



Customer and Stakeholder Engagement Activities and Findings Part D



Part D

Contents

Engagement Phase 1 (cont.)

Written responses to directions paper

Liverpool City Council	191
Penrith City Council	192
Blacktown City Council	195
Parramatta City Council	199
Cumberland Council	210
Shoalhaven City Council	212
Southern Sydney Regional Organisation of Councils	214
Wollondilly Shire Council	216
Western Sydney Regional Organisation of Councils	219
NSW Office of Local Government	229
NSW Health	230
NSW Office of Environment and Heritage – National Parks and Wildlife Service	232
NSW Planning and Environment	233
NSW Roads and Maritime Services	234
Public Interest Advocacy Centre	240
Total Environment Centre	247
Urban Development Institute of Australia	248

Written responses to
Endeavour Energy's Directions Paper for Consultation

1 JULY 2019 - 30 JUNE 2024



Mr Ty Christopher
General Manager Asset Management
Endeavour Energy
PO Box 811
Seven Hills NSW 1730

By email: yoursay@endeavourenergy.com.au

Dear Mr Christopher

Re: Endeavour Energy - Direction Paper for Consultation 2019-2024

I write in response to your correspondence dated 1 August 2017 regarding Endeavour Energy's plans to provide a safe, reliable and affordable electricity supply to its customers and communities over the five years from 2019-2024. Council wishes to thank you for the opportunity to comment on the Direction Paper.

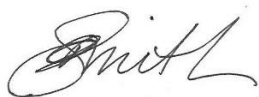
It is our opinion that Endeavour Energy should engage earlier with Western Sydney Councils' strategic planning and economic development departments to ensure timely infrastructure delivery. As mentioned in the paper, there have been capacity constraints in some locations in the South West Priority Growth Area which need to be prioritised in consultation with the relevant local Councils.

We are anticipating rapid growth in the designated Western Sydney Priority Growth Area (WSPGA) and in our City Centre coupled with the anticipated development at Western Sydney Airport (WSA) and Western Sydney Employment Area (WSEA). Despite the importance of the proposed WSA and WSEA, it is crucial to confirm that other parts of the growth area such as Austral and East Leppington are included in the overall network planning and delivery programme.

Regular consultation with relevant Council officers to ensure timely provision of power related infrastructure will support balanced growth throughout the region.

For further enquiries regarding this matter, please contact Masud Hasan, A/Executive Planner on 9821 7232.

Yours sincerely



David Smith
A/Manager Strategic Planning



Our reference: 7776910
Contact: Brian Steffen
Telephone: 4732 7551

21 September 2017

Mr Ty Christopher
General Manager
Asset Management
Endeavour Energy
PO Box 811
SEVEN HILLS NSW 1730

Dear Mr Christopher

Endeavour Energy Directions Paper 2019-2024

I write in response to your letter dated 1 August 2017 requesting comments about Endeavour Energy's Directions Paper in preparation for the AER revenue proposal submission.

I can advise that Penrith City Council spends over \$3 million a year on street lighting, with more than \$2,200,000 relating to street lighting maintenance costs. Council's street lighting costs for 2016-17 were \$3,361,043 consisting of \$1,129,404 energy usage charges & \$2,231,639 SLUOS (maintenance) charges.

As you would understand this a major cost for Council and our residents. However, we do acknowledge the downward trend of network costs reflected in our total electricity usage costs. We understand this is a result of downward pressure on costs by the AER and efficiencies achieved by Endeavour Energy.

We agree with the Endeavour Energy's objectives to provide a safe, reliable and affordable electricity supply however, we are concerned with recent changes to street lighting maintenance charges and capital payments and note that your direction paper makes scant mention of these costs and charges.

In response to your question on page 45 of the directions papers I offer the following comments;

1. *What are the priorities of the stakeholders you represent?*

Council's priorities are to the residents of the LGA to, amongst other things, provide value for money for the services we provide. In addition, Council has a focus on Community Safety and effective street lighting plays an important role in community safety.

We recognise that there has been a downward trend in the cost of network charges and commend the AER and Endeavour Energy in achieving this.

Council's main concerns relate to street lighting charges as follows;

Reduced annual (SLUOS) maintenance costs relating to the increased use of LED technologies for residential (P category) street lighting hasn't been realised by Councils as yet. It is widely recognised that LED technologies significantly reduce maintenance and operating costs for network operators and the reduction in cost should flow through in SLUOS charges to Councils, acting to drive further investment in this area.

The new "Public Lighting Management Plan" (September 2016) issued by Endeavour Energy with no consultation with Councils has changed the definition of what scale of projects involving an upgrade to the existing street light network are deemed "non-contestable" and "contestable". Previously all projects where low voltage supplies were directly available for connection of new assets were deemed "non-contestable". These projects were able to be designed and constructed by Endeavour Energy including meeting all capital up-front costs. Under the new Management Plan only upgrade projects involving only in-fill lighting of no more than 7 luminaires on existing poles are deemed "non-contestable". This change means residents via Council rates have to capital up-front around 95-99% of street light projects across their LGA creating a disincentive to improve outcomes for our community.

Councils in Western Sydney including Penrith City Council have already invested over \$3 million in funding LED upgrades to street lighting with little advantage to councils in respect of SLUOS costs.

While Council recognises the statutory requirements surrounding the management of trees under powerlines there is an opportunity for improved pruning practices and greater communication and consultation with Council. Tree trimming is an issue of growing concern for our communities, and we feel that the impacts (visual and health) of inappropriate trimming should be a central part of the decision making process, not just what is needed to achieve a minimum safety clearance. Options to reduce tree maintenance should be explored, such as aerial cable bundling and tree replacement and planting programs. Council is willing to work cooperatively with Endeavour Energy to achieve better vegetation management around powerlines and would welcome an opportunity to do so.

Council also acts as an advocate for the community of our local government area and encourages Endeavour Energy to carefully consider the impacts of any tariff and pricing changes on the most vulnerable members of our community.

2. *What can we do to best deliver on these priorities?*

Council suggests that Endeavour Energy continue to provide best value outcomes to all of its stakeholders striking a balance between safety, reliability and affordability and continue the downward trend in network charges.

Council strongly recommends that Endeavour Energy reviews its street lighting and public lighting management plan to remove the barriers for

councils to invest in the LED technology and, in addition, shares the resultant operational cost savings in the charges with Councils who are paying the capital to upgrade your assets.

3. *What changes to our tariff design should we be considering?*
From a residential perspective tariff design should be kept as simple as possible however, if network tariffs are designed to send a pricing signal residents should be informed in plain language about the detail of the tariff.

Vulnerable members of our community, for example low income people with medical conditions and people living alone are most at risk from changes to tariff pricing and any changes should be carefully considered to ensure that these customers are not adversely affected.

Your recognition of the need to support and integrate new technologies in a cost-reflective way for consumers as per the Electricity Network Transformation Roadmap is a positive step. More flexible models and approaches are needed to obtain the full benefits of local renewables and battery storage, along with micro-grids and other innovative models, including virtual net metering, for both the electricity distributor and the customers.

4. *How should we be engaging with our customer and stakeholders in developing our proposal?*

Council supports Endeavour energy proposal for engagement and education detailed in the direction paper.

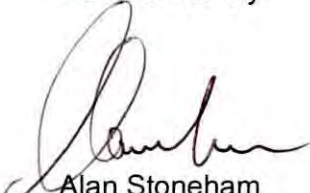
5. *What should be our role in the future energy market that will provide customers greater choice and control?*

Council does not have any specific suggestions in this regard expect where there are changes for greater choice and control that customers and stakeholders are fully engaged with the implementation.

Penrith City Council is a member of the Western Sydney Regional Organisation of Councils (WSROC) and supports the detailed submission of WSROC dated September 2017.

Thank you for the opportunity to provide feedback on Endeavour Energy's direction paper. If you require any further information please contact Brian Steffen, Executive Manager City Assets on 4732 7551 or by email brian.steffen@penrith.city.

Yours sincerely



Alan Stoneham
General Manager

File no: 118-21-2/5
C17/37329

25 August 2017

Ty Christopher
General Manager, Asset Management
Endeavour Energy
51 Huntington Drive
Huntington, NSW 2148

Email: yoursay@endeavourenergy.com.au

Dear Mr Christopher,

Feedback: Endeavour Energy's Directions Paper 2019 – 2024

Thank you for inviting Blacktown City Council to provide feedback on Endeavour Energy's Directions Paper. We have structured our response under the questions posed by Endeavour Energy.

What are the priorities of the stakeholders that you represent?

To give some context, Blacktown City is large, and growing. It has the second-largest municipal population in NSW, with around 350,000 people. It has 48 suburbs. One in 70 Australians live in Blacktown City. Our community is diverse. Nearly 3% are of Indigenous background and nearly 46% were born overseas. The level of socio-economic advantage and disadvantage ranges widely with pockets of both advantage and of significant disadvantage. Energy affordability is important for our residents, and it is important for Council to contain our own energy costs to reduce the need to pass on expense to ratepayers.

Blacktown City hosts much of Sydney's north-west development, so our population is rapidly growing. This fuels increased demand for services and infrastructure from both Endeavour Energy and Council. Council operations will need to grow proportionately with the population.

In delivering services to our community including local businesses, our overall priority is balancing our quadruple bottom line elements: social, environmental, economic and civic leadership. We are committed to sustainability and greenhouse gas reductions in our own operations. We are currently reviewing and updating our climate change policy and strategies. We also engage with the local community to educate on and implement sustainability measures, to assist in improving environmental, social and economic outcomes.

We welcome and share Endeavour Energy's enthusiasm for the *Electricity Network Transformation Roadmap* developed by CSIRO and Energy Networks Australia – including

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All correspondence to: The General Manager • PO Box 63 • Blacktown NSW 2148

increasing the proportion of renewable energy generation embedded in the distribution network.

Council actively works to reduce consumption and increase the proportion of renewable energy in our own energy mix. We are investigating options towards achieving zero emissions from our energy usage. We run a continuous program of actions that:

1. Investigates and implements cost effective energy efficiency improvements
2. Has swapped a proportion of older street lamps for energy efficient LED lights
3. Reduces electricity consumption through education and behaviour change, combined with planned improvements in monitoring and accountability
4. Implements rooftop solar PV on selected sites where these are feasible and cost effective
5. Investigates the potential of battery storage
6. Gradually upgrades our passenger vehicle fleet to hybrids and plug-in electric hybrid cars
7. Is partnering with ENE-HUB and negotiating with the NSW Roads and Maritime Services to install smart poles in public spaces, enabling people to charge their electric vehicles and plug-in hybrids
8. Is investigating offsetting our electricity consumption with existing renewable energy generation sources and/or, purpose building or partnering to develop a solar farm. The aim is to save on energy bills, ensure guaranteed supply of renewable energy, and achieve zero emissions status from electricity usage.

What can we do to best deliver on these priorities?

Council's 2015-16 electricity consumption for street lighting was around 17.4 GWh, which cost us nearly \$5.2 million. It appears the power demand of our street lighting can be around 4 megawatts. We believe about 90 per cent of the street lamps are conventional metal halide, sodium and mercury vapour lamp technology.

The 2019-24 Endeavour proposal does not include commitments to upgrade existing street lights to LEDs. We think that street lighting contributes significantly to the evening peak load. Improved energy efficiency could reduce the power load. This would also contribute towards a more realistic understanding of whether and when there is need for network upgrades. A full change-over to LED street lamps would considerably improve efficiency, save on electricity bills and reduce carbon emissions. Council's financial savings could be diverted to other infrastructure projects, creating stronger economic outcomes for our community and businesses.

Council encourages Endeavour to include a clear plan and realistic timeframe to upgrade street lighting to LEDs in the proposal. This would help defer the need for a potential network upgrade, providing savings to Endeavour, and through a fair process, to customers.

Council is considering developing its own solar farm of around 15 megawatts if there is a suitable site within Blacktown City. It is likely that other Councils are also considering a similar approach to tackle climate change and reduce costs over time. These types of initiatives will require reliable grid connection points in the distribution network. In line with the CSIRO/ENA Roadmap for more distributed energy, we would like to see Endeavour's proposal include a clearer plan toward accommodating local mid-size renewable energy developments linking directly into the distribution network. We suggest that Endeavour investigate grid connection options. We envisage potential for reducing the electricity that needs to be sourced through transmission networks, creating improved efficiency in electricity delivery and a reduction in related costs and greenhouse gases.

Council welcomes Endeavour's plans to conduct battery storage trials with residents and at grid-scale in the network areas. However, there is no plan for trials with councils or commercial operations. We would be happy to partner on battery storage trials on our sites. We have already implemented over 500 kW of roof top solar PV and intend to implement more on other sites.

Council is considering a gradual shift to electric cars (subject to acceptance by our staff) in the medium to long term. Community shifts to electric vehicles and plug-in hybrids will increase electricity demand, affecting network requirements. Council is keen to partner with Endeavour on any electric car charging project, and is well-placed to do so as we are already active in this evolving area.

What changes to our price tariff design should we be considering?

Council has negotiated different electricity tariff structures for its larger and smaller sites. Most of the smaller sites are on a fixed tariff structure. The large sites' tariff is based on time of use (peak, shoulder and off-peak) and includes demand, environment and other fixed charges.

The proposed structure of a three-tariff arrangement (flat rate, seasonal time of use and seasonal time of use demand) in the Endeavour proposal would affect billing costs differently for households and businesses. It is not clear whether the proposed tariff options relate only to households, which tend to have similar peak demand later in the afternoon and evening. Business demand peaks vary according to the nature of the business.

Council would like more clarity regarding the proposed time of use tariffs, as our street-lighting consumption occurs during the evening peak and overnight, while much of our operational consumption occurs during the day.

How should we be engaging with customers and stakeholders in developing our proposal?

As outlined in the Directions Paper, the market is transitioning from a conventional centralised generation model to a model that increasingly includes, and must cater to, distributed generation. We welcome Endeavour's invitation to meet and discuss our evolving energy plans and future needs.

We would also welcome being involved in workshops with other stakeholders, and/or inclusion on Endeavour's Customer Consultative Committee. It is important for us to keep abreast of Endeavour's plans and changes as we undertake our own energy planning.

What should be our role in the future energy market that will provide customers greater choice and control?

We suggest that Endeavour:

- Extend battery storage trials to include council and commercial premises through partnerships with interested players, including us
- Take action to encourage the development of distributed generation in the network area
- Simplify network connection procedures

- Support and facilitate local energy trading through virtual net metering
- Make plans and undertake trials for electric vehicle charging in public places.

We look forward to meeting with you. To arrange the meeting, please contact Jon Bannister, Manager Plant and Energy on 9839 6798.

Yours faithfully,



Rudi Svarc
Director City Assets



Your Reference:
Our Reference:
Contact: Mark Matthews
Telephone: 9806 5109

Ty Christopher
General Manager
Asset Management
Endeavour Energy
51 Huntingwood Drive,
Huntingwood NSW 2148

Date 27 September 2017

Feedback on the Endeavour Energy Directions Paper

Dear Ty,

Thank you for the opportunity to provide comments on the Endeavour Energy Directions Paper. Endeavour Energy is a key stakeholder for the City of Parramatta and we look forward to working with you in the future to support the growth in the Local Government Area.

Please note that this submission focuses on the issues of greatest concern to the City of Parramatta. The submission feedback is to be seen as high level commentary that touches upon issues facing the Local Government Area.

The following sections set out our Councils' main priorities around the energy network, these priorities are:

- **Public lighting and SLUOS charges:** Ensuring pricing transparency and achieve fairer maintenance charges for LEDs;
- **New technology:** Ensuring opportunities to capitalise on new technology are realised.
- **Affordability:** Ensuring affordable energy for City of Parramatta residents and businesses.
- **Vegetation management:** Ensuring mutually agreeable vegetation management practices with respect to both amenity and safety;
- **Infrastructure:** Ensuring the City of Parramatta is adequately serviced and future proofed – especially considering future population growth; and
- **Urban heat:** Collaborate with stakeholders to identify and implement urban heat mitigation measures.

We look forward to your consideration of the issues raised below and continue to partner with Endeavour Energy into the future.

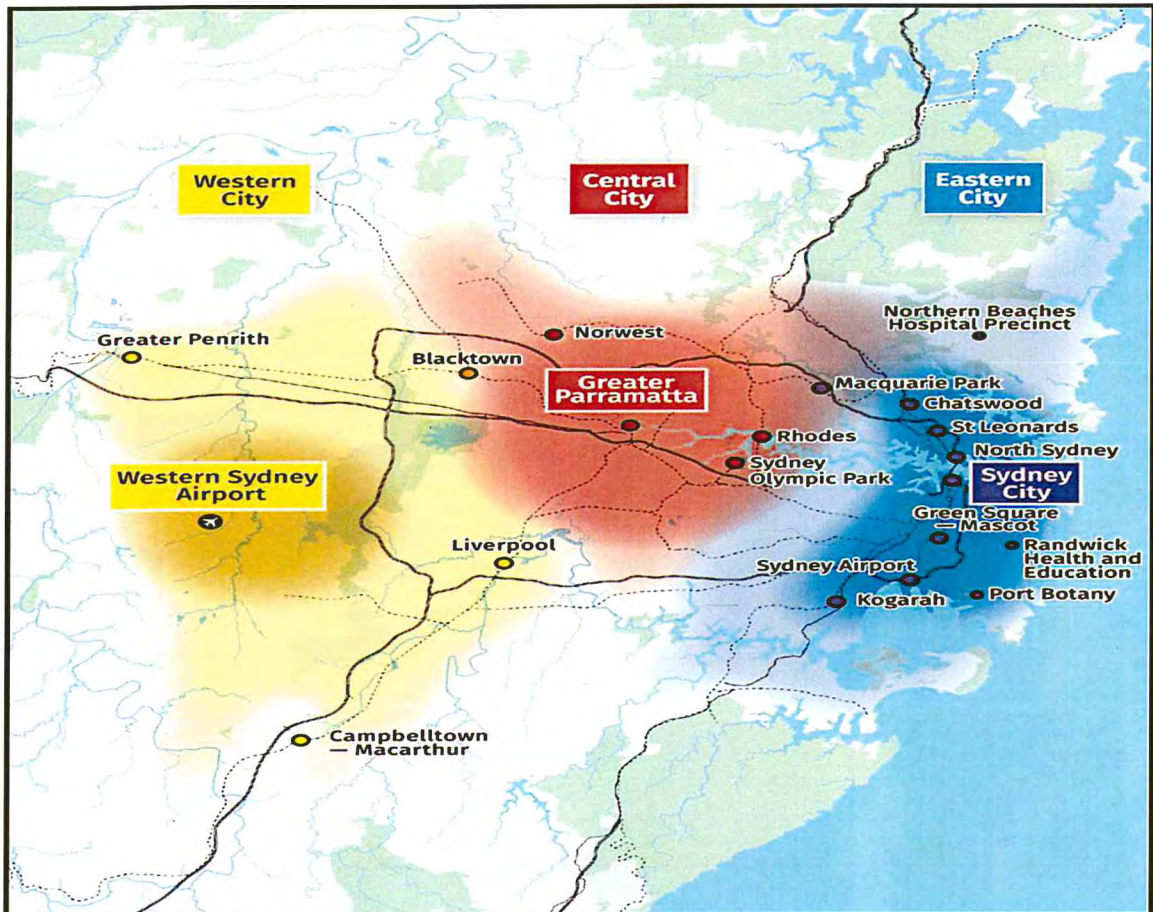
Your sincerely,

A handwritten signature in black ink, appearing to read 'Mark Matthews', written in a cursive style.

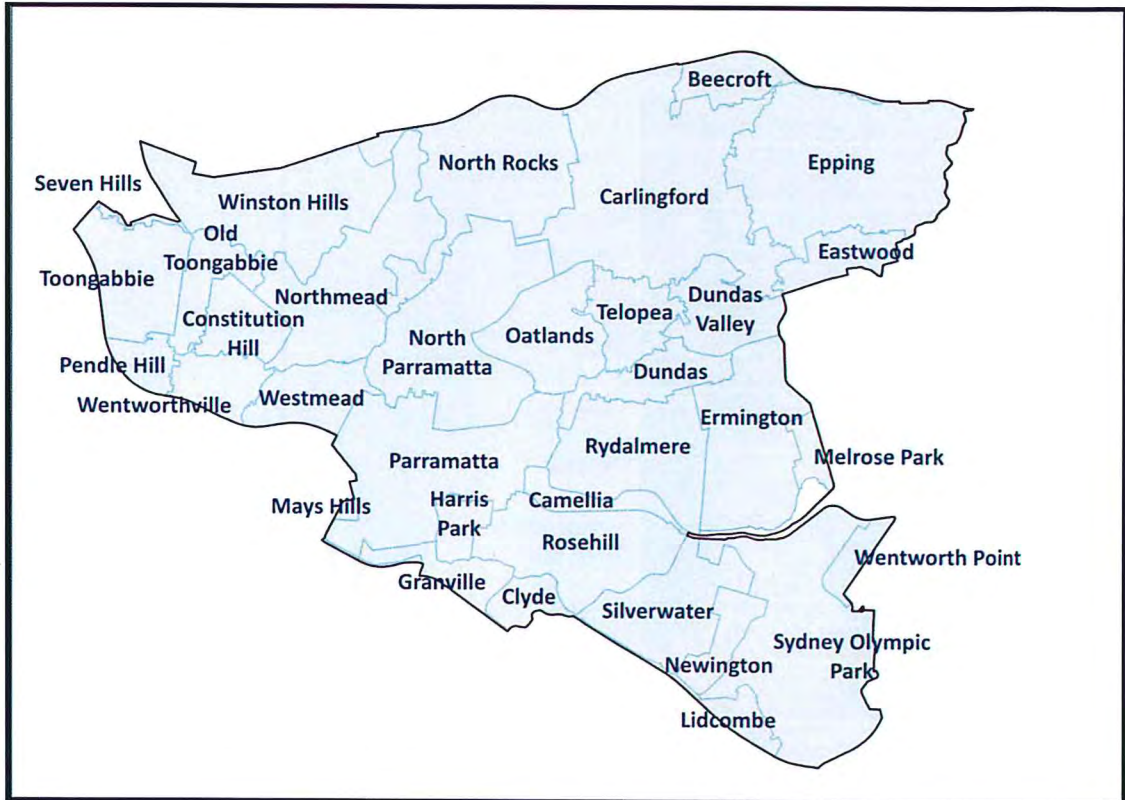
Mark Matthews
Environmental Outcomes Acting Manager

Introduction and Background

The City of Parramatta (The City) Local Government Area (LGA) is 83 square kilometres and includes the Parramatta CBD, several key centres including Westmead, Epping, Rydalmere, Sydney Olympic Park and North Rocks. Based on the Greater Sydney Commission's plan, we are considered Sydney's Central City.



The City LGA is made of 35 suburbs, the large majority of which is serviced by Endeavour Energy.



The City of Parramatta is going through great change and transformation. Our population is due to grow from 245,000 in 2016 to over 400,000 by 2038. Dwelling numbers will increase to over 157,000 by 2038 and our worker population is set to double. The City is currently processing 25% of all planning proposals for the State of New South Wales.

The LGA has 13 key growth precincts at different stages in the development process. The Table below shows the estimated number of dwellings each precinct will contain.

The City is also currently assessing several major developments including;

- Western Sydney Stadium;
- Museum of Applied Arts and Sciences;
- Parramatta Light Rail (Stage 1);
- Parramatta Square;
- Westmead Hospital redevelopment; and
- New Aquatic Centre.

Area	Estimated additional dwellings to 2036+
Camellia	10,000
Carlingford	4,400
Carter Street	6,000
Epping	5,700
Granville	5,300
Parramatta CBD	10,500
Parramatta North	3,400
Rydalmere, Ermington, Malrose Park	12,000
Sydney Olympic Park	11,400
Talopaa	4,000
Wentworth Point	5,500
Wentworthville	New Priority Prec.
Westmead	New Priority Prec.
TOTAL	78,200

Public Lighting and SLUOS charges

Priority: Ensure pricing transparency and achieve fairer maintenance charges for LEDs

Issue: Public lighting is a major cost to Local Government. In recent years the City of Parramatta has worked with Endeavour and WSROC to drive technology change to lower cost and energy LED lighting. We are encouraged by Endeavour Energy's work in this regard and look forward to further beneficial projects.

However, currently the Endeavour Energy Street Lighting Use of System (SLUOS) tariffs for LEDs are creating a direct disincentive for Council to fund further projects. The structure of the tariffs is such that around three quarters of the cost of the LED tariff is a maintenance cost.

This means all the maintenance for lighting is charged equally across different technologies, despite LEDs resulting in significantly lower maintenance

requirements. In other jurisdictions pricing for LEDs is up to half that of other light types. Endeavour Energy's LED maintenance pricing is actually higher than for its other light types.

It is clear that under the current arrangements the City is subsidising the maintenance of other light types through previous roll outs of LEDs. For the coming pricing period we request that this direct subsidisation be removed and a representative maintenance cost structure be adopted.

In addition, the current structure does not provide clarity around where the overall maintenance costs occur (e.g. % of cost associated with call centres, lamp replacements, patrols etc.). This has severely compromised Councils' ability to understand the basis of public lighting pricing, public lighting investment proposals and make informed decisions about lighting choice.

Recommendation:

- Provide real transparency regarding pricing for Public Lighting and engage with councils around service levels at a regional level.
- Change maintenance (SLUOS) changes to reflect actual maintenance of light types.

New Technology

Priority: Ensuring opportunities are realised in order to capitalise on new technology.

Issue: Technology is rapidly changing and continues to improve, with the advent of affordable and endemic renewable technologies, LED lighting for main roads nearing approvals and with smart city infrastructure currently emerging. These provide exciting new options in terms of safety and cost and emissions savings.

However, adoption of some of these new technologies has been slow for NSW utilities compared to council owned networks.

It is exciting to hear that Endeavour is aiming to be a leader in the transition to renewables and addressing of peak demand through the integration of storage systems. Councils are also interested in the future deployment of a wide range of technologies including renewable energy, battery storage and electric vehicle.

The City of Parramatta's recently adopted Environmental Sustainability Strategy sets ambitious community and corporate renewable energy and carbon emissions reduction targets and to meet these are deploying solar on its facilities and will consider appropriate interventions to increase community solar.

Recommendation:

- That Endeavour Energy work with the City of Parramatta to pilot, assess and deliver smart lighting and smart city technology. WSROC and councils fundamentally believe that the best approach to these systems is a collaborative approach that ensures the designed outcomes puts the interests of the Western Sydney Community as first priority.
- Encourage Endeavour Energy to liaise with Local Government regarding potential partnerships in the space of smart technologies, pilot projects around solar and battery storage.

Affordability

Priority: Ensuring affordable energy for the City of Parramatta residents and businesses.

Issue: Electricity prices have increased sharply in the last few years, and the indication is that prices will continue to increase. This puts major strain on budgets of businesses and communities alike. Price increases can further lead to critical health and social issues when residents are unable to run their heating or cooling devices adequately due to concern over their electricity bill.

The City has concerns that the most vulnerable in our communities will be hit hardest by the increasing prices. We further express concern that these people are most at risk from changes to tariff pricing. We therefore urge Endeavour Energy to consider models that will not have an adverse impact on these communities, and to ensure that any tariff changes are clearly and timely communicated.

We further note that Endeavour outlines the need for fairness among its diverse customer base. Endeavour Energy needs to be considerate of low income households when developing pricing models.

Recommendation:

- Any changes in tariff structure will need to be communicated clearly to existing and new customers, in plain language.
- Any proposed tariff modelling to consider the impact on vulnerable communities.

Vegetation management

Priority: Ensuring mutually agreeable vegetation management practices with respect to amenity and safety.

Issue: The City of Parramatta is concerned with the extent and quality of pruning undertaken by Endeavour Energy contractors in the area. Current pruning practices have been shown to be inefficient and to severely impact the health, structure and aesthetics of the street trees, which has a total estimated value of \$140 million across the LGA.

We recognise the statutory requirements placed on electricity supply authorities, as well as the difficulties involved with the management of trees under power lines due to the complex nature of streets, community attitudes, government regulations and often poorly selected tree species.

However, the current pruning practices are found to be inappropriate, often resulting in a large number of community complaints to council. The extensive removal of limbs to a designated clearance, and beyond, may appear like a cheap solution in the short term, but the rapid regrowth generated necessitates frequent return visits making this pruning practice inefficient in the longer term.

This practice also impacts on the structural integrity of the tree that may result in its eventual removal, and has a negative aesthetic and urban cooling impacts making trees look disfigured and reducing shading and cooling where it is most needed.

Tree trimming is an issue of growing concern for our community and certainly an area of interest where the impacts (visual and health) of inappropriate tree trimming should be critical to the decision making process. In this context, other issues than just the need to achieve a minimum safety clearance should be considered.

We note the outcomes of the customer consultative survey around tree trimming, however, we understand that those surveyed did not include councils. The City of Parramatta sees this as a missed opportunity provided that councils are a key stakeholder in this process.

The City encourages Endeavour Energy to improve its engagement with Local Government and to come to a mutually agreeable practice which encourages quality tree management under power lines. We are confident that a partnership arrangement has potential to result in better vegetation management, improve visual amenity outcomes, and ultimately provide the community with more cost effective tree management services.

We also refer to Ausgrid's recently implemented Vegetation Management Engagement Plan which includes a working group to improve engagement with key stakeholders as an example of a partnership arrangement designed to address similar issues.

Recommendation:

- Establishment of a partnership arrangement between Endeavour Energy and Council to improve collaboration around vegetation management, and:
 - Establish protocols for the delivery and management of tree works resulting in more efficient vegetation management, urban cooling and visual amenity outcomes.
 - Explore options to reduce tree maintenance, such as aerial cable bundling, tree replacement and planting programs.

Infrastructure

Priority: Ensuring the City of Parramatta is adequately serviced and future proofed – especially considering future population growth

Issue: It should be noted that the Directions paper does not cover the City of Parramatta LGA despite the unrepresented growth in dwellings, resident and worker population and major developments including Parramatta Square.

Given this impending growth and infrastructure investment it is critical that Endeavour outline an investment plan for the City. Future proofing the electricity network is critical. The current infrastructure is already under strain, which is especially apparent when demand peaks, for example in extreme heat events when supply is not able to meet demand.

The City's existing and key growth precincts require services that will adequately service the population into the future.

Additionally, this infrastructure needs to meet the community and amenity expectations – this will predominantly be delivered through underground services. Council strongly urges that the supply of services takes into consideration the quality of life for our residents, including amenity and aesthetics of development.

Infrastructure needs to also consider preservation of high quality amenity in our streets and public domain. Without collaboration on strategic infrastructure planning, we will continue to experience ad hoc road and public domain excavation for new services, creating further disruption for residents and business.

Recommendations:

- Regular and close collaboration with the City of Parramatta to strategic plan and align future infrastructure planning.
- Ensure amenity and aesthetics are considered for any roll out of services for new and existing developments.
- Ensure City of Parramatta existing and precinct sites are appropriately serviced, connection capacity to take into account future population growth of the City of Parramatta and its centres.
- Consider the energy infrastructure requirements for Parramatta Light Rail.
- Any new infrastructure needs to be considerate of community and amenity needs – i.e. underground services

Urban heat

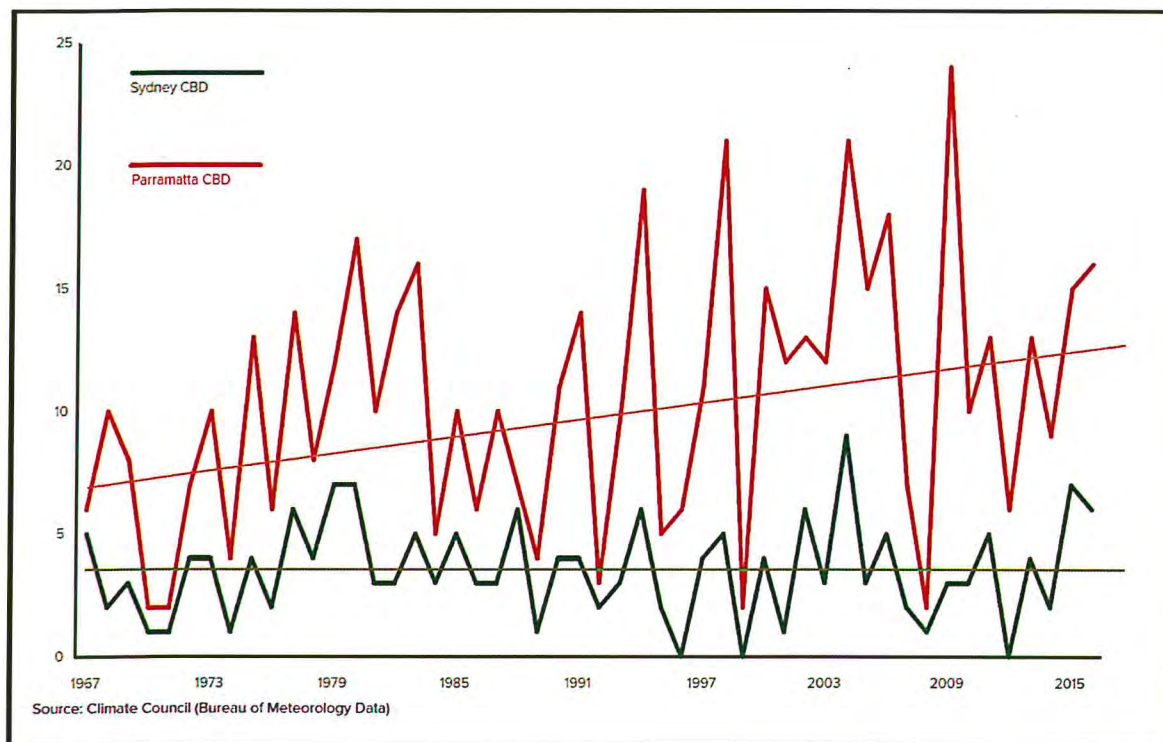
Priority: Collaborate with the City of Parramatta to identify and implement urban heat mitigation measures.

Issue: Urban heat is Australia's number one natural killer, more deadly than storms, fire and floods combined. It causes major liveability and resilience problems with critical impacts for human health, infrastructure, emergency services and the natural environment.

Urban heat isn't unique to Western Sydney, but it does have a particularly significant impact here due to the region's unique climatic conditions, its large residential population and ongoing urban development.

Parramatta's location, unique geography and lack of sea-breeze means that the region experiences more days over 35°C than Eastern Sydney. The City of Parramatta currently experiences over 15 days over 35 degrees, with temperatures often staying around 27 degrees at night.

Based on the temperature trends over the last 30 years this will likely continue to increase. The graph below shows the trend in the number of hot days in the Parramatta CBD versus Sydney CBD (35 degrees and over) since 1967.



The City of Parramatta sees a clear role in this process for District Network Service Providers (DNSP) in ensuring critical infrastructure responses are in place to secure network reliability during episodes of extreme heat. The City is particularly concerned about the potential of electricity supply network disruptions due to extreme heat, impeding the ability of individuals to manage their exposure to high temperatures.

We are encouraged to see extreme heat being a recognised area of concern for Endeavour Energy and we would like to encourage Endeavour Energy to not only seek solutions to ensure peak hot weather electricity load is being managed appropriately, but also to assist in finding ways to alleviate those vulnerable communities who depend on electricity but struggle to pay their energy bills.

Recommendation:

- Endeavour to work with the City and other key stakeholders (including WSROC and its member councils) in the region to explore urban heat mitigation strategies specifically focused on securing energy reliability and affordability in extreme heat conditions.



CUMBERLAND
COUNCIL

26 SEPTEMBER 2017

Our Reference ED2017/62845
Contact ADAN DAVIS
Telephone 02 8745 9787

Mr Ty Christopher, General Manager
Asset Management, Endeavour Energy
PO Box 81
SEVEN HILLS NSW 1730

Dear Mr Christopher

ENDEAVOUR ENERGY PRELIMINARY REGULATORY PROPOSAL 2019-2024 DIRECTIONS PAPER FOR DISCUSSION

Thank you for your recent letter and opportunity to provide comment on your preliminary five-year regulatory plan. We have reviewed your preliminary paper and provide the following comments.

Tree trimming

Maintaining street tree canopy is critical to Council's initiatives in addressing the urban heat island effect. We understand Endeavour Energy's need to prevent bush fires by maintaining clearance between powerlines and tree canopy, however we ask that you look at proactive initiatives to elevate existing powerlines, particularly in older established suburban areas, such as Cumberland, so that trimming resulting in mis-shapen tree canopies can be minimised.

Planning for future technologies

Council supports Endeavour Energy's solar generation planning, as well as early thinking on electric vehicles and battery storage. The goals in the Electricity Network Transformation Roadmap, in particular the goal of zero net emissions for the Electricity sector by 2050 is also supported.

Residential Customers

Residents value affordable, reliable and safe electricity provision, and Council stresses the importance for energy providers to communicate information about available residential options and pricing to the general community, simple and effectively. The use of translated material is also recommended.

Business and Industry

Cumberland Council is home to many Small to Medium Enterprises (SME), as well as a variety of industry sectors, which make an important contribution to our local and regional economy. Initiatives and communication of available options to businesses and industries are encouraged. As the owner of a large and diverse property portfolio, Council is also interested in the efficiency and environmental benefits of new lighting technologies, including street lighting, sports fields, parks, public spaces and internal lighting.



CUMBERLAND
COUNCIL

Council welcomes the opportunity to meet with Endeavour Energy and will contact you in due course. Should you have any further questions regarding our comments, please contact Adan Davis in Council's Environment & Infrastructure department on 02 8745 9787 Monday to Friday.

Yours faithfully

Malcolm Ryan
GENERAL MANAGER

Submission to Endeavour Energy Directions Paper INE7170 Shoalhaven City Council

Tariff Design

Shoalhaven City Council's large electricity users are a mix of regular business hour assets such as administration buildings, sewerage treatment works and leisure centres as well as high consuming, typically off peak, assets such as water pumping stations and potable water treatment plants.

The proposed tariff structures (Flat, STOU, STOU Demand) will have varying impacts on how and when Shoalhaven City Council uses electricity to minimise the cost of energy. It may be the case that the benefits of any reduction in off-peak tariffs will be cancelled out by increases during peak seasonal demand periods.

For example, the Shoalhaven experiences an influx of visitors during the Christmas holiday period and energy use in Water & Wastewater assets increase accordingly. This would coincide with the STOU demand tariff peak periods and potentially impact the cost of our energy. On the other hand, our largest energy user by far is a raw water pumping station, which runs almost exclusively off peak. It is assumed that proposed STOU Demand tariff will reduce the 'off-peak' network charges to offset the increased charges during the peak period. If this is the case, Shoalhaven Water in particular would be in support of this approach to assist in managing peak periods and ultimately reducing the infrastructure investment required across the network, and hence lead to a general reduction in network charges in the future.

A number of our larger consumer sites are actively managed by operators or scheduling programs to control high power equipment with varying demand profiles. One of the frustrating factors from is that the 'Demand' charge is calculated as \$/kVA/Month. If during any one period in the month a large peak is recorded, the peak charge is brushed over the entire month regardless of prior/future frugality. Demand charges on a weekly or even daily period, (\$/day/kVA / \$/week/kVA), would be preferred to encourage active power operators/programs to limit peaks on a regular basis.

For example, our operators/scheduling could diligently keep peak demand at low levels for up to 30 days in the month only to have a brief event on the last day of the month whereby the peak is significantly higher for only a 30 minute period. In this case, that site would be charged the elevated demand charge for the prior 30 days, not just the day of the higher peak. From Endeavours point of view, the reverse of this scenario could cause demand issues via inconsequential demand. For example, if a maximum site peak was recorded on the 1st of the month, then the site has no incentive to keep demand down for the remaining days in the month.

Tariff Transparency

The current structure of the tariffs and the relationships between retailers, network providers and the other electricity line items (AEMO, Green Charges etc) is not easy to understand, particularly at an executive level. This leads to misinformation and/or delays in decision making regarding energy consumption.

A brief summary information pack should be made available describing the tariff structures in a simple graphical form (in conjunction with retailers) and how to get more information regarding the different sections of a typical electricity bill. Origin have a 'Business account bill explainer' but it's more of a generalist explanation and doesn't cover simple things like the difference between Peak, Shoulder and Off peak times between Endeavour and Origin.

If the information was made more transparent, then Council as a large user could better educate operators and schedule operations where possible on how best to reduce the overall cost of energy and help to level the load across the network. In effect, the energy providers incentivise using electricity outside peak periods and reducing peak demand to the benefit of all – and we'd like to help out.



1 September 2017

Jon Hocking
Manager Network Regulation
Endeavour Energy
PO BOX 811
SEVEN HILLS NSW 1730
C/O: yoursay@endeavourenergy.com.au

Dear Mr Hocking

Re: SSROC SLI Program Submission on the 2019-24 Endeavour Energy Directions Paper

Thank you for the opportunity to comment on the 2019-2024 Endeavour Energy Directions Paper.

The Southern Sydney Regional Organisation of Councils (SSROC) makes this submission on behalf of 30 Councils participating in the SSROC [Street Lighting Improvement Program](#). While largely served by Ausgrid, we note that the five councils participating in the SSROC SLI Program (Canterbury-Bankstown, Parramatta, Cumberland, Ryde and Hornsby) are all partly served by Endeavour Energy and that some of the issues raised below apply to all NSW councils provided with street lighting services by NSW DNSPs.

As acknowledged by the AER in a 2013 review of public lighting¹, public lighting in NSW is currently an effective monopoly of the NSW DNSPs and the prospects for meaningful contestability and any subsequent competition are extremely limited. SSROC can see no evidence that this situation has changed since the last pricing review. A prerequisite for competition is regulatory reform that introduces an access framework and contestability in the provision of the public lighting services and no such reform has eventuated since the previous AER review, let alone resulted in effective competition. SSROC makes this submission with this broad context in mind which underlines the need for a clearer basis of service for what is an essential public service.

In parallel with the Endeavour Energy Directions Paper consultation, we note that the NSW Department of Planning & Environment – Division of Resources & Energy has convened a Public Lighting Forum to assist in the drafting of a revised NSW Public Lighting Code. At present, there is only a voluntary and limited Public Lighting Code and there are no current contracts and no minimum service levels defined in regulation. SSROC's understanding is that the Department's intent is to introduce a mandatory NSW Public Lighting Code that would establish minimum binding service levels for the DNSP provision of the service.

It is in this context that SSROC suggests that Endeavour Energy adopt the following priorities for the forthcoming regulatory period:

1) **SUPPORT FINALISATION OF PUBLIC LIGHTING CODE**

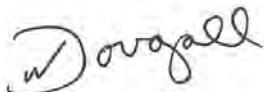
Endeavour Energy should support the near-term finalisation of a mandatory and expanded NSW Public Lighting Code to clarify the basis of service before the AER pricing review proceeds further.

1 AER Stage 1 Framework and Approach, NSW Electricity Distribution Network Service Providers, page 36, March 2013

- 2) **WRITTEN AGREEMENT ON TECHNOLOGY CHOICE**
Endeavour Energy should seek written agreement with the councils it serves on a portfolio of Category P and Category V LED luminaires, agreement on a process for keeping luminaire technology current and agreement to discontinue the installation of all non-LED legacy luminaire types.
- 3) **PROGRESS ACCELERATED LED REPLACEMENT NEGOTIATIONS**
SSROC recognises the pioneering work that Endeavour Energy and WSROC have done in with Category P LED replacements. Endeavour Energy should now enter into comprehensive negotiations with the councils it serves on a large-scale replacement program encompassing on all legacy Category P and Category V luminaires with LEDs
- 4) **PROGRESS SMART CONTROLS NEGOTIATIONS**
Endeavour Energy and councils should initiate work to jointly explore the case for widespread deployment of smart controls in conjunction with an accelerated LED replacement program. These negotiations should include consideration of how future smart city devices might be deployed in conjunction with the smart controls network (including issues such as device ownership, data access, data ownership, access to poles for future smart cities devices and cybersecurity).
- 5) **PRICE MODELLING DISCLOSURE**
In seeking to improve confidence in street lighting costs and service levels, Endeavour Energy should release its proposed 2019-2024 street lighting pricing model to councils at the outset of the 2019-2024 pricing review process including all underlying assumptions.
- 6) **MAINTENANCE DATA DISCLOSURE**
In seeking to improve confidence in street lighting service levels and to aid council decisions on future technology choice, Endeavour Energy should provide councils with comprehensive local and network-wide data on spot repairs and spot replacements by technology type as well as night patrol reports and bulk lamp replacement data.

SSROC welcomes further discussion with Endeavour Energy about this submission, the NSW Public Lighting Code and the 2019-2024 pricing review.

Yours faithfully



Namoi Dougall
General Manager
Southern Sydney Regional Organisation of Councils

Our Reference: 1497#368

Endeavour Energy
 Manager Network Regulation
 PO Box 811
 SEVEN HILLS NSW 1730

1 September 2017

Dear Sir,

DIRECTION PAPER FOR CONSULTATION – RESPONSE FROM WOLLONDILLY SHIRE COUNCIL

With reference to Endeavour Energy's Directions Paper for Consultation July 2019 to June 2024 and the request of 1 August 2017 requesting feedback from Wollondilly Shire Council.

I am pleased to provide the following feedback on behalf of Council:

Stakeholder Representation

As a community based organisation, Council's comments are on behalf of the residents, businesses and visitors to the Shire, collectively referred to as our community; and Council as a direct consumer of electricity and services provided by Endeavour Energy

Priorities & Opportunities for Endeavour Energy to Deliver against Priorities

<i>Stakeholder Priorities</i>		<i>How Endeavour can deliver</i>
Improve network resilience	Reduce risk of network failures in general due to storms	Increased undergrounding of key distribution links
	Reduce risk of network failures impacting on significant power reliant sectors such as Picton town centre (the centre of operations for council), Telstra exchanges	Increased undergrounding of key distribution links Increased contingency resources and planning for catastrophic failure, such as in the 2016 Picton floods, to re-energise key community facilities
Network capacity & reliability for existing areas		Improving capacity and reliability in existing residential areas reportedly experiencing frequent "brown outs" e.g. Appin and Tahmoor. Partnering with retailers for increased community education of power management opportunities to reduce overall demand and hence reliability issues

<i>Stakeholder Priorities</i>		<i>How Endeavour can deliver</i>
Network capacity & reliability for growth areas		In conjunction with growth area development (Macarthur Release area) and other significant expansion areas such as Appin and Picton/Tahmoor/Thirlmere - timely expansion of network and capacity either through direct supply or augmented by on-site storage such as in West Dapto
		Understanding infill growth and town/village expansion plans for Wollondilly - participate in regular coordination meetings with council
Distributed generation opportunities	Increased utilisation of distributed generation opportunities to reduce network stability/capacity issues	Increased education and marketing of opportunities with retail providers for new development areas and rural industry
		Examination of opportunities for solar panels on existing Endeavour assets such as street lights for residential or neighbourhood storage partnerships in conjunction with retailers
Consumption reduction		Partner with council and retailers for increased rate of roll out of reduced consumption street lights such LED lamps and "smart" lights where overall lighting levels can be adjusted for time of night or similar, especially for main streets and car park areas
Street light cost reductions		Partner with council for opportunities for multi-use of street light infrastructure for smart technology e.g. WiFi, mobile data, smart signs etc; to increase use of asset and increase ancillary income
Use of Endeavour assets for community benefit		Increased access to street light infrastructure for ancillary uses such as signs, banner poles, CCTV infrastructure for overall community benefit
Destructive and amenity reducing trimming of street trees for overhead wire protection and bushfire management	Council receives complaints from the community following the perceived destruction of street trees for overhead wire and bush fire management works. Trees subject to large scale trimming have been found to be suffering from bracket fungus and structural stress resulting in reduced life. Excessive trimming and life reduction is also resulting in a general reduction in canopy resulting in increased heat island and other environmental impacts	Increased liaison with council and potentially entering into a MOU with council to identify opportunities for less destructive trimming and/or potential replacement programmes for street trees that will still manage network risks whilst maintaining an acceptable level of amenity and retention of urban canopy

Changes to Tariffs

As a consumer, Council is a five plus day a week service centre for the community with little opportunity to change its consumption patterns through the day or seasonally as our consumption is service and environmentally driven i.e. publically accessible facilities and offices with our larger centres requiring air-conditioning year round.

Given our consumption inflexibility, we would prefer Option 1: Flat Tariff and unit based consumption charges.

On behalf of the community, council supports a long term stable tariffing rate that reduces large increases in consumer bills and the resulting "bill shock", especially for the lower socioeconomic areas in the Shire. Given the challenges outlined in the paper regarding the asset based cost to serve irrespective of consumption, we would recommend an extensive community and consumer education and consultation program, in conjunction with the electricity retailers, with a view to achieving a long term, say +10 year, tariffing plan.

Engagement Methods

Wollondilly has a dispersed population of almost 48,000 spread over an area of 2,500 sq.km with noticeable black spots for digital and mobile connectivity.

Accordingly, council suggests a multi-media engagement process that directs customers to platform(s) for submitting their comments and suggestions. The consultation process should also incorporate phone survey, letter drops and drop in kiosks. In addition, Council undertakes Community Forums, in Picton, as a part of our monthly Council Meeting process. We would be happy to provide an opportunity for Endeavour Energy to present at a Forum as a part of a broader engagement process.

Endeavour's role in providing customer choice and control

Given the apparent market volatility, mixed political and market messages regarding network capacity/integrity, generation and consumption; council would be supportive of Endeavour Energy taking a greater role on coordinating or leading an educative and engagement program with our community that encompasses the practicalities of energy supply and distribution as well as the environmental and social improvements that can be achieved through a more informed customer base.

Thank you for the opportunity to comment on Endeavour Energy's planning process. Should you have any questions on this submission please contact me.

Yours faithfully



Michael Malone
Director
INFRASTRUCTURE & ENVIRONMENT



*Feedback to the
Endeavour Energy Future Directions Paper*



September 2017

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1. Introduction and background

1.1 About WSROC

Thank you for the opportunity to provide feedback to the *Endeavour Energy Future Directions Paper*.

The Western Sydney Regional Organisation of Councils (WSROC) represents eight councils in Western Sydney which together provide services for over 5,500 square kilometres, ranging from densely populated metropolitan areas to rural lands and the World Heritage Area of the Blue Mountains. The Greater Western Sydney region's population is 2 million and is expected to increase by 1 million in twenty years' time.

WSROC provides a strong voice for the residents of Western Sydney to improve quality of life. The organisation has a reputation for considered policy analysis and advocacy on a wide range of issues affecting the residents of Western Sydney. WSROC also manages a number of projects, which are either funded jointly by its members or from external sources.



Figure 1 - WSROC member councils

1.2 This submission

Please note that this submission focuses mainly on issues of greatest concern to our member councils and is not a comprehensive review of all elements of the draft paper. The WSROC submission feedback is therefore to be seen as high level commentary that touches upon issues across the region. Lack of comment on detail of the draft plan does not necessarily imply WSROC's support. WSROC member councils will also have made their own submissions, which should be considered separately and in addition to this response.

2. General comments

We welcome the opportunity for WSROC and its councils to provide feedback, ideas, information and expertise to assist in better regulation of our energy provision through Endeavour Energy.

Western Sydney councils work closely with Endeavour Energy mainly around the provision of street lighting. Endeavour Energy owns the street lights (assets) and conduct maintenance. Public lighting accounts for approximately 55 per cent of WSROC councils' energy costs and around five per cent of total budget expenditure. Councils' focus is to ensure its residents have access to safe, reliable and affordable electricity, taking into consideration social, environmental and economic impacts.

WSROC and Western Sydney councils worked closely with Endeavour Energy in the delivery of the Light Years Ahead program (2014-2016) which changed nearly 15,000 inefficient public street lights to more efficient LEDs across nine Western Sydney LGAs. The successful delivery of this program resulted in Stage Two of the Light Years Ahead program currently being scoped.

WSROC is also a member of the Endeavour Energy Customer Consultative Committee and organises regular public lighting forums (for Western Sydney councils and Endeavour Energy) which aim to improve the public lighting system for councils and their communities in the Endeavour Energy region.

The following sections set out our councils' main priorities around the energy network, these priorities are:

- **Public Street lighting:** Ensuring pricing transparency and achieve fairer maintenance charges for LEDs;
- **Contestable works:** Clarify definition of "non-contestable" works to include projects where low voltage supplies are directly available for connection of new assets;
- **New technologies:** Ensuring opportunities to capitalise on new technology are realised;
- **Affordability:** Ensuring affordable energy for Western Sydney residents and businesses.
- **Vegetation management:** Ensuring mutually agreeable vegetation management practices with respect to both amenity and safety;
- **Planning and development:** Ensuring Western Sydney is adequately serviced and future proofed – especially considering future population growth and the new Western Sydney Airport; and
- **Urban heat:** Collaborate with stakeholders to identify and implement urban heat mitigation measures.

3. Public street lighting

Priority: Ensuring pricing transparency and achieve fairer maintenance charges for LEDs.

Issue: Public lighting is a major cost to local government. In recent years Endeavour and WSROC members have successfully collaborated to drive technology change to lower cost and energy efficient LED lighting. We are encouraged by Endeavour Energy's work in this regard and look forward to further collaboration.

However, currently the Endeavour Energy Street Lighting Use of System (SLUoS) tariffs for LEDs are creating a direct disincentive for WSROC councils to fund further projects. The structure of the tariffs is such that around $\frac{3}{4}$ of the cost of the LED tariff is a smeared maintenance cost. This means all the maintenance for lighting is charged equally across different technologies, despite LEDs resulting in significantly lower maintenance requirements. In other jurisdictions maintenance pricing for LEDs is up

to half that of other light types. Endeavour Energy's LED maintenance pricing is actually higher than for its other light types.

It is clear that under the current arrangements WSROC councils are subsidising the maintenance of other council areas through previous roll outs of LEDs. For the coming pricing period we request that this direct subsidisation be removed.

In addition, the current structure does not provide clarity around where the overall maintenance costs occur (e.g. % of cost associated with call centres, lamp replacements, patrols etc.). This has severely compromised councils' ability to understand the basis of public lighting pricing, public lighting investment proposals and make informed decisions about lighting choice.

It is WSROC's view that the public benefit of full disclosure of NSW utility street lighting pricing, financial models and all underlying assumptions (including supplier prices and maintenance assumptions) greatly out-weighs any possible commercial disadvantage for lighting suppliers. At present, inadequate and unequal levels of disclosure are undermining confidence in the pricing review process and may even be contributing to higher prices for public lighting in view of the highly concentrated lighting equipment supply market.

Recommendation:

- Provide real transparency regarding pricing for public lighting and engage with councils around service levels at a regional level.
- Change maintenance (SLUOS) changes to reflect actual maintenance of LED lights.

4. Contestable works

Priority: Clarify definition of "non-contestable" works to include projects where low voltage supplies are directly available for the connection of new assets.

Issue: The new "Public Lighting Management Plan" was issued by Endeavour Energy in September 2016. local government was not consulted on the Plan, however, the Plan includes a changed definition of what scale of projects involving an upgrade to the existing street light network are deemed "non-contestable" and "contestable".

Previously all projects where low voltage supplies were directly available for the connection of new assets were deemed "non-contestable". These projects were able to be designed and constructed by Endeavour Energy and the NDSP was to meet all capital up-front costs. Under the new Management Plan only upgrade projects involving in-fill lighting of no more than 7 luminaires on existing poles are deemed "non-contestable". This change means residents, via council rates, have to provide up-front capital to around 95-99 per cent of street light projects across their LGA. This creates a disincentive to improve outcomes for their communities.

Recommendation:

- WSROC and its member councils wish to seek clarification from Endeavour Energy around contestability of projects.

5. New technologies and smart cities

Priority: Ensuring opportunities to capitalise on new technology are realised.

Issue: Technology is rapidly changing and continues to improve. The landscape is an exciting with, with the advent of affordable and renewable technologies, LED lighting for main roads nearing approvals and with smart city infrastructure currently emerging. All of this provides exciting new options in terms of safety and cost and emissions savings. WSROC is encouraged to see Endeavour Energy's enthusiasm for the Electricity Network Transformation Roadmap developed by the CSIRO. WSROC also fully supports this roadmap as a forward looking process to design the grid for the future.

We note however that adoption of new technologies has been slow for NSW utilities compared to council owned networks. Western Sydney councils continue to invest in smarter controls on assets and buildings to include dash boards that represent live decision making tools for users and are reaping benefits from improved service and decision making.

It is exciting to hear that Endeavour is aiming to be a leader in the transition to renewables and addressing of peak demand through the integration of storage systems. Councils are also interested in the future deployment of a wide range of technologies including renewable energy, battery storage and electric vehicle. We believe there is broad scope for collaboration between councils and Endeavour Energy in this space and both WSROC and Western Sydney councils would like to see this reflected in the submission.

It needs to be noted that several Western Sydney councils are considering solar farms and other large scale renewable projects. These types of initiatives will require reliable grid connection points in the distribution network. We would like to see the proposal include a clearer plan towards accommodating local mid-size renewable energy developments linking directly into the network.

As distributed renewable energy continues to grow in NSW as forecast, WSROC recommends Endeavour Energy includes further policy directions to enable tis transition to occurs in the most efficient way possible, and maximise benefit of all consumers.

Specifically, we encourage Endeavour to articulate policies that streamline the application process for distributed generators, and reduce associated fees, especially for smaller PV generators. We further recommend the implementation of continuous review of the technical requirements for the connection of embedded generators, as they prove themselves as a mature technology.

In addition WSROC encourages Endeavour Energy proactively support innovative mechanisms for the sale of electricity from distributed generators, such as peer-to-peer electricity procurement, and power purchase agreements. This should include a fair price for electricity supplied to the grid, which reflects the value of distributed power in reducing network demands and reduced peak electricity prices.

WSROC is currently supporting several of its councils to deploy solar on large scale as well as demand management solutions and looks forward to working collaboratively with Endeavour Energy on these and other projects. We welcome Endeavour Energy's recent participation in the WSROC Energy Forum (Sept. 2017) and look forward to discussing LED major road technology, smart lighting and renewable energy at future forums.

Recommendation:

- WSROC encourages Endeavour Energy to work with councils to pilot, assess and deliver smart lighting and smart city technology. WSROC and councils fundamentally believe that the best approach to these systems is a collaborative approach that ensures the designed outcomes put the interests of the Western Sydney community as a first priority.

- WSROC would encourage/invite Endeavour Energy to liaise with local government regarding potential partnerships in the space of smart technologies, pilot projects around battery storage or solar programs.
- WSROC requests that for any rollouts of equipment, consideration be given for infrastructure (such as street lighting) to have capability for smart technology.
- Stronger support for distribution of renewable energy, including innovative mechanisms for the sale of electricity from distributed generators and ensuring a fair price for electricity supplied to the grid.

6. Affordability

Priority: Ensuring affordable energy for Western Sydney residents and businesses.

Issue: Electricity prices have increased sharply in the last few years, and the indication is that prices will continue to increase. This puts major strain on the budgets of businesses and communities alike. Price increases can further lead to critical health and social issues when residents are unable to run their heating or cooling devices adequately due to concern over their electricity bill.

WSROC is aware that distribution costs only make up a proportion of our councils' and residents' electricity bills. Nonetheless, it is still a considerable component of the cost. We note that Endeavour Energy has succeeded in achieving great efficiencies resulting in significant savings, which is to be commended. We would however, strongly encourage a greater portion of these cost savings be passed onto customers to alleviate bill stress and improve customer relations.

WSROC supports Endeavour's increased focus on a consumer centred culture and business model which can provide customers with increased flexibility and ownership over their electricity consumption and sale (e.g. renewables, micro-grids, storage and smart metering). However, we would ask Endeavour Energy to provide more clarity regarding the tariff structure as outlined in the paper. The proposed structure of a three-tariff arrangement (flat rate, seasonal time of use and seasonal time of use demand) would affect billing cost differently for households and businesses. It is not clear whether the proposed tariff options relate to households and/or business both which have very different demands profiles.

WSROC is especially concerned that the most vulnerable in our communities will be hit hardest by the increasing electricity prices and potential impact of tariff changes. We therefore urge Endeavour Energy to consider models that will not have an adverse impact on these communities, and to ensure that any tariff changes are clearly communicated in a timely manner.

We also caution that those for whom renewables are not a viable option (due to income constraints, renting or other considerations) should not end up enduring the brunt of the price adjustments when increasingly larger proportions of the community make the switch to renewable energy. We note that the report outlines the need for fairness among Endeavour Energy's diverse customer base. In line with this, WSROC requests Endeavour look at models where prices will not be adjusted so that those who cannot make the change will not be affected by punitive price increases.

Recommendation:

- WSROC encourages a greater proportion of savings to be passed onto customers.
- WSROC asks for Endeavour Energy to provide more clarity regarding the proposed tariff structure and its impact on households and business.

- Any changes in tariff structure will need to be communicated clearly to existing and new customers, in plain language.
- Any proposed tariff modelling must consider the impact on vulnerable communities.

7. Vegetation management

Priority: Ensuring mutually agreeable vegetation management practices with respect to both amenity and safety.

Issue: WSROC member councils have raised concern about the extent and quality of pruning undertaken by Endeavour Energy contractors in the Western Sydney area. Current pruning practices have been shown to be inefficient and to severely impact the health, structure and aesthetics of the trees.

WSROC councils recognise the statutory requirements placed on electricity supply authorities, as well as the difficulties involved with the management of trees under powerlines due to the complex nature of streets, community attitudes, government regulations and often poorly selected tree species.

However the current pruning practices are found to be inappropriate, often resulting in a large number of community complaints to councils. The extensive removal of limbs to a designated clearance, and beyond, may appear like a cheap solution in the short term, but the rapid regrowth generated necessitates frequent return visits making this pruning practice inefficient in the longer term. This practice also impacts the structural integrity of the tree, which has a negative aesthetic impact and may result in its eventual removal.

Tree trimming is an issue of growing concern for our communities and certainly an area of interest for councils who believe the impacts (visual and health) of inappropriate tree trimming should be critical to the decision making process. In this context, issues other than the need to achieve a minimum safety clearance should be considered.

We note the outcomes of the customer consultative survey around tree trimming, however, we understand that those surveyed did not include councils. WSROC sees this as a missed opportunity provided that councils are key stakeholders in this process.

WSROC encourages Endeavour Energy to improve its engagement with local government and to come to a mutually agreeable practice which encourages quality tree management under power lines. We are confident that a partnership arrangement has potential to result in better vegetation management, improve visual amenity outcomes, and ultimately provide the community with more cost effective tree management service.

We also refer to Ausgrid's recently implemented Vegetation Management Engagement Plan which includes a working group to improve engagement with key stakeholders as an example of a partnership arrangement designed to address similar issues.

Recommendation:

- Establishment of a partnership arrangement between Endeavour Energy and councils (possibly through ROCs) to improve collaboration around vegetation management, including:
 - Establish protocols for the delivery and management of tree works resulting in more efficient vegetation management and visual amenity outcomes.
 - Explore options to reduce tree maintenance, such as aerial cable bundling, tree replacement and planting programs.

8. Planning and development

Priority: Ensuring Western Sydney is adequately serviced and future proofed – especially considering future population growth and the new Western Sydney Airport.

Issue: Western Sydney is growing rapidly; an additional 1 million people are expected to settle in the region between 2011 and 2031. WSROC supports Endeavour Energy’s proposed investment in Western Sydney’s growth areas. Future proofing the electricity network is critical. The current infrastructure is already under strain, which is especially apparent when demand peaks, for example in extreme heat events when supply is not able to meet demand.

Western Sydney’s existing and greenfield sites require infrastructure services that will adequately service the populations from now into the future. Planning for this should take into account future population growth and environmental impacts. WSROC further urges that supply of services takes into consideration the quality of life for our residents, including amenity and aesthetics of development.

A key development for Western Sydney is the new Western Sydney Airport which is set to be operational by 2026. The airport is expected to have significant impact on Western Sydney, its residents, economy, employment and its services. WSROC stresses the need to ensure all essential services are in place when the airport opens and that those services are scaled to accommodate the projected expansion of the site.

Recommendation:

- Regular and close collaboration with local councils for any new development and for future energy planning.
- All new distribution assets in greenfield sites should be harmonious and consistent with the amenity of the area.
- Ensure Western Sydney’s existing and greenfield sites are appropriately serviced, with connection capacity that takes into account future population growth of Western Sydney growth centres.
- Work with Western Sydney Employment Area to ensure the future Western Sydney Airport is appropriately serviced. Connection capacity to take into account the airport’s projected staged growth.

9. Urban heat

Priority: Collaborate with stakeholders to identify and implement urban heat mitigation measures.

Issue: Urban heat is Australia’s number one natural killer, more deadly than storms, fire and floods combined. It causes major liveability and resilience problems with critical impacts for human health, infrastructure, emergency services and the natural environment.

Urban heat isn’t unique to Western Sydney, but it does have a particularly significant impact here due to the region’s unique climatic conditions, its large residential population and ongoing urban development. Its unique geography and lack of sea-breeze means that the region experiences more days over 35°C than the eastern Sydney suburbs. The greatest temperature increase in the near future is projected for Western Sydney, with an additional five–10 hot days by 2030.

WSROC sees a clear role in this process for NDSPs in ensuring critical infrastructure responses are in place to secure network reliability during episodes of extreme heat. WSROC is particularly concerned about the potential of electricity supply network disruptions due to extreme heat, impeding the ability of individuals to manage their exposure to high temperatures.

We are encouraged to see extreme heat being a recognised area of concern for Endeavour Energy and we would like to encourage Endeavour Energy to not only seek solutions to ensure peak hot weather electricity load is being managed appropriately, but also to assist in finding ways to alleviate those vulnerable communities who depend on electricity but struggle to pay their energy bills.

Recommendation:

- Endeavour to work with key stakeholders (including WSROC and its member councils) in the region to explore urban heat mitigation strategies specifically focused on securing energy reliability and affordability in extreme heat conditions.

10. Conclusion

WSROC sees great scope for increased partnership and collaboration between Endeavour Energy and Western Sydney councils. Through our response to the *Endeavour Energy Future Directions Paper* we highlighted a range of issues that we invite Endeavour Energy to respond to.

As outlined, the current public lighting pricing structure is of great concern to Western Sydney councils. We specifically raise that the current public lighting SLUOS modelling works as a disincentive for local government to do the right thing for their communities; provide more reliable lighting while reducing its carbon footprint.

WSROC and councils are also concerned regarding the impact of increasing energy prices on our vulnerable communities and urge Endeavour Energy to do all that is possible to alleviate bill stress.

We are however encouraged to see that Endeavour Energy is gearing up to become a leader in renewable energy and smart technology. We invite Endeavour Energy to collaborate closely with local councils to scope new opportunities and maximise benefits of existing programs.

The table below summarises our key priorities and recommendations.

Priority	Recommendations
Street lighting	<ul style="list-style-type: none"> • Provide transparency regarding pricing for public lighting. • Engage with councils around service levels at a regional level. • Change maintenance (SLUOS) changes to reflect actual maintenance of LED lights.
Contestable works	<ul style="list-style-type: none"> • Provide clarification around contestability of projects.
New technologies and smart cities	<ul style="list-style-type: none"> • Work with councils to pilot, assess and deliver smart lighting and smart city technology. • Partner with councils in the space of smart technologies (including pilot projects around battery storage or solar programs). • Ensure that for any equipment roll outs consideration be given for infrastructure (such as street lighting) to have capability for the smart technology. • Support for distribution of renewable energy, including innovative mechanisms for the sale of electricity from distributed generators and ensuring a fair price for electricity supplied to the grid.

Affordability	<ul style="list-style-type: none"> • Commit to greater proportion of savings to flow through to customers. • Provide more clarity regarding the proposed tariff structure and its impact on households and business. • Communicate any changes in tariff structure clearly to existing and new customers, in plain language. • Minimise the impact of any proposed tariff modelling on vulnerable communities.
Vegetation management	<ul style="list-style-type: none"> • Establishment partnership arrangements with councils to improve collaboration around vegetation management, including: <ul style="list-style-type: none"> ○ Establishing protocols for delivery and management of tree works. ○ Exploring options to reduce tree maintenance.
Planning and development	<ul style="list-style-type: none"> • Ongoing collaboration with local councils for any new development. • Ensure that all new distribution assets in greenfield sites are harmonious and consistent with the amenity of the area. • Ensure Western Sydney existing and greenfield sites and the new airport are appropriately serviced.
Urban heat	<ul style="list-style-type: none"> • Work with key stakeholders to explore urban heat mitigation strategies.

WSROC appreciates that local government has been consulted in the lead up of this submission period and we would encourage the continuation of this level of partnership. Ongoing consultation and collaboration with stakeholders such as local government is critical for the delivery of reliable, safe and affordable electricity.

As stated earlier, WSROC organises regular (quarterly) forums between Endeavour Energy and Western Sydney councils in order to improve collaboration and the sharing of information. WSROC invites Endeavour Energy to present the results of the feedback as received through this consultation process back to the forum. Western Sydney councils are interested in hearing how Endeavour Energy will address this feedback and the next steps of the AER proposal process.

We look forward to continuing our collaboration with Endeavour Energy in delivering the best outcomes for Western Sydney communities.



Office of Local Government

5 O'Keefe Avenue NOWRA NSW 2541
Locked Bag 3015 NOWRA NSW 2541

Our Reference: A559844
Your Reference:
Contact: Policy
Phone: 02 4428 4100

Mr Rod Howard
Chief Operating Officer, Endeavour Energy
PO Box 811
Seven Hills NSW 1730

By email: rod.howard@endeavourenergy.com.au



E-MAILED

5/9/17 KA

Dear Mr Howard

Thank you for your letter of 7 August 2017 to Mr Tim Hurst Acting Chief Executive of the Office of Local Government providing the opportunity to comment on Endeavour Energy's 2019-2024 Directions Paper. Mr Hurst has asked me to respond on his behalf for the Office of Local Government.

As the Paper notes, local councils are a significant stakeholder group within Endeavour Energy's customer base. There are currently 39 local councils within your area of operations. These councils face significant energy costs through the provision of street lighting, the operation of community facilities and, in the case of regional councils, the operation of water and sewerage networks.

As on-demand service providers to the community, councils have limited opportunity to proactively manage their energy consumption. In this regard, any plans to introduce peak time demand tariffs may impact significantly on local government's ability to deliver cost-effective services to the community. I would encourage you to consult further with councils on this matter and to consider the potential financial impacts on local government of each of the tariff options proposed.

As the Directions Paper notes, councils can achieve important savings in energy consumption through the application of energy-efficient technologies. I would encourage Endeavour Energy to continue to explore these options in consultation with local councils in your service area, particularly in regard to street lighting technologies and opportunities for additional generation and storage systems.

Yours sincerely

Keith Baxter
Manger, Policy
Office of Local Government

5/9/17



Mr Bruce Rowley
General Manager Customer and Corporate Services
Endeavour Energy
By Email: yoursay@endeavourenergy.com.au

Dear Mr Rowley

Re: Feedback on the Endeavour Energy Directions Paper 2019-2024

Thank you for your correspondence sent to the Secretary of Health on 3 August 2017 requesting feedback on the Endeavour Energy Directions Paper. The Secretary has asked me to respond.

I appreciate your invitation for feedback in acknowledgement of Health NSW being a large user of electricity in your network area. The following are answers to the targeted questions within your Directions Paper for consideration:

1. What are the priorities of the stakeholders that you represent?

One of the primary concerns to Health facilities is the ongoing security and sustainability of electricity supply. In addition, strength in the communications protocols to affected sites in preparation for programmed power outages or load shedding power interruptions is also of critical importance.

2. What can we do to best deliver these priorities?

The priorities could be delivered by ensuring adequate investment in distribution infrastructure to ensure the sustainability of distribution contingencies. In addition, priorities can be delivered through retention of strong communications with sites of high vulnerability.

3. What changes to our price tariff design should we be considering?

Health facilities operate 24 hours a day and 7 days a week and therefore have a relatively flat load profile that typically benefits from a flat rate tariff. The *seasonal time of use tariffs* and *seasonal time of use demand tariffs*, would not benefit most Health facilities as site consumption is not flexible enough to move away from expensive peak charge times and towards off-peak charge times. However, having tariff options available to opt into where sites could benefit is welcome.

4. How should we be engaging with customers and stakeholders in developing our proposal?

Workshops targeting agency level stakeholders are a good way to gather information. Writing to the recipients of outage notifications on your existing contacts list may also be a good way to get feedback from relevant stakeholder staff directly affected by electricity distribution network performance.

5. What should our role be in the future energy market that will provide customers greater choice and control?

Diversifying the tariff structure is an adequate way to provide choice and control to customers, however acceptable measures need to be employed to guide customers towards opting for the tariff options that is of most benefit to them. The provision of high level advisory services to facilitate site level tariff optimisation needs to be a consideration to facilitate the greater control that customer's desire.

Thank you again for seeking feedback from the Ministry of Health. If you require further feedback please contact Russell Burns, Program Manager Sustainability and Facilities of this office by either phone 9391 9927 or email: rburn@doh.health.nsw.gov.au.

Yours sincerely



Jan Schmidt
Director Asset Management

Dear Mr Howard

Thank you for inviting the National Parks and Wildlife Service (NPWS) to comment on Endeavour Energy's plans to provide a safe, reliable and affordable electricity supply over the five years from 2019-2024.

NPWS has reviewed your 'Directions Paper for Consultation 1 July 2019 - 30 June 2024'. We have no specific comments to make regarding the contents of the document, however, we do note that your document makes no mention of environmental protection as an issue to consider when planning either maintenance or capital expenditure works.

NPWS encourages you to include environmental protection as an issue to be considered in future planning and maintenance of your assets.

If you have any further questions about this issue, please contact me on 9995 6127 or at cherie.pittman@environment.nsw.gov.au.

CHERIE PITTMAN
Acting Director Property and Commercial Branch
National Parks and Wildlife Service





Mr Rod Howard
Chief Operating Officer
Endeavour Energy
PO Box 811
SEVEN HILLS NSW 1730

Dear Mr Howard

Thank you for your letter inviting comments on Endeavour Energy's plans for the upcoming 2019–24 regulatory control period.

I support your efforts to improve Endeavour Energy's engagement with customers and stakeholders, including the NSW Government. I understand that staff from the Division of Energy, Water and Portfolio Services also met with Kate McCue, Manager Corporate Affairs and Jon Hocking, Manager Network Regulation, to discuss aspects of your plans in more detail.

As you may be aware, improving energy affordability is one of the NSW Government's key priorities. In this context I note your efforts to reduce costs through the Endeavour 2020 transformation program while maintaining the safety and reliability of Endeavour Energy's distribution network.

In relation to tariff design, please keep the Division of Energy, Water and Portfolio Services updated about in relation to stakeholder views on the tariff structure options outlined in your Directions Paper. The NSW Government supports the transition to more efficient tariff structures, with customers having the option to 'opt-out' to the flat tariff where other tariffs are not right for them.

Given my Department has a number of responsibilities relating to planning strategy for population and economic growth in Sydney's west, I would welcome the opportunity to continue to engage with Endeavour Energy on long term energy infrastructure planning in this area.

Should you have any questions, please contact Katharine Hole, Executive Director Energy Strategy on 9338 6634.

Yours sincerely

Carolyn McNally
Secretary

13-9-17



CE17/0817

Mr Ron Howard
Endeavour Energy
51 Huntingwood Drive
Huntingwood NSW 2148

RECEIVED

13 SEP 2017

Dear Mr Howard,

Thank you for your invitation for Roads and Maritime Services to provide feedback on the Endeavour Energy – Directions Paper for Consultation 1 July 2019 – 30 June 2024 (Revenue Proposal for 2019-2024). I have been asked to respond on behalf of the Chief Executive.

Roads and Maritime has a statutory obligation to maintain the road network and there are associated restrictions and requirements to ensure both the safety of the public and the security of the road where development occurs within a road corridor or have the potential to impact upon the travelling public.

Roads and Maritime has a number of projects in the growth centre areas that are highlighted in Endeavour Energy's Revenue Proposal. Of highest concern is the Western Sydney Employment Areas which has a number of interfaces with the Western Sydney Airport. For ease of reference, please refer to the attached Western Sydney Infrastructure Plan map.

There is a need to discuss multiple projects within Endeavour Energy's 2019-2024 Revenue Proposal as a matter of urgency. Appendix A details the specific projects under discussion. In particular, it is noted that Endeavour Energy's Revenue Proposal states that: *"The airport developer rather than our customers will be required to fund the dedicated assets of this network infrastructure."*

Accordingly, we request for work to enable the Western Sydney Airport that an easement outside of the existing road corridor is procured, and Roads and Maritime is consulted early about the placement of these dedicated assets so they are not impacted by future road upgrade work.

Roads and Maritime's 2022 Forward Workplan can be viewed at www.rms.nsw.ov.au/business-industry/major-projects/events/index.html. Specific projects websites are available for information and consultation.

Please note that Roads and Maritime does not have the ability to acquire land for purposes other than road works.

Any development that proposes to use a Roads and Maritime controlled road corridor requires the approval of Roads and Maritime in accordance with Section 138 of the *Roads Act 1993*. This is to ensure safety is maintained in accordance with the *Work Health and Safety Act 2011* and Austroads requirements. Further, any future maintenance access to assets that are within the road pavement or footway that requires a traffic lane shutdown will be subject to obtaining a *Road Occupancy Licence* through Transport for NSW's Traffic Management Centre.

Roads and Maritime's preference is that Endeavour Energy obtain easements outside of the existing road corridors. This is to ensure that any future road upgrade project does not impact newly installed Endeavour Energy assets which may reduce reliability to the customers of NSW, and may impact the travelling public. Special conditions also apply regarding utility assets crossing motorways either as an overhead connection, underground connection or located within a bridge.

There are a number of Roads and Maritime controlled roads and road projects that are currently in preliminary investigation, development or delivery stages which have the potential to be impacted by Endeavour Energy's 2019-2024 Revenue Proposal. It is essential that there be a close level of consultation and liaison with Roads and Maritime in determining the impact upon road alignments and profiles to ensure the safety of the public. Roads and Maritime requests early consultation in the planning stages for any proposed Endeavour Energy assets that may impact a road upgrade project.

Roads and Maritime looks forward to working with Endeavour Energy in the development and rollout of the Revenue Proposal 2019-2024 to ensure the road upgrades and integrated transport solutions are delivered to support growth. To ensure the respective organisations can work together to obtain the best outcome for the people of NSW, could you please keep Roads and Maritime informed of the progress of the proposal.

Should you have any questions or wish to discuss our feedback, please do not hesitate to contact me on 0428 580587.

Yours sincerely

Handwritten signature of Edward Scully in blue ink, followed by the date 7/9/17.

Edward Scully
A/Director Network Sydney

Encl.

1. Western Sydney Infrastructure Plan Map
2. North West Growth Centre Map
3. Appendix A – Endeavour Energy Proposed Projects and interfaces with RMS Projects

Appendix A – Endeavour Energy Proposed Projects and Interfaces with RMS Projects

Western Sydney Employment Lands

Growth Area	Endeavour Project	RMS Project	RMS Project Stage
WSEA	<u>Oakdale Industrial New Zone Substation and new feeder</u> from Sydney West TG	Archbold Road (Great Western Highway to Sydney Water Pipelines)	Development
WSEA	<u>Oakdale Industrial New Zone Substation and Science Park New Zone Substation</u> , and the associated <u>new feeder</u>	Archbold Road (Great Western Highway to Sydney Water Pipelines)	Concept Design & REF
		Mamre Road Upgrade (M4 Motorway to Kerrs Road)	Preliminary Investigation
WSEA	<u>Science Park New Zone Substation to Western Sydney Airport New Switching Station (North)</u> and the associated <u>new feeder</u>	The Northern Road, Eaton Road to Littlefields Road	Delivery
		M12 motorway, M7 to The Northern Road	Development
		Any future potential upgrade to Elizabeth Drive corridor	N/A
WSEA	<u>Western Sydney Airport New Switching Station (North) to Kemps Creek New Switching Station Tee Western Sydney Employment Area New Zone Substation</u> and the associated <u>new feeder</u>	M12 motorway, M7 to The Northern Road	Development
		Any future potential upgrade to Elizabeth Drive corridor	N/A
		Mamre Road/Devonshire Road grade separated interchange	Preliminary Investigation
WSEA	<u>Western Sydney Airport New Switching Station (North) to Western Sydney Airport New Switching Station (south)</u> , and associated <u>new feeder</u>	The Northern Road, Eaton Road to Littlefields Road	Delivery Ready
		The Northern Road, Mersey Road to Eaton Road	Delivery Ready
		M12 motorway, M7 to The Northern Road	Development
WSEA/ WSPGA	<u>Bringelly Zone Substation Upgrade to Western Sydney Airport New Switching Station (South)</u> and associated <u>new feeder</u>	The Northern Road upgrade, Peter Brock Drive to Mersey Road as well as Bringelly Road upgrade from King Street to The Northern Road	Construction

Table 1: Western Sydney Employment Area - RMS Project and Endeavour Energy Project Interfaces

Greater Macarthur Priority Growth Area

Growth Area	Endeavour Project	RMS Project	RMS Project Stage
GMPGA	<u>Mt Gilead New Zone Substation and associated new feeder</u> from Macarthur TG	Appin Road Safety Improvements	Preliminary Investigation
		Appin Road (Mount Gilead)	Development
		Appin Road at Narellan Road	Development
GMPGA	<u>Menangle Park new zone substation and associated new feeder</u> from Macarthur TG	Spring Farm Parkway	Development
GMPGA	<u>Rebuild of 33kV Feeder 308 From Nepean to Douglas Park</u>	Spring Farm Parkway	Development

Table 2: Greater Macarthur Priority Growth Area - RMS Project and Endeavour Energy Project Interfaces

North West Priority Growth Area

Growth Area	Endeavour Project	RMS Project	RMS Project Stage
NWPGA	<u>New Feeder</u> between Vineyard TG and Box Hill New Zone Substation	North West Growth Centre Road Strategy including Bandon Road and Denmark Link Road	Preliminary Investigation
NWPGA	<u>New feeder</u> between Marsden Park Zone Substation and South Marsden Park Zone Substation	Richmond Road upgrade	Maintenance Period

Table 3: North West Priority Growth Area - RMS Project and Endeavour Energy Project Interfaces

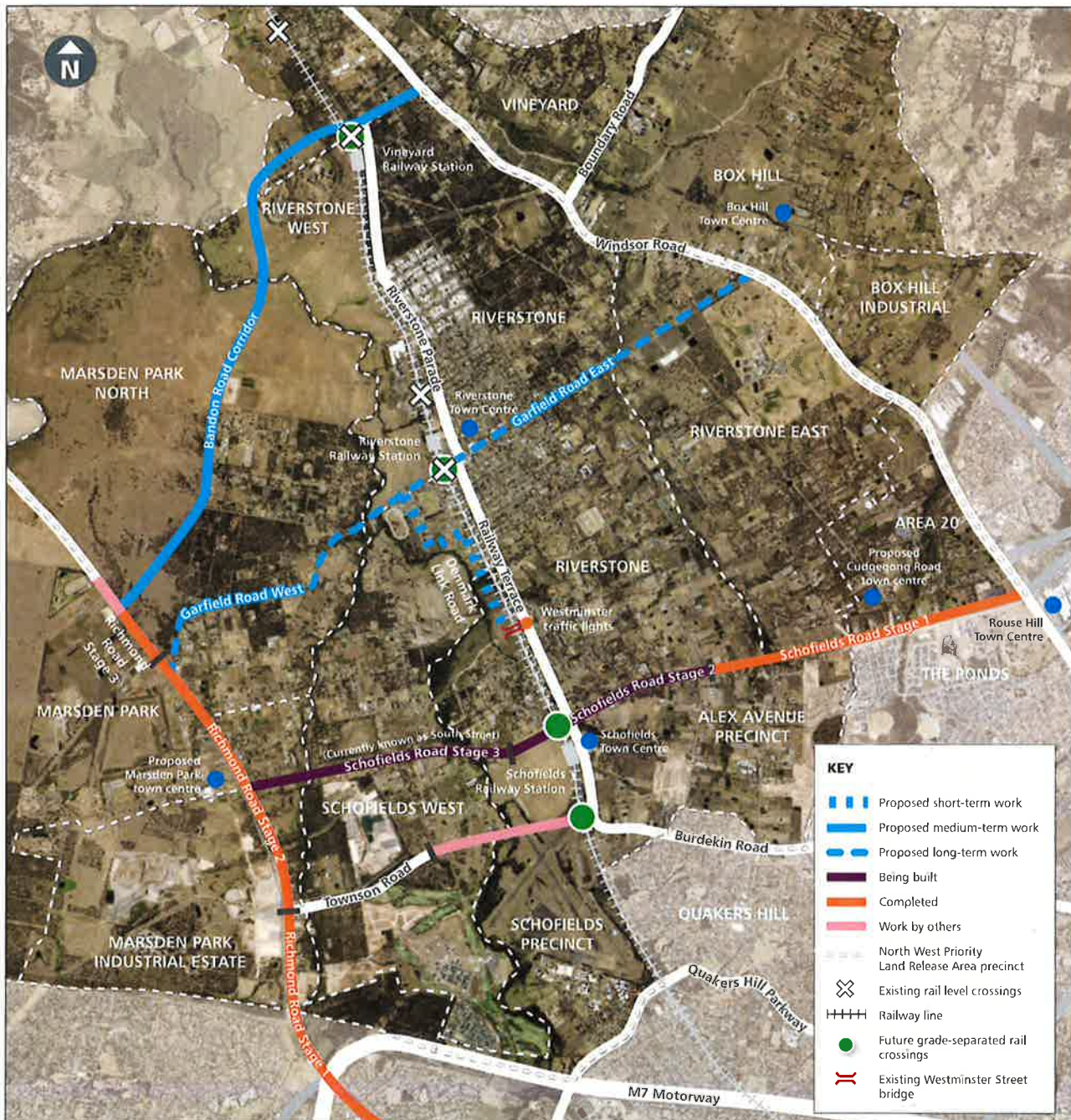
South West Priority Growth Area

Growth Area	Endeavour Project	RMS Project	RMS Project Stage
SWPGA	<u>Bringelly Zone Substation Upgrade</u>	The Northern Road upgrade, Peter Brock Drive to Mersey Road as well as Bringelly Road upgrade from King Street to The Northern Road	Construction
SWPGA	<u>Maryland New Zone Substation</u> and any associated feeders	The Northern Road upgrade, Peter Brock Drive to Mersey Road as well as Bringelly Road upgrade from King Street to The Northern Road	Construction
SWPGA	<u>Upgrade Feeders</u> between Macarthur TG and Nepean Transmission Substation	Spring Farm Parkway	Development

Table 4: South West Priority Growth Area - RMS Project and Endeavour Energy Project Interfaces

North West Growth Centre Road Network Strategy

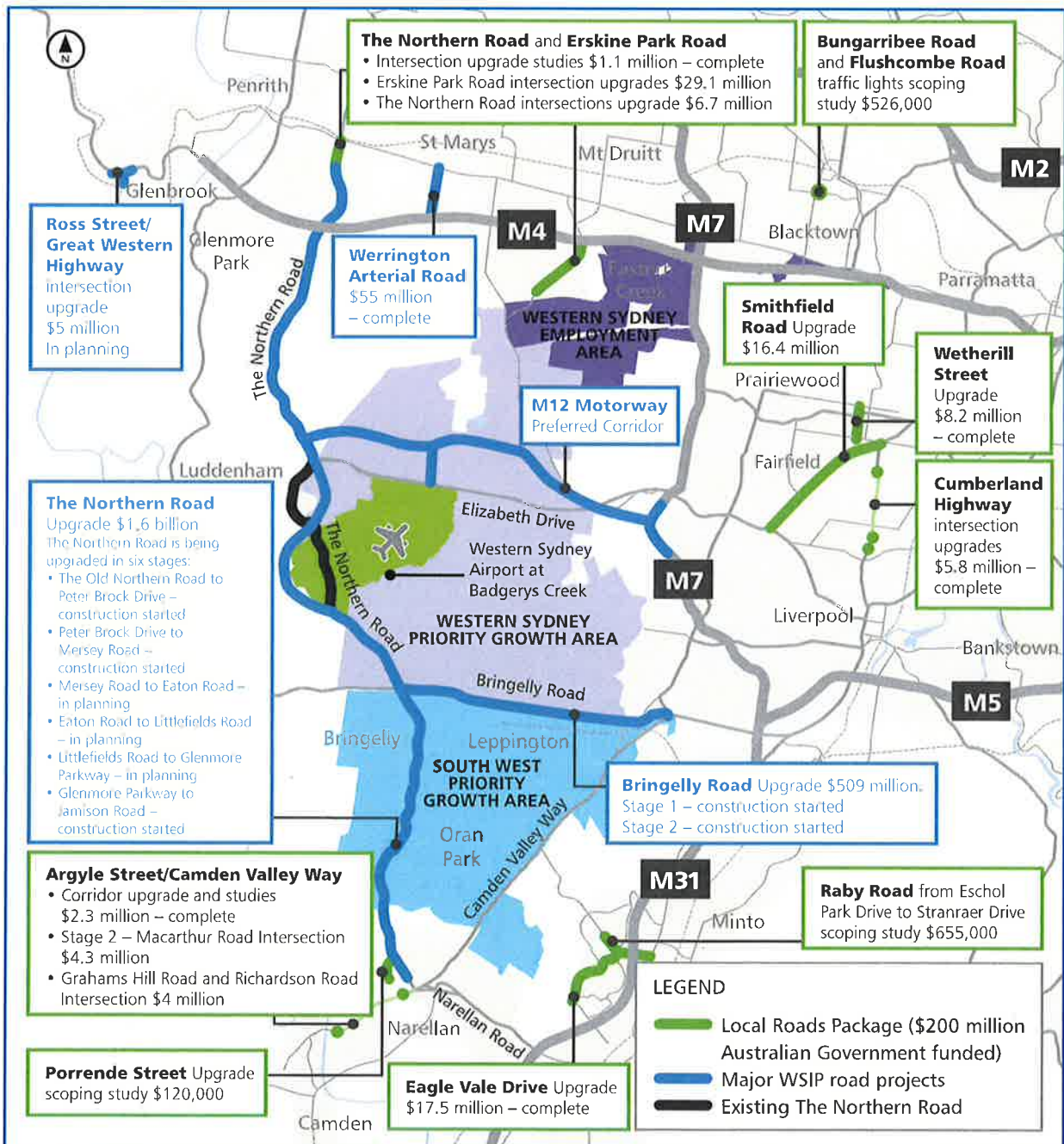
March 2017





Western Sydney Infrastructure Plan (WSIP)

June 2017



**PIAC response to Endeavour Energy's
Directions Paper**

6 September 2017

Introduction

The Public Interest Advocacy Centre

The Public Interest Advocacy Centre (PIAC) is an independent, non-profit law and policy organisation that works for a fair, just and democratic society, empowering citizens, consumers and communities by taking strategic action on public interest issues.

PIAC identifies public interest issues and, where possible and appropriate, works co-operatively with other organisations to advocate for individuals and groups affected.

Established in July 1982 as an initiative of the (then) Law Foundation of New South Wales, with support from the NSW Legal Aid Commission, PIAC was the first, and remains the only broadly based public interest legal centre in Australia.

Energy and Water Consumers' Advocacy Program

The Energy + Water Consumers' Advocacy Program (EWCAP) represents the interests of low-income and other residential consumers of electricity, gas and water in New South Wales. The program develops policy and advocates in the interests of low-income and other residential consumers in the NSW energy and water markets. PIAC receives policy input to the program from a community-based reference group whose members include:

- Council of Social Service of NSW (NCOSS);
- Combined Pensioners and Superannuants Association of NSW;
- Ethnic Communities Council NSW;
- Salvation Army;
- Physical Disability Council NSW;
- Anglicare;
- Good Shepherd Microfinance;
- Financial Rights Legal Centre;
- Affiliated Residential Park Residents Association; and
- Tenants Union.

PIAC's engagement with Endeavour Energy

PIAC welcomes the opportunity to respond formally to Endeavour Energy's directions paper. PIAC has been engaging broadly with Endeavour Energy over recent months. This engagement has covered issues including tariff design, deliberative forum content and consumer engagement strategies. PIAC considers this submission to be a further positive step in this engagement process. The submission addresses the feedback questions raised in the directions paper.

Responses to directions paper questions

Question 1: What are the priorities of the stakeholders that you represent?

PIAC represents all NSW residential energy consumers.

Having advocated for NSW residential energy consumers for close to 20 years, PIAC has extensive knowledge of the opinions of these consumers. At the moment, their number one energy priority is affordability. Between escalating energy bills and other cost of living pressures - most notably rising housing costs – many consumers are less able to absorb recent price increases than they have been in the past. As identified in the directions paper, this is reflected in Endeavour Energy’s own research.¹

Increasingly, the impact of higher energy prices is not limited to low income households. In their July 2016 *Consumer Pulse* report, Choice reported that over 80% of both high and low-income households are concerned about their electricity bills.² As a result of bill increases after July 2017, high numbers of consumers who have not previously identified as ‘hardship customers’ may experience payment difficulty for the first time. These may include families on middle incomes, people experiencing mortgage stress, and self-funded retirees. In many cases, these consumers are unaware of their entitlement to retailer hardship support. They are often disinclined to request support, due to the stigma associated with seeking assistance, until the problem is exacerbated by accumulated debt and/or forgone expenditure on other essential products and services.

Given that energy affordability is such a key concern for consumers, PIAC contends that it should be treated as a priority for Endeavour Energy as it approaches its regulatory proposal.

Recommendation 1

PIAC recommends that Endeavour Energy focus its attention on energy affordability, as this is a key priority for consumers.

Question 2: What can we do to best deliver on these priorities?

Reliability

Many energy businesses posit the view that higher revenues are justified because consumers expect high reliability levels. PIAC contends that this is a falsely predicated and overly simplistic understanding of consumer preferences. In order to deliver more affordable electricity to consumers, energy networks businesses need to break the cycle of unnecessarily increasing expenditure to achieve levels of reliability that are beyond what people are willing and able to pay.

Consumers in the National Electricity Market (NEM) currently experience a very high level of reliability. In Endeavour Energy’s service area, supply is available to consumers, on average, 99.9% of the time.³ Given the extremely high reliability of NSW electricity supply, PIAC suggests that increased expenditure to increase reliability is not needed, and cautions Endeavour Energy against seeking revenue to “reduce the potential for any further deterioration” in reliability.⁴ If

¹ Endeavour Energy, *Directions Paper for Consultation – 1 July 2019 – 31 June 2024*, 2017, Sydney, 8 <http://www.endeavourenergy.com.au/wps/wcm/connect/2ec58892-b248-4ae2-b978-d300fe984386/INE7170_Preliminary_Proposal_final.pdf?MOD=AJPERES>.

² Choice, *Consumer Pulse: Australians’ Attitudes to Cost of Living 2015-2016*, 2016, pg. 8.

³ Endeavour Energy/Newgate Research, *Endeavour Energy Deliberative Forum*, presentation slide notes, 2017, Slide 59.

⁴ Endeavour Energy, *Directions Paper for Consultation*, 13.

anything, it may be appropriate for Endeavour Energy to accept a slightly lower level of reliability and pass on the associated saving on reliability-related expenditure to consumers. By doing so, Endeavour Energy could reduce their portion of consumers' energy bills and contribute to addressing the energy affordability problem faced by their customers.

PIAC acknowledges that Endeavour Energy's deliberative forum results suggested that customers would be willing to pay for higher reliability. However, PIAC is concerned about how this question was framed. In the fora, participants were actually told that 'Option Three', of lower bills for lower prices was unlikely to be adopted.⁵ By framing this option as off the table, Endeavour Energy implied that a vote for that option was essentially wasted. PIAC contends that this is likely to have contributed to the very low level of support for Option Three. This low level of support can be contrasted with Essential Energy's deliberative forum results, which suggested that when presented with this course of action as a viable option a majority were willing to trade slightly lower reliability for lower prices.

Given the extremely high reliability levels and consumer concern about affordability, a slight reduction in reliability should be a live option for Endeavour Energy.

Secondly, the trade-off was presented as an issue of intergenerational equity. Essentially, participants were told that future consumers would eventually have to pay for reliability if they voted not to pay for it now. While PIAC concedes that consumers will have to pay to ensure reliability does not decrease to an unacceptable level, reliability is currently so high that consumers could, sustainably, pay less for slightly lower reliability that is still well within acceptable levels. By suggesting that a vote for Option Three was pushing extra costs onto future consumers, PIAC is concerned that votes for that option may have been emotively deterred.

For these reasons, PIAC is of the firm view that Endeavour Energy should not interpret their deliberative forum results to justify increasing costs through expenditure to ensure higher reliability in their network.

Recommendation 2

PIAC recommends that Endeavour Energy does not use increasing reliability to justify higher revenue in the upcoming regulatory period.

Forecasting network growth

In addition to ensuring that consumers are not paying for unnecessary reliability expenditure, Endeavour Energy should also ensure that they forecast expenditure needed to deal with network growth in a robust way.

In the directions paper, Endeavour Energy identifies population-based network growth as a significant driver for capital expenditure over the next regulatory period.⁶ PIAC agrees that growth in Sydney's North West and South West Priority Growth Areas will require significant investment. However, any capital program that addresses this expansion must have a strong empirical base. If there is insufficient data to support the long-term need for any level of investment it is

⁵ Endeavour Energy/Newgate Research, *Endeavour Energy Deliberative Forum*, presentation slide notes, 2017, Slide 64.

⁶ Endeavour Energy, *Directions Paper for Consultation*, 15.

inappropriate for the investment risk to be placed on the existing customers, from whom expansion costs would be recovered even if the investment proves unnecessary.

In order to address this issue Endeavour Energy should include network expansion expenditure as a contingent project in their AER proposal. Under the National Electricity Rules (NER), Endeavour Energy can propose that a project and associated expenditure be considered by the AER to be contingent on a trigger event.⁷ Such a project is not included in a DNSP's allowable revenue until it is confirmed, or triggered. This allows DNSPs to plan for projects without putting risk onto existing consumers by speculatively investing in them. In Endeavour Energy's case, the contingent project would be a potential network expansion and the trigger event a firmer forecast of population growth, either due to government infrastructure funding or another pre-determined action such as commitment of a new development.

PIAC considers the use of contingent projects to be an appropriate way for Endeavour Energy to manage prospective network expansion in areas where growth is expected but the scale is not currently defined.

Recommendation 3

PIAC recommends that Endeavour Energy ensures it has a strong empirical basis for expenditure on expanding the network due to population growth in greenfield areas and, where appropriate, to include such expansions as contingent projects.

Question 3: What changes to our price tariff design should we be considering?

In 2014, the AEMC implemented a change to the National Electricity Rules (NER) that required DNSPs to implement cost reflective pricing structures.⁸ PIAC supported this change and contends that DNSPs should move to cost reflective pricing as quickly as practicable while considering consumer impacts in the transition.

PIAC's understanding of the application of the Rules is that, while implementing the cost reflective pricing should be the primary consideration in Endeavour Energy's tariff design, this change still needs to be considered in the context of consumer impacts. In order to serve these interests, Endeavour Energy should not seek to increase the fixed charge portion of their network tariffs in the name of cost reflectivity. While a higher fixed price may more accurately reflect the nature of Endeavour Energy's cost base, increasing fixed charges is detrimental to consumers in two ways. Firstly, a high fixed charge disadvantages low energy-use consumers by fixing a larger proportion of their bill. This has a particular impact on low income and vulnerable consumers, who are overrepresented in the low energy-use group of consumers, and on consumers who have already made long term investments in building and appliance efficiency, on site generation and storage to reduce their energy demand. Secondly, high fixed charges reduce the ability of all consumers to manage their electricity costs through reducing their consumption, a practice that is particularly important for low income and vulnerable consumers.⁹

⁷ NER, 6.6A.

⁸ AEMC, National Electricity Amendment (Distribution Network Pricing Arrangements) Rule 2014, Final Determination, November 2017, Sydney <<http://www.aemc.gov.au/Rule-Changes/Distribution-Network-Pricing-Arrangements/Final/AEMC-Documents/Final-determination.aspx>>.

⁹ NSW Council of Social Services, *Turning Off the Lights: The Cost of Living in NSW, June 2017*, 2017, Sydney, 19 <<https://www.ncoss.org.au/sites/default/files/Cost-of-Living-Report-16-06-2017-FINAL.pdf>>.

Rather than increasing fixed charges, Endeavour Energy should implement cost reflective pricing through the introduction of peak demand tariffs in place of existing volume based, along with the provision of network services that promote the uptake of smart metering. Unlike flat and time of use tariffs, demand tariffs effectively target periods of peak demand on the network and therefore send effective price signals to retailers about the costs of serving customers. Hence PIAC supports Endeavour Energy's approach to discuss demand tariff options in both their customer deliberative fora and the directions paper.¹⁰

However, PIAC is concerned that the Endeavour Energy seasonal time of use demand tariff (STOU Demand) is not being proposed as the default tariff option.

Endeavour Energy has proposed a regular seasonal time of use (STOU) tariff as the default structure for all new connections. PIAC understands that this is with a view to using it as a transitional tariff ahead of a future adoption of demand tariffs as the default. While PIAC agrees that STOU tariffs are "more cost reflective" than a flat tariff,¹¹ it is not appropriate to use them as transition mechanism, particularly given the confusion and lack of long term certainty that doing so creates for consumers.

Instead, Endeavour Energy should adopt the STOU Demand as the default tariff structure for new connections. PIAC acknowledges that some transition method is necessary to enable customer education about how to take engage with cost reflective pricing, this should be achieved by starting with a low proportion of the network bill allocated to a demand charge that is gradually increased as volume based charge are decreased. This allows for a gradual transition to more cost reflective network charges, for all connections, without the need for an unnecessary extra tariff structure.

Recommendation 4

PIAC recommends that Endeavour Energy does not use the transition to cost reflective pricing to justify an increase to fixed charges.

Recommendation 5

PIAC recommends that Endeavour Energy adopt demand tariffs as the default tariff structure, at least for new connections, to satisfy the NER requirement for cost reflective pricing.

Question 4: How should we be engaging with customers and stakeholders in developing our proposal?

PIAC notes that the AER's *Consumer Engagement Guideline for Network Service Providers*¹² should underpin Endeavour Energy's engagement with consumers when developing their proposal. In this guideline, the AER identifies four principles for consumer engagement:

1. Clear, accurate and timely engagement;

¹⁰ Endeavour Energy, *Directions Paper for Consultation*, 43.

¹¹ *Ibid*, 42.

¹² AER, *Consumer Engagement Guideline for Network Service Providers* <<https://www.aer.gov.au/system/files/AER%20-%20Consumer%20engagement%20guideline%20for%20network%20service%20providers%20-%20November%202013.pdf>>.

2. Accessible and inclusive engagement;
3. Transparent engagement; and
4. Measurable engagement.

Endeavour Energy should apply these principles whenever they engage with either consumer advocates or directly with their customers.

In addition to the principles set out by the AER, PIAC contends that genuine engagement requires Endeavour Energy to reflect the results of that engagement in their final proposal to the AER. If the preferences of consumers and their advocates are not reflected in a network business' regulatory proposal, it has been 'engagement for engagement's sake' and would not be considered genuine.

Recently, Endeavour Energy has engaged closely with PIAC and other key consumer advocates about, for example, the content of their deliberative fora, and accurately reflected our feedback in their design. PIAC supports this form of productive engagement, and strongly encourages Endeavour Energy to continue to work to incorporate engagement results into their actions.

Recommendation 6

PIAC recommends that Endeavour Energy continues to engage constructively on matters of importance and works to incorporate the findings from their stakeholder engagement into their final AER proposal.

Question 5: What should be our role in the future energy market that will provide customers with greater choice and control?

PIAC supports consumers having greater choice and control in the future energy market. In order for this to be the case, it is important that Endeavour Energy and other DNSPs play a key role in facilitating these choices.

However, the decisions on how the future market develops must be based on both the long-term interests and preferences of consumers. While there are clear benefits in DNSPs providing some innovative services in the future market, there may be non-DNSP solutions that also support good, or in some cases better, consumer outcomes.

Further engagement

PIAC would welcome the opportunity to discuss the issues considered herein in more depth. For any queries please contact Policy Team Leader Energy and Water, Craig Memery at cmemery@piac.asn.au or on (02) 8898 6522.

TEC email

Hi Kate,

Thanks for sending this. My interest is only in the TSS so here are a few brief comments - but btw congrats on a really appealing, accessible doc.

On the plus side, the changes to 2017-19 TSS are definitely a step in the right direction. And by proposing a STOUD tariff you have been braver than the other NSW networks - although I wonder how you'd do the cost allocation on that if the demand charge is meant to mainly recover LRMC costs, given the lack of known network constraints apart from new growth areas over the next decade.

Three comments for further discussion:

1. As you indicate, the STOUD tariff is probably too complex to be successful on an opt-in basis. Also please see the attached paper from UNSW on why demand tariffs based on a customer's monthly peak have a poor correlation with network peaks (localised or not).
2. A more cost-reflective option (for those with smart meters) would be flat tariffs with peak time rebates to encourage demand response during the 2 hour window 8-10x pa when the network is peaking.
3. It might also be worth trialing a true capacity tariff (as available in France, and akin to download speed-related telco tariffs) which would involve consumers paying for a set, chosen kW of capacity, which if exceeded would result in a premium being charged for additional demand. This could be combined with peak time rebates so there is a carrot plus a stick.

Assuming I get the grant late this month from ECA I've applied for, my future work in this area will focus on scoping network consumption tariffs that are fair for both solar and non-solar consumers. Moving solar owners onto demand charges would help, as they'd then pay their fair share for evening peaks (although I am dead-set against different tariffs for solar and non-solar, and fortunately the Rules are on my side for now at least). The main problem concerns the need to still recover sunk costs; if not via higher fixed charges (which are gressive, disadvantaging low income and low consumption users), then they'd need to be by inflating demand charges and rebates, which potentially skews their design. I wish there were other ways to skin this cat; some creative thinking is needed.

Apologies for the brevity; trying to finish ups few things before heading off on leave tomorrow (btw I'm building at Arakoon, an hour south of Mylestom; best climate in Australia!).

cheers

Mark

Mark Byrne
Energy Market Advocate
Total Environment Centre

12 September 2017

Mr Tony Narvaez
Chief Executive Officer
Endeavour Energy
PO Box 811
SEVEN HILLS NSW 1730

Dear Mr Narvaez,

Re: Endeavour Energy's Revised Funding Arrangements

The Urban Development Institute of Australia (UDIA) NSW is the leading property industry group promoting the responsible growth of this State. We have over 500 company members and more than 3,000 of their employees attend our events, sit on our committees, undertake training or are involved in the activities of the organisation on an annual basis. Our organisation is the oldest property development advocacy group in the country, having been established in 1962. Our advocacy is based on making our cities more liveable, affordable and connected.

UDIA NSW highly commends Endeavour Energy's decision to provide a capital contribution towards substation costs and high voltage cabling for subdivisions. This strategic shift to invest in growth is welcomed by industry due to the cost savings it will bring for development.

NSW faces an unprecedented housing affordability challenge. Based on Government projections, Sydney requires 825,000 new homes to accommodate 1.7 million by 2036 or 41,250 annually. Sydney has never delivered this number of new dwellings in a calendar year before let alone 20 years running.

The time lag in a project start and completion for land and housing (currently around 7-10 years for land and house packages to reach the Sydney market) and taxes & charges (responsible for 30-40% of the cost of a new house) are two of the biggest challenges in addressing the housing affordability crisis. Any reduction in time and cost will go directly to improving affordability.

Due to Endeavour Energy's contribution towards growth of the network, savings for a standard subdivision will be in the order of \$1,000 - \$1,500 per lot. Also, Endeavour Energy's funding of shared lead-in electrical works can often amount to many hundred thousand dollars, which removes first mover risk for developers who may otherwise not progress these projects.

The continued investment by Endeavour Energy in building its network is not only encouraged but it makes sense. 70% of Sydney's population growth over the next 20 years will be in Western Sydney and it is crucial that this growth is delivered in a timely and affordable fashion.

UDIA NSW has long enjoyed a good relationship with Endeavour Energy. Endeavour Energy representatives sit on our policy committees, speak at our industry events and UDIA has sat on Endeavour Energy's Customer Council for many years. We are keen to continue to work together to shape Sydney's future growth and make sure the infrastructure required to meet this growth is provided.

At your earliest convenience, we would be pleased to meet to discuss the relevant issues outlined above. Should you wish to take up this invitation, please contact Justin Drew, General Manager, Policy and Corporate Affairs on 9262 1214 or at jdrew@udiansw.com.au to organise a meeting time and place.

Yours sincerely

A handwritten signature in black ink, appearing to read "Steve Mann". The signature is fluid and cursive, with a long horizontal stroke at the end.

Steve Mann
Chief Executive