Electricity Network Regulation
Productivity Commission
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Electricity Network Regulatory Frameworks
Draft Report

Thank you for the opportunity to comment on the *Electricity Network Regulatory Frameworks* Productivity Commission Draft Report (October 2012).

The **Northern Alliance for Greenhouse Action** (NAGA) is an alliance of Moreland Energy Foundation and the councils spanning the northern metropolitan region of Melbourne from the CBD to the rural/urban fringe (see footer). The Alliance covers a quarter of Melbourne's population; the region spans major industrial, commercial, and residential areas, activities and types, as well as forests, agriculture, and water catchments on the urban fringe.

NAGA shares information, coordinates emission reduction and adaptation activities, and cooperates on the research and development of innovative projects. NAGA and its members have demonstrated significant climate change action innovation at the local government and regional level. NAGA is actively involved in implementing regional scale climate change projects and developing approaches to governance, project management and business cases to support this work.

The *Electricity Network Regulatory Frameworks* Draft Report is a substantial document; NAGA's comments (overleaf) are restricted to key issues and areas of focus related to NAGA's goal for transition to a low-carbon future, working with our local government members and stakeholders.

Please contact me if you would like to discuss any of these issues in more detail.

Yours sincerely

Judy Bush
Executive Officer

The views represented in this submission do not necessarily represent the views of all NAGA members individually.

Electricity Network Regulatory Frameworks
Draft report, October 2012

A focus on consumers

- The draft report notes that the electricity market, national electricity rules and regulatory regimes are indeed very complex, making meaningful and effective consumer participation very important and challenging. The proposal for establishment of a well-resourced, broad, skills-based consumer body is therefore strongly supported, with adequate resources to build, facilitate and value the consumer perspective.
- The draft report reinforces that the overarching objective of the regulatory regime is the long-term interests of electricity consumers. This objective should be paired with a complementary objective focused on the environmental sustainability of the electricity network, so that delivery of reliable, safe, and secure supplies of energy is done in the most environmentally sustainable way possible. This is fundamentally consistent with the long-term interests of consumers, since electricity generation and transmission is a substantial source of greenhouse gas emissions, and climate change has been recognised as one of the most significant global threats to communities, economies, infrastructure and human systems, most recently by the World Bank in its report *Turn Down the Heat: Why a 4°C Warmer World Must Be Avoided*, released on 18 November 2012. Given the significant market failures to date related to externalisation of environmental sustainability, it is imperative to incorporate an explicit environmental sustainability objective to ensure its consideration, rather than simply relying on market measures such as the Renewable Energy Target and the carbon price.

Demand management

- Demand management measures through energy efficiency represent extremely cost effective ways to reduce or delay the need for network augmentation, as well as reducing energy costs for consumers. Demand management programs should be elevated from their current status of secondary or less important responses to network augmentation needs. A required percentage allocation of funding for demand management programs instead of network infrastructure augmentation would contribute to a shift in understanding of the substantial opportunities and alternative pathways possible through energy efficiency measures. There have been a number of research reports (eg Prime Minister's Task Group on Energy Efficiency; Climate Works Australia's Low Carbon Growth Plan; Energy Efficiency Council; and Alliance to Save Energy's research reports on demand management in network infrastructure planning) that have identified the substantial unutilised opportunities for implementation of energy efficiency measures in the residential, commercial and industrial sectors throughout Australia, and the significant cost-effective contributions these measure could have in creating new cost efficient system capacity.
- Other commercially viable alternatives to network augmentation include district energy systems. A number of NAGA's members have undertaken detailed feasibility studies for installation of cogeneration plants that can generate heat and power, thus improving efficiencies and providing cost-effective local energy generation. For example, Manningham City Council, in partnership with distribution business United Energy, have undertaken a study into the commercial feasibility of district energy systems for the Doncaster Hill Principal Activities Area. The study was funded through the Demand Management Incentive Scheme and demonstrated that a district energy system, consisting of an energy hub, hot and cold water thermal girds and thermal storage, would enable energy balancing over various demands during peak and non peak times, as well as meeting a substantial proportion of the area's ongoing energy needs.[1]

Time of use pricing and smart technologies

- The draft report has identified time of use pricing, with the introduction of smart meters as measures to address peak demand. However, consumers (both households and businesses) do not necessarily respond effectively and actively to information and price signals. If they did, many existing energy efficiency actions with very short payback periods would already have been implemented. Pricing can be a very 'blunt' and potentially ineffective instrument to achieve changed behaviours and promote change in technology and usage.

[1] Further detailed information is available on request.

- Any introduction of time of use pricing must include significant protection for vulnerable and disadvantaged consumers.
- Victoria's experience with smart meter introduction has highlighted a number of key experiences and lessons which should inform the rollout of smart meters in other areas. Key lessons include the importance of highlighting the benefits to consumers, not just the costs. The Victorian smart meter rollout was met with high levels of consumer concern about increased costs, potential dangers of new technologies, privacy concerns and a significant lack of information about any of the benefits that consumers may be able to harness. Information on both time of use pricing and on smart meter technologies needs to be provided with some sophistication, as well as emphasising the interests of consumers.
- Of course, time of use pricing will not necessarily lead to reduced greenhouse gas emissions, if use is simply shifted to a time when energy generation is of equal or greater greenhouse intensity. This latter point reinforces NAGA's focus on the importance of energy efficiency and demand management measures to effectively address environmental sustainability and emissions reductions objectives, as well as costs.

Information for consumers

- NAGA supports the provision of energy consumption data, both consumers' own data, as well as aggregated data (at postcode scale) for governments. Consistent, accurate energy consumption data at the local level is essential to plan and monitor energy use in a changing market. NAGA has been active in seeking local data to support efforts to reduce carbon intensive energy consumption and improve energy efficiency. Access to aggregated energy consumption data provides the framework to measure, monitor and report trends in energy end-use.
  NAGA recognises that provision of information alone to household consumers is likely to be insufficient to promote changed behaviours. NAGA recently developed energy use profiles applicable for councils and communities, including trialling the "Go 5" campaign. This information program is aimed at informing households on how much electricity an average home uses, and motivating them to reduce their electricity use to the target of 5kWh of electricity use per person per day, or less. Benchmarks have already been used to drive significant reductions in water consumption in Victoria (the Target 155 program). Local and relevant information has significant power to influence behaviour towards efficient energy use. Using actual consumption data can be a persuasive communications tool to raise awareness and promote local action. Just as Victorians have become water conscious through communications campaigns centring on the resource, usage and targets, there is scope to apply the same approach to energy consumption at the state, city and local levels. NAGA is currently piloting approaches to communicating electricity benchmarks in selected local areas, to inform and influence electricity consumption norms and behaviours, a key step in giving people greater control over their consumption.

Distributed generation

- The draft report recommends that governments discontinue subsidies for rooftop photovoltaic units; this should only be implemented with concurrent establishment of appropriate, fair and reasonable levels of payments to small scale generators for the electricity they produce. Rooftop photovoltaic systems will be generating maximum outputs during peak demand periods when wholesale electricity prices are significantly higher; if other subsidies and supports for these important generators are removed, their contribution to generation should be adequately financially valued. This contribution should reflect the benefits to other consumers based on wholesale electricity price reductions associated with generation during periods of peak demand.