

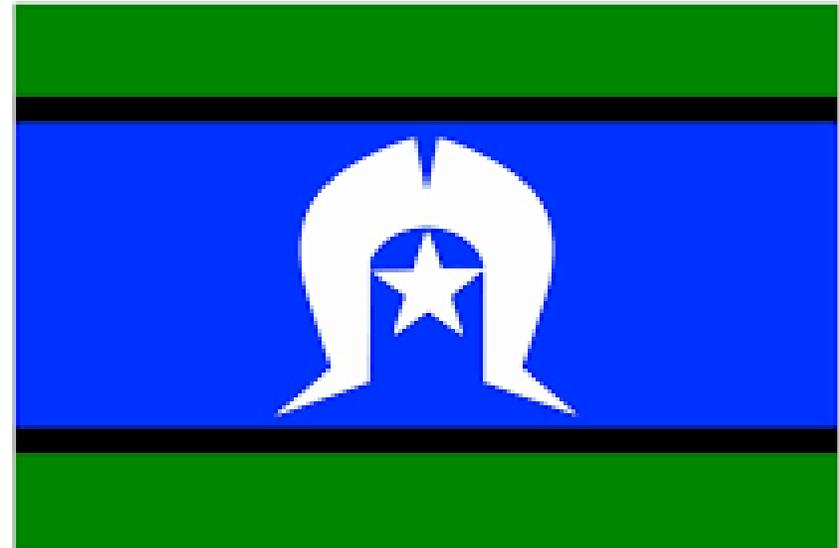
Consumer
Challenge
Panel

NSW Regulatory Proposals 2019-24 CCP10 Initial response

In presentation order: Mark Henley, Eric Groom, Mike Swanston, Louise Benjamin

Sydney 3rd July 2018

We recognise the traditional owners of the land we meet on: The Gadigal people of the Eora Nation.



Introducing the CCP

- Set up under the Better Regulation Reforms
- CCP10 is part of the 'second iteration' of the CCP – for NSW / ACT
- We assist the AER to make better regulatory determinations by providing input on issues of importance to consumers

**Represent a consumer
'real world' perspective –
the 'person in the street'**

the 'person in the street',
real world perspective –

**Focus: consumer outcomes
Price, performance,
service, corporate
responsibility**

responsibility
service, corporate

**Fair outcomes for all
A well-performing utility is
of best value to the
community**

community
of best value to the

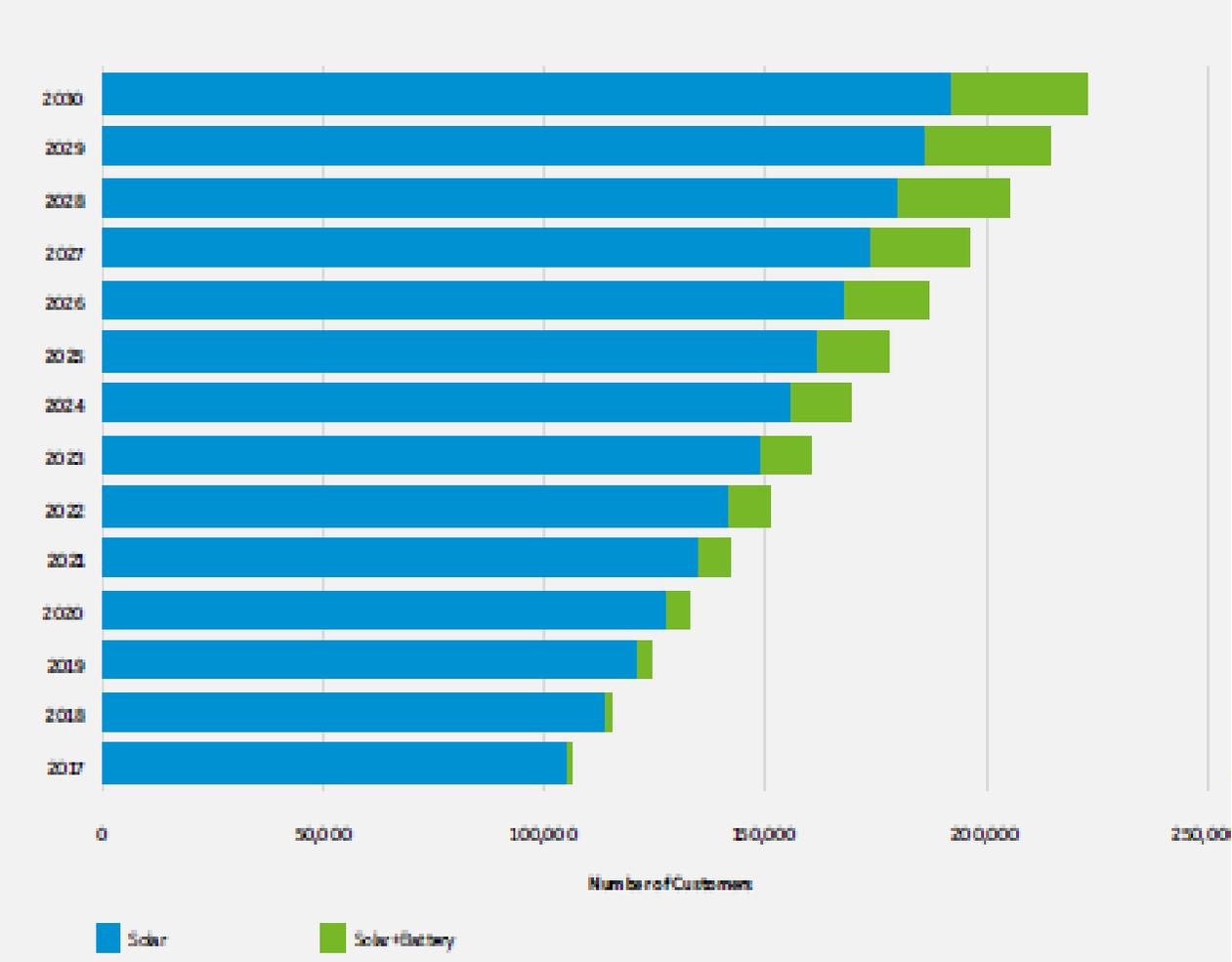
This Presentation - approach

- Present laterally, (thematically)
- Raise issues of most interest /concern on businesses by business basis
- We've developed a "heatmap" to try and summarise, visually, the '000s of pages of submission
- Speaking order Mike, Eric, Louise

Context of these proposals is significant

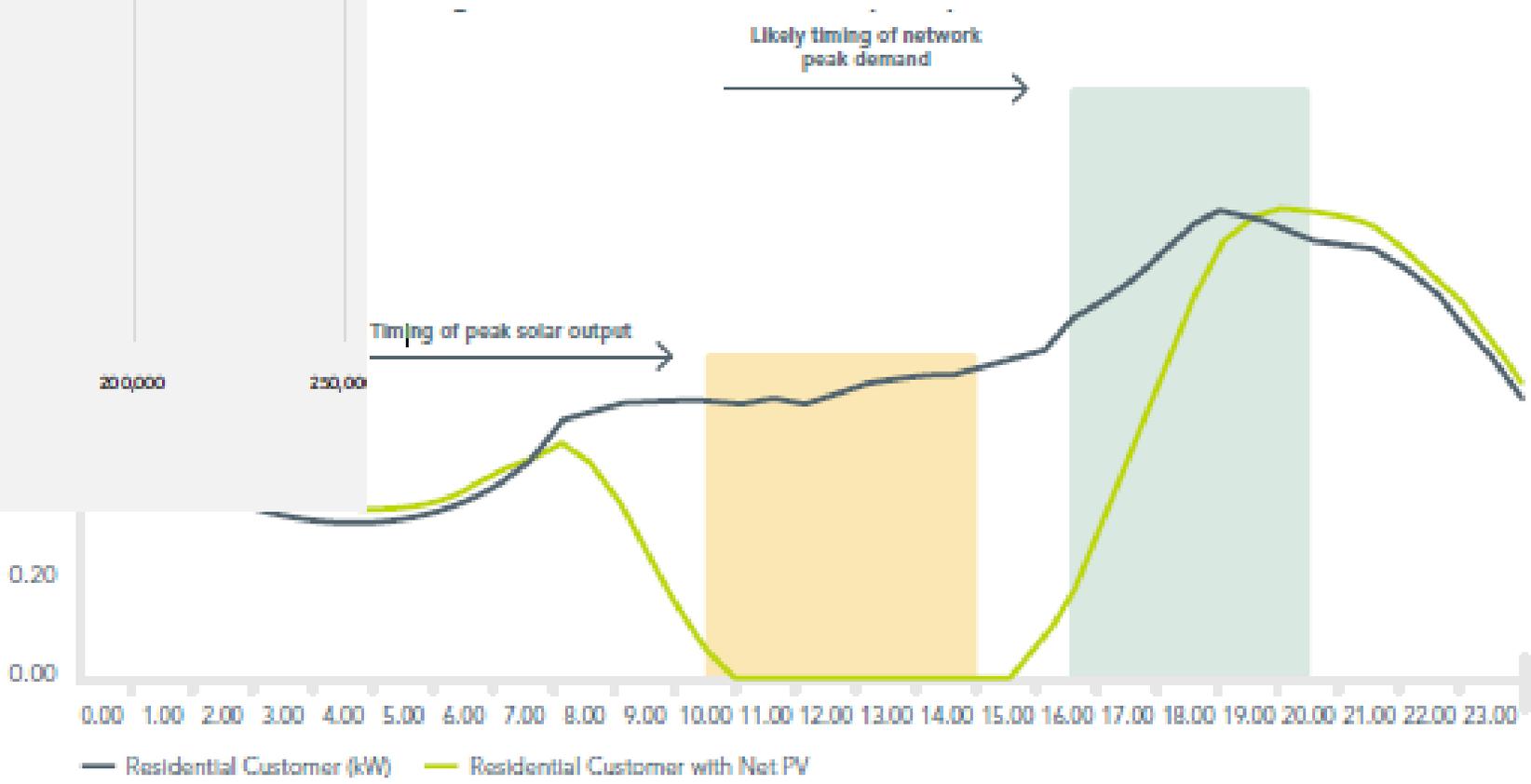
- 2014-19 determination not resolved before 2019-24 lodged
- Rapid changes: particularly in technology: for example solar, batteries, “Smart Network”
- 2012 rule changes and “Better Regulation” now embedded - last time they were ‘brand new’
- New ownership for Ausgrid and Endeavour
- NSW Businesses on transition from inefficient to efficient
- New binding Rate of Return guideline being developed by the AER
- Benchmarking now better established, compared to 2015
- Major developments in Consumer Engagement intent and approaches
- All 3 NSW DBs considered together, start with overview “Heatmap”

Number of customers with small-scale solar+battery systems (2016/17-2029/30)



Change Example: Small Scale Solar and Battery

Ausgrid, growing solar and battery (green) penetration

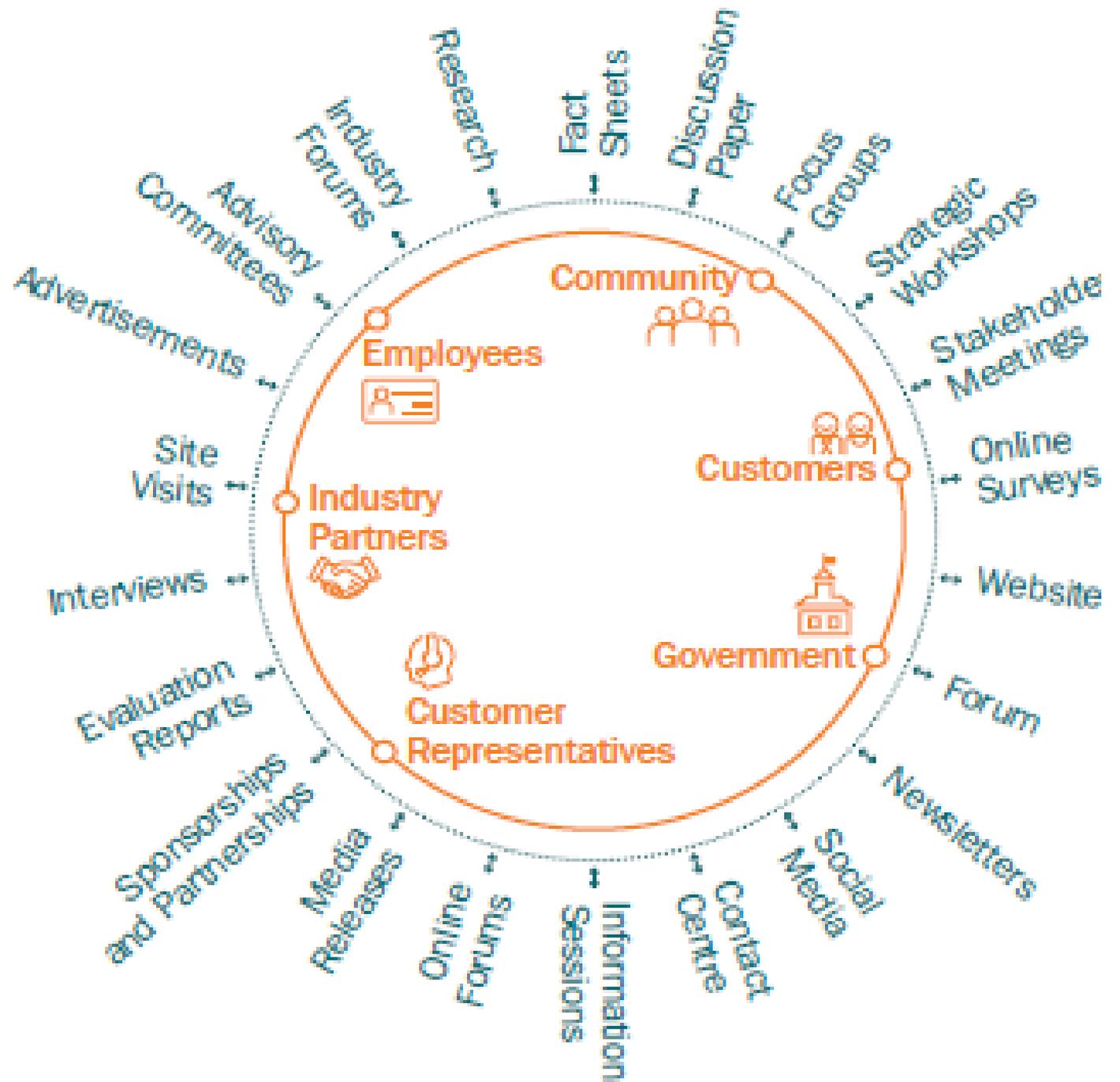


Endeavour, Changing peak

A significant change from last time has been improvements in Consumer Engagement by all 3 NSW DBs— well done.

(but not “there” yet.)

Example, from Essential.



Proposal Summaries - some key numbers

19-24 Summary	Ausgrid	Endeavour	Essential
Total Bid (\$18/19m, unsmoothed)	7,971.9	4,335	5,137
Total Opex (\$m)	2,402	1,504	1,698
Total Capex (\$m)	3,083.7	2,165	2,100
IT Spend (\$m)	215	91.2	164
RAB June 19 (real \$m)	15,716	6,512	8215
RAB June 24 (real, \$m)	16,127	7,294	8,684
% change	+ 2.6%	+12.0%	+5.7%

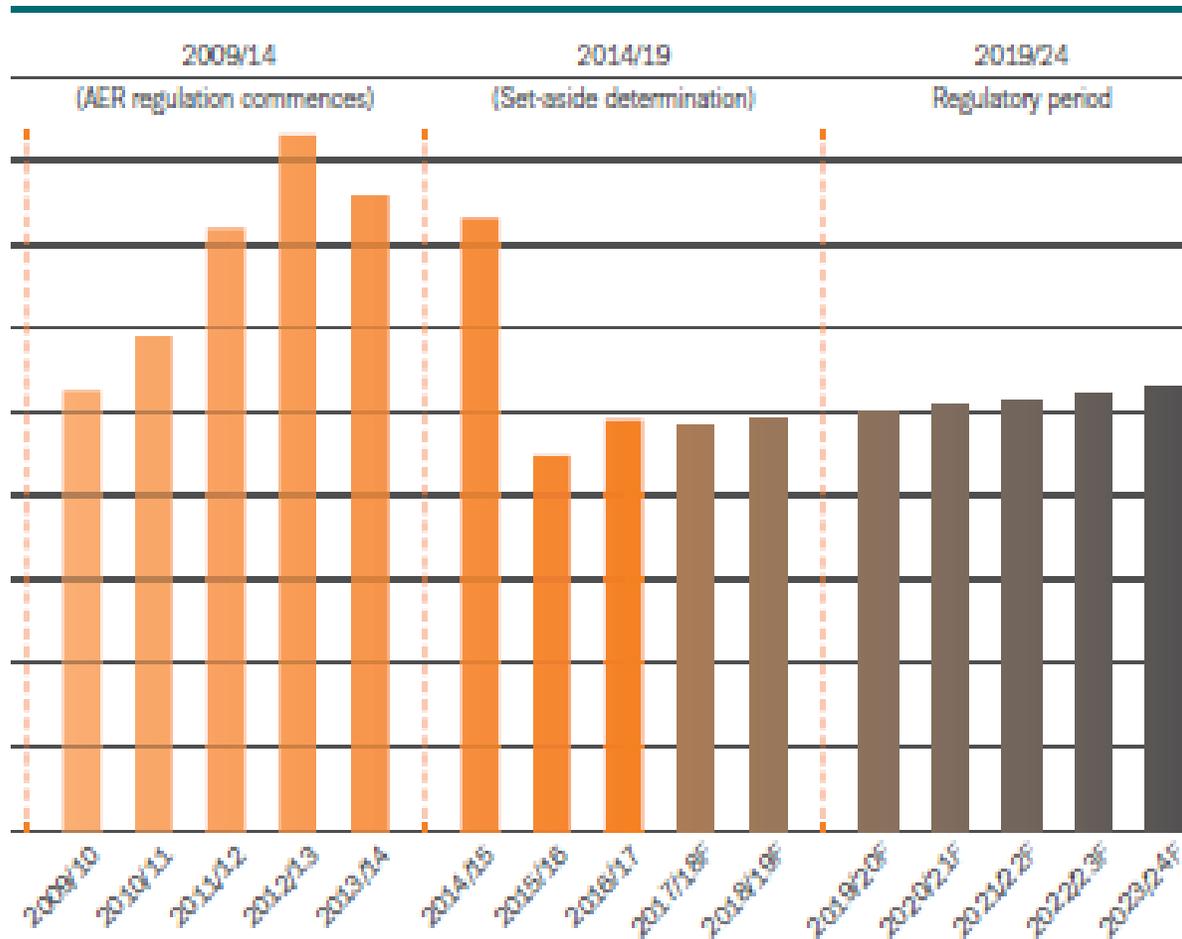
Price Matters: Changes in Real Average Distribution Charges – “X factors”

		2019-20	2020-21	2021-22	2022-23	2023-24
Ausgrid	Without Remittal	-5.7%	0	0	0	0
	With Remittal	N.A.	N.A.	N.A.	N.A.	N.A.
Endeavour*	Without Remittal	+0.8%	+0.8%	+0.8%	+0.8%	+0.8%
	With Remittal	-1.0%	-1.0%	-1.0%	-1.0%	-1.0%
Essential	Without Remittal	+1.59%	+1.59%	+1.59%	+1.59%	+1.59%
	With Remittal	+1.43%	+1.43%	+1.43%	+1.43%	+1.43%

* Endeavour Energy has estimated that if both the effect of the remittal and the EBSS were removed the annual real change in prices would be -1.0%. CCP 10 considers that EBSS was an integral part of the 2014-19 determination, so the effect of the EBSS should not be removed in comparing the proposed price path with prices under the remitted 2014-19 decision.

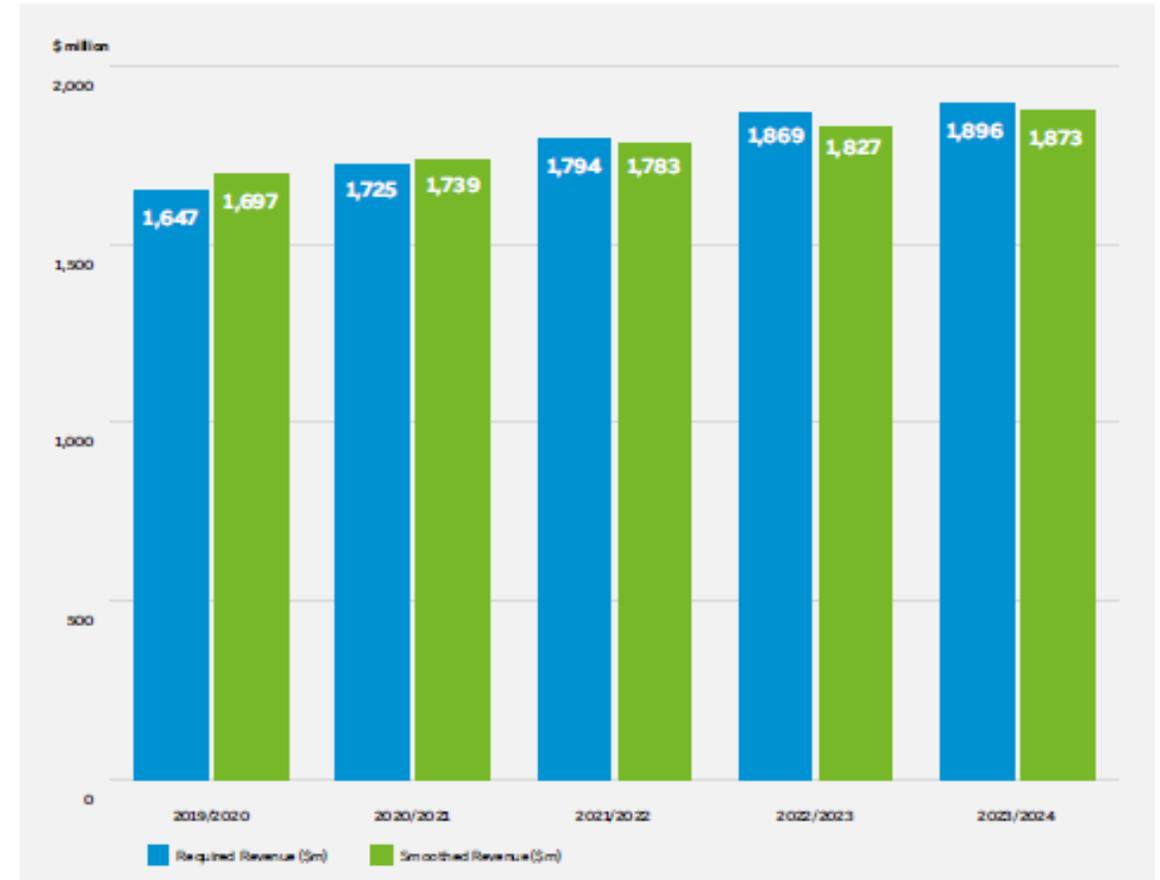
Price Paths - Examples

Essential Energy



Ausgrid

Ausgrid's forecast required revenue versus smoothed revenue 2019/20–2023/24 (\$ million, nominal)



Heatmap chart– Top Line Summary



Level 1 Heat Map				
Category	Ausgrid	Endeavour	Essential	
LITC 1 Responsiveness to Consumer Environment	Yellow	Red	Yellow	Yellow bars
LITC 2 Business Operations Efficiency	Orange	Red	Green	Yellow bars
LITC 3 Efficient planning & Management of Assets	Orange	Yellow	Yellow	Yellow bars
LITC 4 Effective use of information to Support Business Operation & Decision Making	Orange	Yellow	Green	Yellow bars
LITC 5 Efficient approach to corporate commercial issues	Yellow	Red	Green	Yellow bars
LITC 6 Service Delivery - value for money	Green	Yellow	Green	Yellow bars
LITC 7 Network of the Future	Green	Red	Orange	Yellow bars

Level 1 Heat Map				
Category	Ausgrid	Endeavour	Essential	
TSS Tariff Structure Statement	Red	Green	Yellow	Yellow bars
Engagement 1 Quality (What was tried?)	Orange	Yellow	Green	Yellow bars
Engagement 2 Effectiveness (What was heard?)	Orange	Yellow	Green	Yellow bars
Engagement 3. Timeliness. (Including: was extension utilised effectively?)	Orange	Yellow	Yellow	Yellow bars
Engagement 4. Impact 'What was applied?'	Green	Yellow	Green	Yellow bars
Engagement 5. Delivery of the key objectives	Yellow	Red	Green	Yellow bars

Heatmap: Strategic Awareness of Consumer Focus

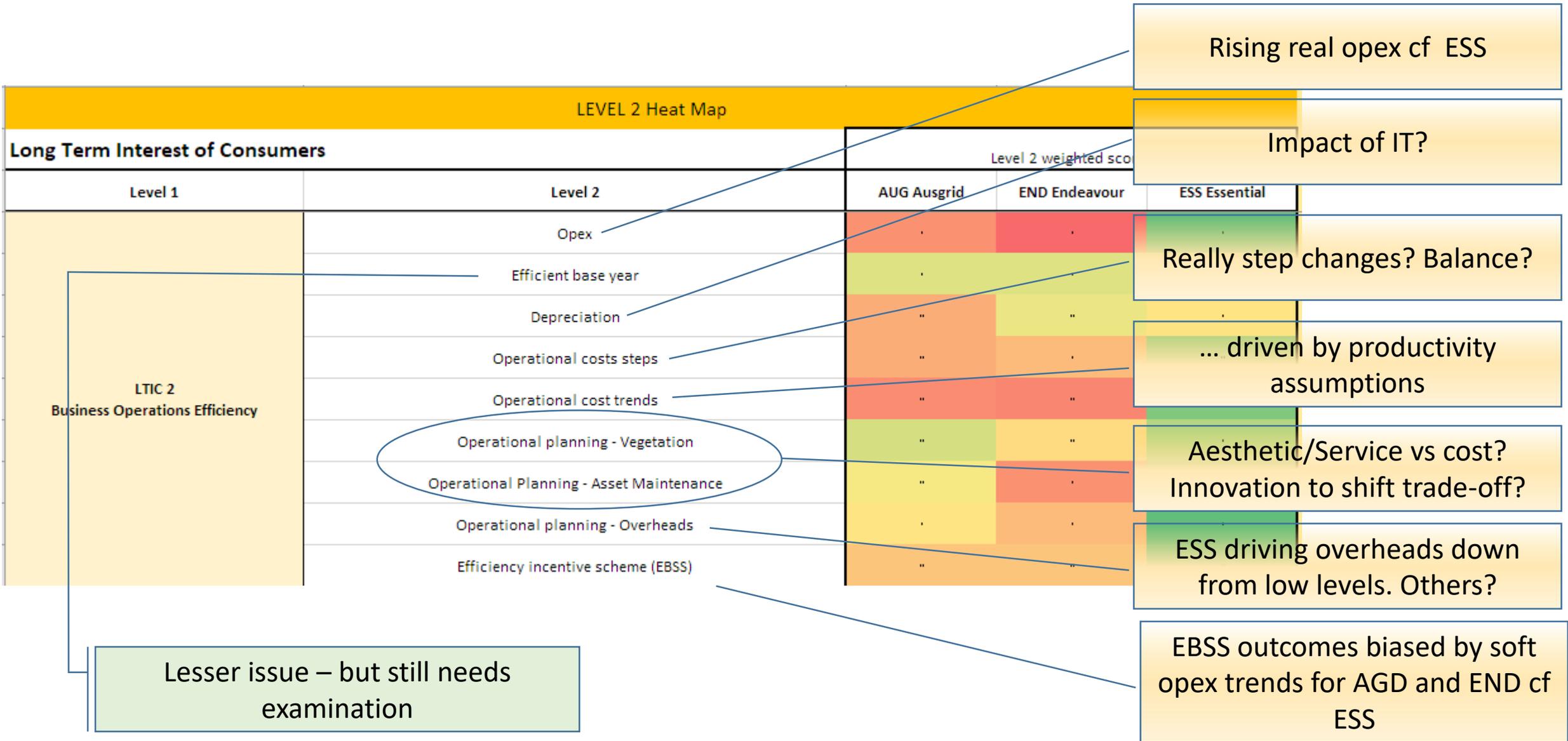
Performance Categories		Performance Attributes		Attribute Weight			
Level 1	Level 2						
LITC 1 Responsiveness to Consumer Environment	Price path	Plan achieves price reduction	<input checked="" type="radio"/>	3.0	Green	Red	Red
		Affordability is considered	<input type="radio"/>	2.0	Light Green	Orange	Green
		Value for money underpins planning (would you do this with your money ?)	<input type="radio"/>	1.0	Orange	Red	Green
	Regulatory Asset Base	Is the RAB decreasing over the reset period ?	<input checked="" type="radio"/>	3.0	Green	Orange	Red
		Was the concern of RAB growth raised and discussed in the public forums and in plans ?	<input type="radio"/>	1.0	Orange	Red	Light Green
		Is there a measured approach to delivering the plan ? (when ?)	<input type="radio"/>	1.0	Orange	Orange	Green
		Minimise network investment through innovation and use of new technology (how)	<input type="radio"/>	2.0	Light Green	Orange	Green
	Market	Sensitive to the needs of the broader community of stakeholders	<input type="radio"/>	1.0	Orange	Yellow	Green
		Application of 'causer pays' in planning and pricing	<input type="radio"/>	2.0	Yellow	Orange	Yellow
	Business Strategy	Sustainability is effectively integrated (environmental)	<input type="radio"/>	1.0	Red	Yellow	Yellow
		Business planning reflects consumer needs (customer focussed)	<input type="radio"/>	2.0	Yellow	Orange	Green
		Risk Management reflects changing consumer needs (adaptive)	<input type="radio"/>	2.0	Orange	Orange	Green
		Business approach with suppliers to draw out synergies by sharing cost & risk	<input type="radio"/>	1.0	Yellow	Yellow	Yellow
		Business Continuity Plans includes consumer needs (customer risks considered)	<input type="radio"/>	1.0	Yellow	Yellow	Orange

Opex; Level 1's from Heatmap:

Eric

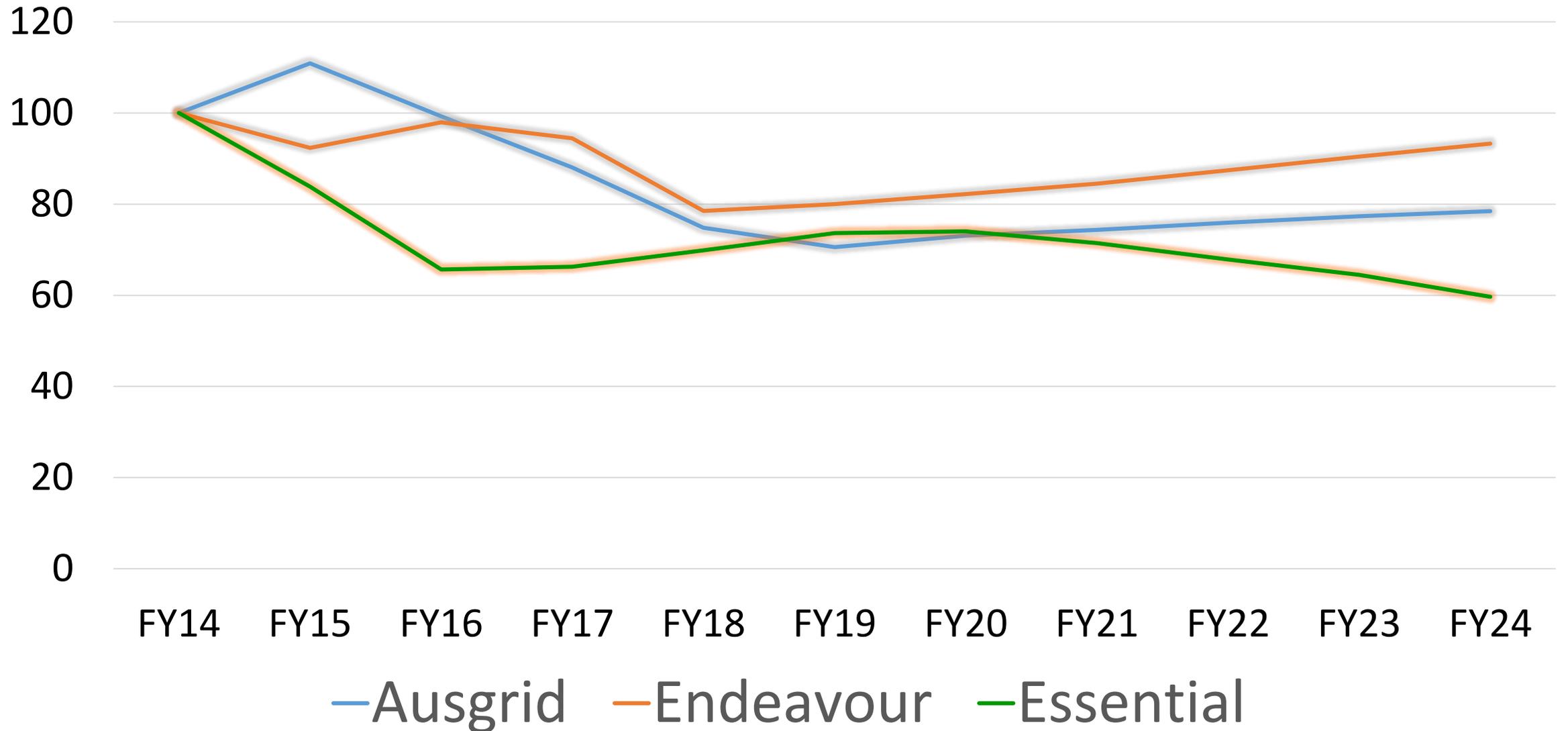
- Business Operations
- Efficiency
- Commercial Issues

LTIC 2 - Business operations efficiency - Overview



Real OPEX

Index = 100 FY 2015

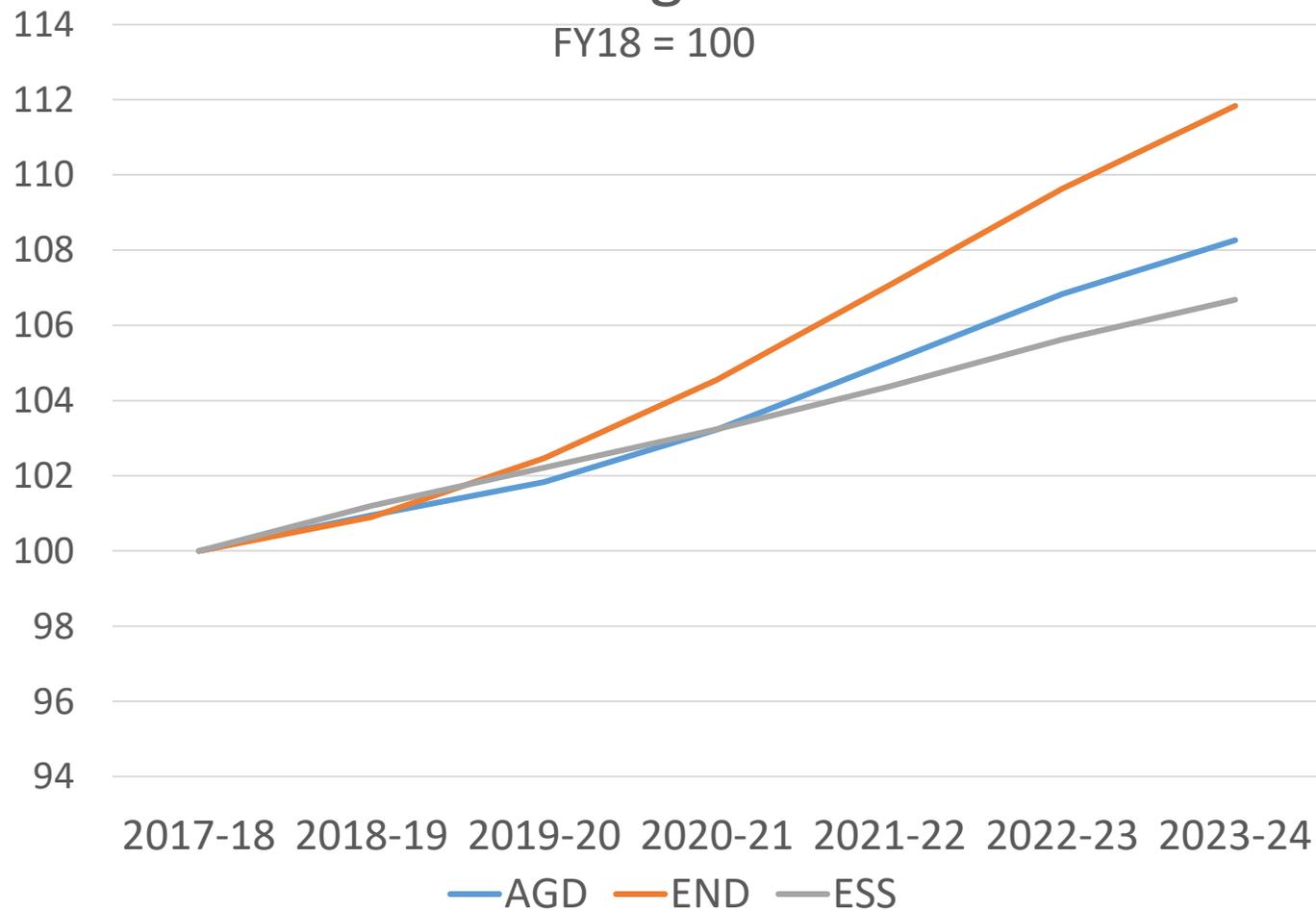


Wages Assumptions

Assumed Increases in Wages and Salaries (%)						
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Ausgrid	0.95%	0.88%	1.37%	1.74%	1.73%	1.33%
Endeavour	0.90%	1.55%	2.04%	2.41%	2.40%	2.00%
Essential	1.20%	1.00%	1.00%	1.10%	1.20%	1.00%

Real Wage Index

FY18 = 100



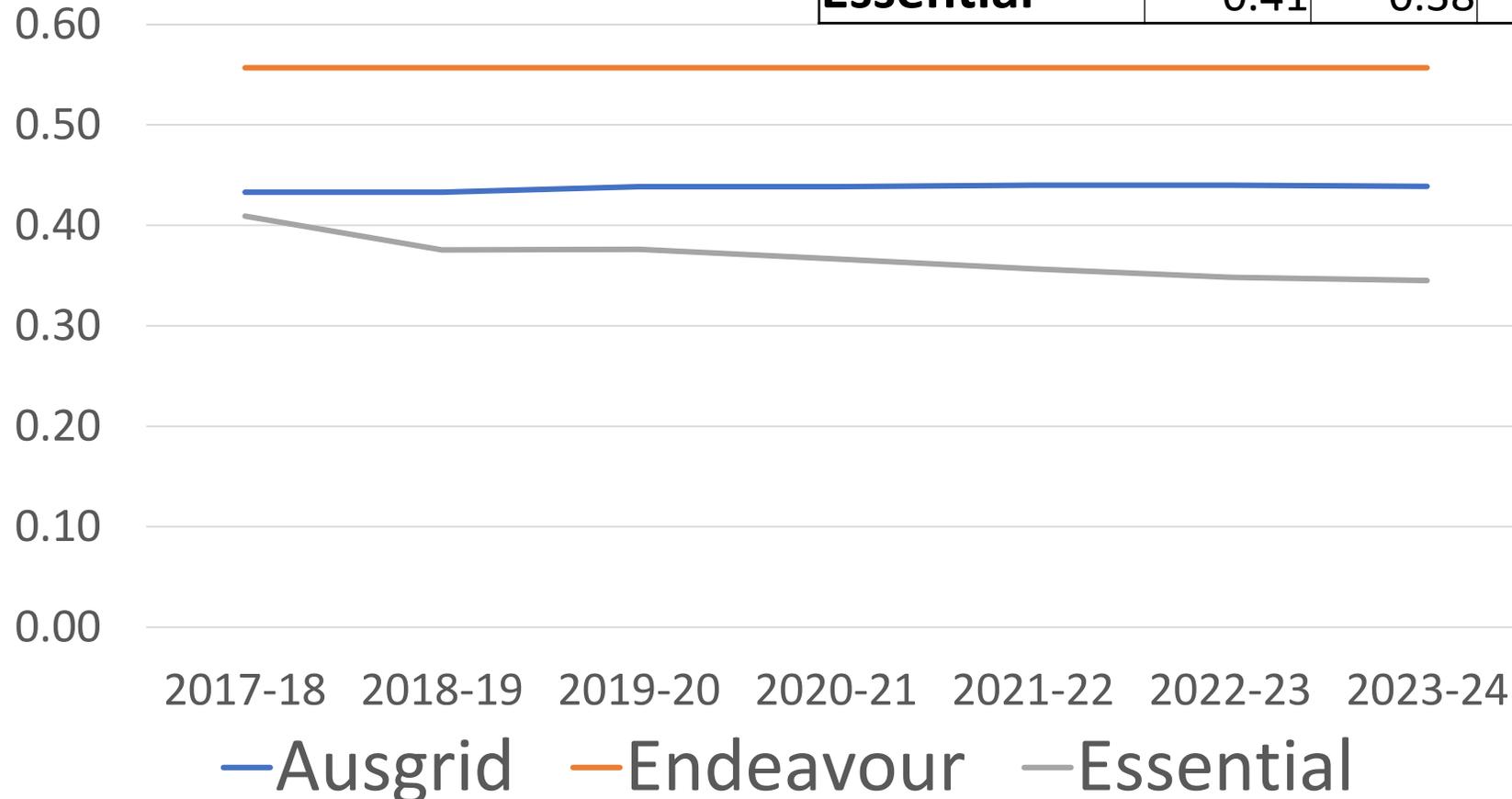
Notes:

1. Endeavour is projecting a significantly higher rate of growth in real wages
2. Neither Endeavour nor Ausgrid offset rising wages with assumed productivity improvements
- 3. *But Essential does.***

Overheads

Opex Overhead Ratios

	Overhead ratio						
	(proportion of Opex for Standard Control Services)						
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Ausgrid	0.43	0.43	0.44	0.44	0.44	0.44	0.44
Endeavour	0.56	0.56	0.56	0.56	0.56	0.56	0.56
Essential	0.41	0.38	0.38	0.37	0.36	0.35	0.35



Notes:

- Overheads are a very large proportion of Opex
- Is it reasonable to expect a reduction in overheads given:
 - Expectation of ongoing efficiency improvements
 - Objectives of improving affordability while maintain service standards

EBSS

- Assessment of EBSS linked to assessment of proposed cost path
- Under incentive regulation
 - The regulator sets a ‘tough but fair’ price path
 - Utility has incentive to improve efficiency
 - Some do better, some worse than target
 - Expected value of EBSS should be zero
 - ***If not, positive expected value should be built into cash flows***
- EBSS was intended to equalise incentives over time – not create a bonus
- “Soft” assumptions on productivity mean that the expected value is positive and inconsistent with LTIC

LTIC 5 - Commercial issues

Acceptance of 2013 approach and parameters? Acceptance of 2018 RORG?

LEVEL 2 Heat Map				
Long Term Interest of Consumers		Level 2 weighted scores		
Level 1	Level 2	AUG Ausgrid	END Endeavour	ESS Essential
LTIC 5 Efficient approach to corporate commercial issues	Capitalisation of overheads	.	.	.
	Weighted Average Cost of Capital (WACC)	"	"	"
	Value from previous investments	.	"	.
	Capital Contributions policy	"	"	.

Consistency with principles of equity and efficiency (causer pays)? Acceptance/support?

Clear demonstration of benefits from past investment? Clearly reflected in projected costs?

WACC

- ESS has clearly:
 - Used current approach **and** parameter values
 - Accepted application of 2018 guideline
- Endeavour has clearly:
 - Used current approach **and** parameter values
 - Argued against application of 2018 guideline
- Ausgrid's position is less clear
 - Used current approach **and** parameter values but reserve right to challenge
 - Unclear re 2018 guideline

Capital Contributions

- Ausgrid and Essential are not proposing changes
 - Current policy broadly accepted
- Endeavour proposes change – shifts costs from new customers to existing customers
 - Is it an improvement? Preliminary view: No.
 - Inconsistent with causer pays principle? We consider causer pays:
 - Is consistent with efficiency and efficient development
 - Is equitable and supported by community
 - Idea that new customers contribute according to costs caused seems well accepted
 - Highly uncertain who will benefit from change. Homebuyers? Developers? Sellers of undeveloped land?
 - Not clear change is accepted by broader customer base (not just developers)

Capex; Level 1's from Heatmap: Mike

- LTIC 3 – Efficient Planning and Management of Assets
- LTIC 4 – Effective use of Information to support Business Planning
- LTIC 6 – Service Delivery
- LTIC 7 – Network of the Future

LEVEL 2 Heat Map				
Long Term Interest of Consumers		Level 2 weighted scores		
Level 1	Level 2	AUG Ausgrid	END Endeavour	ESS Essential
LTIC 3 Efficient planning & Management of Assets	Replacement capital	•	•	•
	Augmentation Capital	•	•	•
	Non-system capital (other than ICT)	•	•	•
	Capitalised Overheads	•	•	•
	Incentive scheme (CESS)	•	•	•
	Contingent projects	•	•	•
	Bushfire and environmental considerations	•	•	•
	Asset Productivity & utilisation	•	•	•

Contemporary risk management approach

Resource management (unit costs)

Planning & Strategy (programming and timing)

Operations management (efficient use of resources)

Non-network approach

Replacement Capital:

- Ausgrid: oil cables, very high project & unit costs
- Endeavour: Increased cost overall, transformers
- Endeavour: Underspent this period, more next
- Essential: Enhanced approach to risk, needs evidence

Overall:

- Still very high, almost unsustainable. Sensitivity N/A
- Operate to fail & Non-asset solutions rare
- Outage data and impact history is not detailed

LEVEL 2 Heat Map				
Long Term Interest of Consumers		Level 2 weighted scores		
Level 1	Level 2	AUG Ausgrid	END Endeavour	ESS Essential
LTIC 3 Efficient planning & Management of Assets	Replacement capital	..	..	..
	Augmentation Capital	..	.	..
	Non-system capital (other than ICT)	..	..	..
	Capitalised Overheads	..	.	.
	Incentive scheme (CESS)	.	.	..
	Contingent projects	.	..	.
	Bushfire and environmental considerations	.	.	.
	Asset Productivity & utilisation	.	.	.

Augmentation:

- Steady national trend down as the impact of relaxing network security standards take effect
- We recognise the impact of ‘spot load growth’ as the new primary driver of investment
- Expect strong tie-in with demand management.
- Impact of new tariffs is very ‘soft’
- END does not show dividends from 2009 – 2014 investment

LEVEL 2 Heat Map				
Long Term Interest of Consumers		Level 2 weighted scores		
Level 1	Level 2	AUG Ausgrid	END Endeavour	ESS Essential
LTIC 3 Efficient planning & Management of Assets	Replacement capital	..	..	..
	Augmentation Capital	..	.	..
	Non-system capital (other than ICT)	..	..	..
	Capitalised Overheads	..	.	.
	Incentive scheme (CESS)	.	.	..
	Contingent projects	.	..	.
	Bushfire and environmental considerations	.	.	.
	Asset Productivity & utilisation	.	.	.

- Contemporary approach
- Aggressive cost reduction strategies
- Value from past investments

Non-system Capital :
 Ausgrid: Fleet, property, plant all increasing (+ (90M)
 unit allocation data not evident

LEVEL 2 Heat Map

Long Term Interest of Consumers		Level 2 weighted scores		
Level 1	Level 2	AUG Ausgrid	END Endeavour	ESS Essential
LTIC 3 Efficient planning & Management of Assets	Replacement capital	..	..	..
	Augmentation Capital	..	.	..
	Non-system capital (other than ICT)	..	..	..
	Capitalised Overheads	..	.	.
	Incentive scheme (CESS)	.	.	..
	Contingent projects	.	..	.
	Bushfire and environmental considerations	.	.	.
	Asset Productivity & utilisation	.	.	.

Other:

- CESS – Essential has fewer projects that appear to be ‘carried over’
- Contingent projects used by Endeavour
- More detail needs on fleet plans
- Bushfire – important, but less profile in Ausgrid’s proposal
- Asset utilisation – mentioned by Endeavour as a goal
- Capitalised overheads appear higher than peers in AUG & ESS – require further investigation

LEVEL 2 Heat Map				
Long Term Interest of Consumers		Level 2 weighted scores		
Level 1	Level 2	AUG Ausgrid	END Endeavour	ESS Essential
LTIC 4 Effective use of information to Support Business Operation & Decision Making	Information Technology	.	.	.
	Cybersecurity	"	"	"
	Digital Transformation for efficiency	"	"	"

Risk management for costs , delivery and outcomes (on time on budget)

Well articulated business plan with benefits arriving early and articulated

IT benefits evident in the various line items of the overall business plan (e.g. Opex)

Essential –

- strong linkage between IT spend, improved business performance and lower business costs
- Requires strong KPIs to avoid future costs or degraded performance

LEVEL 2 Heat Map

Long Term Interest of Consumers		Level 2 weighted scores		
Level 1	Level 2	AUG Ausgrid	END Endeavour	ESS Essential
LTIC 6 Service Delivery - value for money	Better meeting consumer needs	Green	Orange	Green
	Network Performance Planning	Yellow	Yellow	Green
	Performance Incentive scheme (STPIS)	Green	Green	Green

Better meeting consumer needs:

- Ausgrid: Network performance falling, not identified by customers as a major issue as yet
- Endeavour: Stable performance & risk, disregarding capital contribution approach
- Essential: Stable performance, need to watch the impact of changes to opex and vegetation

Business plans are linked to customer needs and validated preferences

Use of technology to provide better, more flexible service

Supporting and contributing to industry best practice (effective, efficient)

Changes are seen as value for money by customers (use statistics, feedback)

Long Term Interest of Consumers		Level 2 weighted scores		
Level 1	Level 2	AUG Ausgrid	END Endeavour	ESS Essential
LTIC 7 Network of the Future	Network of the Future planning	Yellow	Orange	Orange
	Narrative	Green	Orange	Green
	Demand Management Incentive System	Yellow	Red	Red

- DMIS principles embraced on business investments - inherent in asset planning
- Effective long term non-network strategy
- Non-network market entities effectively engaged
- Proposal includes effective capex - opex trade-offs

Demand Management Incentive Schemes:

- Essential & Endeavour: some discussion about DM and innovation, not inherent in some planning documents

TSS and Consumer Engagement; *Level 1's from Heatmap:* Louise

- TSS
- What was Tried?
- What was Heard?
- Timeliness – value of extensions

Tariff Structures Statement (TSS)

TARIFF STRUCTURE STATEMENT	Level 2	AUG	END	ESS
<p style="text-align: center;">TSS Tariff Structure Statement</p>	Effective analysis of customer needs (planning)			
	TSS proposal content (expressing)			
	Implementation (delivery)			
	Innovative and effective engagement (bringing customers along)			

TSS – cost reflective tariffs are in the LTIC

- Each network has a unique problem to solve:
 - Critical peak problem: aim of cost reflective tariffs is to defer investment by incentivising consumers to lower their consumption at the network peak
 - Energy flow problem: aim is to incentivise customers to self consume or not export energy at time of excess energy reverse flow (DER)
- to date reform has been slow and fragmented
- no single consumer perspective
- *Pricing Directions* is to provide cohesive consumer perspective to assist networks, retailers and AER to accelerate reform
- We look forward to working with retailers on the design of network tariffs and pass-through prices to customers
- CCP advocates a faster transition to demand tariffs with a mid period review and greater integration with DM

TSS – network proposals

- **ESS** has the slowest progress to cost reflective tariffs:
 - increased attractiveness of new demand charge with ToU but only for new customers
 - more fixed costs being recovered from existing flat tariffs
- **End** has responded the most to feedback:
 - introduction of demand charge based on average of 5 days default but optional
- **Ausgrid** indicated preference for energy tariffs and increased fixed charges:
 - placeholder in TSS for a demand tariff with no customers assigned to it
 - formation of Tariff Working group pending further research is a positive step

Engagement 1 - 3

ENGAGEMENT	Level 2	AUG	END	ESS
Engagement 1 Quality (What was tried?)	Discovery phase (Scoping)	Orange	Yellow	Green
	Methodology Effectiveness (information)	Orange	Yellow	Light Green
	Engagement activities (effectiveness)	Yellow	Yellow	Light Green
Engagement 2 Effectiveness (What was heard?)	All contentious issues identified (completeness)	Orange	Yellow	Light Green
	Long term Strategy for engagement (embedding)	Red	Orange	Light Green
	Inclusiveness	Light Green	Yellow	Light Green
	Government & Legislation	Light Green	Orange	Light Green
Engagement 3. Timeliness. (Including: was extension utilised effectively?)	Prepare and set up early	Orange	Orange	Yellow
	Draft plan	Orange	Red	Yellow
	Extension	Orange	Light Green	Yellow
Engagement 4. Impact 'What was applied?'	Engaging the wider business to issues	Light Green	Light Green	Green
	Responsiveness to what was heard	Light Green	Yellow	Light Green
Engagement 5. Delivery of the key objectives	Best possible proposal, first time	Yellow	Orange	Green

What was tried?

- **ESS** benefited from starting early:
 - engagement embedded as part of business planning
 - tried a variety of methods
 - open to feedback and responsive
- **End** started from a position lacking credibility in the Discussion paper:
 - provided a lot of information but narrative lacking
 - not as open to change in the difficult conversations
- **Ausgrid** started behind from withdrawal of discussion paper and late and struggled to catch up:
 - consumers not given enough time to consider material
 - hard to have full deep dive program as engagement calendar already full

What was heard?

- **ESS** heard from a broad range of consumers as part of its integrated engagement framework:
 - articulated trends and offered productivity dividends
 - demonstrated how affordability has informed its business KPIs
- **End** appeared to persuade more than listen:
 - narrative for increased spend not justified
 - influenced by developers and reliance on growth to justify increased spending not clear
 - plans for ongoing engagement unclear
- **Ausgrid** undid its good early engagement work by withdrawing the proposal and through staff turnover:
 - consumer engagement not integrated into business planning and not appearing to influence proposal
 - proposal consistent with historical trends but consumers seeking greater share of efficiencies

Extensions: value for time?

- Extensions unique and will never happen again
- Huge investment for consumer advocates and AER staff
- Long term value will be effective pre lodgement engagement and triage approach
- **Ess:** remittal was very valuable
 - engagement on 19-24 was presentation rather than responding to feedback
 - main issue is RAB growth and sustainability of forecast expenditure
- **End:** heard issues but stopped responding and closed off difficult issues until post lodgement
 - consumers expecting proposal capable of acceptance but Endeavour expecting draft capable of acceptance – this was not the deal
 - remittal resolution positive
- **Ausgrid:** started so far behind and with all new staff that it was too hard to catch up
 - consumers still lack confidence in genuine commitment to the LTIC
 - lack of resolution of 14-19 disappointing

Engagement 4 - What was Applied?

ENGAGEMENT	Level 2	AUG	END	ESS
Engagement 1 Quality (What was tried?)	Discovery phase (Scoping)	Orange	Yellow	Green
	Methodology Effectiveness (information)	Orange	Light Green	Light Green
	Engagement activities (effectiveness)	Yellow	Yellow	Light Green
Engagement 2 Effectiveness (What was heard?)	All contentious issues identified (completeness)	Orange	Light Green	Green
	Long term Strategy for engagement (embedding)	Red	Orange	Light Green
	Inclusiveness	Light Green	Yellow	Light Green
	Government & Legislation	Light Green	Orange	Light Green
Engagement 3. Timeliness. (Including: was extension utilised effectively?)	Prepare and set up early	Orange	Orange	Yellow
	Draft plan	Orange	Red	Yellow
	Extension	Orange	Light Green	Yellow
Engagement 4. Impact 'What was applied?'	Engaging the wider business to issues	Light Green	Light Green	Green
	Responsiveness to what was heard	Light Green	Yellow	Light Green
Engagement 5. Delivery of the key objectives	Best possible proposal, first time	Yellow	Orange	Green

Consumer Engagement approaches

Endeavour Energy

5.3.3 What we heard from our customers and how we intend to respond

What customers and stakeholders said:

Affordability

Affordability is the number one concern for many of our customers, but not at the sacrifice of safety or reliability. Electricity is valued because it provides security and lifestyle benefits to residential customers and communities, and because it connects new homes and underpins prosperous businesses and regions. There's a clear expectation that Endeavour Energy's plans should reflect measures to continue downward pressure on our part of electricity bills by containing capital investment, without compromising safety.

What we will do in response:

- Deliver a decrease in network charges of one percent each year, in today's dollars, for the period 2019-24. This figure includes our proposed remittal.
- Deliver these decreases while implementing pricing reforms that will provide increased opportunities for customers to control their bills.
- Lock in and maintain our real price decreases throughout the next regulatory period building on our demonstrated history of responding to incentive regulation.
- Return \$240m (FY19 dollars) to our customers through these reduced charges during the next regulatory period.
- Continue to reduce underlying costs which will continue to reduce prices for customers.
- Deliver real price decreases for our public lighting customers.
- Encourage greater efficiency in the way our network is used by introducing an opt-out seasonal demand tariff for new customer connections.

Ausgrid

Customer and stakeholder and input into our Proposal

GROUP	CHANNEL	DESCRIPTION	INPUT INTO OUR PROPOSAL
Reset Working Group	Workshops Individual meetings	Customer advocates Highly informed on regulatory and energy issues	Tested details of the Proposal, capital expenditure (capex) program, operating expenditure (opex) forecasts and Tariff Structure Statement
Customer Consultative Committee	Workshops Individual meetings	Customer advocates Informed on energy policy and regulatory issues	Tested key components of the Proposal and Tariff Structure Statement at a high level
Retail energy businesses	Workshops Individual meetings	Part of the energy ecosystem Highly informed on regulatory and energy issues	Discussed how we plan to structure our prices and how our Proposal might impact businesses and their customers
Local council representatives	Workshops Individual meetings	Customers Informed on local regulations	Vegetation management, street lighting and planning
Customers	Deliberative Forums Focus groups Surveys	General population Equipped with unique insights on customer issues and preference	Explored customer expectations, long-term needs and attitudes to pricing and managing network peaks Explored customer expectations and preferences Tested key issues identified in qualitative research

Key issues for immediate consideration

- Price paths: are they the best that consumers could expect?
- Productivity: Is zero productivity over 5 years acceptable?
- IT expenses are large, do they constitute good value for money for consumers?
- Capital Contributions
- Lack of DM and constant investment in capex for network solutions
- Capex, are some capex proposals larger than necessary?

Where to now for engagement?

We'd expected Regulatory Proposals that could be accepted, not the case, though Essential closest. A fair bit of "engagement capital" has been cashed in, to what avail?

“Boards need to lead and engagement needs to go through the organisation – like a golden thread”

Sharon D’Arcy, CEO SustainAbility (UK)

Speaking at Gill Owen Memorial Lecture, Melbourne – 7/2/18

Heatmap chart– Summary

