

Attachment C.6

SAPN_The NTF Group Review of AERs Response

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C.6: Report on AER Discussion on Willingness To Pay Research

Prepared for SA Power Networks

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Review Team

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1. INTRODUCTION

1.1 Scope of this report

The NTF Group (“NTF”) has been engaged to prepare this report by SA Power Networks (“SAPN”). The context of this report is the Distribution Determination being conducted by the Australian Energy Regulator (“AER”) in relation to SAPN's Revised Regulatory Proposal for the 2015-20 period.

In Attachment 6 (Capital Expenditure) of its Preliminary Determination, the AER set out various opinions on the Willingness to Pay (WTP) research undertaken by NTF on behalf of SAPN. This report addresses the discussion of WTP by the AER.

1.2 Expertise

The NTF Group is a leading Insights and Analytics firm, with expertise in, and a specialist focus on, *inter alia*, “willingness to pay” research. NTF has been in operation for nearly 20 years, and its clients count amongst some of the largest, most influential and reputable corporations in the region.

The consultants undertaking this review have over 70 years of combined experience in market research survey and analysis techniques and their application.

Curriculum Vitae of the NTF project team are appended.

2. AER CONCLUSIONS

The AER concludes: “We consider that the business case and the WTP survey and its findings do not demonstrate that the bushfire mitigation program is a prudent and efficient investment.”

The AER then goes on to outline five key criticisms of WTP:

1. The sample was not representative
2. The way the survey was presented to respondents may have influenced their willingness to pay
3. Outcomes of choices were not presented to respondents
4. The scope of the study was limited
5. The basis upon which WTP findings were translated into service improvements.

3. NTF REVIEW OF AER CONCLUSIONS

3.1 Sample

The AER is correct that only residential customers were included in the WTP research. However, the sample is representative of all South Australian households.

The AER then goes on to assert that “the proportion of respondents from the [Eastern Hills and Fleurieu Peninsula] EH and FP region was 50% higher than was required to be representative... [that] this is problematic because the EH and FP region is affected by more interruptions ... [and] this may mean that those residing in the EH and FP region may be willing to pay more”. This is factually inaccurate. Those living in metropolitan areas have a higher stated willingness to pay, therefore if anything, the 12 percentage point over-representation of respondents in EH and FP would have understated the level of consumer willingness to pay.

NTF is concerned that the AER has misinterpreted the study in such a fundamental way, and that this may be systematic of a broader misunderstanding, and therefore misinterpretation. The supposition put forward by the AER contradicts the finding of the study that consumer willingness to pay is higher in Adelaide, a finding that was reiterated by Oakley Greenwood in its Peer Review.

3.2 The presentation of choice scenarios

The AER state: “the way that the survey was presented to survey participants may have influenced their willingness to pay for undergrounding power lines. Information was also lacking around how survey participants would be affected by the cost of the undergrounding program”. This assertion by the AER is false and repeats one of the unfounded assertions made by SACOSS regarding the presentation of choices being misleading.

Respondents were made aware of the precise financial impact in every choice task. It was explained to respondents that regardless of their decision, there would be a modest reduction in price. This is a true statement of the cost impact for consumers. Respondents could choose to retain the savings in full, or pay for service improvement. Prices were couched as quarterly to correspond with quarterly bills.

For clarity, the study transparently provided full cost information to respondents. The AER’s own consultant, Oakley Greenwood, rejected this SACOSS criticism, which the AER has then chosen to repeat.

3.3 Outcomes of choices were not presented to respondents

In its Peer Review, Oakley Greenwood make the point that the description of choice scenarios should have stated outcomes. It was not possible for SA Power Networks to draw verifiable causal links between some of the improvement initiatives tested and real world outcomes (e.g. such as every X km of undergrounding in bushfire areas would reduce the number of bushfires by Y). In line with the conservative and prudent approach SA Power Networks and NTF applied to the design of the WTP, outcomes which could not be objectively verified were excluded from the study.

While NTF agrees with the theory espoused by Oakley Greenwood, it was not feasible in this instance.

3.4 Limited scope of the study

It is important to recognise that the WTP research was just one component of a much larger body of work (i.e. the SA Power Networks Customer Engagement Program (CEP)). While the limited scope helps to maximise the efficiency and effectiveness of the WTP study (e.g. by reducing respondent cognitive burden), it is also the case that wider application of WTP to, say, areas of existing prescriptive regulatory obligation, would have been pointless. The targeted WTP research was aimed at selected aspects of customer preference that emerged from the wider CEP, and could thereby make a valid and new contribution to SA Power Networks' service proposals.

The AER cites the contribution of undergrounding to customer satisfaction: "*undergrounding of powerlines contributed 4 per cent – the lowest contribution to overall customer satisfaction*". System wide undergrounding (as reflected in this relative importance analysis) and selective undergrounding in high bushfires risk areas, are fundamentally different concepts, and to confuse the two initiatives is entirely erroneous. This appears to be another area where the AER has misunderstood and therefore misinterpreted the WTP research.

3.5 The basis upon which WTP findings are translated into service improvements

The AER has also criticised the thresholds by which WTP survey results translate into recommended service improvements.

The AER state: "*Oakley Greenwood consider that the desire for some customers for higher service levels should be tempered by the amount of cost that desire imposes on other customers who are not willing to pay for the higher level of service*".

While Oakley Greenwood refer to "*some customers' preferring higher service levels*", the SAPN proposal was based upon service improvements supported by a majority of customers (and not just a simple majority).

The "NTF approach" starts by taking the generally accepted 50% threshold (simple majority), for which there is academic support and historical precedent. Then, because of the conservative and prudent principle applied to the research design, NTF imposed two further constraints: 1. The 50% accepted convention is lifted to **55%**; and 2. This 55% threshold had to be achieved in each of the three core segments (ie residential, residential solar PV and residential hardship customers).

The "NTF approach" is based on convention and academic learning, but with additional constraints making it more akin to supermajority rules. Neither the AER, nor Oakley Greenwood, cite any precedent for the application of their theory in WTP research and/or regulatory determinations.

The AER is in effect rejecting a convention of 'supermajority' rules in favour of the idea put forward by Oakley Greenwood, which is interesting but untested.

4. CONCLUSIONS

Unfortunately there are areas where the AER has misunderstood the WTP research, and therefore misinterpreted the findings.

This WTP research has rigorously captured the amount SA households are prepared to pay for very specific service improvements, through a study which provided full cost transparency and was technically sound. As such the study reflects the choices SA households wish to make. Given consumers are unable to make choices with respect to electricity distribution services, the AER is entrusted to make those choices on behalf of consumers, with reference to available robust information such as this WTP survey.

We consider the AER has dismissed consumer choices because it:

1. believes some of those choices may have been made on 'emotional' or 'aesthetic' rather than 'rational' grounds; and
2. rejects the convention of 'supermajority' rules in favour of an interesting but untested idea, for which it provides no empirical support.

5. APPENDICES

Greg Taylor CV

Joan Nelson CV

Tony Corke CV

GREG TAYLOR - DIRECTOR

Greg Taylor has over eighteen years' experience in the design, implementation and analysis of both qualitative and quantitative research. He is a member of the AMSRS. Before co-founding The NTF Group with Joan Nelson in 1995, he was the General Manager of the Financial Market Research division of a national market research agency, with a team of researchers specializing in financial markets. He has particular expertise in the areas of customer segmentation, value proposition development, customer selection and targeting, database modelling and choice modelling and demand projections.

Greg has been involved in numerous econometric and discrete choice modelling studies for transformational studies in both infrastructure and services. His experience in quantitative research is essential for segmenting and sizing the market. He has implemented research in many organizations and has played a key part in organizational transformation.

Greg has been an Adjunct Professor of Boston University and has lectured at the Australian School of Government (ANZSOC) on the use of quantitative methods in government policy development as related to decision making under uncertainty.

Over the past years he has managed assignments in Australia, China, New Zealand, the United Kingdom, and the United States for major Australian and multinational clients.

Major projects for which he has conducted research include:

- Customer satisfaction modelling for Telstra
- Customer segmentation and organizational transformation for Australia Post
- Customer satisfaction modelling for Suncorp
- Analysis of customer data and customer segmentation for Department of Human Services
- Demand projections for transport and housing in Shanghai
- Regulatory pricing: Willingness to pay for new water infrastructure, Yarra Valley Water (2 re-sets)
- Regulatory pricing: Willingness to pay for electricity infrastructure, Citipower
- Regulatory pricing: Willingness to pay for electricity infrastructure, SAPN

Greg has been involved in numerous econometric and discrete choice modelling studies for both infrastructure and services. His experience in quantitative research is essential for segmenting and sizing the market.

He has developed expertise in online quantitative research, particularly in the area of choice modeling, using NTF's own software.

In recent years he has become a regular speaker at 'Big Data' conferences and has taught groups at the AGSM the fundamentals of dealing with large data sets.

JOAN NELSON – DIRECTOR

Joan Nelson is a highly experienced qualitative researcher, member of the MRSA, and the American association of qualitative research consultants, QRCA. She was previously NSW General Manager of a national research company and was responsible for introducing choice modelling to the Group. She has special interests in social policy research, infrastructure, and the use of choice modelling techniques in a social context.

Major infrastructure projects for which she has conducted qualitative research include:

- Sustainable Sydney: Community Attitudes to sustainable transport and planning in Sydney
- Friends of Sydney: community attitudes to public transport
- Bishop Austrans: Evaluation of attitudes to new ultra light transport
- Demand for accessible transport – people with various disabilities
- Women’s transport needs – multi-trip transport
- Transport for Greater Sydney: Attitudes amongst transport decision-makers to what the public wants of public transport, compared to what the public wants
- Personal Public Transport – Perth; Gold Coast
- Queensland Rail: freight customer attitudes
- Attitudes to transport and housing needs in Shanghai
- Feasibility study for VFT (South Coast route – Sydney to Melbourne 1990)
- Willingness to pay for new water infrastructure – Victoria and South Australia
- Willingness to pay for new electricity infrastructure - Victoria

Joan has been involved in numerous demand projection studies for infrastructure, new services and new products. Her experience in qualitative research is essential for these quantitative studies as her work assists in segmenting the market and defines the attributes on which customer decisions are based.

TONY CORKE – HEAD OF MODELLING & ANALYTICS

Tony Corke is responsible for a team of experienced, in-house analysts and for sourcing and managing suppliers of world-class modelling services from a range of prestigious institutions.

His experience managing the analysis for large and complex projects in eHealth, e-commerce, banking and finance sectors well qualifies him for analysing the data across a wide range of client organisations. He has developed customised algorithms for numerous clients to append on their own internal databases and provide predictive selection of data for internal use. He believes strongly in knowledge transfer and is a valued member of Analyst First, an organisation that works closely with a number of government departments to support higher level analytics within those organisations.

Tony's impressive work history has helped him gain expertise in information architecture and management, data warehousing, customer relationship management, as well as data-driven and internet marketing. Previous roles have included Vice President Information, for a US internet startup company, Chief Manager, Information Management for one of Australia's 4 major banks, and Programme Director, Group Information Programme also for a major Australian bank.

Modelling and analysis projects include:

- Customer segmentation and profiling for Department of Human Services
- Customer demand modelling for electricity infrastructure
- Willingness to pay for electricity infrastructure (SAPN 2015 re-set)
- Modelling ROI of Wireless infrastructure in a major hospital in NSW
- Analysis of benefits of a Radiology information Service in hospitals in Queensland
- Willingness to pay for water infrastructure in Victoria and South Australia
- Willingness to pay for electricity infrastructure for Victoria
- Modelling environmental attitudes for a large project on sustainability in Victoria

In addition to these projects, Tony has been head of analytics for a range of studies where his background in econometrics, and as a former CIO of a major Australian bank has been invaluable.