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1 April 2022

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

Dear Ms. Livingstone

Further to my letter dated 21 March 2022 regarding the provision of IPART's model containing the underlying data required for IPART's Annual Review of WaterNSW's 2022-23 Murray Darling Basin (MDB) regulated charges, we are pleased to submit our application to the IPART Annual Review in accordance with the Water Charge (Infrastructure) Rules 2010 Cth (WCIR).

This letter and its attachments supplement the information provided in our 21 March 2022 letter and includes:

- Proposed Regulated Charges for the 2022-23 financial year as requested under the WCIR;
- Any arguments required under rule 37(2) (where applicable) regarding whether or not prices should change from those set in the 2021 Determination, if it is reasonably necessary having regard to changes in the demand or consumption forecasts and price stability; and
- A declaration from the CEO certifying the accuracy of the information provided.

The criteria in the WCIR authorises IPART to consider whether or not it is reasonably necessary to make variations to the 2022-23 charges having regard to 1) changes in demand or consumption forecast and 2) price stability. The variations to be considered by IPART are mechanical and formulaic updates to the demand forecasts and regulatory inputs including the 20-year rolling average of actual water sales, entitlements volumes and the high security premium.

There are compelling reasons for (and against) the need to make variations to the 2022-23 MDB Bulk Water Charges IPART determined in its 2021 IPART Rural Valley Final Determination, having regard to changes in demand or consumption forecasts, including for:

- The effects of updating the 20-year rolling average of water sales incorporating 2020-21 data in 2022-23 in line with the recent IPART determination; and
- The effects of updating the entitlement forecast and the high security premium with the latest actual data.

For example, the most significant benefits include:

- Long term price stability: the rolling average is likely to decline significantly by the end of the 2021-25 regulatory period resulting in significant and or sudden increases in the usage charge at the next 2025 price review leading to potential price shocks for customers. Annual updates to the rolling average would allow the MDB usage charges to increase gradually over the 2021-25 regulatory period. This approach will avoid any sudden and untenable price shocks that would result from a significant variation to the 20-year rolling average at the next 2025 price review
- More accurate demand forecasting: Updating the rolling average is likely to produce a more accurate sales forecast, as the latest set of actual data is incorporated into the averaging calculation.

Notwithstanding these compelling arguments, and amid the economic uncertainty caused by the recent flooding rains, the raising cost pressures experienced by the regions (such as business input costs and inflation), and noting the recent pricing determination saw an average increase in customer bills of 30% across all valleys less than six months ago, WaterNSW considers that it is not reasonably necessary to update the MDB charges to account for changes in demand or consumption forecast.

At this time, WaterNSW's submits that there is a need to provide much needed price relief to the regions. As such, WaterNSW considers that the MDB charges should be adjusted only for the March-to-March inflation factor specified in the 2021 IPART Determination.

WaterNSW considers that there is merit in introducing a more formula-driven price adjustment in the MDB valleys that secures both sufficient revenue streams to WaterNSW whilst maintaining price stability for our customers. WaterNSW welcomes the preliminary findings of IPART's Economic Framework Review in which IPART is committed to exploring the benefits of implementing more flexible forms of price control, such as revenue caps. We look forward to working with IPART in the next price review on the introduction of potential pricing mechanisms that would provide WaterNSW with a reasonable opportunity to recover its prudent and efficient costs over the regulatory period.

Should you have any questions regarding this application, please do not hesitate to contact Michael Martinson, Manager Economic Regulation on **Economic**.

Yours sincerely



Andrew George Chief Executive Officer

Attachments

- Proposed Regulated Charges and estimated bill impacts for 2022-23 financial year
- Information on demand and consumption forecasts
- Statement on the expected voluntary telemetry take-up rate for 2022-23
- Signed Responsibility Statement
- Completed IPART WaterNSW Annual update model 2022-23

### 2022-23 MDB Regulated Charges Updated by CPI

WaterNSW has calculated the 2022-23 MDB Regulated Charges by converting the charges presented in IPART's 2022-25 Rural Valley Bulk Water Determination from 2021-22 dollars into nominal dollars using IPART's estimate of the change in the CPI index from 2021-22 to 2022-23 of 3.2%.

The charges are presented in the tables below:

	2021-22	2022-23	% Variance
Table 1 Entitlement charges for MDI	B Valleys (\$/ML or \$/unit sh	are)	
	nominal \$	nominal \$	
High Security Charge			
Border	6.58	6.79	3.2%
Gwydir	17.40	17.96	3.2%
Namoi	28.93	29.86	3.2%
Peel	61.36	63.32	3.2%
Lachlan	25.10	25.90	3.2%
Macquarie	20.18	20.83	3.2%
Murray	2.26	2.33	3.1%
Murrumbidgee	4.17	4.30	3.1%
General Security Charge			
Border	2.41	2.49	3.3%
Gwydir	4.04	4.17	3.2%
Namoi	10.10	10.42	3.2%
Peel	5.82	6.01	3.3%
Lachlan	3.71	3.83	3.2%
Macquarie	3.94	4.07	3.3%
Murray	0.99	1.02	3.0%
Murrumbidgee	1.43	1.48	3.5%
Lowbidgee	1.72	1.78	3.5%

	2021-22	2022-23	% Variance	
Table 2 Usage charges for MDB Valleys (exclu	Table 2 Usage charges for MDB Valleys (excluding Lowbidgee) (\$/ML)			
	nominal \$	nominal \$		
Border	7.03	7.25	3.1%	
Gwydir	17.19	17.74	3.2%	
Namoi	30.88	31.87	3.2%	
Peel	24.51	25.29	3.2%	
Lachlan	31.17	32.17	3.2%	
Macquarie	21.64	22.33	3.2%	
Murray	2.93	3.02	3.1%	
Murrumbidgee	4.97	5.13	3.2%	

	2021-22	2022-23	% Variance
Table 3 MDBA/BRC entitlement charges (\$/M entitlement or \$/unit share)	L of		
	nominal \$	nominal \$	nominal \$
High Security Licence (\$/ML of Entitlement or \$/unit share)			
Border	4.84	4.99	3.1%
Murray	8.64	8.92	3.2%
Murrumbidgee	1.86	1.92	3.2%
General Security Licence (\$/ML of Entitlement or \$/unit share)			
Border	1.77	1.83	3.4%
Murray	3.80	3.92	3.2%
Murrumbidgee	0.64	0.66	3.1%

	2021-22	2022-23	% Variance
Table 4 MDBA/BRC usage charges (\$/ML)			
	nominal \$	nominal \$	nominal \$
Border	0.86	0.89	3.5%
Murray	1.85	1.91	3.2%
Murrumbidgee	0.37	0.38	2.7%

	2021-22	2022-23	% Variance
Table 5 Irrigation corporations and districts discount (\$)			
	nominal \$	nominal \$	
Murray Irrigation Limited	730,932.58	721,913.93	-1.2%
Western Murray Irrigation Limited	18,465.24	18,237.50	-1.2%
West Corurgan	36,552.12	36,101.42	-1.2%
Moira Irrigation Scheme	19,288.76	19,050.72	-1.2%
Eagle Creek Scheme	6,904.67	6,819.46	-1.2%
Murrumbidgee Irrigation Limited	625,285.01	612,972.91	-2.0%
Coleambally Irrigation Limited	267,976.74	262,699.73	-2.0%
Jemalong Irrigation Limited	56,068.42	58,153.20	3.7%

	2021-22	2022-23	% Variance
Table 6 Entitlement charges for Coastal Valley \$/unit share)	s (\$/ML of entitle	ment or	
	nominal \$	nominal \$	nominal \$
High Security Licence (\$/ML of Entitlement or \$/unit share)			
North Coast	12.82	13.23	3.2%
Hunter	19.94	20.58	3.2%
South Coast	33.56	34.63	3.2%
General Security Licence (\$/ML of Entitlement or \$/unit share)			
North Coast	9.94	10.26	3.2%
Hunter	15.49	15.99	3.2%
South Coast	17.60	18.16	3.2%

	2021-22	2022-23	% Variance
Table 7 Usage charges for Coastal Valleys (\$/ML)			
	nominal \$	nominal \$	
North Coast	18.98	19.59	3.2%

Hunter	19.13	19.74	3.2%
South Coast	18.80	19.40	3.2%

	2021-22	2022-23	% Variance
Table 8 Fish River Supply Scheme customers - bulk raw water (\$/kL)			
	nominal \$	nominal \$	
Access Charge			
Major Customers (except Oberon Council)	0.49	0.51	4.1%
Oberon Council	0.42	0.43	2.4%
Minor Customers	0.49	0.51	4.1%
First tier usage charge			
Major Customers (except Oberon Council)	0.33	0.34	3.0%
Oberon Council	0.26	0.27	3.8%
Minor Customers	0.33	0.34	3.0%
Second tier usage charge			
Major Customers (except Oberon Council)	0.82	0.85	3.7%
Oberon Council	0.68	0.70	2.9%
Minor Customers	0.82	0.85	3.7%

	2021-22	2022-23	% Variance	
Table 9 Fish River Supply Scheme customers - bulk filtered water (\$/kL)				
	nominal \$	nominal \$	nominal \$	
Access Charge				
Major Customers	0.86	0.89	3.5%	
Minor Customers	0.86	0.89	3.5%	
First tier usage charge				
Major Customers	0.53	0.55	3.8%	
Minor Customers	0.53	0.55	3.8%	
Second tier usage charge				
Major Customers	1.39	1.43	2.9%	
Minor Customers	1.39	1.43	2.9%	

	2021-22	2022-23	% Variance
Table 10 Meter service charges (\$ per meter)			
	nominal \$	nominal \$	
50mm	481.16	496.56	3.2%
80mm	483.40	498.87	3.2%
100mm	483.39	498.86	3.2%
150mm	489.07	504.72	3.2%
200mm	491.88	507.62	3.2%
250mm	494.48	510.30	3.2%
300mm	501.20	517.24	3.2%
350mm	531.39	548.39	3.2%
400mm	549.37	566.95	3.2%
450mm	552.83	570.52	3.2%
500mm	567.56	585.72	3.2%
600mm	586.43	605.20	3.2%
700mm	608.85	628.33	3.2%
750mm	640.25	660.74	3.2%
800mm	661.47	682.64	3.2%
900mm	668.19	689.57	3.2%

1,000mm	680.60	702.38	3.2%
Channel	6,306.05	6,507.84	3.2%

	2021-22	2022-23	% Variance
Table 11 Meter accuracy testing charges (			
	nominal \$	nominal \$	
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	4,677.28	4,826.95	3.2%
Lab verification and testing	6,999.03	7,223.00	3.2%

	2021-22	2022-23	% Variance
Table 12 Other Miscellaneous Charges (\$ per meter)			
	nominal \$	nominal \$	nominal \$
Trade processing charge per application	49.92	51.52	3.2%
Fish River Connection Charge			
Low complexity connection	926.38	956.02	3.2%
Medium complexity connection	3,512.39	3,624.79	3.2%
High complexity connection	7,181.32	7,411.12	3.2%
Fish River Disconnection Charge	260.80	269.15	3.2%

				%
		2021-22	2022-23	Variance
Table 13 Annual Scheme Management				
Charge	(\$)			
		nominal \$	nominal \$	
Proportion of voluntary telemetry uptake				
0% - 25%		73.26	75.60	3.2%
>25% - 50%		66.01	68.12	3.2%
>50% - 75%		58.75	60.63	3.2%
>75% - 100%		51.49	53.14	3.2%

	0001.00	0000 00	%
	2021-22	2022-23	Variance
Table 14 Annual Government-Owned Meter			
service charges			
	nominal \$	nominal \$	
Meter service charge - operating costs (\$ per			
Government-Owned Meter)	898.85	927.61	3.2%
Meter service charge for channel meters-			
operating costs (\$ per Government-Owned			
Meter)	6306.04	6,507.83	3.2%
Meter service charge - capital costs (\$ per			
Government-Owned Meter)	0	0.00	N/A

			%
	2021-22	2022-23	Variance
Table 15 Annual telemetry service charge (\$ per meter)			
	nominal \$	nominal \$	
Proportion of voluntary telemetry uptake			
0% - >25%	226.49	233.74	3.2%
25% - >50%	208.74	215.42	3.2%
50% - >75%	191.41	197.54	3.2%
75% or more	182.11	187.94	3.2%

			%
	2021-22	2022-23	Variance
Table 16 Annual non-telemetry service			
charge (\$ per meter)			
	nominal \$	nominal \$	
Proportion of voluntary telemetry uptake			
25% - >50%	218.57	225.56	3.2%
50% - >75%	218.57	225.56	3.2%
75% or more	218.57	225.56	3.2%

			%
	2021-22	2022-23	Variance
Table 17 Exit fee (\$ per meter)			
	nominal \$	nominal \$	
Average capital expenditure (\$ per meter)	0.00	0.00	N/A
Daily depreciation (\$ per meter)	0.00	0.00	N/A

### Bill Impacts – Charges Updated by CPI

TABLE 18- INDICATIVE BILLS FOR HIGH SECURITY CUSTOMERS - WaterNSW CHARGES 2021-22 Bills 2022-23 Bills % Variance nominal \$ nominal \$ Small consumption customers 3.2% Border 1,361 1,404 3,459 Gwydir 3,570 3.2% Namoi 5,981 6,173 3.2% Peel 8,587 3.2% 8,861 Lachlan 5,627 5,807 3.2% Macquarie 4,182 4,316 3.2% 519 Murray 535 3.1% Murrumbidgee 914 943 3.2% 0 Lowbidgee 0 N/A Medium consumption customers 7,020 3.2% Border 6,805 17,295 Gwydir 17,850 3.2% 29,905 Namoi 30,865 3.2% Peel 42,935 44,305 3.2% Lachlan 28,135 29,035 3.2% 20,910 Macquarie 21,580 3.2% 2,595 Murray 2,675 3.1% 4,570 3.2% Murrumbidgee 4,715 Lowbidgee 0 0 N/A Large consumption customers Border 13,610 14,040 3.2% 34,590 3.2% Gwydir 35,700 59,810 Namoi 61,730 3.2% Peel 85,870 88,610 3.2% Lachlan 56,270 58,070 3.2% 41,820 Macquarie 43,160 3.2% 5,190 Murray 5,350 3.1% 9,140 Murrumbidgee 9,430 3.2% 0 Lowbidgee 0 N/A Note: based on a 100% utilisation rate for High Security customers.

WaterNSW has calculated the 2022-23 bill impacts as shown below:

TABLE 19 - INDICATIVE BILLS FOR GENERAL SECU	2021-22 Bills	2022-23 Bills	% Variance
	nominal \$	nominal \$	% variance
Small consumption customers	ΠΟΓΠΙΓΙΟΓ Φ	ΠΟΓΠΙΓΙΟΓΦ	
Border	663	684	3.2%
Gwydir	1,435	1,481	3.2%
Namoi	2,863	2,954	3.2%
Peel	2,053	2,118	3.2%
Lachlan	2,241	2,313	3.2%
Macquarie	1,692	1,747	3.2%
Murray	275	283	3.1%
Murrumbidgee	441	456	3.3%
Lowbidgee*	172	178	3.5%
Medium consumption customers			
Border	3,314	3,420	3.2%
Gwydir	7,177	7,407	3.2%
Namoi	14,314	14,771	3.2%
Peel	10,263	10,592	3.2%
Lachlan	11,206	11,566	3.2%
Macquarie	8,462	8,734	3.2%
Murray	1,374	1,416	3.1%
Murrumbidgee	2,206	2,279	3.3%
Lowbidgee*	860	890	3.5%
Large consumption customers			
Border	6,628	6,840	3.2%
Gwydir	14,354	14,814	3.2%
Namoi	28,628	29,542	3.2%
Peel	20,526	21,184	3.2%
Lachlan	22,412	23,132	3.2%
Macquarie	16,924	17,468	3.2%
Murray	2,748	2,832	3.1%
Murrumbidgee	4,412	4,558	3.3%
Lowbidgee*	1,720	1,780	3.5%
* refers to supplementary licences holders in the Lowbidgee Note: based on a 60% utilisation rate for General Security customers.			

	2021-22 Bills	2022-23 Bills	% Variance
HIGH SECURITY	nominal \$	nominal \$	
Small consumption customers			
Border	570	588	3.2%
Murray	1,049	1,083	3.2%
Murrumbidgee	223	230	3.1%
Medium consumption customers			
Border	2,850	2,940	3.2%
Murray	5,245	5,415	3.2%
Murrumbidgee	1,115	1,150	3.1%
Large consumption customers			
Border	5,700	5,880	3.2%
Murray	10,490	10,830	3.2%
Murrumbidgee	2,230	2,300	3.1%
GENERAL SECURITY			
Small consumption customers			
Border	229	236	3.4%
Murray	491	507	3.2%
Murrumbidgee	86	89	3.0%
Medium consumption customers			
Border	1,143	1,182	3.4%
Murray	2,455	2,533	3.2%
Murrumbidgee	431	444	3.0%
Large consumption customers			
Border	2,286	2,364	3.4%
Murray	4,910	5,066	3.2%
Murrumbidgee	862	888	3.0%

# TABLE 20 - INDICATIVE BILLS FOR HIGH SECURITY AND GENERAL SECURITY CUSTOMERS - MDBA/BRC CHARGES

TABLE 21 - INDICATIVE BILLS FOR CUSTOMERS IN THE FRWS			
	2021-22 Bills	2022-23 Bills	% Variance
	nominal \$	nominal \$	
Energy Australia	4,597,921	4,779,412	3.9%
Raw water - minor customer	483.5	501.2	3.7%
Filtered water - minor customer	597	617	3.2%

#### Notification of the Proportion of Voluntary Telemetry Uptake

Pursuant to clause 6 of Schedule 5 of the IPART Final Determination on WaterNSW Prices for Bulk Water Services from 1 October 2021 and clause 6 of schedule 6 of the IPART Final Determination on Water Administration Ministerial Corporation Maximum prices for water management services from 1 October 2021, WaterNSW hereby notifies IPART of the Proportion of Voluntary Telemetry Uptake for the 2022-23 financial year in accordance with the following calculation:

$$\frac{A}{B} = C$$

Where:

- A is 695 meters which represents WaterNSW's best estimate of the total number of voluntary telemetric meters that will operate in the 2022-23 financial year; and
- B is 6,712 meters which represents WaterNSW's best estimate of the total number of potential voluntary telemetric meters that will operate in the 2022-23 financial year.
- C is 10.35 per cent which represents the Proportion of Voluntary Telemetry Uptake for the 2022-23 financial year

#### Information on consumption forecasts

# WaterNSW's forecast of demand for, or consumption of, infrastructure services for the 2022-23 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 2022-23 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 2022-23 expected demand is based on:

- the 20-year rolling average of actual water sales (with a two-year lag) from 2001-02 to 2020-21.
- Actual entitlement volumes in the 2020-21 financial year.

The results are shown below.

Valley	Usage (ML)	Entitlement volumes (ML)*
Border	133,342	266,359
Gwydir	209,345	536,885
Namoi	131,739	265,532
Peel	12,430	46,678
Lachlan	169,332	690,435
Macquarie	216,718	675,135
Murray	1,334,268	2,360,497
Murrumbidgee	1,516,647	2,705,470
Lowbidgee	N/A	747,000
Total	3,723,819	8,293,991

#### Table 22: 2022-23 usage and entitlements forecast

\* 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 2022-23 financial year is based on:

- For Energy Australia: the 20-year rolling average of actual water sales (with a two-year lag) from 2001-02 to 2020-21, 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 2001-02 to 2020-21,
- Minimum Annual Quantity (MAQ) levels as defined in WaterNSW's licence to operate the FRWS issued under the Water Act 1912 NSW.

Customer	Usage (ML)	Minimum Annual Quantity (ML)*
Fish River – Energy Australia	1,781	8,184.0
Fish River – Raw Water Minor customers	51	17.4
Fish River – Filtered Water Minor customers	100	46.6
Total	1,933	8,248.0

Table 23: 2022-23 usage and minimum annual quantity forecast FRWS

\* MAQ (Minimum Annual Quantity) for minor customers is 200KLs for each minor customer multiplied by the number of minor customers. For instance, 17.4 MAQ MLs is derived by multiplying 87 raw water customers by 200Kls per customer. 46.60 MAQ is derived by multiplying 233 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:

Updated 20-year average of actual annual water allocations		Reliability Ratio		Conversion factor		High Security Premium			
Vallev	HS Licences		GS Licences						
Border	100%	1	43%	=	2.31	Х	1.25	=	2.89
Gwydir	100%	1	31%	=	3.25	Х	1.40	=	4.55
Namoi	100%	/	39%	=	2.58	Х	1.25	=	3.22
Peel	97%	/	55%	=	1.75	Х	6.54	=	11.47
Lachlan	82%	/	26%	=	3.16	Х	2.50	=	7.89
Macquarie	100%	/	30%	=	3.31	Х	1.88	=	6.23
Murray	94%	/	51%	=	1.84	Х	1.31	=	2.40
Murrumbidgee	97%	/	54%	=	1.79	Х	1.69	=	3.03

### Table 24: Calculation of updated HS premium

# WaterNSW's estimate of demand or consumption for infrastructure services for the current, 2021-22 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 2021-22 financial year is equivalent to the forecast included in IPART's 2022 Determination. The recent severe rainfall and flood events in NSW has created significant uncertainty in 2021-22 demand. At this time, the Determination forecast is appropriate until the weather events are resolved, and more information is obtained.

As entitlements are typically stable, forecast entitlements are based on year-to-date figures.

These estimates are shown below:

Valley	2021-22 Year End Usage (ML)	2021-22 YTD Entitlements (ML)*
Border	139,453	266,359
Gwydir	220,489	536,885
Namoi	138,241	265,532
Peel	12,625	46,678
Lachlan	182,100	690,435
Macquarie	232,545	675,129
Murray	1,379,454	2,350,785
Murrumbidgee	1,531,632	2,705,467
Lowbidgee	N/A	747,000
Total	3,836,539	8,284,270

## Table 25: 2021-22 usage and entitlements forecast

\* 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 is equivalent to the forecast included in IPART's 2022 Determination. The recent severe rainfall and flood events in NSW has created significant uncertainty in 2021-22 demand. At this time, the Determination forecast is appropriate until the weather events are resolved, and more information is obtained.

The estimates are shown below:

Customer	Usage (ML)	Minimum Annual Quantity (ML)
Fish River – Energy Australia	1,850	8,184.0
Fish River – Raw Water Minor customers	51	17.4
Fish River – Filtered Water Minor customers	103	46.6
Total	2,004	8,248.0

#### Table 26: 2021-22 usage and minimum annual quantity forecast FRWS