Attachment 9.15

Revisions to Capital Expenditure

Response to Victorian Gas Substitution Roadmap

September 2022

1 Revisions to Capital Expenditure

We are investing $434 million in our Victoria and Albury networks in the next AA period.

1.1 Overview

This attachment sets out revisions to our Final Plan capital expenditure (capex) proposal for the Victoria and Albury gas distribution networks over the next (2023/24 to 2027/28) Access Arrangement (AA) period in response to the Victorian Government's Gas Substitution Roadmap (GSR). In the next AA period we propose to invest $434 million, which is $97 million (or 18%) lower than our Final Plan.

The GSR provides a number of incentives and policy measures to encourage electrification of some gas loads, particularly in the residential sector. Much of our capex is required to ensure ongoing safety and reliability of our networks, compliance with our obligations, and meeting the customer service expectations of our customers. This will not change. However, the GSR measures will impact the way some of our existing customers use gas in their homes and businesses, as well as the number of new homes and businesses connecting to our gas networks in the future. In particular, the GSR will encourage:

- Greater uptake of reverse cycle air-conditioning and electric heat-pump hot water systems through increased incentives to purchase these appliances and removal of existing incentives for equivalent natural gas appliances; and
- More new homes and sub-divisions going "all-electric" through changes to planning codes and the introduction of the new 7-star building standards the National Constriction Code (refer Attachment 13.4 – Revisions to Demand for further discussion on the impacts of the GSR and introduction of the 7 star building standard.

The focus of our response to the GSR therefore relates to those few areas where revisions to our Final Plan are required. In terms of capex, the key revisions are:

- A significant reduction in growth capex to $166 million ($57 million or 25% lower than our Final Plan), reflecting a reduced forecast of new customers connecting to our network over the next AA period of 52,000 (down from 77,000 in our Final Plan);
- A reduction in augmentation capex to $58 million ($20 million or 26% lower than our Final Plan), and some changes to timing of projects, reflecting the impacts of lower growth and higher disconnections over the next AA period; and
- Minor reductions to a number of areas reflecting the impacts of higher disconnections forecast over the next AA period, including:
  - meter replacement capex ($1 million or 2% lower than our Final Plan); and
  - reactive service replacements capex ($0.2 million or 2% lower than our Final Plan);
- A change in five of the sites prioritised for installation of additional telemetry monitoring; and
- A change to the application of CPI between June 2021 and June 2023 in our capex model in line with discussions with the AER following submission of our Final Plan ($16 million or 3% lower than our Final Plan).

All other aspects of our Final Plan capex remain unchanged.

Table 1.1 and Figure 1.1 provide an overview of our capex forecast for the next AA period by capex driver in our GSR Response compared to our Final Plan.

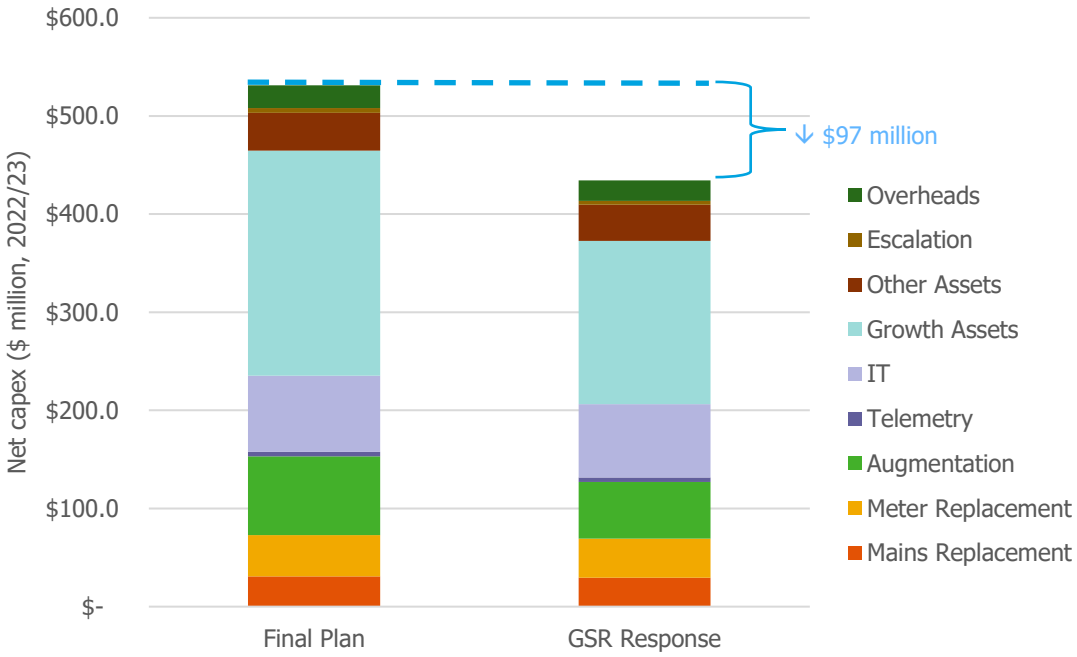
Table 1.1: Comparison of our revisions to capex for the next AA period with the Final Plan ($ million, 2022/23)

	Final Plan	GSR Response**	Key drivers
Mains Replacement	30.9*	29.5	• GSR has no impact on safety and integrity drivers for small HP steel proactive replacement program • Additional existing customer disconnections see minor reductions to reactive service replacements
Growth Assets	229.4	166.1	• Significant reduction in the forecast number of new residential connections
IT	77.5	74.9	• GSR has no impact on the integrity and customer service drivers for our IT program
Meter Replacement	42.0	39.8	• Additional existing customer disconnections see minor reduction to meter replacements
Augmentation	80.4	57.8	• Combination of reduced new residential connections growth and additional existing customer disconnections sees some proposed augmentations no longer required within the next AA period
Telemetry	4.6	4.5	• No change in scope of work, however we have identified five fringe point monitoring sites that were growth driven that would no longer be required. We have replaced these with the next five highest priority sites, which are coverage driven.
Other assets	38.5*	37.0	• GSR has no impact on the safety and integrity drivers of our other capex
Escalation	4.8	4.0	• Lower escalation on account of lower capex
Overheads	23.3	20.7	• Lower overheads on account of lower capex
Total	**531.4**	**434.3**	

*Note we have updated our Final Plan capex to move $1.8 million which was misclassified in Other assets, which should have been in Mains Replacement.

**Our GSR Response capex also incorporates a change to the application of CPI between June 2021 and June 2023 in line with discussions with the AER following submission of our Final Plan. This change reduces the Final Plan capex by around $16 million.

Figure 1.1: Total net capex by driver, Final Plan vs GSR Response



1.2 Customer and stakeholder feedback

1.2.1 Customers

As highlighted in our Final Plans, we found customers' key priorities are affordability, safety and reliability, customer service and preparing for the future. Customers trust our track record of strong safety and reliability performance and 88% of customers were comfortable with our plans to maintain our safety and reliability performance. There was also strong support from customers for our plans to prepare our networks for a renewable future.

Our GSR response maintains all of our safety, integrity and customer service driven programs, as well as our small capex programs to prepare for the potential future for renewable gases to be used in distribution networks. This will ensure we continue to meet the expectations of our customers over the next AA period.

1.2.2 Stakeholders

As highlighted in our Final Plan, stakeholders agreed safety and reliability should be maintained. Many also stressed the need for discretionary capex to be minimised to ensure customers aren't paying any more on their bills than they need to. This was particularly stressed given the relative uncertainty of the future of the gas networks.

The absence of clear policy at the time of our Final Plan meant stakeholders and retailers found it challenging to form a view on whether our Final Plans were capable of acceptance. This resulted in 'a holding point rather than a landing point' in respect of key aspects of our Plans. Challenges included consistency of our proposed accelerated depreciation with growth capex and investments in hydrogen readiness.

Since the release of the GSR, we have engaged with stakeholders on how we interpret the measures in the GSR and what impacts it has on our plans. In the sessions to date we have heard stakeholders expect to see changes like the 7-star new home program take some time to filter through. Stakeholders have

also asked if our approach on hydrogen readiness capex has changed in light of the electrification push in the GSR.

Table 1.2: Summary of relevant customer and stakeholder insights

What we heard	Our response
Final Plan	
• Customers trust our track record of strong safety and reliability performance and 88% of customers were comfortable with our plans to maintain our safety and reliability performance. • Stakeholders have indicated a preference for discretionary capex to be minimised and some struggled to support parts of our capex proposals (e.g. growth capex and augmentation) given the uncertain policy position.	Our GSR response ensures we can maintain current levels of safety and reliability. Specifically, many of our programs which have safety and integrity drivers are unchanged. Our GSR response responds to the policy position set out in the Roadmap and stakeholder feedback received on our capex before the Roadmap was released by reducing growth capex and network augmentation, as well as making minor adjustments to meter replacement and service replacement volumes related to existing customer disconnections.
GSR Engagement	
• Stakeholders questioned whether we were reconsidering hydrogen readiness expenditures, given the strong push towards electrification under the GSR. • Stakeholders commented they expected changes to the 7-star new home would take at least 12 months to filter through.	Our GSR response maintains our small hydrogen adaptation capex which we consider is important in preparing for the potential future for renewable gases to be used in distribution networks and the consideration or renewable gas targets foreshadowed in the GSR. This is discussed at 1.4.7 below Our GSR response demand forecast sees a phased decline in new connection volumes over the next AA period.
GSR Outcome	
We have reduced our proposed capex by around $97 million in response to the GSR. Our GSR response meets the expectations of our customers and stakeholders by: • significantly reducing our connections and augmentation capex in line with the policy positions set out; • maintaining our proposed small capex programs to prepare for the potential future for renewable gases to be used in distribution networks foreshadowed; and • maintaining our capex programs which ensure ongoing safety and reliability of our networks, compliance with our obligations, and meeting the customer service expectations of our customers. We have provided detailed supporting information on our changes to our augmentation program and in the revised capex model in Attachments 9.6A and 9.11A.	
Customers were highly supportive of our capex plans, including efforts to prepare the network for renewable gas.	
We have reflected the GSR policy positions in our capex plans which we consider addresses the difficulty stakeholders were having with accepting some parts of our plans.	

1.3 Our Approach

1.3.1 Background

Our capex forecast for the next AA period is developed using a bottom-up approach, with the cost of undertaking each project and program estimated separately. The proposed projects and programs are

built up having regard to our overarching Business Plans such as our Asset Management Strategy, Asset Management Plan, risk management framework, regulatory obligations, projected network growth and the expectations of our customers.

1.3.2 Remodelling

Most of our investment reflects the continuation of existing programs that we undertake to ensure strong safety and reliability of our network and compliance with our obligations. Much of this remains unchanged.

Our growth capex is the sum of new connections, by type, multiplied by the cost of each connection type. We have remodelled our growth capex using new connection volumes in line with our revised demand forecast. For more information on our revised demand forecast refer to Attachment 13.1A Core Revised Demand Forecast.

Our augmentation capex is developed on a bottom-up basis utilising network pressure modelling for each of our high pressure networks where we are and will continue to experience connection and load growth. We have reviewed each of the projects in our augmentation capex based on the connection and load growth changes in our revised demand forecast. For more information on our revised augmentation capex refer to Attachment 9.11A Addendum to Augmentation Business Cases.

We have reviewed the prioritised fringe point telemetry sites proposed in our Final Plan, and modified the sites we will install in the next AA period to remove five growth driven locations and instead install the next five highest priority coverage driven sites.

Finally, we have applied a top down adjustment to a number of programs to account for the increased forecast of existing customer disconnections as a result of the GSR over the next AA period. These programs include:

- Time expired, reactive and 'hard to read' meter replacement; and
- Reactive service replacement.

1.3.3 Assumptions

Table below outlines the key assumption changes in our GSR Response that have been used in revising our capex forecasts.

Table 1.3: Key assumptions for revising our capex forecasts

	Final Plan	GSR Response
Gross residential new connections (Victoria & Albury)	74,988	52,344
Existing residential customer disconnections (Victoria & Albury)	16,019	90,010

1.4 Our capex in response to the GSR

In the next AA period we propose to invest $434 million, which is $97 million (or 18%) lower than our Final Plan. The reduced investment is primarily driven by lower new connection growth. The increased forecast of existing residential customer disconnections also has a small impact on a number of ongoing programs such as meter replacement and reactive service replacements.

We have also revised our capex forecast for a change to the application of CPI between June 2021 and June 2023 in line with discussions with the AER following submission of our Final Plan. This change reduces the Final Plan capex by around $18.8 million or (4%).

Table 1.4 below provides a summary by capex driver category of the revisions we have made to our plans in response to the GSR. It also shows areas of our plans which do not change.

Table 1.4: Summary of our GSR Response by capex driver

Capex driver category	GSR Response	Key drivers
Mains Replacement	Revised	We have revised down our reactive service replacement program to take account of the forecast increase in disconnection rates for existing customers. We expect existing customer disconnections will reduce the number of services on the network, and therefore the number that are likely to fail and require replacement over the next AA period. See section 1.4.1 below for more information on our GSR Response Mains Replacement capex.
Growth Assets	Revised	We have revised down our growth capex to take account of the lower forecast of new residential connection growth in the next AA period. See section 1.4.2 below for more information on our GSR Response Growth capex.
IT	No Change	We have not made any changes to our IT capex in the next AA period in response to the GSR. See section 1.4.3 below (and our Final Plan) for more information on our IT capex.
Meter Replacement	Revised	We have made a small top-down adjustment to our meter replacement capex to take account of the forecast increase in disconnections rates for existing customers. We expect existing customer disconnections will reduce the number of meters on the network, and therefore the number that will fail or come up for time expired replacement over the next AA period. We have made a similar adjustment for our hard to read digital meter proposal. See section 1.4.4 below for more information on our GSR Response Meter Replacement capex.
Augmentation	Revised	We have revised down our augmentation program to take account of the lower forecast of new residential connection growth and forecast increase in disconnection rates for existing customers where relevant to each of our high pressure networks we were forecasting augmentation would be required. For some networks the augmentation is still expected to be required as planned, for some networks the augmentation is deferred a year or two, and for some networks the augmentation is no longer forecast to be required within the next AA period. See section 1.4.5 below and Attachment 9.11A Addendum to Augmentation Business Cases for more information on our augmentation capex.
Telemetry	No change	We have not made any cost changes to our telemetry capex in the next AA period. We have however updated the prioritised sites we will target for fringe point monitoring. We have removed five growth driven sites identified and replaced them with five coverage driven sites. See section 1.4.6 below for more information on our telemetry capex.

Capex driver category	GSR Response	Key drivers
Other Assets	No Change	We have not made any changes to our other assets capex in the next AA period. This is because the safety and integrity drivers for these programs do not change as a result of the GSR. Our GSR response maintains our small hydrogen adaptation capex which we consider is important in preparing for the potential future for renewable gases to be used in distribution networks and the consideration or renewable gas targets foreshadowed in the GSR. See section 1.4.7 below for more information on our other capex.

1.4.1 Mains Replacement

Our GSR Response includes $30 million of Mains Replacement capex. As noted above, our Mains Replacement program is largely unchanged from our Final Plan. The program is modest and will ensure we can maintain safety and reliability for our customers.

The GSR recognises the importance of maintaining reliability through the transition, therefore, our program is consistent with the priorities of the GSR.

We have made a small adjustment (-$0.7 million or -5%) to our reactive service replacement program. This adjustment revises down the number of service replacements we expect to undertake in the next AA period to take account of the forecast increase in disconnection rates for existing customers. We expect existing customer disconnections will reduce the number of services on the network, and therefore the number that are likely to fail and require replacement over the next AA period.

The reduction to the volume of service replacements in our GSR Response is summarised in Table 1.5 below.

Table 1.5: Revised Mains Replacement forecast costs in the next AA period $'000 real 2022/23 (Victoria and Albury)

$'000 real 2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	Total
Annual percentage of existing customer disconnections due to GSR	0.87%	1.64%	2.41%	2.85%	3.28%	11.05%
Mains Replacement Program						
MRP – Final Plan	6,321	6,446	6,446	5,820	5,820	**30,853**
MRP – Revision	(235)	(258)	(277)	(266)	(277)	**(1,313)**
MRP – GSR Response	**6,086**	**6,188**	**6,169**	**5,554**	**5,543**	**29,540**

Further detail on our mains replacement program can be found in our Distribution Mains and Services Integrity Plan (DMSIP) which is provided at Attachment 9.7 to our Final Plan.

1.4.2 Growth Assets

Our GSR Response includes $166 million of Growth capex. This is a reduction of $63 million (or 28%) compared to the $229 million included in our Final Plan. The driver of this reduction is lower new residential connections as a result of the measures promoting electrification of new homes in the GSR (new planning laws and 7-star efficiency rating). Gross new residential connection numbers have been

revised down to 52,000 in the next AA period (down from 75,000 in the Final Plan). There has been no change to commercial or industrial new connections at this time.

Table 1.6: Revised Growth volumes (Victoria and Albury)

Volumes	2023/24	2024/25	2025/26	2026/27	2027/28	Total
New Residential Connections – Final Plan	16,774	14,990	14,433	14,514	14,535	75,245
New Residential Connections – GSR Response	14,968	13,065	10,772	8,403	5,393	52,344
New Residential Connections – Variance	**(1,806)**	**(1,925)**	**(3,661)**	**(6,111)**	**(9,142)**	**(22,901)**

For more information on our new customer connections forecast and our calculation of growth capex, please see Attachment 13.1A Core GSR Response Demand Forecast, Attachment 9.6A Revised Capex Model – GSR Response and Attachment 9.8 Unit Rates Report (of our Final Plan).

1.4.3 IT

Our GSR Response includes $75 million of IT capex. Our IT capex remains unchanged from our Final Plan, except for a change in the application of CPI as noted above. Our IT program is largely driven by the lifecycle of the IT applications and infrastructure we use to run our business. We have also maintained our digital customer experience program, as while we are forecasting to see some reductions in our customer numbers over the next AA period as a result of the GSR, it is still important that we meet the customer service expectations for the over 700,000 who we will continue to service over the next AA period.

For more information on our IT Capex, please see Attachment 9.9 IT Investment Plan and Attachment 9.14 IT Business Cases to our Final Plan.

1.4.4 Meter Replacement

Our GSR Response includes $40 million of meter replacement capex. The GSR does not change our compliance obligations to maintain accurate metering.

We have made a small adjustment (-$2.1 million or -5.1%) to our time expired, reactive and hard to read meter replacement programs. This adjustment revises down the number of meter replacements we expect to undertake in the next AA period to take account of the forecast increase in disconnection rates for existing customers. We expect existing customer disconnections will reduce the number of meters on the network, and therefore the number that reach time expired replacement, fail and require replacement or are replaced through our hard to read digital metering program over the next AA period.

The reduction to the volume of meter replacements in our GSR Response is summarised in Table 1.7 below.

Table 1.7: Revised Meter Replacement volumes

Volumes	2023/24	2024/25	2025/26	2026/27	2027/28	Total
Annual percentage of existing customer disconnections due to GSR	0.87%	1.64%	2.41%	2.85%	3.28%	11.05%
Domestic Meters (≤25m³ per hour)						
Number of PMCs – Final Plan	22,581	31,504	34,797	31,217	31,529	**151,628**
Number of PMCs – Reduction	(161)	(440)	(741)	(775)	(913)	**(3,031)**
Number of PMCs – GSR Response	**22,420**	**31,064**	**34,056**	**30,442**	**30,616**	**148,597**
Digital Meters						
Remote Meters - HTR – Final Plan	2,500	2,193	-	-	-	**4,693**
Remote Meters - HTR – Reduction	(22)	(36)	-	-	-	**(57)**
Remote Meters - HTR – GSR Response	**2,478**	**2,157**	**-**	**-**	**-**	**4,636**

1.4.5 Augmentation

Our GSR Response includes $58 million of Augmentation capex. This is a reduction of $23 million (or 28%) compared to the $80 million included in our Final Plan.

The key drivers of the reduced augmentation capex are our lower forecast of new residential connection growth and forecast increase in disconnection rates for existing customers. These forecasts have been applied where relevant to each of our high pressure networks that were forecast to require augmentation in the next AA period to determine if under the new conditions, augmentation would still be required. For some networks the augmentation is still expected to be required as planned, for some networks the augmentation is deferred a year or two, and for some networks the augmentation is no longer forecast to be required within the next AA period.

A summary of the changes to our augmentation capex in response to the GSR is provided in Table below.

Table 1.8: Revised Augmentation forecast costs in the next AA period $'000 real 2022/23 (Victoria and Albury)

$'000 real 2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	Total
Network Reinforcement						
Network Reinforcement – Final Plan	29,053	15,852	6,389	6,761	2,279	**60,333**
Network Reinforcement – Revision	(7,883)	1,384	(6,009)	(6,761)	5,693	**(13,577)**
Network Reinforcement – GSR Response	**21,169**	**17,236**	**380**	**-**	**7,971**	**46,757**
Supply Regulator Capacity Upgrades						
Supply Regulator Capacity Upgrades – Final Plan	2,290	6,752	8,850	1,729	417	**20,037**
Supply Regulator Capacity Upgrades – Revision	(310)	(5,474)	(8,387)	(1,266)	6,402	**(9,036)**
Supply Regulator Capacity Upgrades – GSR Response	**1,979**	**1,277**	**463**	**463**	**6,820**	**11,001**

See Attachment 9.11A Addendum to Augmentation Business Cases for more information on our augmentation capex, including the approach we have taken to revise our modelling and the outcome for each augmentation project.

1.4.6 Telemetry

Our GSR Response includes $4 million of Telemetry capex. As noted above, the cost of our telemetry capex remains unchanged from our Final Plan, except for a change in the application of CPI.

We have however updated the prioritised sites we will target for fringe point monitoring. We have removed five growth driven sites identified and replaced them with five coverage driven sites.

The updates in prioritised sites over the next AA period are outlined in Table 1.9 below.

Table 1.9: Revisions to locations for fringe point monitoring

Location	Reason
Unchanged Growth Sites	
Clyde	Despite lower growth, our modelling shows there will still be enough growth to draw down pressures and we have no other visibility in this area
Wodonga	To be placed in Leneva – despite lower growth our modelling shows we still expect to see low pressures in the network within the next AA period
Moama	Site is in NSW – no GSR impact
Sites Removed	
Mornington Peninsula	Lower growth forecasts mean this site is no longer prioritised in the next AA period
Sandhurst or Skye	Lower growth forecasts mean this site is no longer prioritised in the next AA period
Lalor	Lower growth forecasts mean this site is no longer prioritised in the next AA period
Pakenham	Lower growth forecasts mean this site is no longer prioritised in the next AA period
Cranbourne	Lower growth forecasts mean this site is no longer prioritised in the next AA period
Sites Added	
Morwell	Site requires fringe point monitoring for greater coverage and visibility
Sale	Site requires fringe point monitoring for greater coverage and visibility
Traralgon	Site requires fringe point monitoring for greater coverage and visibility
Maffra	Site requires fringe point monitoring for greater coverage and visibility
Somerville	Site requires fringe point monitoring for greater coverage and visibility

As noted in Attachment 9.12 Telemetry Business Cases, we identified more fringe point new installations in the next AA period than we could install maintaining current volumes. We therefore prioritised the locations we would target in the next AA period. We consider it is appropriate to fill the five growth driven installations that would no longer be required, with the next highest priority coverage driven installations.

The GSR suggests some significant changes to way some of our existing customers use gas in their homes and businesses, as well as the number of new homes and businesses connecting to our gas networks in the future. In this changing environment it is even more important for us to have good coverage and visibility of pressures across our networks.

The addition of SCADA and reliable communications at the identified fringe of grid sites is critical to allow us to meet our regulatory obligation in the Victorian Gas Distribution System Code to use all reasonable endeavours to ensure minimum prescribed pressures are maintained at gas delivery points. The real time visibility of the network will also ensure we increase the timeliness of the diagnosis and rectification of failing network assets, thereby minimising the safety and operation impacts.

For more information on our Telemetry capex, see Attachment 9.12 Telemetry Business Cases of our Final Plan.

1.4.7 Other Assets

Our GSR Response includes $37 million of other capex. Our other capex remains unchanged from our Final Plan, except for a change in the application of CPI as noted above. This is because the safety and integrity drivers for these programs do not change as a result of the GSR.

Hydrogen Adaptation

Our GSR Response includes our small hydrogen adaptation program proposed in our Final Plan. We consider the GSR supports this program, given its recognition of the role of renewable gas blending in meeting emission reduction targets.

The Hydrogen Adaptation Plan is required on the basis hydrogen is injected into our network, regardless of the volume. While it is a relatively small program of work, it is important we start in the next AA period to ensure our network is ready, and is not a roadblock, for hydrogen injection, with the GSR foreshadowing additional measures, including a renewable gas blending target, to be introduced in coming years.

For more information on our Hydrogen Adaptation Plan, see Attachments 9.10(1) Network Adaptation Strategy and 9.10(2) Network Adaptation Plan of our Final Plan.

1.4.8 Escalation and overheads

Our GSR Response includes $4 million of real cost escalation and $21 million of capitalised overheads. Both are slightly below the values in our Final Plan on account of lower overall capex in our GSR Response compared to our Final Plan. No other changes have been made to the calculations of real cost escalation and capitalised overheads compared to our Final Plan.

1.5 Summary

Our GSR Response sees a significant reduction in our capex proposal for the next AA period of $97 million (or 18%). This is largely driven by lower growth capex (-$57 million), lower augmentation capex (-$21 million), other top-down reductions (-$3 million) and a change in the application of CPI (-$16 million).

This responds to the GSR policy positions and aligns with stakeholder feedback on the areas of our Final Plan there was some difficulty accepting on the basis of policy uncertainty (e.g. growth and augmentation capex).

It is important to highlight that the GSR does not change our obligations to maintain a safe and reliable network, and meet the customer service expectations of our customers. Therefore, a large portion of our capex program in the next AA period remains unchanged.