



## **Greens NSW Submission to the Australian Energy Regulator's 2014-2019 draft determinations for Ausgrid, Endeavour Energy Essential Energy and Transgrid**

13 February 2015

The Greens NSW welcome to opportunity to comment on the Australian Energy Regulator's 2014-2019 draft determinations for the distribution companies Ausgrid, Endeavour Energy and Essential Energy and Transgrid.

This document seeks to canvass issues that are relevant to all three distribution network operators. It is a submission to each of the determinations for Ausgrid, Endeavour Energy, Essential Energy and Transgrid for the 2014-2019 period.

These determinations will have critical impacts on the price of electricity and the capacity of the network operators to undertake substantial changes to the network hardware and operations that will be necessary to adapt to rapidly evolving technological opportunities and environmental imperatives.

The Greens NSW support the draft determinations' proposed reductions in allowable capital expenditure but we are strongly opposed to the cuts to operating expenditure.

Increases in capital expenditure proposed by the network operators would return NSW to the era of gold plating, where consumers would be forced to pay for infrastructure that is

- ◆ unnecessary to the task of maintaining a reliable supply at minimum cost and minimum environmental impact, and
- ◆ more expensive than the demand management and distributed generation alternatives.

The draft determinations' proposal for operation expenditure would inevitably result in destructive pressure on the workforce, where management would seek to reduce the number of skilled employees and their remuneration and conditions. Neither of these outcomes is desirable in an industry that is confronting substantial change. Damaging workforce capacity will cripple the ability of NSW to be world leaders in clean energy solutions.

These determinations are occurring in the context of a state election campaign that is dominated by the NSW Liberal-National government's proposed partial lease of Ausgrid and Endeavour Energy and all of the transmission undertaking Transgrid.

If the final AER determination were to accept the network operators' bids the price that potential purchasers would be prepared to pay for the lease of the assets would be substantially increased. In effect, the determination would facilitate a transfer of benefit

from consumers and power industry employees to the future owners of the grid leases, in part cased out to the government in the bid prices.

Simultaneously, the NSW government and management of Networks NSW have launched a propaganda campaign against public sector power industry workers and their union as part of both the enterprise bargaining process and the election effort to convince voters to support the 'asset recycling' proposal.

While these are political matters, they are relevant to the Regulator in that they provide an explanation for the network operators' behaviour and assistance in the development of a response.

### **Support cuts to capital expenditure**

The Greens support the Draft Determination to reduce the capital expenditure of the electricity distributors Ausgrid, Essential and Endeavour Energy.

The AER plays a critical role in determining the level of capital expenditure undertaken by these state-owned corporations. Distribution use of system charges are set to allow the operators to recover and earn a return on their investment through higher power prices.

Distribution use of system charges are largely passed through to the consumers. While this formally occurred under regulated tariffs, it continues to be the case in the de-regulated market.

The Australian Energy Regulator's previous decisions to permit greater levels of capital expenditure have accounted for the bulk of the increase electricity costs over recent years.

According to the NSW Independent Pricing and Regulatory Tribunal (IPART) a typical regulated customer's electricity bill increased in NSW over the past 6 years by around \$1060 per annum<sup>1</sup>. The single biggest contribution to this rise is recovery and rate of return on investment in the 'poles and wires'. This accounted for \$580 or 55% of the total increase.

Many commentators have also pointed out that because the AER overestimated forecasts in electricity demand, a large portion of this investment was unnecessary. The network operators used the ruling of the AER to 'gold plate' the network beyond what was necessary to maintain reliability and safety.

Regulatory arrangements for transmission and distribution transfer all of the risk of over-investment to the consumer. Distribution network operators have a strong and perverse incentive to inflate the demand forecast and to under-estimate the ability of demand-side responsiveness (including demand management, pricing signals, distributed generation) to obviate the need for new capacity.

Previous bids by the networks ignored the imminent impacts of rooftop solar panels and customer response to price in their forecasts of the peak demand that would need to be met.

This is not a new error in the electricity industry where management is rightly infamous for 'overhang' errors and their social and economic impact. NSW consumers and the state's

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<sup>1</sup>[http://www.ipart.nsw.gov.au/Home/About\\_Us/FAQs?dlv\\_FAQ%20List=%28dd\\_Industries=electricity%29](http://www.ipart.nsw.gov.au/Home/About_Us/FAQs?dlv_FAQ%20List=%28dd_Industries=electricity%29)

economy paid the price for coal-fired generators such as Mount Piper and Bayswater that were developed decades before they were needed.

This adverse behaviour is likely to intensify under network privatisation where whatever restraint might be exercised through ministerial shareholders and the political consequences of rising power bills would be lost.

The phenomenon of 'gold plating' as describe above has been widely documented<sup>2</sup> and its consequences should serve as a salutary lesson to the assessment of the draft determinations for the period of 2014 to 2019.

Households and businesses are still bearing the brunt of costs associated with the last period's overinvestment. The Greens welcome the proposed cuts to capital expenditure of Ausgrid, Endeavour Energy and Essential Energy.

The Greens recognise that draft determinations of the AER for capital expenditure are well under the distribution network operators' proposals:

<b>Distributor:</b>	<b>Proposed capital expenditure for 2014/19 (\$ billion)</b>	<b>Australian Energy Regulator Draft Determination (\$ billion)</b>
Ausgrid	4.4	2.5
Endeavour	1.7	1
Essential	2.6	1.9

The decision to reduce the capital expenditure costs is a sensible one that takes into account

- ◆ continuing decline in the demand for electricity,
- ◆ increasing price sensitivity in the demand for electricity,
- ◆ the high likelihood of continued reductions in the cost of rooftop solar systems and
- ◆ the probability that cost-effective electricity storage could become available within the determination period.

According research done by the Australia Institute<sup>3</sup>, in each of the three years since 2010 the quantity of electrical energy used has been less than the year before, and there is no evidence of a reversal in this trend.

Various factors are contributing to the decline in electricity demand. The Australia Institute identifies the following as the major drivers:

- ◆ the impact of (mainly regulatory) energy efficiency programs,
- ◆ structural change in the economy away from electricity intensive industries, and

<sup>2</sup>[http://www.aph.gov.au/~media/wopapub/senate/committee/electricityprices\\_ctte/electricityprices/report/report\\_pdf.ashx](http://www.aph.gov.au/~media/wopapub/senate/committee/electricityprices_ctte/electricityprices/report/report_pdf.ashx)

<sup>3</sup><http://www.tai.org.au/content/power-down>

- ◆ since 2010, the response of electricity consumers, especially residential consumers, to higher electricity prices.

In this context, the higher capital spending proposed by the distributors and Transgrid could not be justified by the falling demand that reduces the need to replace existing assets.

It also points to the need to review the amount of faith that is placed in forecasts, particularly where they are developed without consideration of the price feedback loop.

Approving the capital spending proposed by the distributors would therefore have seen the continuation of the 'gold plating' phenomenon with disastrous impacts on the cost of electricity for consumers and on opportunities for renewable energy and demand management.

The Greens support the AER's determination that the reduced rate is sufficient to help the distributors and Transgrid seek efficiencies in their capital expenditure rather than investing in unnecessary infrastructure.

### **Reform needed**

While the Greens NSW submission supports the AER's decision to reduce capital expenditure, we do not endorse a business-as-usual approach to electricity distribution in NSW.

The state's networks are the result of more than 100 years of evolution of electricity supply, driven largely by declining costs of central-station coal and gas fired electricity generation.

Consequently transmission and distribution infrastructure is primarily adapted to the task of moving electricity from a small number of large power stations in a limited number of locations to a large number of mostly passive consumers, distributed across the state.

The era of declining costs driven by improving economies of scale in large thermal power stations has mostly come to an end. The rising CAPEX costs of coal, increases in bulk gas prices, the imperative to de-carbonise the electricity supply and spectacular developments in renewable energy technology have changed the options for industry structure.

The pressure to change this linear system of electricity distribution will almost certainly increase over the span of the 2014- 15 determination period.

As the global shift towards renewable energy continues and Australia comes under increasing pressure to reduce green gas emissions, the current distribution network will need to undergo substantial changes to

- ◆ accommodate both central station and distributed renewable energy sources,
- ◆ facilitate peer-to-peer trading of electricity on the public network,
- ◆ allow for bi-directional flows while protecting the safety of the workforce,
- ◆ create information and control opportunities for consumers to become active participants in managing their own demand and purchasing and selling electricity (ie. contracts) from a variety of distributed and central station sources.

The proliferation of solar PV households is already requiring distributors to reassess their business and technology model and one-way approach to electricity distribution.

The development of the new electricity industry comes with a number of technical, social and economic challenges.

These challenges will require an experienced and innovative workforce to develop new solutions that accommodate changed technologies and consumer expectations.

They will require a management that is nimble and prepared to empower their workforce and they will require a new generation of customer support.

It is also critical that the capital spending set by the AER is focused on facilitating the transition rather than locking in existing inefficient and carbon intensive modes of electricity production.

### **Oppose cuts to operational expenditure**

The Greens oppose the AER's draft determination to cut the operating expenditure of Ausgrid, Endeavour and Essential Energy.

The next five years will be critical in reforming the electricity network to reduce carbon emissions and increase efficiency.

While limiting capital expenditure is an appropriate response to falling electricity demand, curtailing the capacity of the network to respond to changing conditions is antithetical to meeting the challenges posed by creating a 21<sup>st</sup> electricity sector.

Vince Graham, the head of Networks NSW warned in December 2014 that the proposed cuts to operating expenditure would result in the loss of 4,600 jobs. Spread over the three distribution companies, this would equate to 2400 jobs lost from Ausgrid, 1500 from Essential Energy and another 700 from Endeavour Energy.<sup>4</sup>

The loss of the accumulated expertise would deny the industry a platform for critical change and would in effect ossify the transmission and distribution network in its current paradigm.

The costs to the state's economy would include the loss of new job opportunities and the capacity to substantially reduce power bills (if not prices).

Future export opportunities would also be lost as NSW surrendered its opportunity to be amongst the world leaders in new solutions.

Instead, the state would be forced to rely on turnkey imported solutions.

While a substantial reduction in the OPEX would make the undertakings more attractive for privatisation, it would increase the vulnerability of NSW to forced change.

In the short term, a substantially reduced workforce would reduce network reliability and safety.

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<sup>4</sup> <http://www.smh.com.au/business/jobs-axed-asset-prices-slashed-on-nsw-power-price-cut-20141127-11vayl.html#ixzz3ROwciolJ>