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9 March 2020

Ms Liz Livingstone
Chief Executive Officer
Independent Regulatory and Pricing Tribunal
By email: matthew_mansell@ipart.nsw.gov.au

Dear Ms. Livingstone

Thank you for your letter dated 7 February 2020 regarding the information requirements for IPART's Annual Review of WaterNSW's 2020-21 regulated charges required under Part 6 Division 3 of the *Water Charge (Infrastructure) Rules 2010 Cth* (WCIR).

This letter and its attachments set out WaterNSW's application to the 2020-21 Annual Review of WaterNSW's Murray Darling Basin (MDB) Bulk Water Charges. WaterNSW's application has been prepared in accordance with the WCIR information requirements as detailed in the IPART letter.

In line with past Annual Reviews, IPART will consider whether or not it is reasonably necessary to make variations to the 2020-21 charges having regard to 1) changes in demand or consumption forecast and 2) price stability. The variations considered by IPART include mechanical and formulaic updates to the forecast demand, such as the 20-year rolling average of actual water sales, entitlements volumes and the high security premium.

NSW is currently experiencing one of the most severe droughts on record, with the MDB regions the worst affected. Since last year's Annual Review application, and in the past six months alone, WaterNSW has seen the lowest recorded inflows on record.

2019-20 expected demand is forecast at approx. 68% below the current, unrevised 20 year rolling average. This will lead to significant shortfalls in revenue for WaterNSW compared to the 2017-21 IPART revenue allowances.

In last year's Annual Review, we note that IPART was reluctant to update the 20-year rolling average despite actual usage tracking significantly below the notional demand forecasts. Lower than expected demand is expected to continue for the remainder of the 2017-21 determination period. This puts WaterNSW in an untenable financial position.

However, whilst the economic benefits of updating the 20-year rolling average are obvious in this scenario, WaterNSW is proposing no change to the 20-year rolling average of actual water sales. As a result, WaterNSW would forego the additional revenue it would receive when usage charges are uplifted based on updates to the demand forecasts.

WaterNSW's proposal is intended to provide much needed price relief to the MDB regions by ensuring price stability for customers over the remainder of the 2017-21 determination period and in the current environment of prolonged drought.

Should IPART agree with WaterNSW's proposal, IPART is required to inflate the 2020-21 prices by March to March inflation. WaterNSW has calculated the estimated 2020-21 bill impacts using IPART's inflation estimates, which are attached to this letter.

For the next price review, WaterNSW is keen to work closely with IPART in considering the most appropriate way of dealing with the demand forecasting issues for Rural Valley pricing. WaterNSW considers that there is merit in introducing a more formula driven price adjustment that would provide WaterNSW with a reasonable opportunity to recover its prudent and efficient costs both within and across the regulatory periods, consistent with the requirements of Rule 29 of the WCIR.

We look forward to IPART's positive response to our Annual Review application. Should you have any questions regarding this application, please do not hesitate to contact Michael Martinson, Manager Economic Regulation on 0419 121 429.

Yours sincerely



Joe Pizzinga
Chief Financial Officer

Attachments

- Proposed Regulated Charges and estimated bill impacts for 2020-21 financial year
- Information on demand and consumption forecasts
- Completed IPART WaterNSW - Annual update model 2020-21

WaterNSW's proposal on 2020-21 MDB Regulated Charges

WaterNSW has calculated the 2020-21 MDB Regulated Charges by converting the charges presented in IPART's 2017-21 Rural Valley Bulk Water Determination from 2017-18 dollars into nominal dollars using IPART's estimate of the change in the CPI index from 2016-17 to 2019-20 of 5.4%.

The charges are presented in the tables below:

Table 1 Entitlement charges for MDB Valleys	2019-20	2020-21	%
	nominal \$	nominal \$	Variance
High Security Charge			
Border	5.62	5.73	2.0%
Gwydir	11.68	11.92	2.1%
Namoi	18.02	18.38	2.0%
Peel	43.84	44.73	2.0%
Lachlan	16.22	16.55	2.0%
Macquarie	14.25	14.53	2.0%
Murray	1.62	1.65	1.9%
Murrumbidgee	3.11	3.17	1.9%
General Security Charge			
Border	2.09	2.13	1.9%
Gwydir	3.67	3.74	1.9%
Namoi	8.40	8.57	2.0%
Peel	4.24	4.32	1.9%
Lachlan	2.88	2.94	2.1%
Macquarie	3.01	3.07	2.0%
Murray	0.80	0.81	1.3%
Murrumbidgee	1.17	1.19	1.7%
Lowbidgee	0.83	0.84	1.2%

Table 2 Usage charges for MDB Valleys (excluding Lowbidgee)	2019-20	2020-21	%
	nominal \$	nominal \$	Variance
Border	5.73	5.85	2.1%
Gwydir	12.52	12.77	2.0%
Namoi	21.07	21.50	2.0%
Peel	19.37	19.76	2.0%
Lachlan	20.08	20.49	2.0%
Macquarie	14.53	14.83	2.1%
Murray	2.01	2.06	2.5%
Murrumbidgee	3.49	3.56	2.0%

Table 3 MDBA/BRC entitlement charges	2019-20	2020-21	% Variance
	nominal \$	nominal \$	
High Security Licence (\$/ML of Entitlement or \$/unit share)			
Border	4.87	4.96	1.8%
Murray	7.66	7.82	2.1%
Murrumbidgee	1.69	1.73	2.4%
General Security Licence (\$/ML of Entitlement or \$/unit share)			
Border	1.81	1.84	1.7%
Murray	3.75	3.83	2.1%
Murrumbidgee	0.64	0.65	1.6%

Table 4 MDBA/BRC usage charges	2019-20	2020-21	% Variance
	nominal \$	nominal \$	
Border	0.83	0.84	1.2%
Murray	1.58	1.61	1.9%
Murrumbidgee	0.32	0.33	3.1%

Table 5 Irrigation corporations and districts discount	2019-20	2020-21	% Variance
	nominal \$	nominal \$	
Murray Irrigation Limited	606,676.77	611,721.57	0.8%
Western Murray Irrigation Limited	18,730.36	18,885.57	0.8%
West Corurgan	33,417.55	33,695.33	0.8%
Moira Irrigation Scheme	15,575.57	15,705.65	0.8%
Eagle Creek Scheme	24.79	25.30	2.1%
Murrumbidgee Irrigation Limited	451,108.00	456,309.27	1.2%
Coleambally Irrigation Limited	199,401.02	201,699.76	1.2%
Jemalong Irrigation Limited	40,334.52	40,366.09	0.1%

Table 6 Entitlement charges for Coastal Valleys	2019-20	2020-21	% Variance
	nominal \$	nominal \$	
North Coast	12.43	12.68	2.0%
Hunter	13.85	14.13	2.0%
South Coast	32.50	33.16	2.0%
North Coast	9.63	9.82	2.0%
Hunter	10.75	10.97	2.0%
South Coast	17.04	17.39	2.1%

Table 7 Usage charges for Coastal Valleys	2019-20	2020-21	% Variance
	nominal \$	nominal \$	
North Coast	18.38	18.75	2.0%
Hunter	13.32	13.59	2.0%
South Coast	18.21	18.58	2.0%

2019-20	2020-21	% Variance
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Table 9 Fish River Supply Scheme customers - bulk raw water

	nominal \$	nominal \$	
Major Customers	0.41	0.42	2.4%
Minor Customers	0.41	0.42	2.4%
First tier usage charge			
Major Customers	0.26	0.26	0.0%
Minor Customers	0.26	0.26	0.0%
Second tier usage charge			
Major Customers	0.67	0.69	3.0%
Minor Customers	0.67	0.69	3.0%

Table 10 Fish River Supply Scheme customers - bulk filtered water

	2019-20 nominal \$	2020-21 nominal \$	% Variance
Major Customers	0.66	0.67	1.5%
Minor Customers	0.81	0.82	1.2%
First tier usage charge			
Major Customers	0.38	0.39	2.6%
Minor Customers	0.49	0.50	2.0%
Second tier usage charge			
Major Customers	1.04	1.06	1.9%
Minor Customers	1.29	1.32	2.3%

Table 11 Meter service charges

	2019-20 nominal \$	2020-21 nominal \$	% Variance
50mm	466.00	475.47	2.0%
80mm	468.17	477.68	2.0%
100mm	468.16	477.67	2.0%
150mm	473.66	483.29	2.0%
200mm	476.38	486.06	2.0%
250mm	478.90	488.63	2.0%
300mm	485.41	495.27	2.0%
350mm	514.65	525.11	2.0%
400mm	532.06	542.87	2.0%
450mm	535.41	546.30	2.0%
500mm	549.68	560.85	2.0%
600mm	567.95	579.50	2.0%
700mm	589.67	601.65	2.0%
750mm	620.08	632.68	2.0%
800mm	640.63	653.65	2.0%
900mm	647.13	660.29	2.0%
1,000mm	659.16	672.56	2.0%
Channel	6,107.36	6,231.52	2.0%

Table 12 Meter accuracy testing charges

	2019-20 nominal \$	2020-21 nominal \$	% Variance
Refundable meter accuracy deposit	1,750.00	1,750.00	0.0%
Total charge (if meter is found to be within accuracy standards)			
Verification and testing in situ	4,529.91	4,622.00	2.0%

Lab verification and testing	6,778.52	6,916.32	2.0%
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	2019-20	2020-21	% Variance
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Table 13 Environmental gauging station charge

	nominal \$	nominal \$	
	12,376.83	12,628.44	2.0%

	2019-20	2020-21	% Variance
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Table 14 Other Miscellaneous Charges

	nominal \$	nominal \$	
Trade processing charge per application	49.94	49.33	-1.2%
Fish River Connection Charge			
Low complexity connection	897.19	915.43	2.0%
Medium complexity connection	3,401.73	3,470.89	2.0%
High complexity connection	6,955.07	7,096.46	2.0%
Fish River Disconnection Charge	260.87	257.71	-1.2%

Bill Impacts

WaterNSW has calculated the 2020-21 bill impacts as shown below:

TABLE 15 - INDICATIVE BILLS FOR HIGH SECURITY CUSTOMERS - WaterNSW CHARGES

	2019-20 Bills nominal \$	2020-21 Bills nominal \$	% Variance
Small consumption customers			
Border	1,135	1,158	2.0%
Gwydir	2,420	2,469	2.0%
Namoi	3,909	3,988	2.0%
Peel	6,321	6,449	2.0%
Lachlan	3,630	3,704	2.0%
Macquarie	2,878	2,936	2.0%
Murray	363	371	2.2%
Murrumbidgee	660	673	2.0%
Lowbidgee	0	0	N/A
Medium consumption customers			
Border	5,675	5,790	2.0%
Gwydir	12,100	12,345	2.0%
Namoi	19,545	19,940	2.0%
Peel	31,605	32,245	2.0%
Lachlan	18,150	18,520	2.0%
Macquarie	14,390	14,680	2.0%
Murray	1,815	1,855	2.2%
Murrumbidgee	3,300	3,365	2.0%
Lowbidgee	0	0	N/A
Large consumption customers			
Border	11,350	11,580	2.0%
Gwydir	24,200	24,690	2.0%
Namoi	39,090	39,880	2.0%
Peel	63,210	64,490	2.0%
Lachlan	36,300	37,040	2.0%
Macquarie	28,780	29,360	2.0%
Murray	3,630	3,710	2.2%
Murrumbidgee	6,600	6,730	2.0%
Lowbidgee	0	0	N/A

Note: based on a 100% utilisation rate for High Security customers.

TABLE 16 - INDICATIVE BILLS FOR GENERAL SECURITY CUSTOMERS - WaterNSW CHARGES

	2019-20 Bills nominal \$	2020-21 Bills nominal \$	% Variance
Small consumption customers			
Border	553	564	2.0%
Gwydir	1,118	1,140	2.0%
Namoi	2,104	2,147	2.0%
Peel	1,586	1,618	2.0%
Lachlan	1,493	1,523	2.0%
Macquarie	1,173	1,197	2.0%
Murray	201	205	2.0%
Murrumbidgee	326	333	1.9%
Lowbidgee*	83	84	1.2%
Medium consumption customers			
Border	2,764	2820	2.0%
Gwydir	5,591	5701	2.0%
Namoi	10,521	10735	2.0%
Peel	7,931	8088	2.0%
Lachlan	7,464	7617	2.0%
Macquarie	5,864	5984	2.0%
Murray	1,003	1023	2.0%
Murrumbidgee	1,632	1663	1.9%
Lowbidgee*	415	420	1.2%
Large consumption customers			
Border	5,528	5640	2.0%
Gwydir	11,182	11402	2.0%
Namoi	21,042	21470	2.0%
Peel	15,862	16176	2.0%
Lachlan	14,928	15234	2.0%
Macquarie	11,728	11968	2.0%
Murray	2,006	2046	2.0%
Murrumbidgee	3,264	3326	1.9%
Lowbidgee*	830	840	1.2%

* refers to supplementary
licences holders in the
Lowbidgee

*Note: based on a 60% utilisation
rate for General Security
customers.*

TABLE 17 - INDICATIVE BILLS FOR HIGH SECURITY AND GENERAL SECURITY CUSTOMERS - MDBA/BRC CHARGES

	2019-20 Bills nominal \$	2020-21 Bills nominal \$	% Variance
HIGH SECURITY			
Small consumption customers			
Border	570	580	1.8%
Murray	924	943	2.1%
Murrumbidgee	201	206	2.5%
Medium consumption customers			
Border	2,850	2900	1.8%
Murray	4,620	4715	2.1%
Murrumbidgee	1,005	1030	2.5%
Large consumption customers			
Border	5,700	5800	1.8%
Murray	9,240	9430	2.1%
Murrumbidgee	2,010	2060	2.5%
GENERAL SECURITY			
Small consumption customers			
Border	231	234	1.6%
Murray	470	480	2.1%
Murrumbidgee	83	85	1.9%
Medium consumption customers			
Border	1,154	1,172	1.6%
Murray	2,349	2,398	2.1%
Murrumbidgee	416	424	1.9%
Large consumption customers			
Border	2,308	2,344	1.6%
Murray	4,698	4,796	2.1%
Murrumbidgee	832	848	1.9%

TABLE 4.8 - INDICATIVE BILLS FOR CUSTOMERS IN THE FRWS

	2019-20 Bills nominal \$	2020-21 Bills nominal \$	% Variance
Raw water - major customer	3,845	3,927	2.1%
Raw water - minor customer	407	417	2.5%
Filtered water - minor customer	589	601	2.0%

Information on consumption forecasts

WaterNSW's forecast of demand for, or consumption of, infrastructure services for the 2020-21 financial year

The following information on WaterNSW's demand and consumption forecasts is disclosed for IPART's consideration in the event that IPART decides that it is reasonably necessary to make variations to the 2020-21 charges having regard to changes in demand or consumption forecasts related to:

- Updated 20 year rolling average of actual water usage
- Updated Entitlement volumes
- Updated High Security Premium

WaterNSW's forecast of 2020-21 expected demand is based on:

- the 20-year rolling average of actual water sales (with a two year lag) from 1999-2000 to 2018-19.
- Actual entitlement volumes in the 2018-19 financial year.

The results are shown below.

Valley	Usage	Entitlement volumes*
Border	147,948	266,359.00
Gwydir	239,365	536,585.00
Namoi	149,925	265,395.00
Peel	12,686	47,002.00
Lachlan	191,214	690,418.00
Macquarie	249,042	675,157.00
Murray	1,419,325	2,347,178.00
Murrumbidgee	1,593,152	2,706,291.00
Lowbidgee	N/A	747,000.00
Total	4,002,658 MLs	8,281,385.00

* Entitlement volumes which are billable under the fixed charge. For example, excludes supplementary licences except for the Lowbidgee, where WaterNSW levies a fixed charge on supplementary water holders.

WaterNSW's forecast of expected demand in the Fish River Water Scheme (FRWS) for the 2020-21 financial year is based on:

- For Energy Australia: the 20-year rolling average of actual water sales (with a two year lag) from 1999-2000 to 2018-19, excluding past usage from the Wallerawang Power Plant.
- For minor customers: the 20-year rolling average of actual water sales (with a two year lag) from 1999-2000 to 2018-19,
- Minimum Annual Quantity (MAQ) levels as defined in WaterNSW's licence to operate the FRWS issued under the *Water Act 1912 NSW*.

The results are shown below:

Fish River – Energy Australia	1,883.75	8,184.00 MAQ
Fish River – Raw Water Filtered customers	51.00	16.80 MAQ*
Fish River – Filtered Water Filtered customers	105.15	46.20 MAQ*
Total	2,039.90 MLs	8,247 MAQ

* MAQ (Minimum Annual Quantity) for minor customers is 200KLs for each minor customer multiplied by the number of minor customers. For instance, 16.80 MAQ MLs is derived by multiplying 54 raw water customers by 200KLs per customer. 46.20 MAQ is derived by multiplying 231 filtered water customers by 200KLs per customer

WaterNSW's estimate of the updated high security premium is determined by multiplying the following factors:

- the reliability ratio – which is the ratio of the 1) 20-year rolling average of water allocation rates for high security licences and 2) the 20-year rolling average of water allocation rates for general security licences, with a two year lag; and
- the conversion factor – which is a fixed factor set by IPART, using information sourced from each valley's water sharing plan. The factor represents the 'units' of general security water required to secure one 'unit' of high security water.

The updated high security premium is shown in the table below:

Valley	Updated 20-year average of actual annual water allocations				Reliability Ratio		Conversion factor		High Security Premium
	HS Licences	/	GS Licences	=					
Border	100%	/	46%	=	2.19	X	1.25	=	2.73
Gwydir	100%	/	32%	=	3.08	X	1.40	=	4.32
Namoi	100%	/	44%	=	2.29	X	1.25	=	2.87
Peel	98%	/	61%	=	1.61	X	6.54	=	10.55
Lachlan	83%	/	30%	=	2.71	X	2.50	=	6.78
Macquarie	100%	/	37%	=	2.71	X	1.88	=	5.10
Murray	95%	/	55%	=	1.74	X	1.31	=	2.27
Murrumbidgee	97%	/	56%	=	1.72	X	1.69	=	2.90

WaterNSW's estimate of demand or consumption for infrastructure services for the current, 2019-20 financial year

The WCIR requires WaterNSW to disclose its estimate on current year demand as part of the annual review process.

WaterNSW's forecast of expected demand for the 2019-20 financial year considers:

- the amount of water remaining in our storages and customers' accounts;
- the BoM's forecast to the end of the 2019-20 financial year
- water usage trends observed in similar seasons in the past; and
- Verbal information on expected usage from key/large customers.

These estimates are shown below:

Valley	2019-20 Year End Usage	2019-20 YTD Entitlements*
Border	0	266,359.00
Gwydir	20,000	536,585.00
Namoi	2,000	265,395.00
Peel	6,000	47,002.00
Lachlan	144,000	690,462.00
Macquarie	30,000	675,132.00
Murray	482,000	2,351,102.00
Murrumbidgee	710,000	2,709,686.00
Lowbidgee	N/A	747,000.00
Total	1,394,000 MLs	8,288,723.00 MLs

* Entitlement volumes which are billable under the fixed charge. For example, excludes supplementary licences except for the Lowbidgee, where WaterNSW levies a fixed charge on supplementary water holders.

WaterNSW's forecast of expected demand in the FRWS was based on:

- For Minor Customers: year to date usage recorded in WaterNSW's billing system as at December 2019;
- For Energy Australia: year to date usage recorded in WaterNSW's billing system as at December 2019.

The estimates are shown below:

Fish River – Energy Australia	773.56	8,184.00 MAQ
Fish River – Raw Water Filtered customers	31.40	16.80 MAQ*
Fish River – Filtered Water Filtered customers	46.06	46.20 MAQ*
Total	851.02 MLs	8,247 MAQ