Australian Energy Regulator

NSW Electricity Transmission Revenue Reset

Norske Skog Albury Mill's Response

To

TransGrid's Application

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Norske Skog

Norske Skog Paper Mills (Australia) Ltd is Australia's only manufacturer of newsprint. Norske Skog is owned by Norske Skogindustrier ASA, a Norwegian based company, which is among the largest newsprint producers in the world. The company specialises in the production of newsprint and magazine grades of paper.

Norske Skog Paper Mills (Australia) Ltd is as a registered Australian Company and has two paper mills operating in Australia, one at Boyer near Hobart in Tasmania and the Albury Mill in New South Wales.

The Albury Paper Mill has one paper machine with a capacity of approximately 275,000 tonnes per annum manufacturing newsprint grade paper. The mill employs 185 people and approximately 700 people indirectly. The Albury Mill spends approximately $100 million per annum within the local community and a further $150 million per annum in NSW.

The newsprint industry is capital intensive with the most recent upgrade at the Albury Mill costing $135 million in 2006 and the conversion project to lightweight coated production at the Boyer Mill $85 million in 2014.

The Albury Mill has been in continuous operation since 1980.

The Albury Mill's newsprint production relies on the use of both plantation radiata pine pulp logs and recycled paper. The significant proportion of fibre produced at the Albury Mill is from plantation radiata pine pulp logs using a thermo mechanical pulping process. This type of pulp production uses significant amounts of electricity to mechanically separate the wood fibres. This is the major difference from a chemical pulping processes.

The Albury Mill supplies the majority of its output into the Australian Newsprint market, supplying 40% of the Australian newsprint market under medium term contracts. Combined with mills located at Boyer, Tasmania and at Kawerau in New Zealand, Norske Skog provides 80% of the Australian newsprint market. The Albury and Boyer Mills export surplus newsprint capacity into Asia as required.

Even though we are a large newsprint market player, the newsprint industry is an internationally competitive, price-taking market. Our competition in Australia is from newsprint imported predominantly from Asia and Norske Skog has no ability to pass through to customers higher electricity transmission costs. In addition Norske Skog operates with tight margins due to the global and local downturn in the newsprint industry. All of Norske Skog's operations in Australia are in regional areas and any potential impacts will have direct effects on local employment in their local communities.

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Executive Summary

Norske Skog appreciates the opportunity to present its views to the Australian Energy Regulator in regards to the application from TransGrid for the reset of the electricity transmission costs in NSW. Norske Skog's Albury Mill is directly connected to TransGrid's high voltage electricity transmission network.

In its overview and introduction, TransGrid indicates that transmission prices account for 7% of an average consumers costs. By comparison Norske Skog Albury Mill's transmission prices account for 25% of its total electricity cost. Norske Skog operates in a price taking industry and is unable to recover price increases from its customers. Norske Skog Albury Mill has incurred electricity transmission cost increases of 260% over the past seven years while its maximum demand has remained unchanged.

The goal of the National Electricity Market expressed through the National Electricity Objective is to promote efficient investment in and efficient operation and use of electricity services for the 'long term interests of consumers'. Consumers have no bargaining power with network providers and the only recourse for consumers is for their views to be represented by the Australian Energy Regulator in its decisions in the revenue reset process.

The ASX utilities index shows that the sector performance has outperformed the ASX 200 index over the past five years. Norske Skog Boyer's internal global benchmarking clearly indicates that NSW customers (and Tasmanian customers) are paying at least 125% more than similar electricity transmission networks in Europe and Scandinavia.

It is therefore disappointing that the Australian Energy Regulator appears to have adopted the top end of the recently introduced rules and guidelines in favour of network providers. Norske Skog Albury Mill is not suggesting the Australian Energy Regulator adopt the bottom end of the guidelines but that the approach is one that takes a balanced approach to the revenue reset that all costs are justified, are at the lowest and most efficient for a best practice competitive business and are economically efficient.

TransGrid has used the 2013 AEMO forecast data to provide its view of growth in NSW demand. The 2014 AEMO forecast indicates that the NSW highest peak demand of 14.58 GW will not be exceeded until 2020/21 at a 10% Probability Of Exceedance. This provides prima facie evidence that there is no need for TG to augment the NSW transmission network, at least in this regulatory period except for possibly some very (and few) specific areas. NSA recommends that the growth forecast is updated to reflect the AEMO 2014 data which indicates the 2013 data is anticipated to be overstated. This approach should have occurred as part of the last regulatory review where forecasts were overstated. This failure resulted in part to the excessive increases in NSW electricity transmission costs.

Norske Skog's Albury Mill has serious concerns in regards to TransGrid's capex and opex proposals. One major concern is the level of underspend that occurred during the last regulatory period in both these areas of the business and effect this has had on transmission pricing providing excessive returns which aren't in the long term interests of NSW customers. Norske Skog Albury is also concerned at a number of approaches taken by TransGrid which do not reflect the operation of an efficient business in a competitive marketplace. The AER must ensure it uses its regulatory

approach to simulate a competitive environment in which TransGrid must operate during this next regulatory period.

Norske Skog Albury Mill finds the service target performance incentive scheme (scheme) counter intuitive to how a normal competitive marketplace operates and advocates the scheme in its current form is amended or abolished. NSW customers already pay for and expect the provision of a reliable and safe electrical transmission network. The scheme in effect sees NSW customers pay twice for what should be fundamentally provided.

Norske Skog Albury Mill is pleased that through the *Better Regulation Program* TransGrid has commenced customer engagement. Norske Skog Albury Mill's experience so far has been mixed. TransGrid had not consulted with the Albury Mill regarding the revenue application or its proposed capital program. On the other hand, Norske Skog Albury Mill confirms it has had good and constructive dialog with TransGrid in regards to network pricing. Based on our overall experience, Norske Skog Albury does not support TransGrid's claims that they have received the strong endorsements as claimed. The benefits to NSW customers from the funding support TransGrid is seeking for customer engagement are yet to be demonstrated.

TransGrid has identified 28 projects under the umbrella of the Network Capability Incentive Parameter Action Plan (NICIPAP). In a competitive market, firms would only invest in such small discretionary projects if the project provides an immediate solution to an immediate serious safety or environmental issue or has a payback of six to twelve months. Of the projects proposed by TransGrid, one has a payback of 13 years and another 18 years and a further 12 projects would deliver a payback in two years or less. NSA recommends that the AER modify the NICIPAP scheme to simulate a competitive market so that such projects provide tangible benefits to NSW customers.

While it appears excess demand charges have been excluded from the review, NSA views these charges as punitive charges and not providing cost reflective signals. NSA recommends the excess demand charges be abolished and replaced with cost reflective charges.

TransGrid not only has to accommodate in its own transmission pricing, but also recovers the transmission costs incurred by Ausgrid, Directlink and now the ACT transmission network as well. Directlink only provides a service to users on the north coast of NSW and the Ausgrid transmission elements are embedded in the Ausgrid distribution network thereby supporting Ausgrid distribution users. Despite this, TG aggregates the transmission costs of both Ausgrid, Directlink and ACT into its overall transmission costs, and then allocates the combined costs to all consumers in NSW. This means that those consumers in the south of the state pay for the Ausgrid and Directlink transmission - assets that they do not use. Also of concern is the proposal for NSW customers to support an augmentation project in the ACT transmission network.

This is a matter that both the AER and the NSW government needs to address.

Overall both Norske Skog Albury Mill and NSW consumers expect considerably lower costs for electricity transmission services for this next regulatory period. TransGrid's proposal does not recognise this outcome and proposes a continuation in the growth of the current excessive costs.

Transmission Regulatory Framework

Electricity networks are natural monopolies as it is uneconomic for industry and communities to provide the infrastructure. The economic theory for monopolies suggests networks could be expected to set excessive prices without adequate regulation and have little incentive for efficient operation[1]. Our view of regulation is that regulation is trying to simulate a competitive marketplace for the monopoly to operate in.

This regulatory review is being undertaken at a time when consumers have faced significant increases in transmission network prices and this will be detailed later in this submission. To an extent this resulted from the changes to the National Electricity Rules in 2006 and 2007 and the acceptance of poor load and consumption forecasts despite industry representation to the contrary resulting in economic and social hardship. The Productivity Commission states:

> Average electricity prices have risen by 70 per cent in real terms from June 2007 to December 2012. Spiralling network costs in most states are the main contributor to these increases, partly driven by inefficiencies in the industry and flaws in the regulatory environment.[2]

Since then, these rules have undergone further change and under the *Better Regulation Program* guidelines have been developed following wide consultation and with significant consumer input. These new rules provide the Australian Energy Regulator (AER) with greater discretionary powers and the guidelines show stakeholders how the AER can use this discretionary power for an equitable outcome for all parties.

Norske Skog Albury Mill (NSA) consider the AER has a clear responsibility to ensure a balanced approach to the revenue reset, that all costs that are presented are justified, are at the lowest and most efficient for a best practice competitive business and are economically efficient. Of concern to NSA is the amount of capex and opex under spent by TransGrid (TG) in the recent regulatory period and that this pre-payment for projects not delivered and the earning of above normal returns are fairly refunded to all NSW consumers.

The goal of the National Electricity Market (NEM), expressed through the National Electricity Objective (NEO) is to promote efficient investment in and efficient operation and use of electricity services for the 'long term interests of consumers'. There are two issues to consider here:

- That the interest of a business is to remain viable now (the immediate term) by paying the lowest and most efficient costs. This must be balanced with the provision of long life expensive transmission network assets which must operate and be maintained with costs recovered over the longest period possible to provide the lowest cost to consumers. The two timeframes don't necessarily converge resulting in some inefficiencies which must be shared by both parties, and

[1] http://www.pc.gov.au/projects/inquiry/electricity/report Chapter 3 as at 4th August 2014.
[2] http://www.pc.gov.au/projects/inquiry/electricity/report/key-points The First key point released on 26th June 2013 as at 4th August 2014.

- That consumers have no bargaining power with network providers and the only recourse for consumers is for their views to be represented by the AER in its decisions in the revenue reset process.

It is therefore disappointing that the AER appears to have adopted the top end of the guidelines in favour of network providers.

NSA encourages the AER to take a more balanced approach in the interests of consumers. NSA is not suggesting the AER adopt the bottom end of the guidelines but that the approach is one that that best represents all parties not just the network providers, such as TG's access to AAA credit rating financing being reflected in their WACC and not the default BBB rating, after all NSW consumers contribute to the achievement of the AAA rating.

Overall both NSA and NSW consumers expect considerably lower costs for electricity transmission services for this next regulatory period. TG is proposing a continuation in the growth of the current excessive costs.

Sector Performance

While TG is a Corporatised body of the NSW Government, there are private sector network providers with equity traded on the Australian Stock Exchange (ASX). Figure 1 below shows that only the health care sector index has outperformed the utilities sector index over the past five years.

This indicates that investors are willing to pay a premium for better than market returns as in the case for the current offer for Envestra[1]. The premium is in the order of 33.3% above the 30 day volume-weighted share price up to and including the 15th July 2014 which was the day prior to the acceptance of the offer by the Directors.

There are no indicators that TG would be regarded less favourably by the market than the utility companies that comprise the ASX 200 Utilities Index implying that TG is earning above average (defined as the ASX 200 Index) returns at the cost of NSW customers This outcome should influence the market risk premium and the equity beta.

[1] http://www.envestra.com.au/market-information/market-announcements/ as detailed the Target Statement dated 18th July 2014.

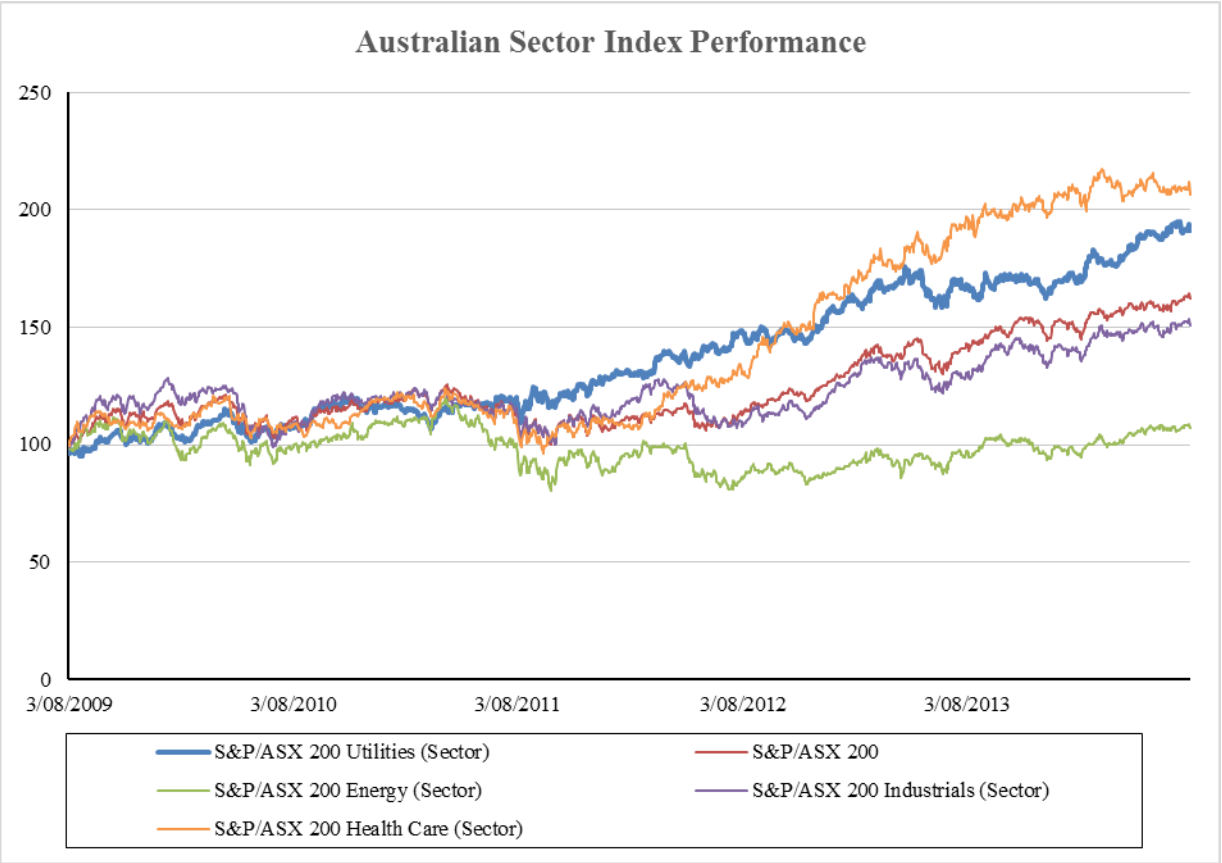


Figure 1: Australian Sector Index Performance[1]

Norske Skog's Boyer Mill's internal Norske Skog global benchmarking indicates that the Boyer Mill incurs the highest electrical transmission price in the group and NSA is the second highest.

Figure 2 displays the benchmarking results with NSA having an electricity transmission price disadvantage of 125% difference when compared to a comparable transmission network in north east France. This French network is inter-regional, inter-country and the French mill is positioned similarly to NSA with regards regional (and country) boundaries.

The sector performance and Norske Skog Boyer's internal global benchmarking clearly indicates that NSW customers (and Tasmanian customers) expect the AER to deliver considerably lower electricity transmission cost outcomes from this regulatory review.

[1] https://my.spindices.com/indices/equity/sp-asx-200-utilities-sector as at 4th August 2014.

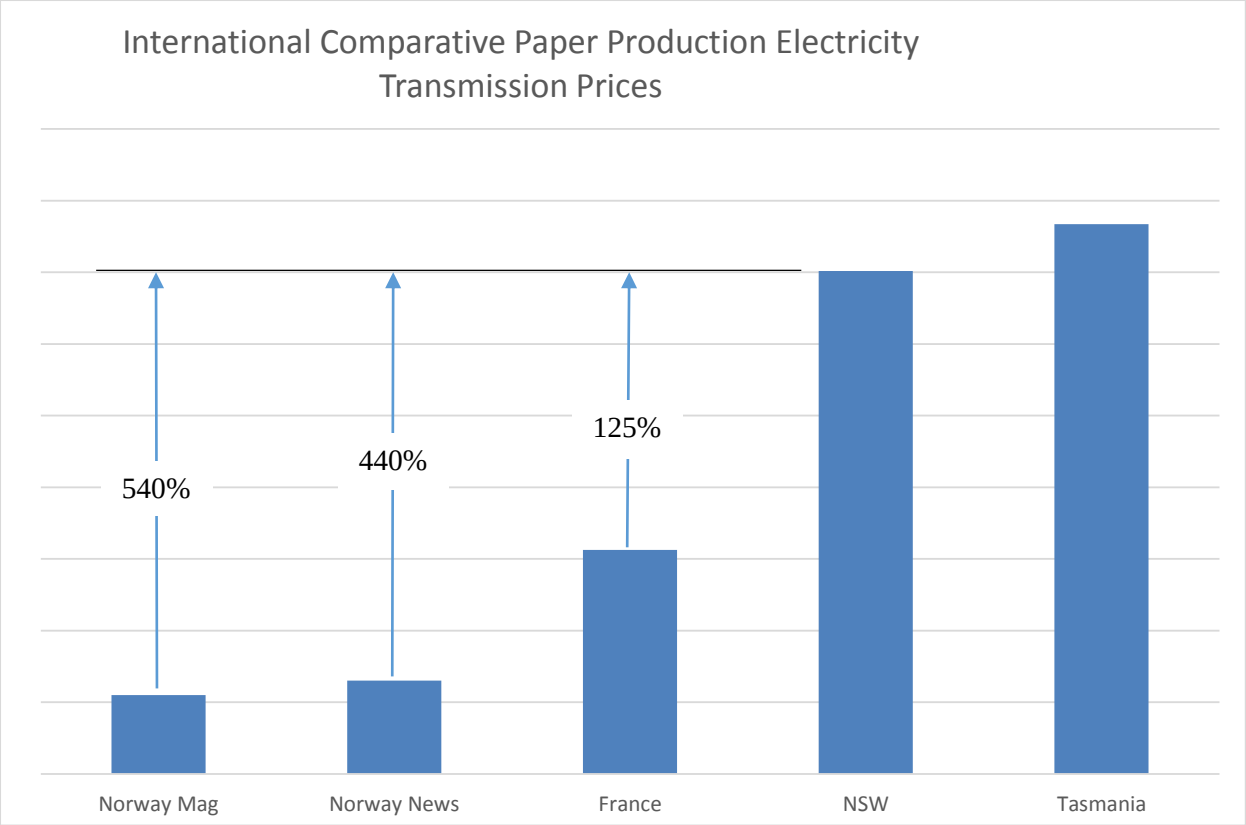


Figure 2: Norske Skog International Electricity Transmission Price Benchmark[1]

Demand Forecast

TG has used the 2013 Australian Energy Market Operator (AEMO) forecast data to provide its view of the growth in NSW demand over the next five years. NSA recommends this is updated to reflect the AEMO 2014 data which indicates the 2013 data is anticipated to be overstated. This approach should have occurred as part of the last regulatory review where forecasts were overstated. This failure resulted in part to the excessive increase in NSW electricity transmission costs.

From figure 3 below, the NSW highest peak demand of 14.58 GW occurred on 1st February 2011 and AEMO forecasts that on a 10% Probability Of Exceedance this demand will not be exceeded until 2020/21 providing prima facie evidence that there is no need for TG to augment the NSW transmission network, at least in this regulatory period except for possibly some very (and few) specific areas.

[1] Source: Norske Skog Boyer Mill Benchmarking Study as at the 6th August 2014.

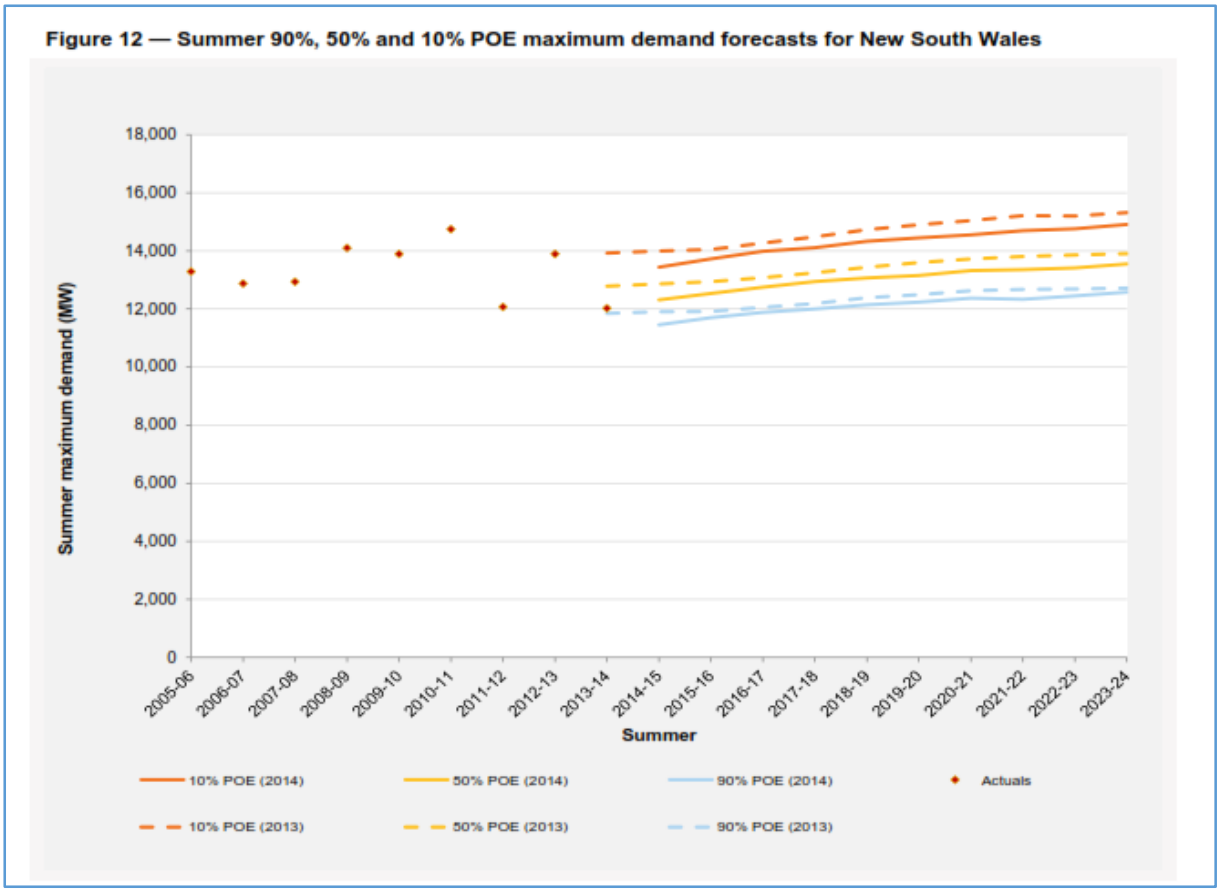


Figure 3: AEMO 2014 Maximum Demand Graph[1]

TransGrid's Revenue Application

NSA has a number of serious concerns with TG's revenue proposal as follows.

Weighted Average Cost of Capital: (WACC) TG has adopted the position that the AER guidelines on the Rate of Return, despite extensive consultation, have shortcomings for an efficient business, but is willing to adopt them when it suits TG. TG then develops a higher value for WACC than under the guidelines.

TG accepts the AER guideline on gearing as their debt to equity structure of 65:35 presents them with a significant benefit compared to the guideline of 60:40. TG acquires debt at AAA rating and then accepts the guideline credit rating of BBB+ in effect a double hit to NSW consumers who are contributing to the NSW Government rating and then being hit again so TG can have a significant benefit of interest of upwards of 200 basis points spread.

TG then rejects the cost of equity modelling by AER of 8.4% and adopts an approach of 10.4%. Consumers are of the view that the debate has been had and that TG's position is further

[1] http://www.aemo.com.au/Electricity/Planning/Forecasting/National-Electricity-Forecasting-Report as at 5th August 2014.

undermined by the proposed sale of Envestra which is attracting a premium based on the AER's decision at that time of a return on equity of 10.36% and the cost of debt of 9.37%.

The AER's final decision on the rate of return guideline calculates an equity beta of 0.7 be used. Subsequent to this decision, the AER's consultant has provided an assessment less than this for firms operating in Australia under Australian conditions. The median value from this work represents the most common equity beta value for firms in Australia operating under the Australian regulatory environment and should be adopted by the AER.

TG proposes debt is acquired on 10 year, BBB rating from the Reserve Bank of Australia on a 10 year trailing average which includes bond rate during the global financial crisis. This sees bond rates exceed 13% compared to the current rates which are less than 6%. TG's annual report shows that it paid approximately 5.5% during the global financial crisis and current rates aren't much higher. TG is proposing to claim a cost of debt of 7.72% which is a gross overstatement and that it should avoid the AER's transition approach claiming the transition approach would cost TG some $141 million is disingenuous. The AER must therefore use external data suppliers to extrapolate the cost of debt.

Debt Raising Costs: Historically TG has raised debt at no cost from the NSW Government. In this regulatory period TG seeks $8 million in costs to raise debt, a cost they won't incur.

Asset Depreciation: NSA is directly connected to TG's 132kV network and own the step down transfers that supply NSA's electricity reticulation system. TG implies that some of its assets might require replacement earlier than their age might dictate due to condition monitoring. This is the opposite to NSA's experience where condition monitoring has extended the life of electrical assets across the Albury Mill site include high voltage equipment, in some cases by up to 10 years.

Early replacement of assets has the impact of TG recovering its capital earlier than planned. The replacement assets then have a higher depreciation cost, all impacting on the cost to NSW customers. TG must ensure that assets last at least the expected life.

There is then further incentive for TG to replace assets as soon as they are fully depreciated rather than retain them in service when they are still useful.

NSA's concern is that assets will be removed from service when they are fully depreciated and where assets are replaced early, there is no impost on TG.

NSA supports the principle of life extension works for assets on the basis:

- that life extension works are depreciated once the asset reaches the end of its depreciation life, and
- that life extension works are the lowest cost alternative.

Opex: NSA has serious concerns in regards to TG's opex proposal. The primary issue is the level of opex granted at the last regulatory review and the amount of underspend that occurred. Based on this performance TG has also been rewarded under the efficiency benefit scheme.

In a competitive business, a business will enjoy the benefit of lowering its opex until market forces (economics) restores the balance through pricing. At this point the competitive business must continue to reduce its opex from this new lower level. In the TG case, it receives a benefit based on reducing its opex, which NSA supports as it simulates a competitive market, for a period from

the efficiency benefit scheme but then TG seeks to commence the next regulatory period opex some $40 million higher than the preceding period in 2012/13. In a modern cost focused firm, stretch and aspirational targets for opex improvement are set.

What TG is seeking to implement is not what occurs in a competitive market. NSA recommends that the AER simulate:

- a competitive market in holding TG's opex at a level commensurate with its spend in 2012/13. This will also ensure TG's opex spend becomes efficient as TG will need to contend with inflationary effects like other firms in a competitive market.
- That stretch targets for opex improvement are set as part of the efficiency benefit scheme which are achieved before participation in the scheme is allowed.

NSA is also concerned that TG is possibly gaming the efficiency benefit scheme with NSW customers paying for this.

Labour Cost Escalation: TG is proposing for internal labour cost escalation to use its employee agreement. NSA considers this to an inappropriate escalation mechanism by TG as:

- this encourages the employee negotiations to expect that labour cost movements will be recovered in the next regulatory period, and
- TG management has no strong driver to negotiate a market competitive deal.

NSA recommends that the AER adopt a labour market index which includes labour price movements inside and outside of the utilities and energy sector.

Property Escalation: NSA has concerns about TG's approach to the valuation of easements. The cost of an easement is normally a one-off fixed sum paid to the landowner. This cost often doesn't relate to the land value and the landowner will be most likely be able to use the land as originally used.

The costs of development of an easement, such as surveying, legal agreement and lands and title registration are typically labour costs and are normally associated with a project.

NSA recommends that valuation of easements are based on costs incurred and not property values.

Capex: The capex proposal by TG is considerably overstated. TG has underspent the previous regulatory period capex by approximately $475 million. In other word, NSW customers have paid for projects not delivered or alternatively have paid a deposit for future projects to be delivered by TG.

As seen by the demand forecast for this regulatory period, there is little demand growth and the network can already cater for the peak experienced in 2011. On this basis there is little need for augmentation capex.

Of concern to NSA is the request for NSW customers to support an augmentation project for the ACT. This project should be paid for by ACT consumers as a separate entity user on the basis of either a new connection or as a negotiated connection. Either way ACT augmentation should not be part of the NSW capex base.

In this regulatory period TG seeks $235 million for replacement capex of which some $50 million is for post 2019 projects and $50 million of projects which are not detailed. NSA acknowledges

that there may be an unpredicted failure of equipment despite condition monitoring but considers it excessive to have a fund of upwards of $50 million undefined, or $10 million per annum. The probability of that magnitude of failure each year should be low and a contingency allowed for. On this basis NSA estimates the replacement capex for this regulatory period should be in the order of $150 million and not $235 million. Extrapolating the previous two years spend as being indicative of the future, the replacement capex spend would be approximately $130 million, providing some validity to the above position of $150 million.

Historically TG has spent approximately $9 million per annum on security and compliance capex and is seeking for this regulatory period approximately $33 million per annum, a fourfold increase. TG indicates it now has tools to more readily and more accurately measure line clearances. However, given that these line clearances in some locations while less than designed, up to now have not posed any safety or harm risk. However if any one of these lines represented or posed community harm, they should have be attended to as a discrete project. NSA notes that this spend requires careful consideration by the AER.

Capex and Opex Relationship: When the electrical transmission network is expanding, capex spend increases the number of assets that require opex. When the electrical transmission network is replacing old equipment with new equipment which might also be larger, NSA's experience is opex gets smaller due to more modern monitoring and protection equipment. NSA also recognises training and new skills for people is required. Given that the demand forecast shows no growth NSA anticipates that TG will be focussed on replacement projects and encourages the AER to consider the capex and opex relationship.

Service Target Performance Incentive Scheme

In a normal market, defective products or poor service result in loss of sales as the customer has choice of supplier in the short term and hence decreasing profits for the owners of the business are felt quickly.

Customers of transmission service providers have no such short term choice and in most cases there is no longer term choice.

On the one hand, Australian Governments have set reliability standards for transmission networks rather than rely on incentive regulation[1] while on the other hand use incentive regulation to limit market power and provide strong and targeted incentives to meet specific goals such as reliability management[2].

NSA finds the service target performance incentive scheme (scheme) counter intuitive to how a normal competitive marketplace operates and advocates the scheme in its current form is amended or abolished. NSW customers already pay for and expect the provision of a reliable and safe electrical transmission network. The scheme in effect sees NSW customers pay twice for what should be fundamentally provided.

[1] http://www.pc.gov.au/projects/inquiry/electricity/report Chapter 16 as at 4th August 2014.
[2] http://www.pc.gov.au/projects/inquiry/electricity/report Chapter 5 as at 4th August 2014.

The scheme needs amending so that in the event of deteriorating performance, the transmission service provider should be penalised like any other business. Due to the nature of the electrical transmission business model, a revenue penalty needs to be determined and imposed during the regulatory period, reflecting the short term impost felt in a normal market. In subsequent regulatory periods any capex and opex costs required to return the network to the required performance should be excluded from the regulated revenue, representing the capital and operating costs that are required in a normal market for longer term solutions which aren't normally recoverable by price increases (the cost of staying in business).

The electricity transmission network currently provided by TG to NSA is highly regarded by NSA as being reliable and safe and meets NSA requirements. NSA does not require an improved network and is not willing to pay for such.

TransGrid Customer Engagement – Revenue Reset

NSA is pleased that through the *Better Regulation Program* that TG has commenced customer engagement. NSA has had quite distinct experiences with TG in regards to TG's customer engagement. This section will deal with the revenue reset. NSA makes comment on TG's customer engagement in regards to pricing in a later section of this submission.

NSA did attend one customer forum in Sydney in early April 2014 and the meeting discussed basically pricing, a network augmentation project in Sydney, a capital deferment option in Sydney and several presentations explaining TG's position on WACC which essentially supported TG's position of what was being submitted for the transition year and the regulatory review. All participants at this workshop except NSA and one other participant are connected to the distribution network.

NSA is intrigued though by some of TG's claims from it customer engagement process. One in particular (from page 39) is:

> "Almost two thirds of participants indicated that they were willing to pay a slight increase of around $4 per annum, which is within CPI, to maintain the same reliability as now. Almost one third advised that they would prefer to pay the same as now and accept slightly more blackouts, and a small number would prefer to pay slightly less than now and accept more blackouts."

NSA's comments in relation to this are:

- Most reliability issues are associated with the distribution network and not the transmission network,
- TG is increasing charges more than this for the same level of reliability,
- TG hasn't quantified the impact to service reliability of paying less, instead implying that the transmission network reliability will deteriorate.

In TG's discussion on opex and capex, TG makes reference to the outcomes from the consumer engagement process which indicate support for the proposals it makes. Given the timing of the process which ran from mid November 2013 to late April 2014, it is doubtful this process could have influenced the outcomes given the lead-times for submissions being prepared by TG.

TG had not consulted with the Albury Mill regarding the revenue application or its proposed capital program and therefore NSA does not support TG's claims that they have received the strong endorsements as claimed.

The benefits to NSW customers from the funding support TG is seeking for customer engagement are yet to be demonstrated.

Network Capability Incentive Parameter Action Plan

TG has identified 28 projects under the umbrella of the Network Capability Incentive Parameter Action Plan (NICIPAP).

In a competitive market, firms would only invest in such small discretionary projects if the project provided one of the following, an immediate solution to an immediate serious safety or environmental issue or have a payback of six to twelve months with the term dependent on an individual firm's capital and project controls. Such projects outcomes are also normally measured at the completion of the project.

Of the projects proposed by TG, one has a payback of 13 years and another 18 years and a further 12 projects would deliver a payback in two years or less. The cost of these 12 projects is approximately $8.5 million. Under NICIPAP there appears to be no such justification rigor and payback assessment before and after the project.

NSA recommends that the AER modify the NICIPAP scheme to simulate a competitive market so that such projects provide tangible benefits to NSW customers.

Transmission Pricing

In its overview and introduction, TG indicates that transmission prices account for approximately 7% of the average consumer's electricity costs.

By comparison, NSA's transmission cost is not insignificant as it is more than a 25% of its total electricity cost.

The newsprint industry is an internationally competitive, price-taking market and Norske Skog has no ability to pass through to customers any portion of higher electricity transmission costs. The continuing growth of transmission pricing diminishes the long term viability of NSA.

The loss of any customer (and industry) in NSW will lead to even higher transmission costs for those remaining viable as the revenue collection remains the same but spread over a smaller base as well as creating a risk of stranded or significantly devalued assets.

TransGrid's Transmission Pricing Model

TG's current pricing model is seriously flawed and requires a complete restructure. NSA notes that TG has proposed a new pricing methodology and this is not before time. NSA considers the AER must review the new pricing methodology on the basis that the current methodology has resulted in considerable cross subsidisation as NSA details in the following comments.

The recovery of the MAR is predicated on the state wide mix of peak demand and volume. Over the past five years, the NSW capacity factor (peak demand to average demand) has fallen from 64% to 59% implying there would have to be some upward adjustment in rates to ensure the MAR is achieved.

In contrast, the capacity factor of flat load users (such as NSA) should result in a slight relative falling of cost share and there would be an expectation that flat load user costs should more closely track the MAR, and perhaps be marginally less. Figure 4 below shows this not to be the case.

Other points to note are:

- Total NSA costs are dependent on any changes in demand and volume that occurred over time. So the NSA movements need to be moderated to provide charges on a standard usage basis. In practice, this moderation will probably have only a marginal effect on the outcome
- NSW demand has been falling by about 1% pa over the past few years. As TG is on a revenue cap this would mean that demand charges would have to rise at ~1% pa above MAR increases. Again this has a marginal impact on the comparison.

The effect of this is that NSA has incurred rising electricity transmission costs of over 17% per annum compounding for the last 7 years or approximately a 260% cost increase. During the same period, TG's MAR increase was approximately 150%. NSA's maximum demand has remained unchanged through this period.

During TG's self-imposed revenue freeze in 2013/14, NSA incurred a 3.5% increase. Following AER's transitional year decision to decrease TG's MAR, NSA has incurred a 9.5 % increase, in part due to TG's revenue recovery of the self-imposed freeze. TG has advised NSA that the average NSW 2014/15 increase in revenue is 3.9%. TG advises that NSA's larger increase is due to NSA's share of a 17% increase in the non-locational TUoS and common service charge. TG goes on to advise that this 17% increase is attributable to the revenue offset, Ausgrid's CS revenue increase of 39% and the inclusion of ActewAGL transmission, yet each of these charges is included in the 3.9%

AEMO uses Marginal Loss Factor (MLF) to assess the losses incurred in delivering energy to a user and therefore is an indication of the amount of the network assets used to deliver power (kWh) to an exit point. The higher the MLF, the greater the amount of network used – the lower the MLF, the less of the network used.

NSA accepts the assertion that there is not a straight forward connection between MLF and transmission locational charges, but contends that higher locational charges tend to occur where the MLF is higher.

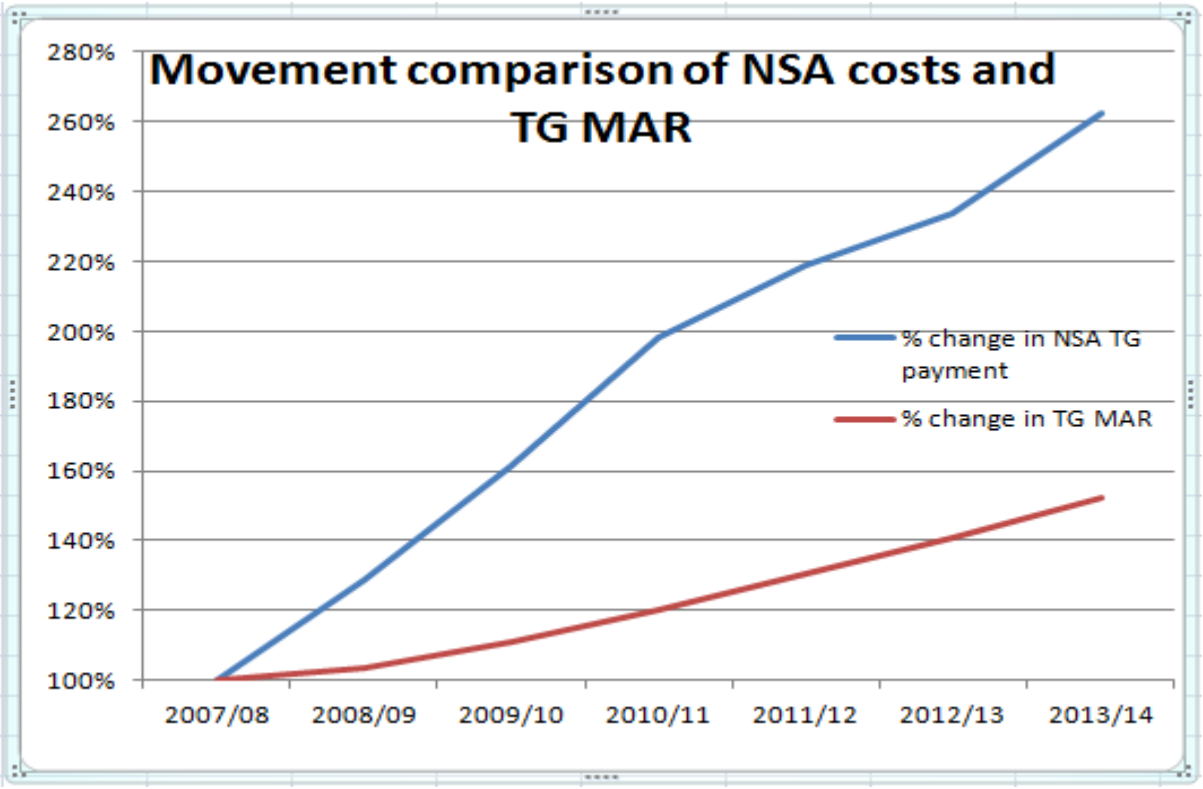


Figure 4: NSA's Cost Increase Compared to TransGrid's MAR Increase

Marginal loss factor (MLF) is an indication of the amount of the network assets used to deliver power to an exit point. The higher the MLF, the greater the amount of network used – the lower the MLF, the less of the network used.

The locational Transmission Use of System (TUoS) reflects the amount of the network used to deliver power to an exit point. The higher the locational TUoS the further the power has to be transported

There are other factors that impact both MLF and locational TUoS so neither is a quantitative indicator, but a trend comparison is appropriate.

Figure 5 tracks the changes in NSA MLF and its locational TUoS

The locational TUoS used for 2009/10 is the notional locational TUoS that would apply if all the locational TUoS had been recovered entirely from demand rather than a mix of demand and consumption. The locational TUoS has been adjusted to remove the effect of the increasing MAR allowed in the ACCC/AER/ACT decisions

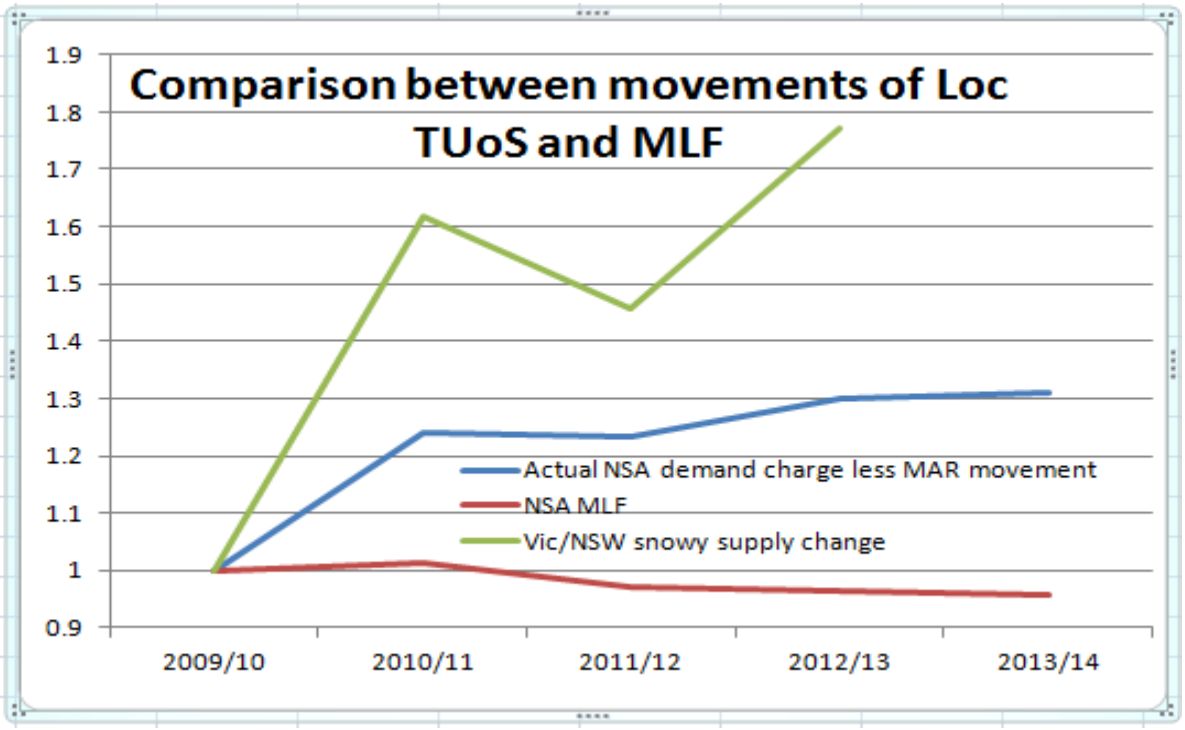


Figure 5: Movement of Locational TUOS and MLF

The fact that the MLF for NSA has fallen in recent years is supported by the increasing flows from Victoria and NSW Snowy generators in recent years and the overall falling of NSW consumption. As NSA is located near the Victorian transfer points into NSW and the NSW Snowy assets, it would be expected that the bulk of NSA demand would be served from these sources.

If this is the case, then the TUoS charges should have fallen rather than increased to reflect the lesser amount of network assets used to deliver power to NSA

NSA has demonstrated to TransGrid using several different methods that NSA is paying a disproportionate amount, well over 20% more per annum for transmission services. This amount is even greater when the NSW transmission rates are compared to those in Victoria, some 25 km away.

During this period, NSA's maximum demand and actual demand has remained constant.

NSA notes that the energy component of charges has increased by around 10% and the demand component of charges has increased by around 35% which is the reverse of that expected, creating a cost reflective anomaly which requires correction.

The impact of this anomaly is:

- The user is given the choice of paying the lesser amount for their unique usage. Implicit in this is that a peaky user (eg one which has a high demand on 20 hot days a year to run their air-conditioning unit) will pay its charges based the amount of the energy (kWh) it uses occasionally (ie just for the 20 days the air-conditioning unit runs). By paying their charges based on energy they do not pay for the capital involved in the transmission network which provides the ability to meet their high demand for the limited times it occurs (ie just the 20 hot days) nor does it provide any incentive to address usage

- Over the longer term, flat load users, whose lowest cost is from demand based pricing, are incentivised to reduce their use of the network and will do this by using capital which may not be the most efficient use of resources. The basic premise of cost reflectivity is that it results in the most efficient use of resources. In comparison, the peaky user above has no incentive to address usage.

In summary NSA considers the current pricing methodology is seriously flawed on the basis that:

- The Albury Mill has paid considerably more than the TG MAR for the current regulatory period as illustrated in the graph above
- There has been very little transmission network investment in the Albury Mill area in the current regulatory period. The investment in the over capacity occurred in previous periods and was reflected in the 2006/07 charges
- That transmission network investment has occurred in other parts of the network for the betterment of customers in those parts of the network
- That price reflectivity is not being correctly allocated and so cross subsidisation is occurring

One could contend that NSA was not paying enough in 2006/07. This is not supported by the evidence above, that NSA's maximum demand has been stable across this period and that the AEMO locational factor for NSA has fallen below unity.

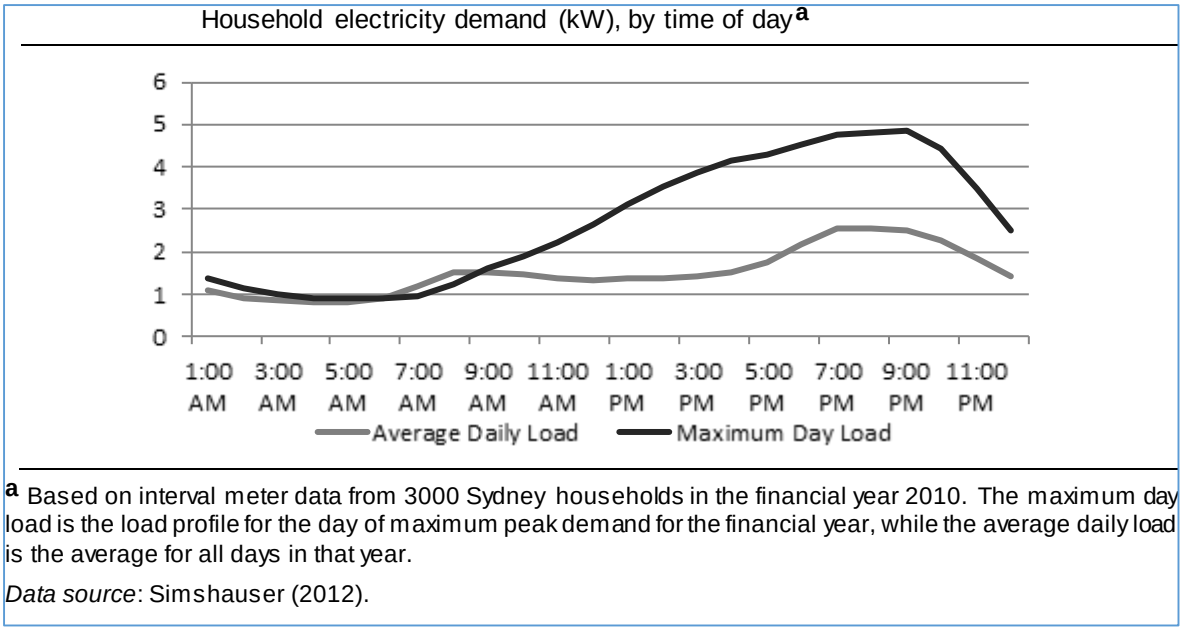
NSA recommends that the current pricing methodology be scrapped and that a demand based pricing methodology be implemented as outlined in TG's recent Transmission Pricing Review following extensive modelling and further customer consultation. NSA considers that the new pricing methodology should be generally accepted and commence in the 2014/15 revenue year or earlier if possible

Demand Management

TG proposes to increase its demand management innovation allowance which will have no benefit for NSA and most other NSW customers.

NSA has proposed a demand management arrangement to TG and has been informed by TG that due to 20% over capacity in the Albury transmission region, TG is unwilling to enter into any network augmentation arrangements with NSA. This indicates a serious over investment in local transmission capacity by TG.

NSA has the production process capability to load shed at least 60% of its daily maximum demand during the electricity transmission networks period of highest loading. By way of an example, based on the Sydney household network load depicted below in Figure 6, NSA can repeatedly and reliably load shed from say 2:00pm through to 9:00pm. For comparison, Victoria offers customer benefits for load shedding between 11:00am and 7:00pm.



[a] Based on interval meter data from 3000 Sydney households in the financial year 2010. The maximum day load is the load profile for the day of maximum peak demand for the financial year, while the average daily load is the average for all days in that year.

Data source: Simshauser (2012).

Figure 6: Household Demand[1]

Based on NSA's experience, it can only conclude that demand management will not be a viable network augmentation as the load reductions aren't seen as significant on a customer by customer basis for transmission (and distribution) service providers. This conclusion, based on actual experience, does not result in the expectations included in the AEMC report "Power of Choice" which is the basis of the recent rule change proposal put to AEMC by the Standing Council on Energy and Resources regarding distribution pricing. Currently demand management accounts for less than 2% of NEM-wide peak demand[2].

Demand management however has the potential for widespread benefits when actioned across a number of customers. Similarly, demand management responses implemented now may not have a benefit until a future point in time. An example, customer 1 implements a demand management project now which has little value until customer 2 implements a demand management project in 2 years time and combined, they provide deferment of network augmentation.

A pricing discount methodology (benefit methodology) is required to be developed to encourage and enable the staged development of demand management to deliver benefits rather than provide network providers with yet another allowance or incentive. This approach can be seen in Victorian electricity transmission network tariffs where load shedding between 11:00am and 7:00pm attracts a lower tariff.

[1] Reproduced from http://www.pc.gov.au/projects/inquiry/electricity/report Chapter 9 page 348 as at 4th August 2014

[2] http://www.pc.gov.au/projects/inquiry/electricity/report Chapter 9 as at 4th August 2014.

Location and Demand Management

Location and demand management is a real conundrum for NSA and TG has not been able to adequately explain this to NSA.

On the one hand, NSA has been advised that transmission charges are based on the whole of the network due to its integrated nature and on the other hand due to NSA's location it isn't able to participate in demand management activities, either on an ongoing basis or a spot basis for network pass through cases.

NSA's locational charge is 25% higher than what might be expected. The locational charge is designed to reflect the amount of the network used to deliver power to an exit point. The higher the locational charge the further the power has to be transported and hence more use of the network assets are required to be used.

NSA has described above its conundrum with the use of MLF and locational TUoS.

NSA's current MLF is below unity (ie there are no losses incurred) which indicates we are "located" immediately adjacent the power station for the provision of kWh.

It is NSA's understanding that TG develops its locational charges by basing the assessment on every half hour usage throughout the year and which occurred in the most recently completed financial year using a computer program T-price. TG's timing of the application of this data means the data is effectively two years old before it is applied to the current financial year pricing model.

NSA recommends that the data used in determining transmission locational charges is the most up to date data available. Practically, this would mean that as the charge setting is carried in say May, the T-price data used should be from April the previous calendar year to the April immediately prior to the current price setting May.

Previously, NSA offered demand side response to TG to assist in managing an issue which became a pass through event. The NSA offer was declined on the basis that NSA load shedding wouldn't affect the area of the network where the pass through event was occurring but NSA was still expected to pay the costs incurred for managing the pass through event.

Similarly, NSA has recently offered to enter into an on-going demand management arrangement with TG. This has been declined as the 'Albury' network area has a surplus capacity of 20MW and any demand management won't defer augmentation of the network in the immediate future due to TG already having installed excess capacity.

In both cases NSA offered to 'spot' load shed with approximately 30 minutes notice for up to 60-70% of its maximum demand and had demonstrated its ability to do so.

The disconnect here is that due to NSA's location, demand management in the order of many tens of MW doesn't have an impact on the TG transmission network. NSA can only conclude that the network is more compartmentalised and local than that being recovered by the current postage stamp charging model. In other words, "smearing" of charges requires addressing with an approach that is price reflective of only some of the assets and other costs that are required to service that part of the network.

On the other hand TG is the coordinating transmission network in NSW. TG not only has to accommodate in its own transmission pricing, but also recovers the transmission costs incurred by Ausgrid and Directlink. Directlink only provides a service to users on the north coast of NSW and the Ausgrid transmission elements are embedded in the Ausgrid distribution network thereby supporting Ausgrid distribution users. Despite this, TG aggregates the transmission costs of both Ausgrid and Directlink into its overall transmission costs, and then allocates the combined costs to all consumers in NSW. This means that those consumers in the south of the state pay for the Ausgrid and Directlink transmission - assets that they do not use.

The impact of this is that NSA's 2014/15 charges will increase by 9.5%. TG has advised NSA that the average NSW 2014/15 increase in revenue is 3.9%. TG advises that NSA's larger increase is due to NSA's share of a 17% increase in the non-locational TUoS and common service charge. TG goes on to advise that this 17% increase is attributable to the revenue offset, Ausgrid's CS revenue increase of 39% and the inclusion of ActewAGL transmission, yet each of these charges is included in the 3.9%

This shows that as the coordinating TNSP, TG is now recovering of the cost of the ACT transmission network from across NSW customers. NSA considers that there is no reason at all for TG to impose on NSW customers any transmission network costs that are dedicated to serving another state or territory such as the ACT and, by doing so, cause NSW electricity consumers to subsidise ACT electricity consumers. This is a matter that both the AER and the NSW government needs to address.

Excess Demand Charge

While it appears excess demand charges have been excluded from the review, NSA views these charges as punitive charges and not providing cost reflective signals.

NSA recommends the excess demand charges be abolished and replaced with cost reflective charges, say a charge based on the costs incurred by TG resulting from a transgression. Given the incremental increase in demand in most instances and for simplicity, NSA suggests two scenarios as follows of which only one incurs a penalty charge:

- When the excess demand occurs when the network capacity is less than 95%, there is no penalty charge as the network demand capacity is being fully cost recovered
- When the excess demand occurs when the network capacity is greater than 95%, there is a penalty charge imposed in proportion to the overrun in demand.

TransGrid Customer Consultation – Network Pricing

Our discussions with TransGrid have been about pricing in regards to the concerns the Albury Mill has had about the massively escalating transmission prices described above and more recently about TransGrid's current pricing methodology and the proposed changes to it.

NSA confirms it has had good and constructive dialog with TG in regards to network pricing. This a good example where current resources and expertise have been able to have an open dialog where the ideas and views of all parties have been considered.

Acronyms

AAA, BBB+, BBB	Credit default probability as calculated by the major credit rating agencies
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
ASX	Australian Stock Exchange Ltd
GW	Gigawatts (1,000,000,000)
kV	Kilovolts (1,000)
MAR	Maximum Allowable Revenue
MLF	Marginal Loss Factor
NEM	National Electricity Market
NEO	National Electricity Objective
NICIPAP	Network Capability Incentive Parameter Action Plan
NSA	Norske Skog Albury Mill
TG	TransGrid
TUoS	Transmission Use of System
WACC	Weighted Average Cost of Capital