following:

(a) subject to clause 3 of this schedule 1, a **water usage charge**, calculated as follows:

$$\left(WUC + \frac{\$/MWh \times 340,360 MWh}{90,000 ML} \right) \times AS$$

Where:

WUC =

(1) with a Carbon Pricing Scheme in operation, the water usage charge in Table 1; or

(2) otherwise, the water usage charge in Table 2,

for the applicable period;

$/MWh = the Variable Network Charge for the applicable period; and

[**Note:** *340,360MWh is the annual average amount of electricity consumption used to allocate variable network charges to SDP's water usage charge. 340,360MWh was determined by taking the annual average electricity consumption over the determination period (350,000MWh p.a.) and subtracting the annual average amount of electricity consumption allocated to the fixed water service charge (9,640MWh). 340,360MWh is divided by the approximate amount of Desalinated Water the Plant would produce if it were to run at full capacity for a year (90,000ML), to yield an approximation of the incremental amount of electricity required to produce each megalitre of Desalinated Water.*]

AS = the number of ML of Desalinated Water supplied by SDP from the Plant to that customer during the applicable period;

(b)   for each day of the Plant Operation Period, a **water service charge** calculated as follows:

$$\left(WSC + FNC + (\$/MWh \times 26.5MWh)\right) \times \frac{AS}{TS} \times \frac{AC}{TC}$$

Where:

WSC =

(1)   with a Carbon Pricing Scheme in operation, the water service charge in Table 3; or

(2)   otherwise, the water service charge in Table 4,

for the relevant day;

FNC = the Fixed Network Charge applicable for the relevant day;

$/MWh = the Variable Network Charge for the relevant day;

[**Note:** *26.5 MWh is the rounded, annual average electricity consumption, converted to a daily amount for allocating variable network charges to SDP's water service charge (or daily shutdown charge/daily restart charge (as applicable)). This value equates to 9,640MWh p.a. reflecting the fixed electricity consumption of the Plant regardless of its mode of operation.*]

AS = the number of ML of Desalinated Water supplied by SDP from the Plant to that customer on the relevant day;

TS = the number of ML of Desalinated Water supplied by SDP from the Plant to all customers on the relevant day;

[**Note:** *If SDP only supplies one customer, customer A, and assuming that SDP supplies 200ML to customer A, then AS and TS = 200ML.*

If SDP supplies 3 customers and assuming that SDP supplies 20ML to customer A, 100ML to customer B and 50ML to customer C, then TS = 170ML and AS for customer A = 20ML, AS for customer B = 100ML and AS for customer C = 50ML.]

AC = the Available Capacity, in ML, for the relevant day.   For the purposes of this formula, if Available Capacity is greater than total capacity (**TC**), Available Capacity shall be deemed to be an amount equal to TC; and

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TC = 250ML per day or, if the Plant is expanded, TC will be the nameplate capacity per day of the expanded Plant;

(c) for each day of the Plant Operation Period which is on or after the Date of Operation, a **pipeline charge** calculated as follows:

$$PC \times \frac{AS}{TS}$$

Where:

PC = the pipeline charge in Table 31 for the relevant day;

AS = the number of ML of Desalinated Water supplied by SDP from the Plant to that customer on the relevant day; and

TS = the number of ML of Desalinated Water supplied by SDP from the Plant to all customers on the relevant day.

For the purposes of calculating the water service charge and the pipeline charge under this Schedule, if, on a day during a Plant Operation Period, the Desalination Plant does not produce any Desalinated Water as a result of a Force Majeure Event:

(a) where Sydney Water Corporation is the only customer of SDP on the relevant day, AS/TS will be deemed to be equal to 1; and

(b) where SDP has multiple customers on the relevant day:

(1) AS will be equal to the number of ML of Desalinated Water supplied by SDP from the Plant to the relevant customer over the 12 months prior to the relevant day; and

(2) TS will be equal to the number of ML of Desalinated Water supplied by SDP from the Plant to all customers over the 12 months prior to the relevant day.

3   Water usage charge

The water usage charge leviable on Sydney Water Corporation for any Desalinated Water supplied by SDP from the Plant to Sydney Water Corporation at a time when Available Storage:

(a) is equal to or greater than 70%, and has not been less than 70% since it was last equal to or greater than 80%; or

(b) is equal to or greater than 80%,

shall be nil.

4   Worked examples

4.1   Worked example 1

Assume that for the purposes of this worked example only:

▼ 2 July 2012 - ownership of the Pipeline is transferred to SDP;

▼ 3 July 2012:

  - SDP's Network Operator's Licence is varied such that the Pipeline forms part of the Water Industry Infrastructure covered by that licence;

  - SDP supplies:

    (A) customer A with 200ML of Desalinated Water (AS for customer A); and

    (B) customer B with 20 ML of Desalinated Water (AS for customer B);

▼ the pipeline charge is $130,000 per day.

On the basis of the above assumptions:

▼ the Date of Operation for the purposes of the pipeline charge is 3 July 2012;

▼ the number of ML of Desalinated Water supplied to all customers (TS) is 220ML;

For customer A:

▼ The pipeline charge for 3 July 2012 will be calculated as follows:

$$\$130,000 \times \frac{200ML}{220ML} = \$118,181.81$$

For customer B:

▼ The pipeline charge for 3 July 2012 will be calculated as follows:

$$\$130,000 \times \frac{20ML}{220ML} = \$11,818.18$$

The pipeline charge would apply in addition to the water usage charge and the water service charge for that day.

4.2   Worked example 2

Assume that for the purposes of this worked example only:

▼ the Pipeline has not been transferred to SDP;

▼ 3 July 2012 to 30 June 2013 – SDP produces 250 ML of Desalinated Water per day;

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▼ 1 July 2013 – SDP produces 180ML of Desalinated Water;

▼ 2 July 2013 - SDP:

   - produces 200 ML of Desalinated Water;

   - supplies:

     (A) customer A with 150 ML of Desalinated Water (AS for customer A); and

     (B) customer B with 50 ML of Desalinated Water (AS for customer B);

▼ the Variable Network Charge for 2 July 2013 is $30/MWh;

▼ the water usage charge (WUC) for 2 July 2013 is $580/ML;

▼ the water service charge (WSC) for 2 July 2013 is $400,000/day;

▼ the Fixed Network Charge (FNC) for 2 July 2013 is $10,000/day;

▼ Available Storage is less than 70% from 3 July 2012 to 2 July 2013.

On the basis of the above assumptions:

▼ there is no pipeline charge;

▼ the Available Capacity (AC) for 2 July 2013 is 249.67ML, calculated as follows:

$$\frac{(250ML\,per\,day \quad x \quad 363\,days) \ + \ 200ML + \ 180ML}{365\,days}$$

For customer A:

The charges for 2 July 2013 will be calculated as follows:

▼ water usage charge for 150ML:

$$\left(WUC + \frac{\$/MWh \times 340,360MWh}{90,000ML}\right) \times AS$$

$$\left(\$580\,/\,ML + \frac{\$30\,/\,MWh \times 340,360\,MWh}{90,000\,ML}\right) \times 150\,ML$$

$$= \$104,018$$

▼ water service charge:

$$(WSC + FNC + (\$/MWh \times 26.5MWh)) \times \frac{AS}{TS} \times \frac{AC}{TC}$$

$$[\$400,000 \ + \ \$10,000 \ + \ (\$30/MWh \ x \ 26.5MWh)] \ x \ \frac{150}{200} \ x \ \frac{249.67}{250}$$

$$= \$307,689.56$$

▼   total which may be levied for 2 July 2013 (being the sum of the water usage charge and the water service charge):

$$\$104,018 \quad + \quad \$307,689.56 = \quad \$411,707.56$$

For customer B:

The charges for 2 July 2013 will be calculated as follows:

▼   water usage charge for 50ML:

$$\left(WUC + \frac{\$/MWh \times 340,360MWh}{90,000ML} \right) \times AS$$

$$\left(\$580 / ML + \frac{\$30 / MWh \times 340,360 \, MWh}{90,000 \, ML} \right) \times 50 \, ML$$

$$= \$34,672.67$$

▼   water service charge for 2 July 2013:

$$\left(WSC + FNC + (\$/MWh \times 26.5MWh) \right) \times \frac{AS}{TS} \times \frac{AC}{TC}$$

$$\left[\$400,000 + \$10,000 + (\$30/MWh \ x \ 26.5MWh) \right] \ x \ \frac{50}{200} \ x \ \frac{249.67}{250}$$

$$= \$102,563.19$$

▼   total which may be levied for 2 July 2013 (being the sum of the water usage charge and the water service charge):

$$\$34,672.67 \quad + \quad \$102,563.19 = \quad \$137,235.86$$

4.3   Worked example 3

Assume that for the purposes of this worked example only:

▼   the Pipeline has not been transferred to SDP;

▼   2 July 2011 to 30 June 2012 – SDP produces 250 ML of Desalinated Water per day;

▼   1 July 2012 – SDP:

-   produces 200 ML of Desalinated Water;

-   supplies:

    (A) customer A with 150 ML of Desalinated Water (AS for customer A); and

    (B) customer B with 50 ML of Desalinated Water (AS for customer B);

▼   the Variable Network Charge for 1 July 2012 is $30/MWh;

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- ▼ the water usage charge (WUC) for 1 July 2012 is $540/ML;

- ▼ the water service charge (WSC) for 1 July 2012 is $405,000/day;

- ▼ the Fixed Network Charge (FNC) for 1 July 2012 is $10,000/day; and

- ▼ the Available Storage is less than 70% from 2 July 2011 to 1 July 2012.

On the basis of the above assumptions:

- ▼ there is no pipeline charge;

- ▼ the Available Capacity (AC) for 1 July 2012 is 249.86ML, calculated as follows:

$$\frac{\left(250ML\,per\,day \quad x \quad 364\,days\right) \; + \; \left(200ML\,per\,day \quad x \quad 1\,day\right)}{365}$$

For customer A:

The charges for 1 July 2012 will be calculated as follows:

- ▼ water usage charge for 150ML:

$$\left(WUC + \frac{\$/MWh \times 340{,}360MWh}{90{,}000ML}\right) \times AS$$

$$\left(\$540\,/\,ML + \frac{\$30\,/\,MWh \times 340{,}360\,MWh}{90{,}000\,ML}\right) \times 150\,ML$$

$$= \$98{,}018$$

- ▼ water service charge:

$$\left(WSC + FNC + (\$/MWh \times 26.5MWh)\right) \times \frac{AS}{TS} \times \frac{AC}{TC}$$

$$\left[(\$405{,}000) \; + \; \$10{,}000 \; + \; (\$30/MWh \quad x \quad 26.5MWh)\right] \; x \; \frac{150}{200} \; x \; \frac{249.86}{250}$$

$$= \$311{,}671.61$$

- ▼ total which may be levied for 1 July 2012 (being the sum of the water usage charge and the water service charge):

$$\$98{,}018 \quad + \quad \$311{,}671.61 = \quad \$409{,}689.61$$

For customer B:

The charges for 1 July 2012 will be calculated as follows:

- ▼ water usage charge for 50ML:

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$$\left(WUC + \frac{\$/MWh \times 340,360MWh}{90,000ML}\right) \times AS$$

$$\left(\$540/ML + \frac{\$30/MWh \times 340,360\,MWh}{90,000\,ML}\right) \times 50\,ML$$

$$= \$32,672.67$$

▼   water service charge:

$$\left(WSC + FNC + (\$/MWh \times 26.5MWh)\right) \times \frac{AS}{TS} \times \frac{AC}{TC}$$

$$\left[(\$405,000) + \$10,000 + (\$30/MWh \ x \ 26.5MWh)\right] \ x \ \frac{50}{200} \ x \ \frac{249.8}{250}$$

$$= \$103,890.54$$

▼   total which may be levied for 1 July 2012 (being the sum of the water usage charge and the water service charge):

$$\$32,672.67 \ + \ \$103,890.54 \ = \ \$136,563.21$$

4.4   Worked example 4

Assume that for the purposes of this worked example only:

▼   5 July 2011 to 30 June 2012 – the Plant produces 250ML per day;

▼   1 July 2012 to 3 July 2012 - the Plant produces 260 ML of Desalinated Water per day;

▼   4 July 2012 - the Plant does not produce Desalinated Water i.e. production of Desalinated Water is 0;

▼   5 July 2012 - the Plant produces 150 ML Desalinated Water and supplies:

   -   customer A with 40ML;

   -   customer B with 110ML;

▼   the Variable Network Charge for 5 July 2012 is $30/MWh;

▼   the water usage charge (WUC) for 5 July 2012 is $540/ML;

▼   the water service charge (WSC) for 5 July 2012 is $405,000/day;

▼   the Fixed Network Charge (FNC) for 5 July 2012 is $10,000/day;

▼   the Pipeline has not been transferred to SDP; and

▼   the Available Storage is less than 70% from 5 July 2011 to 5 July 2012.

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On the basis of the above assumptions:

▼ this schedule 1 continues to apply on 4 July 2012 and 5 July 2012 on the basis that the total period during which the Plant is not producing Desalinated Water is less than 2 days;

▼ there is no pipeline charge;

▼ for 5 July 2012, the following values apply:

- AS for customer A is 40ML;

- AS for customer B is 110ML;

- TS is 150ML;

- the Available Capacity (AC) is 249.81ML, calculated as follows:

$$\frac{(250ML\,per\,day \quad x \quad 361days) \quad + \quad (260ML\,per\,day \quad x \quad 3\,days) \quad + \quad (150ML\,per\,day \quad x \quad 1day}{365}$$

For customer A

The charges for 5 July 2012 will be calculated as follows:

▼ water usage charge for 40ML:

$$\left(WUC + \frac{\$/MWh \times 340{,}360MWh}{90{,}000ML}\right) \times AS$$

$$\left(\$540/ML + \frac{\$30/MWh \times 340{,}360\,MWh}{90{,}000\,ML}\right) \times 40\,ML$$

$$= \$26{,}138.13$$

▼ water service charge:

$$(WSC + FNC + (\$/MWh \times 26.5MWh)) \times \frac{AS}{TS} \times \frac{AC}{TC}$$

$$[\$405{,}000 \quad + \quad \$10{,}000 \quad + \quad (\$30/MWh \quad x \quad 26.5MWh)] \quad x \quad \frac{40}{150} \quad x \quad \frac{249.81}{250}$$

$$= \$110{,}794.40$$

▼ total which may be levied for 5 July 2012 (being the sum of the water usage charge and the water service charge):

$$\$26{,}138.13 \quad + \quad \$110{,}794.40 = \quad \$136{,}932.53$$

For customer B

The charges for 5 July 2012 will be calculated as follows:

▼ water usage charge for 110ML:

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$$\left(WUC + \frac{\$/MWh \times 340{,}360MWh}{90{,}000ML} \right) \times AS$$

$$\left(\$540/ML + \frac{\$30/MWh \times 340{,}360\,MWh}{90{,}000\,ML} \right) \times 110\,ML$$

$$= \$71{,}879.87$$

▼   water service charge:

$$\left(WSC + FNC + (\$/MWh \times 26.5MWh) \right) \times \frac{AS}{TS} \times \frac{AC}{TC}$$

$$\left[\$405{,}000 + \$10{,}000 + (\$30/MWh \; x \; 26.5MWh) \right] \; x \; \frac{110}{150} \; x \; \frac{249.81}{250}$$

$$= \$304{,}684.60$$

▼   total which may be levied for 5 July 2012 (being the sum of the water usage charge and the water service charge):

$$\$71{,}879.87 \; + \; \$304{,}684.60 = \; \$376{,}564.47$$

Tables 1, 2, 3 and 4

Table 1   Water usage charge (with Carbon Pricing Scheme)

Water usage charge	Commencement Date to 30 June 2013 ($/ML)	1 July 2013 to 30 June 2014 ($/ML)	1 July 2014 to 30 June 2015 ($/ML)	1 July 2015 to 30 June 2016 ($/ML)	1 July 2016 to 30 June 2017 ($/ML)
	539.63 x $(1+\Delta CPI_1)$	582.48 x $(1+\Delta CPI_2)$	619.74 x $(1+\Delta CPI_3)$	634.78 x $(1+\Delta CPI_4)$	660.80 x $(1+\Delta CPI_5)$

Table 2   Water usage charge (without Carbon Pricing Scheme)

Water usage charge	Commencement Date to 30 June 2013 ($/ML)	1 July 2013 to 30 June 2014 ($/ML)	1 July 2014 to 30 June 2015 ($/ML)	1 July 2015 to 30 June 2016 ($/ML)	1 July 2016 to 30 June 2017 ($/ML)
	528.93 x $(1+\Delta CPI_1)$	569.09 x $(1+\Delta CPI_2)$	609.85 x $(1+\Delta CPI_3)$	615.97 x $(1+\Delta CPI_4)$	623.57 x $(1+\Delta CPI_5)$

Table 3   Water service charge (with Carbon Pricing Scheme)

Water service charge	Commencement Date to 30 June 2013 ($/day)	1 July 2013 to 30 June 2014 ($/day)	1 July 2014 to 30 June 2015 ($/day)	1 July 2015 to 30 June 2016 ($/day)	1 July 2016 to 30 June 2017 ($/day)
	403,504 x $(1+\Delta CPI_1)$	403,315 x $(1+\Delta CPI_2)$	402,827 x $(1+\Delta CPI_3)$	396,681 x $(1+\Delta CPI_4)$	389,255 x $(1+\Delta CPI_5)$

Table 4   Water service charge (without Carbon Pricing Scheme)

Water service charge	Commencement Date to 30 June 2013 ($/day)	1 July 2013 to 30 June 2014 ($/day)	1 July 2014 to 30 June 2015 ($/day)	1 July 2015 to 30 June 2016 ($/day)	1 July 2016 to 30 June 2017 ($/day)
	403,424 x $(1+\Delta CPI_1)$	403,221 x $(1+\Delta CPI_2)$	402,760 x $(1+\Delta CPI_3)$	396,554 x $(1+\Delta CPI_4)$	389,002 x $(1+\Delta CPI_5)$

Schedule 2   Maximum prices for the Water Supply Services during a Shutdown Period

1   Application

(a)   This schedule specifies the methodology for determining the maximum prices that SDP may charge for the Water Supply Services provided during a Shutdown Period.

(b)   This schedule 2 does not apply to Water Supply Services provided during:

   (1)   a Plant Operation Period; or

   (2)   a Restart Period.

2   Categories for pricing purposes

2.1   Short Term Shutdown

If the total duration of the relevant Shutdown Period is 2 to 10 days inclusive (**Short Term Shutdown**):

(a)   the applicable maximum prices are to be calculated in accordance with clause 3 of this schedule 2;

(b)   clauses 4, 5 and 6 of this schedule 2 do not apply; and

(c)   the Short Term Shutdown is taken to begin on the first day the Plant is Shutdown.

For the avoidance of doubt, if the total duration of the relevant Shutdown Period is less than 2 days or more than 10 days, clause 3 of this schedule 2 does not apply.

2.2   Medium Term Shutdown

If the total duration of the relevant Shutdown Period is 11 to 90 days inclusive (**Medium Term Shutdown**):

(a)   the applicable maximum prices are to be calculated in accordance with clause 4 of this schedule 2;

(b)   clauses 3, 5 and 6 of this schedule 2 do not apply; and

(c)   the Medium Term Shutdown is taken to begin on the first day the Plant is Shutdown.

For the avoidance of doubt, if the total duration of the relevant Shutdown Period is less than 11 days or more than 90 days, clause 4 of this schedule 2 does not apply.

2.3   Long Term Shutdown

If the total duration of the relevant Shutdown Period is 91 days to 2 years inclusive (**Long Term Shutdown**):

(a)   the applicable maximum prices are to be calculated in accordance with clause 5 of this schedule 2;

(b)   clauses 3, 4 and 6 of this schedule 2 do not apply; and

(c)   the Long Term Shutdown Period is taken to begin on the first day the Plant is Shutdown.

For the avoidance of doubt, if the total duration of the relevant Shutdown Period is less than 91 days or more than 2 years, clause 5 of this schedule 2 does not apply.

2.4   Water Security Shutdown

If the total duration of the relevant Shutdown Period is more than 2 years (**Water Security Shutdown**):

(a)   the applicable maximum prices are to be calculated in accordance with clause 6 of this schedule 2;

(b)   clauses 3, 4 and 5 of this schedule 2 do not apply; and

(c)   the Water Security Shutdown is taken to begin on the first day the Plant is Shutdown.

For the avoidance of doubt, if the total duration of the relevant Shutdown Period is 2 years or less, clause 6 of this schedule 2 does not apply.

3   Maximum prices for the Water Supply Services for a Short Term Shutdown

The maximum price that SDP may levy on a customer for the Water Supply Services provided during a Short Term Shutdown is the sum of the following:

(a)   subject to clause 7 of this schedule 2, a **water usage charge**, calculated as follows:

$$\left(WUC + \frac{\$/MWh \times 340{,}360MWh}{90{,}000ML} \right) \times AS$$

Where:

WUC =

(1)   with a Carbon Pricing Scheme in operation, the water usage charge in Table 5; or

(2)   otherwise, the water usage charge in Table 6,

for the applicable period;

$/MWh = the Variable Network Charge for the applicable period; and

AS = the number of ML of Desalinated Water supplied by SDP from the Plant to that customer during the applicable period;

[**Note:** *Although the Plant will not produce Desalinated Water during a Shutdown Period, SDP may continue to supply Desalinated Water out of storage after production has stopped.*]

(b)   for each day of the Short Term Shutdown, a **daily shutdown charge** calculated as follows:

$$\left(DSC + FNC + \left(\$/MWh \times 26.5MWh\right)\right) \times \frac{ADU}{ATS}$$

Where:

DSC =

(1)   with a Carbon Pricing Scheme in operation, the daily shutdown charge in Table 10; or

(2)   otherwise, the daily shutdown charge in Table 11,

for the relevant day;

FNC = the Fixed Network Charge applicable for the relevant day;

$/MWh = the Variable Network Charge for the relevant day;

ADU = the number of ML of Desalinated Water supplied by SDP from the Plant to that customer over the 12 months prior to the commencement of the Shutdown Period; and

ATS = the number of ML of Desalinated Water supplied by SDP from the Plant to all customers over the 12 months prior to the commencement of the Shutdown Period;

(c)   for each day of the Short Term Shutdown which is on or after the Date of Operation, a **pipeline charge** calculated as follows:

$$PC \times \frac{ADU}{ATS}$$

Where:

PC = the pipeline charge in Table 31 for the relevant day;

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ADU = the number of ML of Desalinated Water supplied by SDP from the Plant to that customer over the 12 months prior to the commencement of the Shutdown Period; and

ATS = the number of ML of Desalinated Water supplied by SDP from the Plant to all customers over the 12 months prior to the commencement of the Shutdown Period.

4　Maximum prices for the Water Supply Services for a Medium Term Shutdown

The maximum price that SDP may levy on a customer for the Water Supply Services provided during a Medium Term Shutdown is the sum of the following:

(a)　subject to clause 7 of this schedule 2, a **water usage charge**, calculated as follows:

$$\left(WUC + \frac{\$/MWh \times 340{,}360MWh}{90{,}000ML}\right) \times AS$$

Where:

WUC =

(1)　with a Carbon Pricing Scheme in operation, the water usage charge in Table 5; or

(2)　otherwise, the water usage charge in Table 6,

for the applicable period;

$/MWh = the Variable Network Charge for the applicable period; and

AS = the number of ML of Desalinated Water supplied by SDP from the Plant to that customer during the applicable period;

[**Note:** *Although the Plant will not produce Desalinated Water during a Shutdown Period, SDP may continue to supply Desalinated Water out of storage after production has stopped.*]

(b)　a **transition to shutdown charge** calculated as follows:

$$TTS \times \frac{ADU}{ATS}$$

Where:

TTS = the transition to shutdown charge in Table 7 for the period in which the Medium Term Shutdown begins;

ADU = the number of ML of Desalinated Water supplied by SDP from the Plant to that customer over the 12 months prior to the commencement of the Shutdown Period; and

ATS = the number of ML of Desalinated Water supplied by SDP from the Plant to all customers over the 12 months prior to the commencement of the Shutdown Period;

(c) for each day of the Medium Term Shutdown, a **daily shutdown charge** calculated as follows:

$$\left(DSC + FNC + \left(\$/MWh \times 26.5MWh\right)\right) \times \frac{ADU}{ATS}$$

Where:

DSC =

(1) with a Carbon Pricing Scheme in operation, the daily shutdown charge in Table 12; or

(2) otherwise, the daily shutdown charge in Table 13,

for the relevant day;

FNC = the Fixed Network Charge applicable for the relevant day;

$/MWh = the Variable Network Charge for the relevant day;

ADU = the number of ML of Desalinated Water supplied by SDP from the Plant to that customer over the 12 months prior to the commencement of the Shutdown Period; and

ATS = the number of ML of Desalinated Water supplied by SDP from the Plant to all customers over the 12 months prior to the commencement of the Shutdown Period;

(d) for each day of the Medium Term Shutdown which is on or after the Date of Operation, the **pipeline charge** calculated as follows:

$$PC \times \frac{ADU}{ATS}$$

Where:

PC = the pipeline charge in Table 31 for the relevant day;

ADU = the number of ML of Desalinated Water supplied by SDP from the Plant to that customer over the 12 months prior to the commencement of the Shutdown Period; and

Schedule 2   Maximum prices for the Water Supply Services during a Shutdown Period

ATS = the number of ML of Desalinated Water supplied by SDP from the Plant to all customers over the 12 months prior to the commencement of the Shutdown Period.

5   Maximum prices for the Water Supply Services for a Long Term Shutdown

The maximum price that SDP may levy on a customer for the Water Supply Services provided during a Long Term Shutdown is the sum of the following:

(a) subject to clause 7 of this schedule 2, a **water usage charge**, calculated as follows:

$$\left(WUC + \frac{\$/MWh \times 340{,}360\,MWh}{90{,}000\,ML} \right) \times AS$$

Where:

WUC =

(1) with a Carbon Pricing Scheme in operation, the water usage charge in Table 5; or

(2) otherwise, the water usage charge in Table 6,

for the applicable period;

\$/MWh = the Variable Network Charge for the applicable period; and

AS = the number of ML of Desalinated Water supplied by SDP from the Plant to that customer during the applicable period;

[**Note:** *Although the Plant will not produce Desalinated Water during a Shutdown Period, SDP may continue to supply Desalinated Water out of storage after production has stopped.*]

(b) a **transition to shutdown charge** calculated as follows:

$$TTS \times \frac{ADU}{ATS}$$

Where:

TTS = the transition to shutdown charge in Table 8 for the period in which the Long Term Shutdown begins;

ADU = the number of ML of Desalinated Water supplied by SDP from the Plant to that customer over the 12 months prior to the commencement of the Shutdown Period; and

ATS = the number of ML of Desalinated Water supplied by SDP from the Plant to all customers over the 12 months prior to the commencement of the Shutdown Period;

(c) for each day of the Long Term Shutdown, a **daily shutdown charge** calculated as follows:

$$\left(DSC + FNC + \left(\$/MWh \times 26.5MWh\right)\right) \times \frac{ADU}{ATS}$$

Where:

DSC =

(1) with a Carbon Pricing Scheme in operation, the daily shutdown charge in Table 14; or

(2) otherwise, the daily shutdown charge in Table 15,

for the relevant day;

FNC = the Fixed Network Charge applicable for the relevant day;

$/MWh = the Variable Network Charge for the relevant day;

ADU = the number of ML of Desalinated Water supplied by SDP from the Plant to that customer over the 12 months prior to the commencement of the Shutdown Period; and

ATS = the number of ML of Desalinated Water supplied by SDP from the Plant to all customers over the 12 months prior to the commencement of the Shutdown Period; and

(d) for each day of the Long Term Shutdown which is on or after the Date of Operation, a **pipeline charge** calculated as follows:

$$PC \times \frac{ADU}{ATS}$$

Where:

PC = the pipeline charge in Table 31 for the relevant day;

ADU = the number of ML of Desalinated Water supplied by SDP from the Plant to that customer over the 12 months prior to the commencement of the Shutdown Period; and

ATS = the number of ML of Desalinated Water supplied by SDP from the Plant to all customers over the 12 months prior to the commencement of the Shutdown Period.

6   Maximum prices for the Water Supply Services for a Water Security Shutdown

The maximum price that SDP may levy on a customer for the Water Supply Services provided during a Water Security Shutdown is the sum of the following:

(a) subject to clause 7 of this schedule 2, a **water usage charge**, calculated as follows:

$$\left(WUC + \frac{\$/MWh \times 340{,}360MWh}{90{,}000ML} \right) \times AS$$

Where:

WUC =

(1) with a Carbon Pricing Scheme in operation, the water usage charge in Table 5; or

(2) otherwise, the water usage charge in Table 6,

for the applicable period;

$/MWh = the Variable Network Charge for the applicable period; and

AS = the number of ML of Desalinated Water supplied by SDP from the Plant to that customer during the applicable period;

[**Note:** *Although the Plant will not produce Desalinated Water during a Shutdown Period, SDP may continue to supply Desalinated Water out of storage after production has stopped.*]

(b) a **transition to shutdown charge** calculated as follows:

$$TTS \times \frac{ADU}{ATS}$$

Where:

TTS = the transition to shutdown charge in Table 9 for the period in which the Water Security Shutdown begins;

ADU = the number of ML of Desalinated Water supplied by SDP from the Plant to that customer over the 12 months prior to the commencement of the Shutdown Period; and

ATS = the number of ML of Desalinated Water supplied by SDP from the Plant to all customers over the 12 months prior to the commencement of the Shutdown Period;

(c)   for each day of the Water Security Shutdown, a **daily shutdown charge** calculated as follows:

$$\left(DSC + FNC + \left(\$/MWh \times 26.5MWh\right)\right) \times \frac{ADU}{ATS}$$

Where:

DSC =

(1)   with a Carbon Pricing Scheme in operation, the daily shutdown charge in Table 16; or

(2)   otherwise, the daily shutdown charge in Table 17,

for the relevant day;

FNC = the Fixed Network Charge applicable for the relevant day;

$/MWh = the Variable Network Charge for the relevant day;

ADU = the number of ML of Desalinated Water supplied by SDP from the Plant to that customer over the 12 months prior to the commencement of the Shutdown Period; and

ATS = the number of ML of Desalinated Water supplied by SDP from the Plant to all customers over the 12 months prior to the commencement of the Shutdown Period; and

(d)   for each day of the Water Security Shutdown which is on or after the Date of Operation, a **pipeline charge** calculated as follows:

$$PC \times \frac{ADU}{ATS}$$

Where:

PC = the pipeline charge in Table 31 for the relevant day;

ADU = the number of ML of Desalinated Water supplied by SDP from the Plant to that customer over the 12 months prior to the commencement of the Shutdown Period; and

ATS = the number of ML of Desalinated Water supplied by SDP from the Plant to all customers over the 12 months prior to the commencement of the Shutdown Period.

Schedule 2   Maximum prices for the Water Supply Services
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7   Water usage charge

The water usage charge leviable on Sydney Water Corporation for any Desalinated Water supplied by SDP from the Plant to Sydney Water Corporation at a time when Available Storage:

(a) is equal to or greater than 70%, and has not been less than 70% since it was last equal to or greater than 80%; or

(b) is equal to or greater than 80%,

shall be nil.

8   Worked examples

8.1   Worked example 5

Assume that for the purposes of this worked example only:

▼ 1 July 2013 - SDP decides to shutdown the Plant;

▼ 3 July 2013:

- the Plant stops producing Desalinated Water;

- the Pipeline is transferred to SDP and SDP's Network Operator's Licence is varied accordingly;

▼ 7 July 2013 - the Plant recommences producing Desalinated Water;

▼ pipeline charge is $131,000/day;

▼ the number of ML of Desalinated Water supplied by SDP from the Plant to customer A over the 12 months prior to the commencement of the Shutdown Period is 1000ML (ADU for customer A);

▼ the number of ML of Desalinated Water supplied by SDP from the Plant to customer B over the 12 months prior to the commencement of the Shutdown Period is 2000ML (ADU for customer B); and

▼ the number of ML of Desalinated Water supplied by SDP from the Plant to all customers over the 12 months prior to the commencement of the Shutdown Period is 3000ML (ATS).

On the basis of the above assumptions:

▼ the Date of Operation for the purposes of the pipeline charge is 3 July 2013;

▼ the total duration of the Shutdown Period is 4 days (3 July 2013, 4 July 2013, 5 July 2013 and 6 July 2013). Therefore it is a Short Term Shutdown;

For customer A:

▼   The pipeline charge for each day of the Short Term Shutdown will be calculated as follows:

$$\$131{,}000 \times \frac{1000\text{ML}}{3000\text{ML}} = \$43{,}666.67$$

For customer B:

▼   The pipeline charge for each day of the Short Term Shutdown will be calculated as follows:

$$\$131{,}000 \times \frac{2000\text{ML}}{3000\text{ML}} = \$87{,}333.33$$

The pipeline charge would apply in addition to the water usage charge (if any) and the daily shutdown charge for that day.

8.2   Worked example 6

Assume that for the purposes of this worked example only:

▼   the Pipeline has not been transferred to SDP;

▼   15 July 2013 - the Plant stops producing Desalinated Water;

▼   SDP assumes that the Plant will be Shutdown for 90 days (ie a Medium Term Shutdown) and charges the relevant medium term shutdown charges;

▼   the Plant was actually Shutdown for 95 days;

▼   Desalinated Water supplied by SDP over the 12 months prior to commencement of Shutdown Period:

-   to customer A is 50,000ML (ADU for customer A);

-   to customer B is 40,000ML (ADU for customer B);

▼   medium term shutdown charges:

-   transition to shutdown charge for 15 July 2013 is $190,000 (TTS);

-   daily shutdown charge is $402,000/day throughout the relevant period (DSC);

▼   long term shutdown charges:

-   transition to shutdown charge for 15 July 2013 is $277,000 (TTS);

-   daily shutdown charge is $383,000/day throughout the relevant period (DSC);

▼   Fixed Network Charge is $10,000 per day throughout the relevant period (FNC); and

Schedule 2   Maximum prices for the Water Supply Services
during a Shutdown Period

▼   Variable Network Charge is $30/MWh throughout the relevant period.

On the basis of the above assumptions:

▼   there is no pipeline charge payable;

▼   first day of the Shutdown Period is 15 July 2013;

▼   the shutdown was a Long Term Shutdown, as the total duration of the Shutdown Period was 95 days; and

▼   Desalinated Water supplied by SDP to all customers over the 12 months prior to commencement of the Shutdown Period is 90,000ML (ATS).

The maximum prices that SDP may levy for a Long Term Shutdown are calculated as follows:

For customer A:

▼   transition to shutdown charge:

$$TTS \times \frac{ADU}{ATS}$$

$$\$277,000 \times \frac{50,000}{90,000}$$

$$= \$153,888.89$$

▼   daily shutdown charge:

$$\left(DSC + FNC + \left(\$/MWh \times 26.5MWh\right)\right) \times \frac{ADU}{ATS}$$

$$\left(\$383,000 + \$10,000 + \left(\$30/MWh \times 26.5MWh\right)\right) \times \frac{50,000}{90,000}$$

$$= \$218,775 \, per \, day$$

$$= \$20,783,625 \, for \, 95 \, days$$

▼   total which may be levied for the 95 days = $20,937,513.89 (being the sum of the transition to shutdown charge and the daily shutdown charges)

For customer B:

▼   transition to shutdown charge:

$$TTS \times \frac{ADU}{ATS}$$

$$\$277,000 \times \frac{40,000}{90,000}$$

$$= \$123,111.11$$

▼   daily shutdown charge:

$$\left(DSC + FNC + \left(\$/MWh \times 26.5MWh\right)\right) \times \frac{ADU}{ATS}$$

$$\left(\$383,000 + \$10,000 + \left(\$30/MWh \times 26.5MWh\right)\right) \times \frac{40,000}{90,000}$$

$$= \$175,020\, per\, day$$

$$= \$16,626,900\, for\, 95\, days$$

▼   total which may be levied for 95 days = $16,750,011.11 (being the sum of
the transition to shutdown charge and the daily shutdown charges)

However, as SDP had assumed that the Shutdown Period was to be a
Medium Term Shutdown, it levied the following charges:

For customer A:

▼   transition to shutdown charge:

$$TTS \times \frac{ADU}{ATS}$$

$$\$190,000 \times \frac{50,000}{90,000}$$

$$= \$105,555.56$$

▼   daily shutdown charge:

$$\left(DSC + FNC + \left(\$/MWh \times 26.5MWh\right)\right) \times \frac{ADU}{ATS}$$

$$\left(\$402,000 + \$10,000 + \left(\$30/MWh \times 26.5MWh\right)\right) \times \frac{50,000}{90,000}$$

Schedule 2 Maximum prices for the Water Supply Services during a Shutdown Period

$$= \$229,330.56\,per\,day$$

$$= \$20,639,750\,for\,90\,days$$

▼ total which SDP levied = $20,745,305.56 (being the sum of the transition to shutdown charge and the daily shutdown charges)

For customer B:

▼ transition to shutdown charge:

$$TTS \times \frac{ADU}{ATS}$$

$$\$190,000 \times \frac{40,000}{90,000}$$

$$= \$84,444.44$$

▼ daily shutdown charge:

$$\left(DSC + FNC + \left(\$/MWh \times 26.5MWh\right)\right) \times \frac{ADU}{ATS}$$

$$\left(\$402,000 + \$10,000 + \left(\$30/MWh \times 26.5MWh\right)\right) \times \frac{40,000}{90,000}$$

$$= \$183,464.44\,per\,day$$

$$= \$16,511,800\,for\,90\,days$$

▼ total which SDP levied = $16,596,244.44 (being the sum of the transition to shutdown charge and the daily shutdown charge)

Therefore, the balance which SDP may levy is the amount that should have been charged for a long term shutdown less the amount that was charged for the medium term shutdown, with each relevant charge adjusted for interest in accordance with clause 7 of the Preliminary section of this determination. While each individual charge must be adjusted for interest based on the date on which that charge was due, broadly speaking, the amount SDP may levy is as follows:

For customer A:

$$\$20,937,513.89 - \$20,745,305.56 = \quad \$192,208.33\,(adjusted\,with\,interest)$$

For customer B:

$$\$16{,}750{,}011.11 - \$16{,}596{,}244.44 = \quad \$153{,}766.67 \ (adjusted \ with \ interest)$$

8.3   Worked example 7

Assume that for the purposes of this worked example only:

▼   the Pipeline has not been transferred to SDP;

▼   15 July 2013 - the Plant stops producing Desalinated Water;

▼   SDP assumes that the Shutdown will be for 95 days (ie, a Long Term Shutdown) and charges the relevant Long Term Shutdown charges;

▼   the Plant was actually shut for 90 days (ie, Medium Term Shutdown);

▼   Desalinated Water supplied by SDP over 12 months prior to commencement of Shutdown Period:

  -   to customer A is 50,000ML (ADU for customer A);

  -   to customer B is 40,000ML (ADU for customer B);

▼   long term shutdown charges:

  -   transition to shutdown charge for 15 July 2013 is $277,000 (TTS);

  -   daily shutdown charge throughout the relevant period is $383,000/day (DSC);

▼   medium term shutdown charges:

  -   transition to shutdown charge for 15 July 2013 is $190,000 (TTS);

  -   daily shutdown charge throughout the relevant period is $402,000/day (DSC);

▼   Fixed Network Charge throughout the relevant period is $10,000 per day (FNC);

▼   Variable Network Charge throughout the relevant period is $30/MWh.

On the basis of the above assumptions:

▼   there is no pipeline charge payable;

▼   first day of the Shutdown Period is 15 July 2013;

▼   the shutdown was a Medium Term Shutdown as the total duration of the Shutdown Period was 90 days; and

▼   the number of ML of Desalinated Water supplied to all customers over the 12 months prior to commencement of the Shutdown Period is 90,000ML (ATS).

Schedule 2   Maximum prices for the Water Supply Services during a Shutdown Period

The maximum prices that SDP may levy for a Medium Term Shutdown are calculated as follows:

For customer A:

▼ transition to shutdown charge:

$$TTS \times \frac{ADU}{ATS}$$

$$\$190,000 \times \frac{50,000}{90,000}$$

$$= \$105,555.56$$

▼ daily shutdown charge:

$$\left(DSC + FNC + \left(\$/MWh \times 26.5MWh\right)\right) \times \frac{ADU}{ATS}$$

$$\left(\$402,000 + \$10,000 + \left(\$30/MWh \times 26.5MWh\right)\right) \times \frac{50,000}{90,000}$$

$$= \$229,330.56 \, per \, day$$

$$= \$20,639,750 \, for \, 90 \, days$$

▼ total which SDP may levy for the 90 day Shutdown Period = $20,745,305.56 (being the sum of the transition to shutdown charge and the daily shutdown charges);

For customer B:

▼ transition to shutdown charge

$$TTS \times \frac{ADU}{ATS}$$

$$\$190,000 \times \frac{40,000}{90,000}$$

$$= \$84,444.44$$

▼ daily shutdown charge:

$$\left(DSC + FNC + \left(\$ / MWh \times 26.5 MWh\right)\right) \times \frac{ADU}{ATS}$$

$$\left(\$402{,}000 + \$10{,}000 + \left(\$30 / MWh \times 26.5 MWh\right)\right) \times \frac{40{,}000}{90{,}000}$$

$$= \$183{,}464.44 \, per \, day$$

$$= \$16{,}511{,}800 \, for \, 90 \, days$$

- ▼ total which SDP may levy for the 90 day Shutdown Period = $16,596,244.44 (being the sum of the transition to shutdown charge and the daily shutdown charges).

However, as SDP had assumed that the Shutdown Period was to be a Long Term Shutdown, it levied the following charges:

For customer A:

- ▼ transition to shutdown charge:

$$TTS \times \frac{ADU}{ATS}$$

$$\$277{,}000 \times \frac{50{,}000}{90{,}000}$$

$$= \$153{,}888.89$$

- ▼ daily shutdown charge:

$$\left(DSC + FNC + \left(\$ / MWh \times 26.5 MWh\right)\right) \times \frac{ADU}{ATS}$$

$$\left(\$383{,}000 + \$10{,}000 + \left(\$30 / MWh \times 26.5 MWh\right)\right) \times \frac{50{,}000}{90{,}000}$$

$$= \$218{,}775 \, per \, day$$

$$= \$20{,}783{,}625 \, for \, 95 \, days$$

- ▼ total which SDP levied = $20,937,513.89 (being the sum of the transition to shutdown charge and the daily shutdown charges)

Schedule 2   Maximum prices for the Water Supply Services during a Shutdown Period

For customer B:

▼   transition to shutdown charge:

$$TTS \times \frac{ADU}{ATS}$$

$$\$277,000 \times \frac{40,000}{90,000}$$

$$= \$123,111.11$$

▼   daily shutdown charge:

$$\left(DSC + FNC + \left(\$/MWh \times 26.5 MWh\right)\right) \times \frac{ADU}{ATS}$$

$$\left(\$383,000 + \$10,000 + \left(\$30/MWh \times 26.5 MWh\right)\right) \times \frac{40,000}{90,000}$$

$$= \$175,020 \, per \, day$$

$$= \$16,626,900 \, for \, 95 \, days$$

▼   total which SDP levied = $16,750,011.11 (being the sum of the transition to shutdown charge and the daily shutdown charges).

Therefore, SDP must reimburse the difference between the amount that was charged for a Long Term Shutdown in error and the amount that should have been charged for a Medium Term Shutdown, with each relevant charge adjusted for interest in accordance with clause 7 of the Preliminary section of this determination.   While each individual charge must be adjusted for interest based on the date on which that charge was due, broadly speaking, the amount SDP must reimburse is as follows:

For customer A:

$$\$20,937,513.89 - \$20,745,305.56 = \quad \$192,208.33 \, (adjusted \, with \, interest)$$

For customer B:

$$\$16,750,011.11 - \$16,596,244.44 = \quad \$153,766.67 \, (adjusted \, with \, interest)$$

Tables 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 and 17

Table 5   **Water usage charge (with Carbon Pricing Scheme)**

Water usage charge	Commencement Date to 30 June 2013 ($/ML)	1 July 2013 to 30 June 2014 ($/ML)	1 July 2014 to 30 June 2015 ($/ML)	1 July 2015 to 30 June 2016 ($/ML)	1 July 2016 to 30 June 2017 ($/ML)
	539.63 x $(1+\Delta CPI_1)$	582.48 x $(1+\Delta CPI_2)$	619.74 x $(1+\Delta CPI_3)$	634.78 x $(1+\Delta CPI_4)$	660.80 x $(1+\Delta CPI_5)$

Table 6   **Water usage charge (without Carbon Pricing Scheme)**

Water usage charge	Commencement Date to 30 June 2013 ($/ML)	1 July 2013 to 30 June 2014 ($/ML)	1 July 2014 to 30 June 2015 ($/ML)	1 July 2015 to 30 June 2016 ($/ML)	1 July 2016 to 30 June 2017 ($/ML)
	528.93 x $(1+\Delta CPI_1)$	569.09 x $(1+\Delta CPI_2)$	609.85 x $(1+\Delta CPI_3)$	615.97 x $(1+\Delta CPI_4)$	623.57 x $(1+\Delta CPI_5)$

Table 7   **Transition to shutdown charge for Medium Term Shutdown**

Transition to shutdown charge	Commencement Date to 30 June 2013 ($)	1 July 2013 to 30 June 2014 ($)	1 July 2014 to 30 June 2015 ($)	1 July 2015 to 30 June 2016 ($)	1 July 2016 to 30 June 2017 ($)
	188,034 x $(1+\Delta CPI_1)$	188,034 x $(1+\Delta CPI_2)$	188,034 x $(1+\Delta CPI_3)$	188,034 x $(1+\Delta CPI_4)$	188,034 x $(1+\Delta CPI_5)$

Table 8   **Transition to shutdown charge for Long Term Shutdown**

Transition to shutdown charge	Commencement Date to 30 June 2013 $	1 July 2013 to 30 June 2014 $	1 July 2014 to 30 June 2015 $	1 July 2015 to 30 June 2016 $	1 July 2016 to 30 June 2017 $
	277,502 x $(1+\Delta CPI_1)$	277,502 x $(1+\Delta CPI_2)$	277,502 x $(1+\Delta CPI_3)$	277,502 x $(1+\Delta CPI_4)$	277,502 x $(1+\Delta CPI_5)$

Tables 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 and 17

Table 9   Transition to shutdown charge for Water Security Shutdown

Transition to shutdown charge	Commencement Date to 30 June 2013 $	1 July 2013 to 30 June 2014 $	1 July 2014 to 30 June 2015 $	1 July 2015 to 30 June 2016 $	1 July 2016 to 30 June 2017 $
	1,442,005 x $(1+\Delta CPI_1)$	1,442,005 x $(1+\Delta CPI_2)$	1,442,005 x $(1+\Delta CPI_3)$	1,442,005 x $(1+\Delta CPI_4)$	1,442,005 x $(1+\Delta CPI_5)$

Table 10   Daily shutdown charge for Short Term Shutdown (with Carbon Pricing Scheme)

Daily Shutdown Charge	Commencement Date to 30 June 2013 ($/day)	1 July 2013 to 30 June 2014 ($/day)	1 July 2014 to 30 June 2015 ($/day)	1 July 2015 to 30 June 2016 ($/day)	1 July 2016 to 30 June 2017 ($/day)
	386,752 x $(1+\Delta CPI_1)$	390,774 x $(1+\Delta CPI_2)$	391,346 x $(1+\Delta CPI_3)$	384,583 x $(1+\Delta CPI_4)$	378,011 x $(1+\Delta CPI_5)$

Table 11   Daily shutdown charge for Short Term Shutdown (without Carbon Pricing Scheme)

Daily Shutdown Charge	Commencement Date to 30 June 2013 ($/day)	1 July 2013 to 30 June 2014 ($/day)	1 July 2014 to 30 June 2015 ($/day)	1 July 2015 to 30 June 2016 ($/day)	1 July 2016 to 30 June 2017 ($/day)
	386,602 x $(1+\Delta CPI_1)$	390,628 x $(1+\Delta CPI_2)$	391,244 x $(1+\Delta CPI_3)$	384,392 x $(1+\Delta CPI_4)$	377,769 x $(1+\Delta CPI_5)$

Table 12   Daily shutdown charge for Medium Term Shutdown (with Carbon Pricing Scheme)

Daily Shutdown Charge	Commencement Date to 30 June 2013 ($/day)	1 July 2013 to 30 June 2014 ($/day)	1 July 2014 to 30 June 2015 ($/day)	1 July 2015 to 30 June 2016 ($/day)	1 July 2016 to 30 June 2017 ($/day)
	403,085 x $(1+\Delta CPI_1)$	405,345 x $(1+\Delta CPI_2)$	415,154 x $(1+\Delta CPI_3)$	398,794 x $(1+\Delta CPI_4)$	395,386 x $(1+\Delta CPI_5)$

Table 13   Daily shutdown charge for Medium Term Shutdown (without Carbon Pricing Scheme)

Daily Shutdown Charge	Commencement Date to 30 June 2013 ($/day)	1 July 2013 to 30 June 2014 ($/day)	1 July 2014 to 30 June 2015 ($/day)	1 July 2015 to 30 June 2016 ($/day)	1 July 2016 to 30 June 2017 ($/day)
	402,946 x $(1+\Delta CPI_1)$	405,165 x $(1+\Delta CPI_2)$	413,340 x $(1+\Delta CPI_3)$	398,545 x $(1+\Delta CPI_4)$	394,919 x $(1+\Delta CPI_5)$

Table 14   Daily shutdown charge for Long Term Shutdown (with Carbon Pricing Scheme)

Daily Shutdown Charge	Commencement Date to 30 June 2013 ($/day)	1 July 2013 to 30 June 2014 ($/day)	1 July 2014 to 30 June 2015 ($/day)	1 July 2015 to 30 June 2016 ($/day)	1 July 2016 to 30 June 2017 ($/day)
	393,769 x $(1+\Delta CPI_1)$	386,022 x $(1+\Delta CPI_2)$	380,193 x $(1+\Delta CPI_3)$	372,697 x $(1+\Delta CPI_4)$	369,438 x $(1+\Delta CPI_5)$

Table 15   Daily shutdown charge for Long Term Shutdown (without Carbon Pricing Scheme)

Daily Shutdown Charge	Commencement Date to 30 June 2013 ($/day)	1 July 2013 to 30 June 2014 ($/day)	1 July 2014 to 30 June 2015 ($/day)	1 July 2015 to 30 June 2016 ($/day)	1 July 2016 to 30 June 2017 ($/day)
	393,689 x $(1+\Delta CPI_1)$	385,927 x $(1+\Delta CPI_2)$	380,126 x $(1+\Delta CPI_3)$	372,569 x $(1+\Delta CPI_4)$	369,185 x $(1+\Delta CPI_5)$

Table 16   Daily shutdown charge for Water Security Shutdown (with Carbon Pricing Scheme)

Daily Shutdown Charge	Commencement Date to 30 June 2013 ($/day)	1 July 2013 to 30 June 2014 ($/day)	1 July 2014 to 30 June 2015 ($/day)	1 July 2015 to 30 June 2016 ($/day)	1 July 2016 to 30 June 2017 ($/day)
	383,974 x $(1+\Delta CPI_1)$	376,235 x $(1+\Delta CPI_2)$	371,127 x $(1+\Delta CPI_3)$	362,787 x $(1+\Delta CPI_4)$	355,618 x $(1+\Delta CPI_5)$

Tables 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 and 17

Table 17 Daily shutdown charge for Water Security Shutdown (without Carbon Pricing Scheme)

Daily Shutdown Charge	Commencement Date to 30 June 2013 ($/day)	1 July 2013 to 30 June 2014 ($/day)	1 July 2014 to 30 June 2015 ($/day)	1 July 2015 to 30 June 2016 ($/day)	1 July 2016 to 30 June 2017 ($/day)
	383,894 x $(1+\Delta CPI_1)$	376,140 x $(1+\Delta CPI_2)$	371,060 x $(1+\Delta CPI_3)$	362,659 x $(1+\Delta CPI_4)$	355,365 x $(1+\Delta CPI_5)$

Schedule 3   Maximum prices for the Water Supply Services during a Restart Period

1   Application

(a)   This schedule specifies the methodology for determining the maximum prices that SDP may charge for the Water Supply Services provided during a Restart Period.

(b)   This schedule 3 does not apply to Water Supply Services provided during:

   (1)   a Plant Operation Period; or

   (2)   a Shutdown Period.

2   Categories for pricing purposes

2.1   Restart Period following a Short Term Shutdown

If the Restart Period occurs following a Short Term Shutdown:

(a)   the applicable maximum prices are to be calculated in accordance with clause 3 of this schedule 3; and

(b)   clauses 4, 5 and 6 of this schedule 3 do not apply.

2.2   Restart Period following a Medium Term Shutdown

If the Restart Period occurs following a Medium Term Shutdown:

(a)   the applicable maximum prices are to be calculated in accordance with clause 4 of this schedule 3; and

(b)   clauses 3, 5 and 6 of this schedule 3 do not apply.

2.3   Restart Period following a Long Term Shutdown

If the Restart Period occurs following a Long Term Shutdown:

(a)   the applicable maximum prices are to be calculated in accordance with clause 5 of this schedule 3; and

(b)   clauses 3, 4 and 6 of this schedule 3 do not apply.

Schedule 3   Maximum prices for the Water Supply Services
during a Restart Period

2.4   Restart Period following a Water Security Shutdown

If the Restart Period occurs following a Water Security Shutdown:

(a) the applicable maximum prices are to be calculated in accordance with clause 6 of this schedule 3; and

(b) clauses 3, 4 and 5 of this schedule 3 do not apply.

3   Maximum prices for the Water Supply Services for a Restart Period following a Short Term Shutdown

The maximum price that SDP may levy on a customer for the Water Supply Services provided during a Restart Period following a Short Term Shutdown is the sum of the following:

(a) subject to clause 7 of this schedule 3, a **water usage charge**, calculated as follows:

$$\left(WUC + \frac{\$/MWh \times 340{,}360\,MWh}{90{,}000\,ML} \right) \times AS$$

Where:

WUC =

(1) with a Carbon Pricing Scheme in operation, the water usage charge in Table 18; or

(2) otherwise, the water usage charge in Table 19,

for the applicable period;

$/MWh = the Variable Network Charge for the applicable period; and

AS = the number of ML of Desalinated Water supplied by SDP from the Plant to that customer during the applicable period;

[**Note:** *Although the Plant will not produce Desalinated Water for supply during a Restart Period, SDP may continue to supply Desalinated Water out of storage during a Restart Period.*]

(b) for each day of the Restart Period, a **daily restart charge** calculated as follows:

$$\left(DRC + FNC + \left(\$/MWh \times 26.5\,MWh\right) \right) \times \frac{ADU}{ATS}$$

Where:

DRC =

(1)   with a Carbon Pricing Scheme in operation, the daily restart charge in Table 23; or

(2)   otherwise, the daily restart charge in Table 24,

for the relevant day;

FNC = the Fixed Network Charge applicable for the relevant day;

$/MWh = the Variable Network Charge for the relevant day;

ADU = the number of ML of Desalinated Water supplied by SDP from the Plant to that customer over the 12 months prior to the commencement of the Shutdown Period preceding the relevant Restart Period; and

ATS = the number of ML of Desalinated Water supplied by SDP from the Plant to all customers over the 12 months prior to the commencement of the Shutdown Period preceding the relevant Restart Period;

(c)   for each day of the Restart Period which is on or after the Date of Operation, a **pipeline charge** calculated as follows:

$$PC \times \frac{ADU}{ATS}$$

Where:

PC = the pipeline charge in Table 31 for the relevant day;

ADU = the number of ML of Desalinated Water supplied by SDP from the Plant to that customer over the 12 months prior to the commencement of the Shutdown Period preceding the relevant Restart Period; and

ATS = the number of ML of Desalinated Water supplied by SDP from the Plant to all customers over the 12 months prior to the commencement of the Shutdown Period preceding the relevant Restart Period.

Schedule 3   Maximum prices for the Water Supply Services
during a Restart Period

4   Maximum prices for the Water Supply Services for a Restart Period following a Medium Term Shutdown

The maximum price that SDP may levy on a customer for the Water Supply Services provided during a Restart Period following a Medium Term Shutdown is the sum of the following:

(a)   subject to clause 7 of this schedule 3, a **water usage charge**, calculated as follows:

$$\left(WUC + \frac{\$/MWh \times 340,360 MWh}{90,000 ML} \right) \times AS$$

Where:

WUC =

(1)   with a Carbon Pricing Scheme in operation, the water usage charge in Table 18; or

(2)   otherwise, the water usage charge in Table 19,

for the applicable period;

$/MWh = the Variable Network Charge for the applicable period; and

AS = the number of ML of Desalinated Water supplied by SDP from the Plant to that customer during the applicable period;

[**Note:** *Although the Plant will not produce Desalinated Water for supply during a Restart Period, SDP may continue to supply Desalinated Water out of storage during a Restart Period.*]

(b)   a **transition to restart charge** calculated as follows:

$$TTR \times \frac{ADU}{ATS}$$

Where:

TTR = the transition to restart charge in Table 20 for the period in which the Restart Period begins;

ADU = the number of ML of Desalinated Water supplied by SDP from the Plant to that customer over the 12 months prior to the commencement of the Shutdown Period preceding the relevant Restart Period; and

ATS = the number of ML of Desalinated Water supplied by SDP from the Plant to all customers over the 12 months prior to the commencement of the Shutdown Period preceding the relevant Restart Period;

Schedule 3   Maximum prices for the Water Supply Services
during a Restart Period

(c)   for each day of the Restart Period, a **daily restart charge** calculated as follows:

$$\left(DRC + FNC + \left(\$/MWh \times 26.5MWh\right)\right) \times \frac{ADU}{ATS}$$

Where:

DRC =

(1)   with a Carbon Pricing Scheme in operation, the daily restart charge in Table 25; or

(2)   otherwise, the daily restart charge in Table 26,

for the relevant day;

FNC = the Fixed Network Charge applicable for the relevant day;

$/MWh = the Variable Network Charge for the relevant day;

ADU = the number of ML of Desalinated Water supplied by SDP from the Plant to that customer over the 12 months prior to the commencement of the Shutdown Period preceding the relevant Restart Period; and

ATS = the number of ML of Desalinated Water supplied by SDP from the Plant to all customers over the 12 months prior to the commencement of the Shutdown Period preceding the relevant Restart Period;

(d)   for each day of the Restart Period which is on or after the Date of Operation, a **pipeline charge** calculated as follows:

$$PC \times \frac{ADU}{ATS}$$

Where:

PC = the pipeline charge in Table 31 for the relevant day;

ADU = the number of ML of Desalinated Water supplied by SDP from the Plant to that customer over the 12 months prior to the commencement of the Shutdown Period preceding the relevant Restart Period; and

ATS = the number of ML of Desalinated Water supplied by SDP from the Plant to all customers over the 12 months prior to the commencement of the Shutdown Period preceding the relevant Restart Period.

Schedule 3 Maximum prices for the Water Supply Services
during a Restart Period

5 Maximum prices for the Water Supply Services for a Restart Period following a Long Term Shutdown

The maximum price that SDP may levy on a customer for the Water Supply Services provided during a Restart Period following a Long Term Shutdown is the sum of the following:

(a) subject to clause 7 of this schedule 3, a **water usage charge**, calculated as follows:

$$\left(WUC + \frac{\$/MWh \times 340{,}360MWh}{90{,}000ML} \right) \times AS$$

Where:

WUC =

(1) with a Carbon Pricing Scheme in operation, the water usage charge in Table 18; or

(2) otherwise, the water usage charge in Table 19,

for the applicable period;

$/MWh = the Variable Network Charge for the applicable period; and

AS = the number of ML of Desalinated Water supplied by SDP from the Plant to that customer during the applicable period;

[**Note:** *Although the Plant will not produce Desalinated Water for supply during a Restart Period, SDP may continue to supply Desalinated Water out of storage during a Restart Period.*]

(b) a **transition to restart charge** calculated as follows:

$$TTR \times \frac{ADU}{ATS}$$

Where:

TTR = the transition to restart charge in Table 21 for the period in which the Restart Period begins;

ADU = the number of ML of Desalinated Water supplied by SDP from the Plant to that customer over the 12 months prior to the commencement of the Shutdown Period preceding the relevant Restart Period; and

ATS = the number of ML per day of Desalinated Water supplied by SDP from the Plant to all customers over the 12 months prior to the

commencement of the Shutdown Period preceding the relevant Restart Period; and

(c) for each day of the Restart Period, a **daily restart charge** calculated as follows:

$$\left(DRC + FNC + \left(\$/MWh \times 26.5MWh\right)\right) \times \frac{ADU}{ATS}$$

Where:

DRC =

(1) with a Carbon Pricing Scheme in operation, the daily restart charge in Table 27; or

(2) otherwise, the daily restart charge in Table 28,

for the relevant day;

FNC = the Fixed Network Charge applicable for the relevant day;

$/MWh = the Variable Network Charge for the relevant day;

ADU = the number of ML of Desalinated Water supplied by SDP from the Plant to that customer over the 12 months prior to the commencement of the Shutdown Period preceding the relevant Restart Period; and

ATS = the number of ML of Desalinated Water supplied by SDP from the Plant to all customers over the 12 months prior to the commencement of the Shutdown Period preceding the relevant Restart Period; and

(d) for each day of the Restart Period which is on or after the Date of Operation, a **pipeline charge** calculated as follows:

$$PC \times \frac{ADU}{ATS}$$

Where:

PC = the pipeline charge in Table 31 for the relevant day;

ADU = the number of ML of Desalinated Water supplied by SDP from the Plant to that customer over the 12 months prior to the commencement of the Shutdown Period preceding the relevant Restart Period; and

ATS = the number of ML of Desalinated Water supplied by SDP from the Plant to all customers over the 12 months prior to the commencement of the Shutdown Period preceding the relevant Restart Period.

Schedule 3   Maximum prices for the Water Supply Services
during a Restart Period

6   Maximum prices for the Water Supply Services for a Restart Period following a Water Security Shutdown

The maximum price that SDP may levy on a customer for the Water Supply Services provided during a Restart Period following a Water Security Shutdown is the sum of the following:

(a)   subject to clause 7 of this schedule 3, a **water usage charge**, calculated as follows:

$$\left(WUC + \frac{\$/MWh \times 340{,}360MWh}{90{,}000ML} \right) \times AS$$

Where:

WUC =

(1)   with a Carbon Pricing Scheme in operation, the water usage charge in Table 18; or

(2)   otherwise, the water usage charge in Table 19,

for the applicable period;

$/MWh = the Variable Network Charge for the applicable period; and

AS = the number of ML of Desalinated Water supplied by SDP from the Plant to that customer during the applicable period;

[**Note:** *Although the Plant will not produce Desalinated Water for supply during a Restart Period, SDP may continue to supply Desalinated Water out of storage during a Restart Period.*]

(b)   a **transition to restart charge** calculated as follows:

$$TTR \times \frac{ADU}{ATS}$$

Where:

TTR = the transition to restart charge in Table 22 for the period in which the Restart Period begins;

ADU = the number of ML of Desalinated Water supplied by SDP from the Plant to that customer over the 12 months prior to the commencement of the Shutdown Period preceding the relevant Restart Period; and

ATS = the number of ML of Desalinated Water supplied by SDP from the Plant to all customers over the 12 months prior to the commencement of the Shutdown Period preceding the relevant Restart Period;

(c)   for each day of the Restart Period, a **daily restart charge** calculated as follows:

$$\left(DRC + FNC + \left(\$/MWh \times 26.5MWh\right)\right) \times \frac{ADU}{ATS}$$

Where:

DRC =

(1)   with a Carbon Pricing Scheme in operation, the daily restart charge in Table 29; or

(2)   otherwise, the daily restart charge in Table 30,

for the relevant day;

FNC = the Fixed Network Charge applicable for the relevant day;

$/MWh = the Variable Network Charge for the relevant day;

ADU = the number of ML of Desalinated Water supplied by SDP from the Plant to that customer over the 12 months prior to the commencement of the Shutdown Period preceding the relevant Restart Period; and

ATS = the number of ML of Desalinated Water supplied by SDP from the Plant to all customers over the 12 months prior to the commencement of the Shutdown Period preceding the relevant Restart Period;

(d)   for each day of the Restart Period which is on or after the Date of Operation, a **pipeline charge** calculated as follows:

$$PC \times \frac{ADU}{ATS}$$

Where:

PC = the pipeline charge in Table 31 for the relevant day;

ADU = the number of ML of Desalinated Water supplied by SDP from the Plant to that customer over the 12 months prior to the commencement of the Shutdown Period preceding the relevant Restart Period; and

ATS = the number of ML of Desalinated Water supplied by SDP from the Plant to all customers over the 12 months prior to the commencement of the Shutdown Period preceding the relevant Restart Period.

Schedule 3   Maximum prices for the Water Supply Services
during a Restart Period

7   Water usage charge

The water usage charge leviable on Sydney Water Corporation for any Desalinated Water supplied by SDP from the Plant to Sydney Water Corporation at a time when Available Storage:

(a) is equal to or greater than 70%, and has not been less than 70% since it was last equal to or greater than 80%; or

(b) is equal to or greater than 80%,

shall be nil.

8   Worked example

Assume that for the purposes of this worked example only:

▼ the Pipeline has not been transferred to SDP;

▼ the Plant has been Shutdown for a period of 91 days in financial year 2013/14 (Long Term Shutdown);

▼ the Plant recommences production of Desalinated Water on day 92 of financial year 2013/14;

▼ the first day that SDP produces Desalinated Water for supply and supplies that Desalinated Water to a customer after the Shutdown Period is day 100 of financial year 2013/14;

▼ the transition to restart charge for the relevant day is $1,771,000 (TTR);

▼ the daily restart charge throughout the relevant period is $382,000 per day (DRC);

▼ Desalinated Water supplied by SDP over 12 months prior to commencement of the Shutdown Period preceding the Restart Period:

- to customer A = 50,000ML (ADU for customer A);

- to customer B = 40,000ML (ADU for customer B);

▼ Fixed Network Charge throughout the relevant period is $10,000 per day (FNC); and

▼ Variable Network Charge throughout the relevant period is $30/MWh.

On the basis of the above assumptions:

▼ there is no pipeline charge payable;

▼ the duration of the Restart Period is 8 days (day 92 to day 99); and

▼ the total Desalinated Water supplied to all customers over the 12 months prior to commencement of Shutdown Period is 90,000ML (ATS).

Schedule 3   Maximum prices for the Water Supply Services
during a Restart Period

The maximum prices that SDP may levy for a Restart Period following a Long Term Shutdown are calculated as follows:

For customer A:

▼ transition to restart charge:

$$TTR \times \frac{ADU}{ATS}$$

$$\$1,771,000 \times \frac{50,000}{90,000}$$

$$= \$983,888.89$$

▼ daily restart charge:

$$\left(DRC + FNC + \left(\$/MWh \times 26.5MWh\right)\right) \times \frac{ADU}{ATS}$$

$$\left(\$382,000 + \$10,000 + \left(\$30/MWh \times 26.5MWh\right)\right) \times \frac{50,000}{90,000}$$

$$= \$218,219.44 \, per \, day$$

$$= \$1,745,755.56 \, for \, 8 \, days$$

▼ total which may be levied for 8 days during the Restart Period = $2,729,644.45 (being the sum of the transition to restart charge and the daily restart charges)

For customer B:

▼ transition to restart charge:

$$TTR \times \frac{ADU}{ATS}$$

$$\$1,771,000 \times \frac{40,000}{90,000}$$

$$= \$787,111.11$$

▼ daily restart charge:

$$\left(DRC + FNC + \left(\$/MWh \times 26.5MWh\right)\right) \times \frac{ADU}{ATS}$$

$$\left(\$382,000 + \$10,000 + \left(\$30/MWh \times 26.5MWh\right)\right) \times \frac{40,000}{90,000}$$

Schedule 3   Maximum prices for the Water Supply Services
during a Restart Period

$$= \$174{,}575.56 \, per \, day$$

$$= \$1{,}396{,}604.44 \, for \, 8 \, days$$

- ▼ total which may be levied for 8 days during the Restart Period = $2,183,715.55 (being the sum of the transition to restart charge and the daily restart charges)

50   **IPART** Prices for Sydney Desalination Plant Pty Limited's Water Supply Services

Tables 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29 and 30

Table 18   Water usage charge (with Carbon Pricing Scheme)

Water usage charge	Commencement Date to 30 June 2013 ($/ML)	1 July 2013 to 30 June 2014 ($/ML)	1 July 2014 to 30 June 2015 ($/ML)	1 July 2015 to 30 June 2016 ($/ML)	1 July 2016 to 30 June 2017 ($/ML)
	539.63 x (1+ΔCPI_1)	582.48 x (1+ΔCPI_2)	619.74 x (1+ΔCPI_3)	634.78 x (1+ΔCPI_4)	660.80 x (1+ΔCPI_5)

Table 19   Water usage charge (without Carbon Pricing Scheme)

Water usage charge	Commencement Date to 30 June 2013 ($/ML)	1 July 2013 to 30 June 2014 ($/ML)	1 July 2014 to 30 June 2015 ($/ML)	1 July 2015 to 30 June 2016 ($/ML)	1 July 2016 to 30 June 2017 ($/ML)
	528.93 x (1+ΔCPI_1)	569.09 x (1+ΔCPI_2)	609.85 x (1+ΔCPI_3)	615.97 x (1+ΔCPI_4)	623.57 x (1+ΔCPI_5)

Table 20   Transition to restart charge following Medium Term Shutdown

Transition to restart charge	Commencement Date to 30 June 2013 $	1 July 2013 to 30 June 2014 $	1 July 2014 to 30 June 2015 $	1 July 2015 to 30 June 2016 $	1 July 2016 to 30 June 2017 $
	202,129 x (1+ΔCPI_1)	202,129 x (1+ΔCPI_2)	202,129 x (1+ΔCPI_3)	202,129 x (1+ΔCPI_4)	202,129 x (1+ΔCPI_5)

Table 21   Transition to restart charge following Long Term Shutdown

Transition to restart charge	Commencement Date to 30 June 2013 $	1 July 2013 to 30 June 2014 $	1 July 2014 to 30 June 2015 $	1 July 2015 to 30 June 2016 $	1 July 2016 to 30 June 2017 $
	1,770,928 x (1+ΔCPI_1)	1,770,928 x (1+ΔCPI_2)	1,770,928 x (1+ΔCPI_3)	1,770,928 x (1+ΔCPI_4)	1,770,928 x (1+ΔCPI_5)

Tables 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29 and 30

Table 22   Transition to restart charge following Water Security Shutdown

Transition to restart charge	Commencement Date to 30 June 2013	1 July 2013 to 30 June 2014	1 July 2014 to 30 June 2015	1 July 2015 to 30 June 2016	1 July 2016 to 30 June 2017
	$	$	$	$	$
	5,497,899 x $(1+\Delta CPI_1)$	5,497,899 x $(1+\Delta CPI_2)$	5,497,899 x $(1+\Delta CPI_3)$	5,497,899 x $(1+\Delta CPI_4)$	5,497,899 x $(1+\Delta CPI_5)$

Table 23   Daily restart charge following Short Term Shutdown (with Carbon Pricing Scheme)

Daily Restart Charge	Commencement Date to 30 June 2013	1 July 2013 to 30 June 2014	1 July 2014 to 30 June 2015	1 July 2015 to 30 June 2016	1 July 2016 to 30 June 2017
	($/day)	($/day)	($/day)	($/day)	($/day)
	386,752 x $(1+\Delta CPI_1)$	390,774 x $(1+\Delta CPI_2)$	391,346 x $(1+\Delta CPI_3)$	384,583 x $(1+\Delta CPI_4)$	378,011 x $(1+\Delta CPI_5)$

Table 24   Daily restart charge following Short Term Shutdown (without Carbon Pricing Scheme)

Daily Restart Charge	Commencement Date to 30 June 2013	1 July 2013 to 30 June 2014	1 July 2014 to 30 June 2015	1 July 2015 to 30 June 2016	1 July 2016 to 30 June 2017
	($/day)	($/day)	($/day)	($/day)	($/day)
	386,602 x $(1+\Delta CPI_1)$	390,628 x $(1+\Delta CPI_2)$	391,244 x $(1+\Delta CPI_3)$	384,392 x $(1+\Delta CPI_4)$	377,769 x $(1+\Delta CPI_5)$

Table 25   Daily restart charge following Medium Term Shutdown (with Carbon Pricing Scheme)

Daily Restart Charge	Commencement Date to 30 June 2013	1 July 2013 to 30 June 2014	1 July 2014 to 30 June 2015	1 July 2015 to 30 June 2016	1 July 2016 to 30 June 2017
	($/day)	($/day)	($/day)	($/day)	($/day)
	403,085 x $(1+\Delta CPI_1)$	405,345 x $(1+\Delta CPI_2)$	415,154 x $(1+\Delta CPI_3)$	398,794 x $(1+\Delta CPI_4)$	395,386 x $(1+\Delta CPI_5)$

Tables 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29 and 30

Table 26 **Daily restart charge following Medium Term Shutdown (without Carbon Pricing Scheme)**

Daily Restart Charge	Commencement Date to 30 June 2013 ($/day)	1 July 2013 to 30 June 2014 ($/day)	1 July 2014 to 30 June 2015 ($/day)	1 July 2015 to 30 June 2016 ($/day)	1 July 2016 to 30 June 2017 ($/day)
	402,946 x $(1+\Delta CPI_1)$	405,165 x $(1+\Delta CPI_2)$	413,340 x $(1+\Delta CPI_3)$	398,545 x $(1+\Delta CPI_4)$	394,919 x $(1+\Delta CPI_5)$

Table 27 **Daily restart charge following Long Term Shutdown (with Carbon Pricing Scheme)**

Daily Restart Charge	Commencement Date to 30 June 2013 ($/day)	1 July 2013 to 30 June 2014 ($/day)	1 July 2014 to 30 June 2015 ($/day)	1 July 2015 to 30 June 2016 ($/day)	1 July 2016 to 30 June 2017 ($/day)
	393,769 x $(1+\Delta CPI_1)$	386,022 x $(1+\Delta CPI_2)$	380,193 x $(1+\Delta CPI_3)$	372,697 x $(1+\Delta CPI_4)$	369,438 x $(1+\Delta CPI_5)$

Table 28 **Daily restart charge following Long Term Shutdown (without Carbon Pricing Scheme)**

Daily Restart Charge	Commencement Date to 30 June 2013 ($/day)	1 July 2013 to 30 June 2014 ($/day)	1 July 2014 to 30 June 2015 ($/day)	1 July 2015 to 30 June 2016 ($/day)	1 July 2016 to 30 June 2017 ($/day)
	393,689 x $(1+\Delta CPI_1)$	385,927 x $(1+\Delta CPI_2)$	380,126 x $(1+\Delta CPI_3)$	372,569 x $(1+\Delta CPI_4)$	369,185 x $(1+\Delta CPI_5)$

Table 29 **Daily restart charge following Water Security Shutdown (with Carbon Pricing Scheme)**

Daily Restart Charge	Commencement Date to 30 June 2013 ($/day)	1 July 2013 to 30 June 2014 ($/day)	1 July 2014 to 30 June 2015 ($/day)	1 July 2015 to 30 June 2016 ($/day)	1 July 2016 to 30 June 2017 ($/day)
	383,974 x $(1+\Delta CPI_1)$	376,235 x $(1+\Delta CPI_2)$	371,127 x $(1+\Delta CPI_3)$	362,787 x $(1+\Delta CPI_4)$	355,618 x $(1+\Delta CPI_5)$

Tables 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29 and 30

Table 30   **Daily restart charge following Water Security Shutdown (without Carbon Pricing Scheme)**

Daily Restart Charge	Commencement Date to 30 June 2013 ($/day)	1 July 2013 to 30 June 2014 ($/day)	1 July 2014 to 30 June 2015 ($/day)	1 July 2015 to 30 June 2016 ($/day)	1 July 2016 to 30 June 2017 ($/day)
	$383{,}894 \times (1+\Delta CPI_1)$	$376{,}140 \times (1+\Delta CPI_2)$	$371{,}060 \times (1+\Delta CPI_3)$	$362{,}659 \times (1+\Delta CPI_4)$	$355{,}365 \times (1+\Delta CPI_5)$

Schedule 4   Pipeline Charge

1   Application

This schedule specifies the maximum pipeline charge that SDP may charge on and from the Date of Operation.

2   Maximum pipeline charge

Table 31 sets out the maximum pipeline charge.

Table 31

Table 31 Pipeline charge

Pipeline charge	Commencement Date to 30 June 2013 ($/day)	1 July 2013 to 30 June 2014 ($/day)	1 July 2014 to 30 June 2015 ($/day)	1 July 2015 to 30 June 2016 ($/day)	1 July 2016 to 30 June 2017 ($/day)
	$130{,}032 \times (1+\Delta CPI_1)$	$130{,}235 \times (1+\Delta CPI_2)$	$129{,}399 \times (1+\Delta CPI_3)$	$128{,}204 \times (1+\Delta CPI_4)$	$127{,}711 \times (1+\Delta CPI_5)$

Schedule 5   Definitions and Interpretation

1   Definitions

1.1   General definitions

Availability Day means a day which is not an Unavailability Day.

Available Capacity, for a day, means:

(a)   where the relevant day is an Availability Day, the average of the Daily Volumes for the 364 Availability Days occurring prior to the relevant day and the relevant day;

(b)   where the relevant day is an Unavailability Day, the average of the Daily Volumes for the 365 Availability Days occurring prior to the relevant day.

Available Storage means the available storage in Sydney's water supply reservoirs as published on a weekly basis on the website of the Sydney Catchment Authority. If for any reason the Sydney Catchment Authority is unable to calculate or publish the Available Storage, the Available Storage is the amount of water as calculated and notified from time to time by such other authority as is nominated by the Minister responsible for Part 2 of the WIC Act.

Carbon Pricing Scheme means a carbon pricing scheme of the kind currently embodied in the *Clean Energy Act 2011* (Cth).

Commencement Date means the Commencement Date defined in clause 2(a) of the Preliminary section of this determination.

Daily Volume, for a day, means:

(a)   the volume of Desalinated Water produced by the Plant on that day; or

(b)   where the supply capability of the Plant is reduced on that day as a result of a Force Majeure Event, the volume of Desalinated Water the Plant would have been capable of producing on that day had the Force Majeure Event not taken place; or

(c)   where the nameplate capacity of the Plant has been expanded since that day, the volume of Desalinated Water referred to in paragraph (a) or (b) (as the case may be) multiplied by the proportion that the expanded nameplate capacity of the Plant bears to the nameplate capacity of the Plant as at that day.

Date of Operation means the later of:

Schedule 5   Definitions and Interpretation

(a)   the date on which ownership of the Pipeline is transferred to SDP; and

(b)   the date that the Licence Variation takes effect under the WIC Act.

Desalinated Water means desalinated water produced at the Plant which is suitable for the purposes specified in SDP's Network Operator's Licence and Retail Supplier's Licence.

Distribution Network Service Provider has the meaning given in the National Electricity Rules.

Fixed Network Charge, for a day, means the fixed charges, fees and tariffs payable by SDP in respect of Use of System Services provided on that day by a Distribution Network Service Provider (including access charges and capacity charges) which are applied to the NMI (or NMIs) at which SDP's electricity usage at the Plant is measured.

Force Majeure Event means any event or circumstance which:

(a)   reduces the amount of Desalinated Water the Plant is capable of supplying to SDP's customers, including by means of the Pipeline;

(b)   is outside the reasonable control of SDP (including its contractors); and

(c)   could not have been prevented, avoided or overcome by SDP and its contractors acting in accordance with Good Industry Practice.

Good Industry Practice has the meaning given in SDP's Network Operator's Licence.

GST has the meaning given under the A New Tax System (Goods and Services Tax) Act 1999 (Cth).

Interest Rate means 6.7% per annum real pre-tax.

IPART has the meaning given in clause 4(a) of the Preliminary section of this determination, established under the IPART Act.

IPART Act means the *Independent Pricing and Regulatory Tribunal Act 1992* (NSW).

Licence Variation means a variation to SDP's Network Operator's Licence such that the Pipeline forms part of the Water Industry Infrastructure covered by that licence.

Long Term Shutdown means Long Term Shutdown as defined in clause 2.3 of schedule 2.

Medium Term Shutdown means Medium Term Shutdown as defined in clause 2.2 of schedule 2.

ML means megalitres or one million litres.

MWh means megawatt hours.

National Electricity Law means the National Electricity Law set out in the Schedule to the *National Electricity (South Australia) Act 1996* (SA).

National Electricity Rules means the National Electricity Rules made under the National Electricity Law.

Network Operator's Licence has the meaning given in the WIC Act.

NMI means a meter allocated a National Metering Identifier as defined in the National Electricity Rules.

Pipeline means the pipeline system running from Lot 2 in Deposited Plan 1077972 in the suburb of Kurnell to Lot A in Deposited Plan 365407 in the suburb of Erskineville and consisting of the following infrastructure:

(a)   an overland pipeline running from the drinking water pumping station at the Plant to Silver Beach;

(b)   a marine pipeline running from Silver Beach to a point 800 metres offshore from Silver Beach;

(c)   twin marine pipelines running from 800 metres offshore of Silver Beach to Cook Park, Kyeemagh; and

(d)   an overland pipeline running from Cook Park, Kyeemagh to the connection valve at Shaft 11C on the City Tunnel at Bridge Street, Erskineville.

Plant means the Water Industry Infrastructure covered by the Network Operator's Licence held by SDP (excluding the Pipeline).

Plant Operation Period means a period in which the Plant:

(a)   is producing Desalinated Water and that Desalinated Water is being supplied by SDP to a customer; or

(b)   is Shutdown for less than 2 days.

For the avoidance of doubt, a Plant Operation Period begins on and includes the first day of a period during which the Plant produces and supplies Desalinated Water to a customer, and ends on and includes the day immediately preceding the first day of a Shutdown Period.

Referral means the Referral defined in clause 4(b) of the Preliminary section of this determination.

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Restart Period means a period:

(a) beginning on the day of recommencement of the production of Desalinated Water at the Plant following a Shutdown Period; and

(b) ending on the day before the first day that Desalinated Water is produced by the Plant and supplied by SDP from the Plant to a customer after that Shutdown Period.

Retail Supplier's Licence has the meaning given in the WIC Act.

SDP has the meaning given in clause 1 of the Preliminary section of this determination.

Short Term Shutdown means Short Term Shutdown as defined in clause 2.1 of schedule 2.

Shutdown means when the Plant:

(a) is not producing Desalinated Water; or

(b) is producing minimal quantities of Desalinated Water for the sole purpose of maintaining the Plant (including Plant membranes).

Shutdown Period means a period of 2 or more days for which the Plant is Shutdown.

Sydney Catchment Authority means the Sydney Catchment Authority constituted under the *Sydney Water Catchment Management Act 1998* (NSW).

Sydney Water Corporation means Sydney Water Corporation (ABN 49 776 225 038), a statutory State-owned corporation established under the *State Owned Corporations Act 1989* (NSW).

Term means the Term defined in clause 2(b) of the Preliminary section of this determination.

Unavailability Day means any of the following days:

(a) any day on which Available Storage is equal to or greater than 80%;

(b) any day on which Available Storage is equal to or greater than 70% provided that, as at that day, Available Storage has not been less than 70% since it was last equal to or greater than 80%;

(c) any day during which SDP is required to reduce production at the Plant below 250ML or, if the Plant is expanded, the nameplate capacity per day of the expanded Plant, other than because of SDP being in breach of a contract pursuant to which it operates the Plant;

(d) any day on which the Plant is Shutdown; or

(e) any day in a Restart Period.

Use of System Services has the meaning given in the National Electricity Rules.

Variable Network Charge means the variable charge, fee or tariff per megawatt hour payable by SDP in respect of Use of System Services provided by a Distribution Network Service Provider in respect of electricity supplied to the NMI (or NMIs) at which SDP's electricity usage at the Plant is measured for the applicable period

Water Industry Infrastructure has the meaning given in SDP's Network Operator's Licence.

Water Security Shutdown means Water Security Shutdown as defined in clause 2.4 of schedule 2.

Water Supply Services means the Water Supply Services as defined in clause 4(b) of the Preliminary section of this determination.

WIC Act means the *Water Industry Competition Act 2006* (NSW).

1.2   Consumer Price Index

(a)   CPI means the consumer price index All Groups index number for the weighted average of 8 capital cities, published by the Australian Bureau of Statistics, or if the Australian Bureau of Statistics does not or ceases to publish the index, then CPI will mean an index determined by IPART.

(b) $\Delta \text{CPI}_1 = \left(\dfrac{CPI_{March\,2012}}{CPI_{March\,2011}} \right) - 1$

$\Delta \text{CPI}_2 = \left(\dfrac{CPI_{March\,2013}}{CPI_{March\,2011}} \right) - 1$

$\Delta \text{CPI}_3 = \left(\dfrac{CPI_{March\,2014}}{CPI_{March\,2011}} \right) - 1$

$\Delta \text{CPI}_4 = \left(\dfrac{CPI_{March\,2015}}{CPI_{March\,2011}} \right) - 1$

$\Delta \text{CPI}_5 = \left(\dfrac{CPI_{March\,2016}}{CPI_{March\,2011}} \right) - 1$

each as calculated and notified by IPART.

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(c)   The subtext (for example CPI$_{March2012}$) when used in relation to paragraph (b) above means the CPI for the quarter and year indicated (in the example, the March quarter for 2012).

2   Interpretation

2.1   General provisions

In this determination:

(a)   headings are for convenience only and do not affect the interpretation of this determination;

(b)   a reference to a schedule, annexure, clause or table is a reference to a schedule or annexure to, clause of, or table in, this determination unless otherwise indicated;

(c)   a construction that would promote the purpose or object expressly or impliedly underlying the WIC Act is to be preferred to a construction that would not promote that purpose or object;

(d)   words importing the singular include the plural and vice versa;

(e)   a reference to a law or statute includes regulations, rules, codes and other instruments under it and consolidations, amendments, re-enactments or replacements of them;

(f)   where a word is defined, other grammatical forms of that word have a corresponding meaning;

(g)   a reference to a day is to a calendar day;

(h)   a reference to a person includes a reference to the person's executors, administrators, successors, substitutes (including, but not limited to, persons taking by novation), replacements and assigns; and

(i)   a reference to a body, whether statutory or not:

(1)   which ceases to exist; or

(2)   whose powers or functions are transferred to another body, is a reference to the body which replaces it or which substantially succeeds to its powers or functions.

2.2   Explanatory notes and clarification notice

(a)   Explanatory notes, the simplified outline and worked examples do not form part of this determination, but in the case of uncertainty the explanatory notes and worked examples may be relied on for interpretation purposes.

(b)   IPART may publish a clarification notice in the NSW Government Gazette to correct any manifest error in this determination as if that clarification notice formed part of this determination.

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2.3 Prices exclusive of GST

Prices or charges specified in this determination do not include GST.

Schedule 6   Statement of reasons why IPART has chosen to set a methodology for fixing a maximum price

Under section 13A of the IPART Act, IPART may set maximum prices or may determine a methodology for setting maximum prices.

In this determination, IPART has employed a methodology for fixing the maximum prices that SDP may charge for the Water Supply Services. The methodology allows for:

(a) a pass through of actual electricity network costs incurred by SDP in providing the Water Supply Services;

(b) recovery of SDP's costs in relation to the Pipeline; and

(c) higher charges for Water Supply Services when a Carbon Pricing Scheme enters operation on 1 July 2012.

IPART considers it important that SDP is able to pass through electricity network costs through its water prices given that SDP will have little ability to control these costs. In addition, there is significant uncertainty about average changes in network prices into the future. Given these uncertainties, we have established a mechanistic cost pass through provision for network charges to ensure that SDP does not have to bear the risk associated with changes in network costs. This in turn ensures that the charges paid by water customers ultimately reflect the actual network costs.

In this determination, IPART has determined a methodology allowing for higher charges when a Carbon Pricing Scheme enters operation on 1 July 2012. This is because the water usage charge, the water service charge, the daily shutdown charge and the daily restart charge each include an electricity consumption component.

SDP proposes to acquire the Pipeline, at some time after the date of this determination, in order to provide the Water Supply Services. The pipeline charge determined by IPART reflects the estimated incremental fixed costs that SDP will incur in providing the Water Supply Services in circumstances where it has acquired the Pipeline and the Licence Variation has occurred (including a return on and return of capital expenditure associated with the Pipeline, and the fixed component of the operating costs of the Pipeline). As such, IPART considers that SDP should only be permitted to charge the pipeline charge in circumstances where SDP has acquired the Pipeline and the Licence Variation has occurred, and has set a methodology to allow for this.