Mr Paul Petersen
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Re: Energy Efficiency Council - ESS Rule Change Consultation 2013

20 December 2013

Dear Mr Petersen

This letter sets out the Energy Efficiency Council's submission in response to the NSW Energy Savings Scheme (ESS) Rule Change Consultation Paper 2013 (hereafter referred to as the consultation paper).

The Energy Efficiency Council strongly supports the ESS. The ESS addresses a combination of market failures and distortions in the energy market that result in over-investment in energy supply and under-investment in demand-side solutions. The ESS has delivered substantial improvements in energy efficiency and lowered peak demand, reducing energy bills for homes and businesses, including non-participants.

The Council congratulates the strong ongoing commitment from the NSW Government, particularly the Hon Robyn Parker MP and former Minister Hon Chris Hartcher MP, to supporting homes and business through energy efficiency. The NSW Energy Efficiency Action Plan (EEAP) puts NSW at the forefront of energy efficiency policy in Australia, particularly with its clear intention to continue and enhance the ESS.

A recent survey by the Council, CHOICE and the Brotherhood of St Laurence found that the NSW community strongly also supports the ESS. The survey found that:

- Electricity is still the most concerning cost-of-living pressure for NSW households, with almost 84 per cent of households concerned about electricity costs.
- Over 85 per cent NSW households believe it is important that the NSW Government help reduce energy bills; and
- By far the most popular option for the State to tackling energy bills was 'help homes and businesses save energy', with 82 per cent support and less than one per cent opposition.

While the ESS has delivered substantial benefits to date, there is potential for the ESS to deliver even greater benefits, boosting the affordability of energy for households and businesses and developing the energy efficiency sector. The ESS will be particularly critical in the next few years to help businesses struggling with rising electricity and gas prices.

The Council supports the broad direction of the proposed changes to the ESS, although we have recommended amendments to address concerns with some of the proposals. Due to the timing of the consultation coinciding with the Council's national conference and end of the calendar year, the Council has withheld comment on a number of matters. The following five points highlight key issues, while more detailed responses to the questions in the consultation paper are set out in the attached paper.

First, we are strongly supportive of the intent of the proposal to refine the Project Impact Assessment (PIA) methodology to encourage greater use of the PIA methodology. The International Performance Measurement and Verification Protocol (IPMVP) is a suitable

basis for the PIA methodology. We thank the NSW Government for responding to our request to hold a dedicated forum on the PIA methodology on 9 December 2013, which we believe was of great value.

Given the need for the NSW Government to be assured that the measurement and verification (M&V) of savings is robust, we support the proposal to allow Accredited Certificate Providers (ACPs) to use published default M&V methodologies. However, ACPs must also be allowed the option of using tailored M&V methodologies. This approach would address the current unacceptable situation for one-off projects, which are common in the industrial sector. Currently, the Independent Pricing and Regulatory Tribunal (IPART) requires a type of project to have already been delivered at least once to accredit a methodology, and won't allow retrospective creation of certificates, making one-off projects impossible.

Second, while the intent of the requirement for households to put in a minimum co-payment for a bundle of measures is laudable, this needs to be carefully considered and implemented. Setting the minimum co-payment at $150 would present a significant barrier to uptake of energy efficiency measures, particularly among low-income households. We recommend that the co-payment requirement start at a lower level in early years, and be raised gradually over time, to allow the industry to adapt. In addition, this requirement should be waived for low-income households subject to suitable safeguards.

Third, while the Council supports the proposal that ACPs would install a bundle of measures in homes to deliver deeper savings, this proposal should be introduced gradually and ACPs should have flexibility in which items they deliver in that bundle. The NSW Government could require ACPs to offer households at least two items from a long list of specified measures (e.g. insulation and down-lighting upgrades), but should not provide specification beyond this. Experience from US weatherisation programs suggest that, if ACPs are required to offer households an extensive list of items, it will be much more expensive for households. If ACPs are allowed to pick a small selection of measures that they specialise in, and then offer this bundle to households, it will maximise the benefit to cost ratio of energy efficiency retrofits (Garnaut 2008).

Fourth, we strongly support the proposal to include insulation in the ESS. Insulation not only offers substantial, long-term improvements in energy efficiency and reductions in peak demand, it also significantly boosts the comfort of homes and protects residents against extreme weather events. Standards Australia and the insulation industry have made significant efforts to ensure that the issues that occurred with the Home Insulation Program do not occur again, and the proposed framework in the consultation paper will further strengthen these industry-wide changes.

Fifth, we recommend that the NSW Government look at expanding the ESS target, to account for the significant energy efficiency potential in NSW. In the short term, the target could be expanded by allowing ACPs to bid certificates from the ESS into the Emissions Reduction Fund (ERF), and allowing the Commonwealth Government to retire these certificates. This would require discussion between the NSW Government and the Commonwealth.

We look forward to continuing to work closely with the NSW Government on the design and operation of the ESS. If you require any further information please contact me at any time on 0414 065 556 or ceo@eec.org.au.

Yours sincerely

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ESS Rule Change Consultation 2013

EEC Response to Questions

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Response to ESS consultation document questions

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1. Home energy efficiency retrofits

Q1 - Can high quality, comprehensive home energy efficiency assessments and retrofits by skilled tradespeople be delivered for less than $150 out-of-pocket under the ESS?

The Energy Efficiency Council (EEC) believes that, for most households, a basic energy efficiency assessment and retrofit by skilled tradespeople can be delivered for less than $150 out-of-pocket under the ESS, although for some types of retrofit the costs could be much higher.

The Council supports the intent of the requirement for households to put in a minimum co-payment for a bundle of measures. However, international experience from programs like the UK's Green Deal suggests that setting the minimum co-payment at $150 could excessively reduce the uptake of energy efficiency measures, particularly among low-income households. Therefore, we recommend that the general co-payment requirement ramp up slowly over time, initially starting much lower than $150 and raised gradually. For low-income households this requirement should be waived.

In addition it's desirable that ACPs would install a bundle of measures to deliver much deeper savings. However, each ACP should not be required to offer households an extensive list of measures. Research on the US 'weatherization' programs found that home retrofits were most cost effective when the energy service provider focused on delivering a 'bundle' of retrofit activities (e.g. boiler upgrades, insulation and draft sealing) to a large number of dwellings. This allowed the service provider to become an expert in a small number of measures, and significantly reduced the overheads (stock, tools, number of experts required to deliver the upgrade, etc.). If providers are expected to offer homes a very wide range of measures, the costs of a service will be much higher.

Therefore, we recommend that ACPs should be required to offer households a minimum of two measures from an extensive list of measures. Given the uncertainty about whether ACPs will choose to supply bundled offerings and households will demand these offerings, this requirement should be introduced tentatively, and the market's response noted.

Finally, we noted that take-up would be much stronger if NSW introduced mandatory residential disclosure of home energy efficiency at the point of sale or lease. While the EEAP recommends the introduction of voluntary disclosure, this will have a much more limited market transformation impact.

Q2 - The Government has proposed an expanded range of residential retrofit activities to be included in the attached draft ESS Rule. Are there any additional activities you think should be included?

The Council recommends that a suite of technology and behavioural activities be allowed under the ESS as long as the savings are properly measured and verified under Project Impact Assessment (PIA). In addition, the Council recommend that the NSW Government continue to examine technologies for deeming on a case-by-case basis as they are proposed by manufacturers and ACPs.

Q3 - Do the eligibility requirements, equipment requirements, and implementation requirements specified for Home Energy Efficiency Retrofits in Schedules D and E of the draft ESS Rule adequately ensure high quality performance and energy savings? If not, please propose alternative requirements and explain how they would better achieve these objectives.

The Council recommends that the minimum warranty period on insulation should be significantly expanded to 20 years. Generally, quality insulation manufacturers offer a minimum of a 20 year warranty on insulation products if they are installed in accordance

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with the Australian Standards. The Council neither supports nor opposes other elements in Schedules D and E of the ESS Rule.

Q4 - Would the proposed requirements appropriately address the risks associated with installing ceiling insulation? How could this approach be further strengthened? What alternative approaches might better manage risks associated with insulation?

The Council supports the re-introduction of insulation into the ESS. Insulation not only offers substantial, long-term improvements in energy efficiency and reductions in peak demand, it also significantly boosts the comfort of homes and protects residents against extreme weather events. Insulation has been used safely around the world for decades.

The Home Insulation Program (HIP) delivered significant benefits to over a million households, but a small number of design flaws caused problems that have now been thoroughly analysed. Four inquiries into the HIP have identified the design problems with the HIP and confirmed that properly-installed insulation can deliver substantial benefits. This means that, if the NSW Government puts appropriate structures in place, it can move forward confidently to include insulation in the ESS. These must include:

- Ensuing household co-payments for insulation under the ESS, so that households provide a level of quality assurance
- Requiring installation by experienced and/or accredited installers. We understand that the Insulation Council of Australia and New Zealand (ICANZ) is developing an accreditation system that may provide suitable quality assurance for the NSW Government.

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2. High efficiency appliances

Q5 - Are there any additional high efficiency appliances that could be included in the ESS?

No comment

Q6 - Is assigning the role of Energy Saver for high efficiency appliances to the appliance retailer the best way to make ESC creation for high efficiency appliances viable and is the proposed proof of sale method appropriate? If not what might be a better solution?

The EEC supports the proposal that the role of Energy Saver for high efficiency appliances would be assigned to the appliance retailers.

3. Retiring old refrigerators and freezers

Q7 - Would the simplified eligibility criteria and Default Savings Factors encourage retirement of old fridges and freezers?

No comment

Q8 - Could a similar incentive to the retirement of old fridges and freezers be introduced for the permanent removal and disposal of old and inefficient air-conditioners and save significant amounts of energy?

No comment

4. Beyond household fixtures and star-rated appliances

Q9 - Does the proposed Aggregated Metered Baseline Method achieve the desired balance between rigour and scope for competition and innovation? If not, how could it be improved?

The Energy Efficiency Council supports the broad proposal for the Aggregated Metered Baseline Method.

Q10 - Are there simpler or better ways to avoid double counting of savings from other activities and programs under the Aggregated Metered Baseline Method?

No comment

Q11 - What expertise or qualifications would be required by an independent accredited statistician under the Aggregated Metered Baseline Method to ensure that the experimental design and methods used to calculate energy savings are accurate and high quality?

No Comment

Q12 - How could opt-in programs be designed so that energy savings can be reliably measured under the Aggregated Metered Baseline Method?

No Comment

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5. Clear requirements for measurement and verification

Q13 - Are there other reasons for the historical low uptake of projects under the PIA Method? Would the suggested changes sufficiently address these issues?

There are a number of key reasons for the historical low uptake of projects under the PIA Method, including:

- Short assumed persistence of savings (e.g. lifespan of equipment) under the PIA Method, which significantly reduces the number of certificates that projects can generate under the PIA Method;
- Low ESS certificate prices over the last two years;
- Substantial complexities and delays in getting PIA proposals approved by the Independent Pricing and Regulatory Tribunal (IPART), including M&V methodology proposals; and
- Requirements for excessively complex (and expensive) M&V methodologies

The EEC strongly supports the PIA method and the broad direction of the proposed change to:

- Base the PIA more explicitly the International Performance Measurement and Verification Protocol (IPMVP); and
- Provide clearer guidelines for M&V to avoid delays in securing IPART's approval for PIA proposals.

However, there may be potential for increasing flexibility, such as by introducing a panel of Certified Measurement and Verification Professionals (CMVPs) to assist IPART by signing off on the suitability of measurement and verification (M&V) plans where an ACP wants to use a tailored M&V approach. These issues were discussed at the NSW Government's forum on the PIA on 9 December 2013, and we look forward to the Government's response to this forum.

The EEC supports the proposal to increase the persistence of savings under the PIA Method. However, while the proposed expansion of the maximum lifetime of mesures from 5 to 10 years is a positive step, we note that:

- For some equipment, persistence is much longer than 10 years. While we recognise that it is not always possible to determine how long an energy user will use equipment for, ACPs should be able to make a case for particular products being in use for more than 10 years (e.g. where it is used in long-lived infrastructure like water treatment)
- Without more details on the proposed Low Carbon Australia persistence model we cannot comment on its suitability.

Finally, the PIA will become more attractive if the target for the ESS is expanded to account for the much greater potential for energy efficiency in NSW. In the short term the target could be expanded by allowing the Commonwealth Government's proposed Emission Reduction Fund to buy and retire ESS certificates.

Q14 - Would the draft Rule clearly set out the requirements under the proposed PIA with M&V Method? Would it allow ACPs to better estimate the costs of accrediting and implementing projects?

The Council believes it is critical to set out clear default methodologies for a 'PIA with M&V' method, as long as ACPs are allowed to elect to use a tailored M&V method.

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Q15 - Would the proposed PIA with M&V Method align well with IPMVP, or is there a better standard approach that could be followed?

The proposed PIA with M&V method aligns well with IPMVP, but ACPs must be allowed to elect to use a tailored M&V method.

Q16 - Would the proposed PIA with M&V Method allow flexibility for ACPs and their clients to choose cost-effective approaches to estimating energy savings, or how could it be made more flexible?

ACPs must be allowed to elect to tailor their M&V method rather than use a default M&V method. However, as the government will be providing funding, the government will need to be satisfied that the tailored method is suitable. The response to Q13 sets out a suggested approach that the Council wishes to discuss with the NSW Government.

Q17 - Would the proposed PIA with M&V Method ensure that high quality energy savings are realised?

The Council broadly supports the direction of the proposed PIA with M&V method, noting that we wish to discuss this in detail with the NSW Government.

Q18 - The proposed PIA with M&V Method includes detailed instructions on how to calculate savings in Methods 7A.1 to 7A.6. What are the advantages and disadvantages of detailing these calculation steps in guidance documents rather than in the Rule?

No comment

6. Lowering transaction costs for multi-site activities

Q19 - Is sampling a cost-effective way of ensuring accurate M&V in small projects that are applied across multiple sites under the proposed PIA with M&V Method?

The Council broadly supports the intent of sampling. Sampling is commonly used to estimate savings where there is a high degree of homogeneity between measures and contexts.

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7. Better targeting of incentives for lighting upgrades

Q20 - If you do not support the removal of luminaire retrofits, what evidence is there that luminaire retrofits are free from all issues with performance, customer satisfaction, permanence, safety and the potential to void warranties of existing equipment?

While the Council supports the proposal to exclude all T5 adaptors from the ESS, we do not support the exclusion of Linear LED adaptors from the ESS. In order to ensure that LED adaptors are installed in a way that addresses issues with performance, customer satisfaction, permanence, safety and the potential to void warranties of existing equipment, we recommend:

- Specific models of Linear LED adaptors be considered on a case-by-case basis for approval based performance, customer satisfaction and safety
- ACPs be required to record evidence for IPART about the removal of capacitors
- Periodic audits of lighting upgrades for compliance

Q21 - Under the proposed changes to the Commercial Lighting Energy Savings Formula are there any additional building types for which the NSW Government should provide annual operating hours different from the default of 3,000 hours per annum? What evidence is there for other values?

The Council supports the proposal to provide a list of default operating hours for different building types in order to reduce red-tape for commercial lighting projects, based on activities previously accredited. The Council does neither supports nor opposes the list set out in Table A10.2.

Q22 - How can the ESS cost-effectively ensure that lighting upgrades meet the recommended illuminance maintenance and uniformity specifications in accordance with AS/NZS 1680.1 over the lifetime of a project? Is there a better way of ensuring that lighting retrofits meet the needs of the end-user than using the Standard?

The EEC recommends that this is addressed by periodic audits by qualified lighting experts.

Other Matters

The Council does not support the exclusion of induction lighting products. Rather, induction lighting products should be assessed on a case-by-case basis.

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8. New Deemed Energy Savings for business

Q23 - Are there any issues with matching eligibility with VEET but providing different incentives in the ESS for Deemed Energy Savings for business equipment?

The EEC believe that the ESS matching eligibility with VEET, but providing different incentives in the ESS, for Deemed Energy Savings for business equipment is a positive first step in harmonisation of the two schemes. However, we would prefer that ultimately the incentives for Deemed Energy Savings for business equipment would be identical between VEET and the ESS, as differences between the schemes increase costs for ACPs and makes it harder for energy users that operate in both NSW and Victoria to easily roll out a project in both states.

Q24 - Are there any other standardised equipment used by businesses that could be included in the ESS under the Deemed Energy Savings Method?

The Council notes the list of measures set out in the consultation paper, and beyond the list of measures set out recommends that the NSW Government continue to examine technologies for deeming on a case-by-case basis as they are proposed by manufacturers and ACPs.

9. Small business energy efficiency retrofits

Q25 - Are there any cases where energy savings factors for small businesses should be different from the value for households when considering extending the use of the Home Energy Efficiency Retrofits Method to small businesses?

Small businesses operate for longer hours, typically during peak demand periods, and we therefore recommend that when extending the Home Energy Efficiency Retrofits Method to small businesses, retrofits to small businesses should generate more certificates.

10. Improved NABERS Baseline Method

Q26 - Is the proposed approach to the NABERS Baseline Method simple, effective and flexible?

No comment

Q27 - How can ESS incentives be best targeted under NABERS to help transform the commercial building market?

No comment

11. Amendments to the Power Factor Correction Energy Savings Formula

Q28 - The proposed Power Factor Correction Energy Savings Formula assumes that 70% of upstream network losses, as represented by the Distribution Loss Factor are "technical" losses that can be reduced by reducing line current. Can this assumption be improved?

No comment

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12. A simpler “nomination” process

Q29 - Are the proposed simplifications of Original Energy Savers optimal for each method?

No comment

13. Transitional arrangements

Q30 - Is there any need to provide different transitional arrangements for the changes proposed in this consultation paper?

No comment

Q31 - Does allowing top-up ESC creation for previous PIA Method projects lead to additional energy savings?

No comment

14. Definition of energy savings

Q32 - Under the current ESS Rule, electricity networks are allowed to create ESCs for savings from reducing distribution losses. Would such projects also meet regulatory requirements such as the Regulatory Investment Test – Distribution (RIT-D), and, if so, how might this be taken into account in calculating additional savings under the ESS?

No comment

15. Streamlined ESC creation and analysis

Q33 - Are there any end-use categories that should be added to Table A17?

No comment

16. New timing for regular Scheme amendments

Q34 - Does the proposed annual timetable provide sufficient opportunities and realistic timeframes for stakeholders to participate in developing the ESS?

No comment

17. Other Matters

No comment

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