

Manager Sustainable Energy Programs
Operations and Programs Branch
NSW Department of Industry, Resources and Energy Division

By email: energysavings.scheme@industry.nsw.gov.au

23 December, 2016

Dear ESS Team,

Submission on Proposed Rule Change 2016-17

Thank you for the opportunity to provide our feedback on the current ESS Review. This cover letter provides a brief description of our involvement in the ESS, and our motivation to contribute to the Review. Our response to each of the questions raised in the Consultation Paper is attached.

Background

Out Performers is an engineering company specialising in Energy Measurement and Verification (M&V). We mainly work with Australia's top 200 energy users, helping them to:

- identify opportunities to improve their energy productivity;
- design and implement effective solutions;
- measure and verify actual energy savings; and
- improve project viability by accessing energy efficiency incentives such as the ESS.

Out Performers is the largest Accredited Certificate Provider (ACP) in the ESS both in terms of the total volume of ESCs generated, and also the scope of activities for which we are accredited. The ESS has been an important part of our business since 2009 and we take an active leadership role with industry development activities, such as:

- a) we've been an active participant in policy development and ESS reviews;
- b) we are a founding and executive member of the Energy Efficiency Certificate Creators' Association (EECCA);
- c) we're an executive member of the Energy Efficiency Council.

We are independent of technology suppliers in order to find the best solutions for our clients. And we see the ESS as a means to an end, rather than a core business activity. Therefore we are motivated to ensure the ESS is an efficient way to incentivise commercial energy efficiency projects.

We trust our attached submission will provide a useful perspective on the ESS Review and we would be happy to discuss it in more detail if needed.

Yours sincerely,

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Out Performers' Responses to the Consultation Paper Questions

2 General ESS Rule

Question 1 Is the proposal to require Electricity and Gas Savings data at an Activity Definition level for the HEER and HEAB sub-methods reasonable?

Yes, we believe this is reasonable.

Question 2 Do you think Electricity Savings and Gas Savings data should be reported at an Activity Definition level for the SONA and ROOA sub-methods?

Yes, we believe they should.

3. Project Impact Assessment with Measurement and Verification Method

Question 3 Are these proposed requirements reasonable and sufficient?

We agree that the proposed change regarding Effective Range is reasonable and sufficient, and we fully support the re-introduction of the Sampling Sub-Method. This is an important innovation to incentivise a broader range of projects and technologies.

Question 4 Should the business classification also be included in the minimum Eligibility Requirements, or is End-Use Service sufficient?

We believe that the End-Use Service is sufficient and appropriate. Business classifications will add red tape with minimal benefit, and also preclude eligible projects that are sufficiently similar for the method, but happen to be implemented in different types of businesses.

Question 5 Is the measurement and statistical requirement for Regression Analysis when using the PIAM&V sampling sub-method reasonable?

Yes we believe this is reasonable.

Question 6 Is the requirement for the minimum number of Sample Sites to be 6 times the number of Site Constants appropriate?

We would appreciate some further explanation on the statistical basis of this requirement.

4 Metered Baseline Method

Question 7 Is the proposal to expand the ESS Metered Baseline NABERS sub-method to include hospitals appropriate?

Yes, we believe this is appropriate because it will provide another option for verifying energy savings that may be useful since hospitals are generally complex energy loads for which appropriate PIAM&V energy models may not be possible.

5 Deemed Energy Savings Method

5.1 General Changes

Question 8 Are there changes to ESS Rule requirements around the purchaser co-payment that could meet the objectives of consumer engagement and quality lighting outcomes while reducing red-tape and compliance costs?

Out Performers supports the principle behind this requirement, but its implementation has not been appropriate and has caused significant additional costs due to issues such as these:

- a) Requirements for documentary evidence of the payment are unreasonable and impractical.
- b) The requirements for documentary evidence were applied by IPART in retrospect on projects for which ESCs were created before the new requirements were announced.
- c) The new proposed requirement that the co-payments must be made before the point of ESC creation are not practical. They will require ACPs to pay out revenue from ESC sales to their clients before they have received any revenue from the ESC creation services they provide, placing a substantial cashflow burden on ACPs. This is further complicated where ACPs are subject to the provisions of a set-aside agreement with IPART (refer to IPART's Compliance and Performance Monitoring Strategy) where a percentage of ESCs are not released until after an audit is complete;
- d) Many of our large clients are not able to simply extract a copy of transactions as they typically process many thousands of transactions each day. Furthermore, the designation of staff ACPs typically interact with to create ESCs often find it extremely difficult to get access to a centralised payable system.

There is no simple solution, but we believe that the established compliance risk assessment performed by IPART on each ACP could also be used to relax the evidence requirements for ACPs who are not expected to dodge the system.

5.2 Sale of New Appliances

Question 9 Do you agree with the proposal to update the SONA Equipment Energy Savings tables?

Yes we do agree with this.

5.3 Commercial Lighting

Question 10 Are the percentages of cooling season and heating season reflective of an average of how often buildings across NSW are in cooling and heating mode respectively?

We do not have access to sufficient data to assess the suitability of the proposed season duration percentages. However we raise the following concerns related to the suggested changes to the air-conditioning multiplier:

- 1) The quantity of the interactive effects between lighting and HVAC loads is not expected to be constant across NSW, or across different building types. We suggest that a table of different air-conditioning multipliers be created that are appropriate for each climatic zone across NSW, and also for some specific types of buildings / applications, such as Data Centres.**
- 2) The proposed change will significantly reduce verified savings, and so its implementation should be preceded by a notice period of at least 6 months so as not to adversely affect projects already committed for 2017 based on ROIs that factor-in ESC revenue;**

Question 11 Do you agree with the proposed amendments to Table A9.2?

Yes, we support the proposed amendments to Table A9.2 for fluorescent lighting control gear.

5.4 Public Lighting Energy Savings Formula

Question 12 Do you wish to be part of a targeted consultation on potential rewording of Clause 5.4(c) in order to make this clear?

Yes, we wish to be part of the consultation.

5.5 Home Energy Efficiency Retrofits

Question 13 Do you agree with amending the definition for Small Business Building to allow Energy Savings to be calculated for BCA class 5, 7b and 8 buildings? If not please indicate why and provide us with an evidence base to support your justification.

Yes Out Performers agrees with expanding the definition of Small Business Buildings.

Question 14 Do you agree with amending the definition for Residential Building to allow Energy Savings to be calculated for BCA class 4 buildings? If not please indicate why and provide us with an evidence base to support your justification

Yes Out Performers agrees with expanding the definition of Small Business Buildings.

5.5.2 Small Business Building default savings factors

Refer to the draft ESS Rule: §9.8 Activity E1 - E5 and E11

Question 15 Do you agree with the following? If not please indicate why and provide us with an evidence base to support your justification:

- Provide separate Electricity Savings Factors for Small Business Buildings based on 4,200 operating hours in Activity Definitions E1, E4 and E5.
- Provide a separate Deemed Activity Electricity Savings equation based on 3,000 operating hours in Activity E11.
- Provide separate Electricity Savings Factors for Small Business Buildings based on 3,000 operating hours for 'LED Lamp only – ELV' replacements in Activity Definition E1 and E3.
- Provide separate Electricity Savings Factors for Small Business Buildings based on 1,000 operating hours in Activity Definitions E2.
- Provide a Lifetime deeming period of 10 years for Small Business Buildings.

Yes, we agree with these proposed changes.

5.5.3 ELV Halogen to 240V LED

Refer to the draft ESS Rule: §9.8 Activity E1

Question 16 Do you agree with the proposal to expand Activity E1 to allow Energy Savings to be calculated when replacing an ELV halogen downlight with a 240V LED?

Yes, we agree with this proposed change.

5.5.4 Replacing a T8 or T12 Luminaire with a LED Luminaire

Refer to the ESS Rule: §9.8 Activity E5

Question 17 Is the proposal to replace the 10W banding in Table E5.1 with 5W banding appropriate?

Yes, we agree with this proposed change.

5.6 High Efficiency Appliances for Businesses

5.6.1 Installing a New High Efficiency Air-conditioner in Small Business Buildings

Refer to the draft ESS Rule: §9.9 Activity F4

Question 18 Do you agree with the proposal to expand the eligible BCA classifications under the HEAB sub-method?

Yes, we agree with this proposed change.

5.6.2 Business operating hours for Chillers and Air-conditioners

Refer to the draft ESS Rule: §9.9 Activity F2 and F4

Question 19 Do you agree with the proposed hours? If not please indicate why not and provide us with an evidence base to support your justification.

Yes, we agree with this proposed change.

5.6.3 Proposed Deemed Gas Efficiency Activity Definitions

Refer to the draft ESS Rule: §9.9 and Schedule F

Question 20 Are the Building Code of Australia building classifications appropriate in each of the four proposed Activity Definitions?

Yes we believe these are appropriate.

Question 21 Should there be additional requirements for any End-user Equipment if they will use biogas or another Gas variant?

No, we see no reason for additional requirements.

Question 22 Is there a form of evidence that can be provided that would prove that a steam boiler or water heater has or has NOT been down-rated?

No, not that we are aware of.

Question 23 Are the savings factors representative of the average efficiency improvements achieved by replacing a boiler?

Yes, they seem reasonable.

Question 24 Is the turn-down ratio requirement of 4:1 for replacement End-User Equipment with a nameplate capacity of 1000 kW or more reasonable? Will it help ensure that Gas Savings are achieved?

No, we don't believe this is reasonable because significant gas savings can be achieved even where installed systems have reduced turndown capacity.

Question 25 An Equipment Requirement that an oxygen trim system must be included on replacement End-User Equipment with a nameplate capacity of 2000 kW has been included in the proposed Rule text (Schedule F8). Is this reasonable? Will it help ensure that Gas Savings are achieved?

No, we don't believe this is reasonable or necessary to achieve gas savings, and risks rendering projects ineligible that would otherwise be good candidates to achieve the scheme's objectives.

Question 26 Is it necessary to further define Gas fired steam boilers or water heaters by referring to definitions in standards AS/NZS1200:2000 and AS3500.0:2003?

No, we believe the definitions are adequate.

Question 27 Are the 80% and 85% efficiency requirements for replacement steam boilers and water heaters reasonable? Is there an evidence base to support alternative efficiency requirements?

Yes, we believe these are appropriate.

Question 28 Should any warranty requirements be included for steam boilers, water heaters or any other technologies?

No, we don't believe this is reasonable or necessary to achieve gas savings, and risks rendering projects ineligible that would otherwise be good candidates to achieve the scheme's objectives.

Question 29 There is a wide range of quality in new burners and oxygen trim systems. Are there (a) distinguishing features of either system, or (b) testing standards to determine quality and expected lifetimes that should be considered as an equipment requirement to ensure that savings are achieved?

No, not that we are aware of.

Question 30 Is a stack test a good measure of the minimum and maximum stack temperature? What would be suitable evidence of the results of this test? Should a position on the stack be specified to measure temperature?

No response.

Question 31 Is a 2% average blowdown a reasonable basis for the calculations?

Yes, this is reasonable.

Question 32 Is there an evidence base that demonstrates that one or multiple industry sectors are significantly disadvantaged by the approach to estimating LUF?

We do not have the data analysis available, but it would seem to be logical that some industry sectors will have a much higher LUF than the proposed average.

Question 33 Are there pipes, valves or tanks in multi-dwelling residential, commercial or industrial buildings that aren't currently insulated? If so, why not?

Yes definitely, for the variety of reasons that other efficiency measures are usually not fully implemented.

Question 34 Is there a case to provide an incentive to go beyond current Australian Standards or NCC specifications for insulating pipes, valves and tanks? If so, how?

Yes, it makes sense to incentivise users to maximise efficiency rather than meet a minimum threshold. So the method could use a sliding scale of deemed abatement for insulation above the minimum standards. The abatement incentives would need to be large enough to drive activity in this space.