BRIEFING PAPER: THE IMPACTS OF CHANGES TO THE SRES THRESHOLD



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CHANGES TO SRES THRESHOLD: COST AND RED TAPE BURDEN ON SMALL BUSINESSES

About 80% of solar PV systems purchased by small businesses are in the 10 kW to 100 kW range. If the threshold for the Small-scale Renewable Energy Scheme (SRES) is reduced to 10 kW small businesses would be required to create Large-scale Generation Certificates (LGCs).

This paper estimates the significant additional cost and red tape burden that small businesses would suffer if the threshold is reduced.

Reducing the SRES/LGC threshold would also increase administrative work for the Clean Energy Regulator (CER) and would represent a potentially substantial reduction to the Largescale Renewable Energy Target (LRET). These are significant impacts that should be carefully considered by the Climate Change Authority (CCA) however this discussion paper does not attempts to quantify those impacts.

COST AND RED TAPE BURDEN FOR SMALL BUSINESSES

The CER has a number of prerequisites (described here) for companies that wish to create LGCs. This includes registering as a NEM participant (refer here for details) and all of the associated revenue-grade metering requirements that entails. The National Electricity Rules specify metrology requirements in a 100-page document titled the National Electricity Amendment (Provision of Metering Data Services and Clarification of Existing Metrology Requirements) Rule 2010 No. 12 (available here).

The Clean Energy Council (CEC) has consulted widely among its members regarding the additional cost involved in complying with requirements to create LGCs. A leading provider of commercial-scale solar PV systems (Solgen Energy) and Australia's leading supplier of inverters (SMA-Australia) provided an initial estimate of costs (see table 1). The initial estimate was provided to the CCA, which responded with some questions. CEC undertook further consultation with members to obtain a detailed, itemised breakdown of the costs involved based on written quotes from equipment and service providers. In addition to consulting with Solgen Energy and SMA-Australia (who provided the initial estimate) we also obtained information and quotes from Bradford Energy Solutions, Canadian Solar, Metering Dynamics, Clean-Tech Partners,



Chadwick Industries and others. The itemised breakdown is included as Attachment 1. Table 1 compares the initial cost estimates to those based on a detailed, itemised costing. The main differences are:

- Initial estimates assumed a requirement for current transformers. These would be required for solar PV systems larger than 72 kW (assuming reduction of the threshold), but would not be required for a 30 kW system.
- Initial estimate over-estimated annual reporting costs and under-estimated the oneoff cost of registration with the CER.

Table 1: Cost burden if small businesses are required to operate in the LGC market

	Initial estimate of cost and administrative burden (\$)	Cost and administrative burden based on quotes and itemised costs (\$)
Additional up-front cost	3,000 – 5,000	3,415 – 5,515
Additional annual costs	500	320 – 440
Additional costs over 15 years	10,500 – 12,500	8,215 – 12,115

The questions raised by the CCA were:

- What new metering is required and why?
- What's involved in 'meter reading'? (Does this involve someone visiting the property? Do the expensive meters not make this unnecessary?)

What new metering is required and why?

New metering is required in order to comply with the CER prerequisites for companies that wish to create LGCs. A Class 1 three phase meter suitable for a 30 kW PV array can be purchased for as little as \$539. However, there are additional costs associated with housing and installation of the additional meter(s) required such as a new switchboard enclosure (about \$600), a communications module (about \$500) and additional installation costs that can vary from as little as \$300 to more than \$2,000.

What's involved in 'meter reading'?

Revenue-grade meters can be read remotely. Reporting to the CER entails a significant cost and red tape burden, even though the revenue-grade meters can be read remotely. The time and associated costs are due to the time required by both the system owner and the CER to process the data, verify and issue the LGCs.

Our revised estimates were formulated in consultation with professional REC agents and make the following assumptions regarding registration, reporting and administration:

Small business owners are more likely to undertake the CER paperwork themselves rather than employ an agent (even though it might be cheaper to employ an agent if a value is placed on the time required).



- As such, the estimates of time required for registration and reporting should be based on the assumption that these activities are undertaken for the first time.
- Gaining accreditation as a power station for the first time would take about eight hours, the first annual report to the CER would take about four hours and subsequent administration activities would require about two hours per year.
- A reasonable value for the opportunity cost of time for a small business owner would be about \$100 per hour.
- The opportunity cost of time for a small business owner would increase at a rate commensurate with CPI, and this obviates the need to calculate a net present value (NPV) for the opportunity cost of time taken with administration. In other words, the nominal value will approximately equal the NPV of a value escalated with CPI.



Attachment 1 - Detailed, itemised breakdown of additional cost and red tape burden for small businesses

Additional impost	Cost	Comments	Source
Class 1 meter	\$665	This is the listed price for an EDMI MK 10E three phase smart meter	Prices available here
New switchboard enclosure and wiring to existing MSB	\$600	Requires XLPE cable encased in protection to AS3000, DNSP rules, SIR. There could be additional costs of accessories (potential Fuses, CT / test terminal block)	Based on quotes and actual costs
Communications module	\$500	3G IP/GSM/GPRS Industrial modem (naked, no SIM)	Prices available here
Additional installation costs	\$650 - \$1,350 (but up to \$2,750 worst case)	Additional installation costs depend on complexity of the board. There will also be a fee of \$350 required for the "Net Meter" for the DNSP/ FIT which would be separate to the gross meter for LGC creation. A \$2,400 installation is probably 'worst case', but is based on an actual written quote. Assume an average of \$300 to \$1,000 (noting \$2,400 is 'worst case') plus the \$350 fee. Costs to the business could be even higher if a shutdown is required.	Based on quotes and actual costs
One-off cost of registering with CER	8 hours @ \$100		Based on estimates by REC agents
Data acquisition and administration (year one)	4 hours @ \$100		Based on estimates by REC agents
Data acquisition and administration (years two to fifteen)	2 hours @ \$100		Based on estimates by REC agents
3G communications	\$10 - \$20 per month		Prices available here, for example
Additional up-front cost	\$3,415 - \$5,515	This includes the cost of the <u>additional</u> two hours for data acquisition and administration at the end of year one	
Additional annual cost	\$320 - \$440	Assumes two hours administration per year over 15 years, undertaken by the small business	
Additional cost over 15 years	\$8,215 - \$12,115		