



23 July 2021

Stephen Procter
Strategic Delivery Manager, Sustainability Programs
Energy, Climate Change and Sustainability
Department of Planning Industry and Environment
Locked Bag 5022
Parramatta NSW 2150

Dear Mr Procter

RE: Energy Savings Scheme 2020-21 Rule change

Shell Energy Australia Pty Ltd (Shell Energy) welcomes the opportunity to respond to the Department of Planning, Industry and Environment's (DPIE) consultation paper on the Energy Savings Scheme (ESS) 2021-21 rule change.

About Shell Energy in Australia

Shell Energy is Australia's largest dedicated supplier of business electricity. We deliver business energy solutions and innovation across a portfolio of gas, electricity, environmental products and energy productivity for commercial and industrial customers. The second largest electricity provider to commercial and industrial businesses in Australia¹, we offer integrated solutions and market-leading² customer satisfaction, built on industry expertise and personalised relationships. We also operate 662 megawatts of gas-fired peaking power stations in Western Australia and Queensland, supporting the transition to renewables, and are currently developing the 120 megawatt Gangarri solar energy development in Queensland. Shell Energy Australia Pty Ltd and its subsidiaries trade as Shell Energy.

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General Comments

As per the current rule, ESS Rule 2020 Amendment 2, in order to claim Energy Savings Certificates (ESC) for the installation of a New High Efficiency Refrigerated Cabinet under Activity Definition F1, the following equipment requirements must be met:

1. The End-User Equipment must be a Refrigerated Cabinet (RC) as defined within the terms of the Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2020.
2. The RC must have an energy efficiency index (EEI) below 77 EEI, as recorded in the GEMS registry.
3. The RC must be a registered product under GEMS and comply with the Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2020.

¹ By load, based on Shell Energy analysis of publicly available data

² Utility Market Intelligence (UMI) survey of large commercial and industrial electricity customers of major electricity retailers, including ERM Power (now known as Shell Energy) by independent research company NTF Group in 2011-2020.



4. The Baseline Efficiency must correspond with the type of new RC model as recorded in the GEMS Registry. This is the Product Code as recorded in the GEMS Registry.

Numerous models have been revalidated automatically on the GEMS Registry as complying with the 2020 Determination, however at present, these cases do not have the EEI rating and product code listed in the GEMS registry and therefore cannot be claimed using ESS Rule 2020. The Energy Rating Team has confirmed that these products would need to be re-registered to GEMS 2020 to provide this information, but they don't have to be re-registered until their expiry date (e.g. 20/04/2026) and may continue to be sold in Australia. Retesting them against GEMS 2020 to have the EEI and Product Class input into the GEMS Registry would impose significant costs on the supplier, both in registering the product as well as internal costs in testing the RCs.

Refrigerated Cabinet suppliers have advised Shell Energy that they can provide recalculated total energy consumption (TEC), Total Display Area (TDA), EEI and Product Type under the requirements of the 2020 Determination without the onerous testing required to meet the full GEMS Determination 2020.

This issue is impacting the majority of cases installed by our clients and will drastically limit the ability for ESCs to be claimed under Activity Definition F1, at least until the existing registrations expire and the supplier re-registers the cases to GEMS 2020.

Response to Consultation Paper Questions

Shell Energy would like to make the following responses to the Consultation Paper NSW DPIE 2021 ESS Rule Change.

Question 21

Do you agree with the updated calculation approach and requirements we are proposing for these Activity Definitions F1.1-F1.5?

Shell Energy has applied DPIE's proposed changes to a worked example to identify if there would still be issues for an Accredited Certificate Provider (ACP) being able to create energy savings certificates from in this case a Class 15 Refrigerated Display Cabinet. The worked example spreadsheet is attached and a screenshot has been provided in Appendix A.

The findings from this worked example show that this particular cabinet would still not be eligible under DPIE's proposed update calculation approach. As the inputs into the five proposed activity 1 definition calculations are very similar, Shell Energy would state that we do not agree with DPIE's proposed changes for this Activity Type.

Question 48

Do you have any alternative solutions the NSW Government should consider?

Shell Energy would like to propose a Transitional Clause alternative which would be based on the expiry date of the approved model in column P in the GEMS Registry.

For example, if the expiry date in the GEMS Registry for the worked example is 27/11/2024 then the data input for the calculation factors listed below can be provided by the Refrigerated Display Cabinet supplier, e.g. Hussmann up until that date. The proposed Transitional Clause can be found attached and a screenshot has been provided in Appendix B. The calculation factors are:

- GEMS 2020 Determination EEI TEC (kWh/day)
- GEMS 2020 Determination EEI TDA (m2)
- EEI remains as High Efficiency is TRUE



Please contact Gay Schubert (gay.schubert@shellenergy.com.au or 02 8094 1742) if you wish to discuss our submission in more detail.

Yours sincerely

[signed]

Michael Wiener
General Manager, Energy Solutions

Shell Energy Operations Pty Ltd, Level 30, 275 George Street, Brisbane Qld 4000. GPO Box 7152, Brisbane Qld 4001.
ABN 28 122 259 223 Phone +61 7 3020 5100 Fax +61 7 3220 6110 shellenergy.com.au



2021 Rule Transitional Clause							
Activity Definition F1.3		INSTALL A NEW HIGH EFFICIENCY REMOTE REFRIGERATED DISPLAY CABINET OR REPLACE AN EXISTING REMOTE REFRIGERATED DISPLAY CABINET					
Equipment Requirements							Comments
1. The End-User Equipment must be an integral Refrigerated Display Cabinet (RDC) as defined within the terms of the Greenhouse and Energy Minimum							
2. The End-User Equipment must be a Refrigerated Display Cabinet (RDC) rated 'high efficiency' within the meaning of AS1731.14 when tested in accordance with AS							Proposed Change
3. The End-User Equipment must be a Refrigerated Display Cabinet (RDC) with an AS1731.14 Product Type when tested in accordance with AS 1731.9-2003 and AS							Proposed Change
4. The refrigerated cabinet must be a registered product based on Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2020.							How do we interpret "based on"?
Equation F1.3							
$\text{Deemed Equipment Electricity Savings} = (\text{Baseline EEI} \times ((M + (N \times \text{TDA}))/100) - \text{TEC}) \times 365.24 \times \text{Lifetime}/1000$							
Where:							
☐ Baseline Energy Efficiency Index (Baseline EEI) as defined in Table F1.3.1;							
☐ M and N coefficients as defined in the GEMS (Refrigerated Cabinet) Determination 2020;							
☐ Total Display Area (TDA), in m ² , is the TDA of the new refrigerated cabinet model as calculated to Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2020; and							Proposed Change
☐ Total Energy Consumption (TEC), in kWh/day, is the daily TEC of the new refrigerated cabinet model as calculated to Greenhouse and Energy Minimum Standards							Proposed Change
☐ Lifetime, in years, is specified in Table F1.3.2							
Table F1.3.1							
GEMS (Refrigerated Cabinet) Determination 2020		AS 1731.14 Product Types	Baseline Energy Efficiency Index (Baseline EEI)	M	N		
Product class	Characteristics (code)						
Class 12	RRH	RS6, RS7, RS8, RS9	130	3.7	3.5		
Class 13	RFH	RS13, RS14,	80	4.2	9.8		
Class 14	RRV or RRV-2	RS1, RS2, RS3, RS4, RS5, RS10	91	9.1	9.1		
Class 15	RFV	RS11, RS12, RS15, RS16, RS17, RS18, RS19, RS20	106	1.6	19.1		
Lifetime							
Table F1.3.2							
Refrigerated Cabinet Class	TDA (m ²)	Temperature class	Lifetime (years)				
Classes 12 - 15	All	All	12				