

ESSENTIAL ENERGY'S NEW DER POLICY IS "ANTI RENEWABLES"

I am small business owner based in Dubbo NSW and have been operating throughout central NSW and beyond for over 35 years.

Over the last 3 years I have been concentrating on mid-sized (40 to 100kW) PV Solar systems, mostly for farmers across NSW. I specialise in the 5B Solar Ground mount type systems.

My business revolves around the assessment, design, sales and installation of "Farm Pack" PV Solar systems (mostly 40 to 100kW) principally for farmers across NSW.

Recent changes in the policy and practices of Essential Energy have put severe pressure on my business, and that of others in the same sector.

New Ultra conservative design requirements (this opinion is supported by experienced electrical engineers and designers – most of whom are ex Essential Energy), have seen projects that would have been promptly and comfortably approved six months ago (ie with little or no network upgrades required- thus feasible), now either not approved, or only approved with extremely unreasonable degrees of grid and network upgrades (re-conductoring, pole replacement etc), resulting in many hundreds of thousands of dollars of work required for solar projects with a total value of <\$100,000. Thus the projects are rendered unfeasible.

What makes this situation even more frustrating is that Essential Energy **will not** provide any guidelines, design criteria or design models to explain and demonstrate the rationale that forms the basis of these outcomes. An applicant has no guidelines of what may, or may not be approved prior to lodging and application and spending in the range of \$800 to \$1,400 (Essential Energy fees) for a design package. **There is no consistency (moving goal posts) and absolutely no transparency.**

One of the key areas of issue with Essential Energy is "voltage rise" within the network (ie at low power demand on a particular section of the grid, excessive export of power into the grid from PV Solar systems may cause a rise in the voltage in the LV and HV portions of the grid), however it is a requirement of approval (and certification) that PV Solar connections have inbuilt "grid protection" (anti-islanding), and modern inverters have the inbuilt capability to manage the degree of export, and hence the "voltage rise" impact, and must automatically either ramp down or shut down if the voltage rise occurs (AS4777, AS5033 and others) thus there will be no "voltage rise" impact on the grid!! **Therefore the argument about voltage rise is not sound!**

In fact the presence of PV Solar systems exporting power into the grid does greatly assist the balance of the grid under high demand!

In conjunction with Mark McDonald of Energyserve Dubbo (Experienced Electrical Engineer and Level 3 Designer – Ex Essential Energy), we have had extensive communication with Essential Energy (at all levels) on this matter, but we are still unable to receive any guidelines, design criteria or satisfactory response on the matter (copies of this communication, and a more technically detailed outline of the issues are available if required).

Central-West Orana Renewable Energy Zone

The NSW Government is promoting the "Central-West Orana Renewable Energy Zone" centred around Dubbo and Wellington; however, it needs to get its "State Owned" power corporation "Essential Energy" to better support renewable energy at all levels.

Rural and Regional customers are disadvantaged!

Another bone of contention is that if you live in the cities, or rural and regional areas outside of the Essential Energy area (ie the privatised power areas), contributions toward the cost of the poles, wires and transformers for new rural customers is provided by the network provider, were as in the Essential Energy area, a customer must pay for 100% of the connection, and network upgrade costs, and then hand the ownership of the assets back to Essential Energy! This considerably disadvantages

customers in Essential Energy areas. Also another inequity is that Essential Energy grants automatic approval for solar systems of 5kW in urban areas, but only 3kW in rural areas?

We fully understand that Essential Energy is responsible for the reliable supply of power of a sound quality, but the new policies are considered too ultra conservative and unreasonable, and the approval process is slow and lacks transparency.

In my view this new policy train is very much “anti renewables”, where the NSW Government (and their associated corporations and authorities etc) should be seen to be fully supporting and embracing renewables, and not just giving it lip service.

If one was cynical, it appears that Essential Energy is trying to get individual farmers (and the private sector generally) to pay for the upgrade of its failing, and under designed distribution network, especially when it comes to facilitating development of DER. And farmers, and the general community’s future, are the losers!