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Submission: Electricity Authority 2013/14 Appropriations and 2013–2016 Work Priorities

Electricity Authority appropriations

Please send submissions to info@ea.govt.nz by 2 November 2012. Please note that late submissions will not be considered. If you do not wish to send your submission electronically, please send one hard copy of the submission to the address below:

POST:	*COURIER:*	*FAX:*
Submissions Electricity Authority PO Box 10041 Wellington 6143	Submissions Electricity Authority Level 7, ASB Bank Tower 2 Hunter Street Wellington	04 460 8879

Note about submissions for the electricity efficiency appropriation

This template is for the Electricity Authority appropriations only. Please send submissions relating to the **electricity efficiency** appropriation to: levyconsultation@eeca.govt.nz If you do not wish to send your submission electronically, please send one hard copy of the submission to the address below.

POST:	*COURIER:*	*FAX:*
EECA PO Box 388 Wellington 6140	EECA Level 8, 44 The Terrace Wellington	04 499 5330

Preface to DEUN Submission on 2013/2014 Electricity Authority Appropriations

DEUN (Domestic Energy Users Network) is an association of national organizations that advocates for affordable and sustainable energy services for all householders. Our policies are based on both statistical evidence and the experiences of our organizations. We promote actions that reduce the inequities in well-being, made worse by household energy bills. We promote energy efficiency and renewable energy solutions that improve household living conditions while reducing greenhouse emissions and other adverse environmental impacts. DEUN supports the principles of the Treaty of Waitangi.

Our submission calls for funding for a substantial initiative to enable residential and other small consumers to influence market design and monitoring to better reflect their own preferences.

Elements of this initiative would include:

- Identifying least-economic-cost opportunities to reduce cost of electricity supply, which will differ in different regions, and for different consumer characteristics.
- Developing smart tariffs that would enable small consumers to adapt their demand to periods of high system cost (both network and generation), and be rewarded through significant rebate. We believe that "critical price offers" could deliver far more value than time-of-use tariffs that do not reflect actual spot price.
- Identifying and analysing spot-price risks to retailers, both vertically integrated and stand-alone, with a view to identifying mechanisms for mitigating risks to the latter
- Monitoring the wholesale market to identify, analyse, and potentially predict, say on a day-ahead basis, periods of high spot prices.
- Analysing retail markets and trends, to identify what elements contribute to retail margins.

The rationale for this initiative is that small-consumer prices have risen faster than inflation for many years, and consumers are told that prices must be high enough to make new generation commercially viable. The outcome has been a very substantial generation surplus.

Some 1500 MW of new generation was built (or is under construction) since 2007, during which time demand has not grown. Only some of this surplus will be reduced by closure of part or all of some older thermal power stations. Cutback or closure of Comalco will add to the surplus. New transmission investment will ensure that constraints are much less frequent, so occasions of market pivotal positions should be much reduced.

Small-consumers agree with the Authority's statement (on transmission pricing) that people should not have to pay for assets from which they do not benefit. Though this was applied to transmission pricing, we consider it applies equally to generation investment. We would therefore expect the surplus to drive wholesale prices down, and for retail margins to be constrained through competition, so that final prices paid by small consumers should fall.

Submitter details

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Date:	31 October 2012

Authority appropriations

Comments are invited on the appropriations proposal:

1. The overall proposed Electricity Authority appropriations as set out in table 1 of the consultation paper	• •
2. The proposed changes to Authority appropriations	• DEUN supports the overall reduction of $1.506 million (in the budgets of both the Electricity Authority and Consumer Affairs) to promote and facilitate consumer switching. While much has been achieved, DEUN considers that there are diminishing returns from future expenditure. • However, DEUN is concerned that there is no rebalancing of this expenditure towards other matters of interest to residential users, which would also work towards the efficient and competitive operation of the market. See Section 3 for further comment.

3. Other key matters relating to the Authority's overall appropriations that you consider the Authority should address in the 2013–2016 timeframe	• Residential users currently fund around one third of the EA levies and are an important part of the market. At present, residential usage also drives peak loads in most areas of New Zealand. • DEUN anticipates that emerging technology such as rooftop photovoltaics, smart metering and smart appliances and a greater uptake of electric vehicles will drive an increasing ability for residential and small commercial users to play a more active role in the market. • DEUN considers that these innovations offer the potential for a reduction in peak loads, thus enabling electricity infrastructure to be used more efficiently. • There is a need for research to examine how residential consumers can work with the market to reduce peak usage. This needs to go beyond simple energy efficiency measures (although they are important) and examine the role that small scale renewables, smart metering, smart appliances and innovative pricing plans can play. • Research into factors specific to New Zealand is needed. There is also a need to ensure that the industry innovations are helpful to residential consumers, rather than just meeting the industry's needs. • For example, with smart meters, DEUN would like to see meters installed that will enable households to import and export power and to have pricing information (including when load controlling is happening). DEUN sees a risk that meters will be installed which will just meet the industry's needs for remote meter reading, remote disconnection and pre-pay. DEUN is also interested in how domestic consumers respond to such meters. • DEUN considers that it is difficult for the interests of domestic consumers to be heard, as there is little or no funding for independent groups such as ourselves. While we have concerns, and matters we would like more information on, we are not the ones setting the agenda. • DEUN therefore requests that some of the savings of $1.506 million from the switching fund are transferred to a dedicated budget to allow contestable research and public education around matters of interest to domestic consumers. DEUN requests that independent groups such as itself be allowed to set some of the agenda for research. Note that in this submission we have proposed four specific projects as an example of research which we feel would be of long term benefit to consumers.

Authority strategic priorities, outcomes and outcome measures

Input is also sought on improving the Authority's non-financial performance information for its 2013–2016 Statement of Intent. (See pages 7 to 17 of the 2012–2015 Statement of Intent.)

4. What changes in the Authority's operating environment do you consider need to be addressed in developing plans for 2013–2016?	
5. What are the key issues you consider the Authority needs to address?	DEUN considers that the Authority needs to address ways in which residential consumers can genuinely gain more market power. This needs to go well beyond consumers selecting the best priced power plan from several very similar offerings. DEUN notes that in the feedback from stakeholders survey, carried out in 2011, the level of competition in the electricity industry was rated poorly by over 50% of respondents. In the same feedback survey, stakeholders strongly disagreed that the current arrangements in the retail market facilitate timely and innovative investment in the electricity system. While the promotion of consumer switching may have helped competitiveness in the short term, in the longer term, DEUN considers much more needs to be done to address structural issues in the market.
6. How should the Authority update its strategic priorities to reflect the environment and key issues?	DEUN would like to see a strategic priority being the reduction in peak load relative to average load, for all classes of consumers. This would meet the Authority's objective for efficiency by enabling better utilisation of existing transmission assets and reducing the need to use more costly peaking thermal generation. It would also make sense from an environmental perspective, and would hopefully lead to more cost-effective energy for residential users.
7. How could the Authority improve its outcome measures?[1]	See above

[1] **Outcome** means a state or condition of society, the economy, or the environment, and includes a change in that state or condition. *s2 Public Finance Act 1989.*

Authority outputs, impacts and performance measures

Comments are invited on the following information set out in the 2012–2015 Statement of Intent (pages 18 to 28):

8. How could the Authority improve its output[2] and impact[3] measures?	

Overall proposed Authority work priorities

Comments are invited on the overall set of proposed projects for 2013–2016 as set tables A to G of appendix E of the consultation paper.

9. Your level of support for the overall suite of proposed projects as outlined in the consultation paper	
10. The priorities assigned to proposed projects overall	

Question 11: Comments on specific projects

Comments are also invited on specific proposed projects for 2013–2016 as set out in tables A to G of appendix E of the consultation paper.

(Copy and paste the table if you have more than two projects to comment on.)

Project Name	
Your level of support for the proposed project as outlined in the consultation paper	
Your views on the project regarding the: • proposed priority; • timetable and milestones; and • the initial assessment of size and benefit.	
Other comments	

[2] **Outputs** (a) means goods or services that are supplied by a department, Crown entity, Office of Parliament, or other person or body; and (b) includes goods or services that a department, Crown entity, Office of Parliament, or other person or body has agreed or contracted to supply on a contingent basis, but that have not been supplied. *s2 Public Finance Act 1989.*

[3] **Impact** means the contribution made to an outcome by a specified set of outputs, or actions, or both. *s2 Public Finance Act 1989.*

Question 12: Other projects you consider the Authority should pursue

Please provide the following information for any other projects that you consider the Authority should pursue in the 2013–2016 timeframe.

(Copy and paste the table if you have more than two suggestions.)

Proposed project name	**TLC Metering Project**
Short description – what the project is about / the problem to be addressed	Research into the customer experience of having a smart meter installed, and resulting impacts on energy bills.
Rationale for the project – why it is important and the benefits it should deliver	The Lines Company (TLC), a distribution company based in Te Kuiti has faced challenges managing the demand on their network at peak loading times. The network is old, and capacity constrained. TLC bills its customers directly for their lines charges; one of only three companies nation-wide that does so. To help manage capacity constraints, it charges a capacity charge whicjh is based on the average of the six highest peak loads a customer takes during a two hour period when TLC is load controlling. This sets the capacity component of the customers bill for the next year. The method of charging has caused some domestic customers distress, as without precise information about when the company was load controlling, many customers were playing safe and under utilising energy. Many who failed to sucessfully do this were upset by subsequent high charges. In response to customer concerns, and to enable more accurate billing, TLC has begun a roll-out of smart meters which will have several features designed to help customers understand their energy consumption and manage their load. One feature will be an in-home display which will show a light when the company is load controlling. Another feature will be a display of the average of the six highest chargeable readings to date and an estimate of whether the current load is at risk of exceeding that average. The work TLC is doing is of interest to DEUN, as they are sending clear pricing signals which are reflective of transmission costs (and are applicable on a wider scale than just TLC). We are interested in whther these meters help customers understand and manage their energy costs, and how well they are able to respond to pricing signals.
Deliverables – things the project should do	Measure the effectiveness of better metering information in reducing energy bills (by reducing overall damand and/or peak load) Qualitative information (via in depth interviews) on the consumer experience of having a smart meter

Proposed project name	**Smart Tariffs for Residential Consumers**
Short description – what the project is about / the problem to be addressed	working in tandom with selected retailers to promote easily understood smart tariffs for residential consumers. These could include time of use tariffs and/or critical price offers. An education campaign around the smart use of appliances and other energy efficiency measures so that the benefits of smart tariffs can be understood and implemented.
Rationale for the project – why its important and the benefits it should deliver	At present, most residential consumers pay a fixed rate for their electricity regardless of when they use it. Retailers cover their risk by charging (on average) higher prices than they need to. Helping residential consumers understand the variable cost of supplying energy and helping them respond to more realistic costs should improve the competitiveness and efficiency of the market
Deliverables – things the project should do	Deliver lower costs to consumers in the trial. Reduce peak demand for consumers in the trial. Fostering a greater awareness of how the electricity market works amongst residential consumers (measured by survey of those involved) .

Proposed project name	**Economic benefit of a smoothing of the peaks in residential load**
Short description – what the project is about / the problem to be addressed	Research into the economic benefits of achieving a reduction (say 10%) in the “peakiness” of domestic load, and how this might be best achieved.
Rationale for the project – why its important and the benefits it should deliver	While there may be an overall surplus of generation in the next few years, there will likely still be a shortage at peak loading times especially in the North Island. Residential consumers contibute significanty to these peak loads. Reducing peak loads (by alternative heating methods, better insulation, tariffs which incentivise off peak usage, smart metering to enable savings, and so on) would enable better utilisation of energy and transmission infra-structure. This shoul result in cheaper average energy, encourage households to use the energy they actually need , and make energy available for other purposes. All of this adds to overall economic efficiency for NZ. It will also stand NZ in good stead when demand increases again , and/or NZ faces renewed energy constraints.

Proposed project name	**Economic benefit of a smoothing of the peaks in residential load**
Deliverables – things the project should do	Report on the efficiency gains/ economic benefits to NZ of a reduction in domestic peak load. Also possible: An outline of the measures domestic consumers could take that would most help. An outline of the measures the industry could take that would most help. An assessment of the actions the Authority could take that would facilitate impliementation of these measures.