

Lower Murray Water
2018 Water Price Review

Response to ESC Draft Decision – Rural Submission

May 2018

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1. Introduction

LMW recognises that its customers' and community's overall well-being and livelihood is directly linked to the agricultural, tourism and support industries which form the region's economic backbone. The LMW approach recognises the intrinsic interrelation between the resource and the region's social and economic fabric.

Engagement for the rural pricing submission is part of an overall Customer Engagement Strategy designed to build strong relationships with customers, communities and partners to enable informed decision making and deliver sustainable outcomes. The Strategy incorporated the values, ethics and process for public participation as established by the International Association of Public Participation (IAP2).

Lower Murray Water has reviewed the Essential Services Commission's (ESC) Rural Draft Decisions for Lower Murray Water (LMW), dated 28 March 2018 and is pleased the ESC notes that LMW's approach to rural engagement is greater than required under the Water Charge (Infrastructure) Rules.

This response to the ESC draft decision summarises:

- Recommendations accepted
- Justification of other recommendations not accepted by LMW
- Changes since the draft decision

This report will provide acceptance of ESC recommendations and provide a reconciliation of expenditure not included in the draft decision, and will explain the adjustment of the expenditure. The additional operating expenditure has resulted from including the latest available electricity information, updating both the LMW submission in September 2017 and from ESC's engagement of Deloitte Access Economics who conducted an expenditure review of Lower Murray Water.

This report also reviews other recommendations made by the ESC and discusses those accepted and not accepted by LMW.

LMW's response provides comment on the draft decision on the following areas for rural services:

- Key Outcomes and Service Levels
- Revenue Requirement
- Operating Expenditure
- Capital Expenditure
- Demand Forecasts
- Rural Tariffs
- Weight Average Cost of Capital (WACC)
- Miscellaneous Charges

2. Key Outcomes and Service Standards

2.1 Rural Outcomes and Service Standards

The extensive customer engagement has informed LMW's on the outcomes desired by our customers and key stakeholders.

- Supply customers with water when they need it
- Keep customer costs to a minimum
- Be easy to contact and quick to respond
- Comply with other government obligations

To track LMW's achievements against these key outcomes, service standards targets have been set and a public reporting methodology has been developed

LMW proposed improved service standard targets with the introduction of 2 new performance measures.

The ESC approved each of the rural service standards proposed in LMW's rural pricing submission.

LMW accepts the ESC's decision.

3. Revenue Requirement

3.1 Rural Revenue Requirement

LMW proposed a revenue requirement of \$128.7 million over the 2018-23 regulatory period and note the ESC's proposed slight reduction of \$0.6 million (0.4% of the total revenue requirement) due to minor corrections to estimates in LMW original price submission. Table 1 sets out the ESC proposed revenue requirement.

Table 1

ESC Proposed Revenue Requirement - Rural (\$m 1/1/18)	2018-19	2019-20	2020-21	2021-22	2022-23	Total
Operating expenditure	20.5	19.7	19.4	19.4	19.3	98.3
Return on assets	3.2	3.4	3.5	3.6	3.6	17.3
Regulatory depreciation	2.2	2.4	2.5	2.6	2.7	12.5
Non-prescribed revenue offset of revenue requirement	-	-	-	-	-	-
Adjustments from last period	-	-	-	-	-	-
Taxation allowance	-	-	-	-	-	-
Draft - Total revenue requirement	25.9	25.5	25.5	25.6	25.7	128.1

It is acknowledged that Deloitte have recommended no adjustments to LMW's controllable operating expenditure and that the ESC accept Deloitte's recommendation however on the understanding that LMW would update the electricity costs with the latest information available in response to the draft decision.

In response to the draft decision's controllable costs, LMW does propose amendments to the electricity costs. Further commentary on the additional electricity costs are contained in section 4.1.2.

In addition, a reduction has been made to in response to the Victorian State Government's budget released in April 2018. Further commentary contained in section 4.1.2.

The ESC has made the minor adjustment to our original pricing submission estimates for non-controllable costs by \$0.6 million as set out in table 3.2 (page 15) of the draft decision. LMW accepts the ESC's decision for the non-controllable costs and proposes no changes in this submission to the draft decision.

The LMW updated proposed revenue requirement is set out in Table 2 below.

Table 2

LMW Updated Proposed Revenue Requirement - Rural (\$m 1/1/18)	2018-19	2019-20	2020-21	2021-22	2022-23	Total
Operating expenditure	20.5	19.9	19.7	19.6	19.4	99.1
Return on assets	3.2	3.4	3.5	3.6	3.6	17.3
Regulatory depreciation	2.2	2.4	2.5	2.6	2.7	12.5
Non-prescribed revenue offset of revenue requirement	-	-	-	-	-	-
Adjustments from last period	-	-	-	-	-	-
Taxation allowance	-	-	-	-	-	-
Proposed - Total revenue requirement	25.9	25.7	25.8	25.7	25.8	128.9

3.2 Rural Regulatory Asset Base

A reconciliation of the regulatory asset base submitted in the pricing submission to the regulatory accounting statement identified the requirement of a minor increase of \$0.2 million. LMW accepts the draft decision updated regulatory asset base to 30 June 2017 of \$84.6 million for the rural business which was amended in January 2018 as part of the reconciliation of the pricing submission and the regulatory accounting statement from 2012-13 to 2016-17.

Table 3

Updated Regulatory Asset Base - Rural					
(\$m 1/1/18)	2012-13	2013-14	2014-15	2015-16	2016-17
Opening asset base	68.3	78.2	54.6	45.0	74.1
plus Gross capex	13.5	12.4	45.8	53.3	13.4
less Government contributions	0.0	32.3	51.9	19.2	0.0
less Customer contributions	1.5	0.5	0.3	0.2	0.1
less Proceeds from disposals	0.3	0.6	0.6	2.0	0.1
less Regulatory depreciation	1.9	2.5	2.7	2.8	2.8
Closing asset base	78.2	54.6	45.0	74.1	84.6

LMW acknowledges that the pricing submission included uncertain capital projects which were moved into the following pricing period 2023-28. Should the need to complete any of these uncertain capital projects in this 2018-23 pricing period arise then LMW will need to demonstrate the prudence and efficiency of the cost to include them into the regulatory asset base.

LMW confirms and accepts the forecast regulatory asset base benchmark in the ESC draft decision as set out in Table 4.

Table 4

Rolled Forward Regulatory Asset Base - Rural						
(\$m 1/1/18)	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Opening asset base	84.6	74.0	83.9	86.8	88.7	89.8
plus Gross capex	2.6	13.9	6.0	5.2	4.4	4.9
less Government contributions	6.2	1.1	0.0	0.0	0.0	0.0
less Customer contributions	0.3	0.3	0.3	0.3	0.3	0.3
less Proceeds from disposals	3.9	0.4	0.4	0.4	0.4	0.4
less Regulatory depreciation	2.8	2.2	2.4	2.5	2.6	2.7
Closing asset base	74.0	83.9	86.8	88.7	89.8	91.4

3.3 Weighted Average Cost of Capital (WACC)

LMW has adopted the ESC's estimated weighted average cost of capital (WACC) of 4.0 per cent for the rural business.

LMW note that the ESC will update the WACC to reflect market conditions in the Final Decision.

4. Operating Expenditure

4.1 Rural Operating Expenditure

Lower Murray Water acknowledges that the ESC has proposed no adjustments to the LMW controllable costs but has requested that LMW update our electricity forecast based on the latest available market information.

Lower Murray Water have proposed no changes to the controllable operating expenditure other than an updated electricity cost and payroll tax in our submission to the draft decision.

Refer to section 4.1.2 for further detail on the electricity expenditure and payroll tax LMW have proposed in this submission to the draft decision.

Lower Murray Water also acknowledges that the ESC has proposed adjustments to the non-controllable expenditure. Refer to section 4.1.1 for further detail.

Table 7 sets out LMW's amended proposed operating expenditure for this submission to the draft decision.

Table 7

(\$m 1/1/18)

Operating Expenditure Summary

Proposed operating expenditure

ESC Adjustments (LMW Accept)

Bulk Water Charges

Licence Fees

Environmental Contribution

LMW Adjustments

Increase in energy costs

Decrease in payroll tax

Total Adjustments

Revised BAU opex

	2018-19	2019-20	2020-21	2021-22	2022-23	Total
Proposed operating expenditure	20.6	19.8	19.6	19.5	19.5	98.9
ESC Adjustments (LMW Accept)						
Bulk Water Charges	-0.1	-0.1	-0.1	-0.1	-0.1	-0.5
Licence Fees	0.0	0.0	0.0	0.0	0.013	0.013
Environmental Contribution	0.008	-0.004	-0.015	-0.026	-0.037	-0.074
LMW Adjustments						
Increase in energy costs	0.1	0.4	0.4	0.3	0.2	1.5
Decrease in payroll tax	-0.1	-0.1	-0.1	-0.1	-0.1	-0.5
Total Adjustments	-0.1	0.1	0.1	0.1	-0.1	-0.1
Revised BAU opex	20.5	19.9	19.7	19.6	19.4	99.1

4.1.1 ESC Adjustments

Bulk Water Charges

LMW acknowledges that the ESC's has made adjustments in the draft decision for bulk water charges. In the draft decision the ESC has indicated that the bulk water charge has been verified against the current price determination 2016-2020 for Goulburn-Murray Water.

Goulburn-Murray Water will undergo an annual tariff approval process to set prices for FY 2018-19, LMW request the ESC to confirm the bulk water charge of Goulburn-Murray Water prior to making the final decision.

Licence Fees

The ESC adjusted licence fees by \$0.013 million for the Department of Human Services, Environment Protection Agency, and the ESC. The adjustments were based on recent advice from those agencies.

LMW accepts the ESC's adjustments to the licence fees.

Environmental Contribution

The ESC in their adjustment have used the 2018-19 value of \$513K for the environmental contribution as provided by the Department of Environment, Land, Water and Planning. Whilst LMW have used the correct 2018-19 value, LMW had assumed the value would be indexed by inflation. The amount will be held in constant nominal terms (decline in real terms) during the 2018-23 regulatory period.

LMW accepts the ESC's adjustments to the environmental contribution. LMW however note that the current environmental contribution value ends in FY 2019/20 and a new environmental contribution value will be calculated by the Department of Environment Land Water and Planning. The current environmental value of \$513K increased \$143K from \$370K 2017-18. Should the same increase occur at the end of the new contribution value period, it would mean additional cost of approximately \$429K over the FY's 2020-23. LMW consider this an uncertain event and as such have not included this in the pricing submission.

4.1.2 LMW Adjustments

Electricity Costs

Lower Murray Water is seeking an increase to the operating electricity expenditure in the pricing submission submitted to the ESC.

LMW's rural business is electricity price sensitive as 30% of the controllable costs are for electricity.

The land established for farming in the pumped irrigation districts is much higher than the water source, being the Murray River. The main pumping stations situated on the banks of the Murray are required to lift the water in the order of 30 metres via rising mains before it enters into the district's delivery system. The lifting of this water is where the majority of the electricity costs are incurred where a mix of gravity and sub pumping stations distributes the water throughout the delivery system via channels and pipelines from this point. The main pump stations have the capacity to pump up to 650 ML per day which is utilised during peak irrigation periods.

LMW's pumped irrigation districts are in Victoria's arid North West region which receives 290mm of rainfall annually on average along with highest evapotranspiration rates within the state. The area's major crop is vines with some land planted to citrus and other fruit varieties, which are all permanent plantings. As the regions rainfall does not sustain these crops, they are dependent on the supply of irrigation water almost all year round but especially during their growing season which is the dry and hot months throughout summer.

Energy management has been a focus of LMW within this submission and has committed to pilot projects to drive energy efficiency within the rural business.

Lower Murray Water has been active in the electricity market to procure its energy requirements into the future and has considered varied methods of procurement. LMW has negotiated a new energy contract, via a broker, with ERM Business Energy for our large contestable sites over a two-year period starting on 1 July 2018 and concluding on the 30 June 2020.

The agreement has been entered with other Victorian businesses who share the brokering adviser Procurement Australia.

LMW has entered into a Retail Electricity Agreement (STEP REA) where the energy and environmental rates payable are not fixed for the term of the agreement but purchased on the ERM Business Energy website via STEP Online in a strategic manner supported by SavvyPlus Consulting.

Due to the use of a progressive purchasing strategy, LMW does not know what the actual purchased energy price will be however the energy forecast price has been updated based on advice from SavvyPlus Consulting.

The energy price forecast has used the latest Victorian market information which includes the future market analysis using a Black Scholes model. The Black Scholes technique is a standard modelling technique to measure the value of a call option in financial markets and is extensively used in the electricity market.

The SavvyPlus Consulting electricity price forecast report is available to the ESC on request.

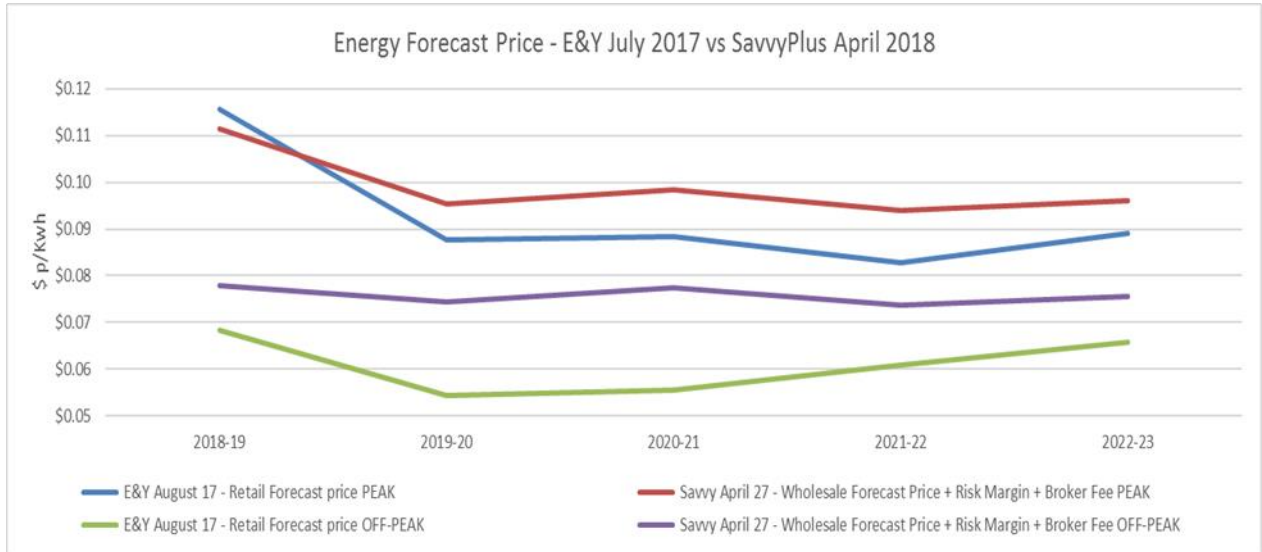
For the small sites, network and other electricity costs, LMW has worked with Ernst & Young, energy price forecasting specialist, to ascertain if the underlying assumptions had changed from our original price forecast report. Ernst & Young had used LMW's actual energy usage and time of use profile data to ensure that the forecast is applicable to LMW's operating environment. It has been concluded that the forecast prices contained in the pricing submission for the small sites, network and other costs are robust and remain relevant for the regulation period FY's 2019-2023.

Lower Murray Water is seeking an increase of \$1.5 million to the \$25.5 million of operating electricity expenditure in the rural pricing submission submitted to the Essential Services Commission. In Lower Murray Water's submission, it was highlighted that electricity expenditure was to be reviewed and any changes incorporated into our response to the ESC's draft decision due to unknown impacts to our electricity pricing path as a result coming out of contract June 2018 and the volatility of the energy markets at the time of our submission.

Comparison of the Ernst & Young August 2017 electricity price forecast to a new issued April 2018 forecast prices via our broker, SavvyPlus Consulting, shows that prices are expected to be higher than LMW initially included in the submitted pricing submission.

Figure 1

Energy Price Comparison of September 2017 submission to LMW response to Draft Decision Submission (not including transmission losses)



Lower Murray Water is seeking an additional electricity expense over the five-year regulatory period of \$1.5 million.

(\$m 1/1/18)

	2018-19	2019-20	2020-21	2021-22	2022-23	Total
LMW proposed electricity adjustment expenditure	0.1	0.4	0.4	0.3	0.2	1.5

On request, LMW will provide the currently negotiated contract for energy throughout FY's 2018-2020 which show the step factors and negotiated brokering fees however not the cost of energy as it is unknown.

In Lower Murray Water's submission, it was highlighted that electricity expenditure was to be reviewed and any changes incorporated into our response to the ESC's draft decision due to uncertainty in the energy market at the time of submitting the pricing submission.

Payroll Tax

The Victorian State Government released its 2018-19 budget in April 2018. The budget contained a payroll tax rate cut from the currently 3.65% to 2.425% for Victorian regional businesses with the commencement date of 1 July 2018.

LMW meet the criteria for the regional business test and have applied the savings in payroll tax to the operating expenditure in this response to the ESC draft decision.

LMW's submitted rural price submission contained payroll tax expenditure of \$1.5M, due to the payroll tax rate cut a decrease of \$0.52M has been applied over the five-year regulatory period.

(\$m 1/1/18)

	2018-19	2019-20	2020-21	2021-22	2022-23	Total
LMW proposed payroll tax adjustment expenditure	-0.1	-0.1	-0.1	-0.1	-0.1	0.5

5. Capital Expenditure

5.1 Rural Capital Expenditure

Lower Murray Water acknowledges the ESC's draft decision to accept the total gross capital expenditure as submitted in the pricing submission 30 September 2017.

No requirement for new capital work projects have emerged since the submission of the pricing submission on 30 September 2017.

LMW has not included any uncertain capital projects in the pricing submission however several uncertain projects were noted in the pricing submission. Should the need to complete any of these uncertain capital projects in this 2018-23 pricing period arise then LMW acknowledge the need to demonstrate the prudence and efficiency of the cost to include them into the regulatory asset base.

As a result, LMW is not proposing to amend the capital expenditure total gross capital expenditure of \$34.3 million from its original pricing submission in 30 September 2017 in this submission to the draft decision.

Lower Murray Water confirm the capital expenditure for the pricing submission as set out in Table 10.

Table 10

(\$m 1/1/18)	2018-19	2019-20	2020-21	2021-22	2022-23	Total
Capital Expenditure Summary						
LMW proposed capital expenditure	13.92	5.95	5.15	4.37	4.94	34.3
ESC Adjustments – draft decision	0.0	0.0	0.0	0.0	0.0	0.0
LMW Adjustments – submission on draft submission	0.0	0.0	0.0	0.0	0.0	0.0
Total Adjustments	0.0	0.0	0.0	0.0	0.0	0.0
Revised capital expenditure	13.92	5.95	5.15	4.37	4.94	34.3

5.1.1 ESC Adjustments

The ESC made no adjustments to LMW's rural capital expenditure proposed.

5.1.2 LMW Adjustments

LMW have not made any additional adjustments to capital expenditure in this submission to the draft decision.

6. Demand Forecasts

6.1 Rural Demand Forecasts

LMW acknowledges that the ESC has approved the demand forecasts submitted in our pricing submission in the draft decision.

LMW is not proposing any adjustments to the pricing submission demand forecast in this submission to the draft decision.

7. Form of Price Control and Rural Tariffs

7.1 Rural Form of Price Control

LMW proposed no change to the form of price control for the regulatory period 2018-23. LMW acknowledges that the ESC accepts LMW's form of price control being a revenue cap via a tariff basket with a maximum tariff adjustment of 10% (not including inflation).

LMW propose no change to the form of price control in this submission to the draft decision.

7.2 Rural Tariff Structure

In its draft decision, the ESC proposes to approve LMW's proposed tariff structure.

LMW accepts the ESC's draft decision and proposed no changes in this submission.

7.3 Rural Tariff Price

LMW acknowledges that the ESC has not approved the maximum individual tariff prices in the draft decision. The ESC requires LMW to submit updated tariff prices that reflect the changes made to the revenue requirement due to ESC and LMW adjustments. LMW acknowledges that the ESC will be updating the WACC and inflation factors in the Final Decision.

LMW has submitted updated tariff prices as requested with this submission to the draft decision in the financial model templates. The draft decision identified LMW's increase for 'Other Drainage' was increasing by more than the rebalancing constraint, this has been addressed in the response to the draft decision.

Table 16 shows the revised cost per ML expected for reference customers in each district. The reference customer is assumed to have 100 ML of storage entitlement and 100 ML pa usage (400 kL in the case of Millewa Urban, 4300 kL rural customers and 1000ML for Diversions customers). The calculation of bills includes "pass through" charges such as water entitlement storage fees, spillable water, salinity fees and DSE water share fees which LMW charge of behalf of other agencies.

Table 16

Cost per ML for Reference Customers

	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	Average Annual Bill Increase
Mildura irrigation and drainage	139.77	138.20	138.74	139.30	139.88	140.48	141.10	0.4%
Merbein irrigation and drainage	113.51	111.94	112.11	112.30	112.50	112.72	112.96	0.2%
Red Cliffs irrigation and drainage	120.11	118.54	119.64	120.76	121.92	123.10	124.32	1.0%
Robinvale irrigation and drainage	215.35	213.79	212.26	210.77	209.33	207.92	206.55	-0.7%
Mildura HPS	194.26	192.69	196.81	201.46	206.70	212.55	219.07	2.6%

	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	Average Annual Bill Increase
Diversions (Irrigation)	13.30	11.74	11.90	12.07	12.25	12.45	12.66	1.5%
Bills Movement per Reference Customer								
Millewa Urban (Irrigation)	20.80	-46.35	-148.35	-141.61	-135.32	-129.45	-123.98	-1.7%
Millewa Rural (Irrigation)	2.63	-2.85	-8.10	-5.70	-3.23	-0.68	1.95	-0.4%
Other stock and domestic (WWD)	6.19	-2.07	-15.43	-17.69	-17.44	-17.20	-16.96	-1.1%

8. Miscellaneous Charges

8.1 Miscellaneous Charges

The ESC has indicated it proposes to approve LMW's rural miscellaneous charges.

LMW acknowledge that the miscellaneous charges are proposed to be approved by the ESC and have not made any additional adjustments in this submission.

9. Rural Price Adjustment Mechanisms

9.1.1 Uncertain and Unforeseen Events

The ESC guidance noted that it proposed for the uncertain and unforeseen events mechanism to continue in its current form.

LMW has complied with this request and confirms it does not propose any change to the uncertain and unforeseen events mechanism in the response to the draft decision.

9.1.2 Goulburn Murray Water Entitlement Storage Fees – Pass Through

LMW levy water entitlement storage fees on and behalf of Goulburn Murray Water (GM-Water) and remit the revenue to GM-Water. The charge is for GM-Water to manage the storage of the water entitlements that LMW customers hold. GM-Water set the charges under the WICR and they are approved by the ESC as an agent for the ACCC. LMW does not add any administration cost to the GM-Water charge that is billed to LMW customers.

LMW characterise these GM-Water regulated charges as a ‘pass through’ tariff for LMW customers. LMW has included the entitlement storage cost of its customers as part of LMW’s building block expenditure which contributes towards the total revenue requirement.

LMW customers own the water storage entitlements and are registered on the Victorian Water Register.

As LMW customers buy or sell water entitlements, the expenditure cost and revenue raised on behalf of GM-Water are adjusted to reflect the volume of water entitlements held.

LMW propose that the ‘pass through’ charges be excluded from the evaluation of the revenue raised to that of the LMW Final Decision revenue requirement in the ESC annual tariff approval process.

9.1.3 Electricity Costs Price Adjustment Mechanism

Lower Murray Water note that price adjustment mechanism for electricity is proposed not to be approved in the draft decision.

LMW’s Board and Management are responsible for maintaining the financial viability of the rural business. They do this by maintaining sound financial governance, investing prudently and efficiently, operating efficiently and managing commercial risk effectively. Electricity costs represent 30% of LMW’s total business controllable operating expenditure and determining how best to respond to the volatility in the electricity market and negotiate through this difficult period is a challenge for LMW.

LMW proposed the “collar” price adjustment mechanism due to the extreme volatility and high energy prices that were being disseminated by numerous sources at the time of our pricing submission. This enabled LMW to propose prices for services at a level where LMW took risk on behalf of the customer in the event that the actual energy prices were higher than forecast. If extreme energy prices did eventuate, LMW would share the financial cost with the customer

however the customer's cost was initially protected to the value of the upper collar price level. Just as important, if actual energy prices dropped dramatically below the forecast price, the mechanism would benefit customers through lower prices.

LMW do agree that the adjustment formula is challenging for customers to understand however it can be noted that many contracts today contain price adjustment mechanisms to hedge risk for either party of a contract. for example; CPI, index prices, interest rates or oversea exchange rates.

LMW considers that the electricity market is less volatile however to protect LMW and its customers in the later years of the pricing submission, some 3-5 years away, LMW are requesting that the ESC re-consider the merit of the proposed price adjustment mechanism for electricity costs.

LMW will consult with its Rural customers via its Strategic Advisory Council and Customer Consultative Committees in May 2018 to discuss the key issues of electricity pricing. The customers' ability to understand the concepts of the proposed price adjustment mechanism and the benefits it has for both customers and LMW will be re-tested. The results of this consultation will be provided to the ESC to inform its deliberations on the final determination.