

**MINISTRY OF ENERGY**

REPUBLIC OF SOUTH AFRICA

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**736. Ms D Carter (Cope) to ask the Minister of Energy:**

Whether the Renewable Energy Independent Power Producer Programme has been able to (a) contribute between 1 – 2 GW of electricity to the grid, (b) deliver on time and on budget to create confidence in the industry, (c) make a case against the argument that renewable energy will not meet base load, (d) demonstrate viability and (e) generate power for the use of any enterprise; if not, why not; if so, what are the relevant details?   NW853E

**Reply:**

1. Yes, the current installed capacity of the Renewable Energy Independent Power Producer (REIPP) Programme is 2.48 GW and the maximum simultaneous contribution recorded is 1.59 GW.
2. Yes, the REIPP programme has been run and is delivering in a world class way comparable to the best in the world. Time expectations have been met and although there is not a “budget” in the strictest sense of the word, the energy prices for the programme have come down via the competitive tendering process, exceeding expectations. There is significant confidence in the industry, which can be seen in the large amounts of money being invested.
3. No, it was never an objective of the REIPP programme to make a case for or against the argument that renewable energy will not meet base load. The decisions around the requirements for base load or peaking energy is made in the Integrated Resource Plan (IRP) process. At the same time it can be stated that the country’s electricity demand profile requires a large portion of base-load generation, which is generation that is predictably available throughout the day for every day of the week. Unfortunately, renewables cannot supply this base load as they are inherently extremely variable and large scale storage, to smooth out this variability, is not yet economically viable. Either nuclear or fossil (coal or gas) or hydro (unfortunately only in a limited way in South Africa) generation must provide this base load. Put differently, a large scale renewable wind programme can provide a degree of base load if geographically well diversified but will need to be supplemented with storage and other dispatchable generation technologies. Concentrated Solar Power (CSP) can provide base load if built with enough storage but the cost of this far exceeds the other base load options.
4. Yes, the REIPP programme has already demonstrated its viability. From an integrated power system point of view, the renewable energy contributed to the grid every day, significantly reducing the need for Eskom to use open cycle gas turbines and as such is preventing load shedding as well.
5. Yes, the electricity supplied from renewables is currently being used by all customers and is thus suitable and available for all. The nature of the country’s integrated power system is such that all generation, regardless of technology or origin, is effectively pooled and all customers draw from this pool. It is not impossible for any customer to determine the generator(s) sourcing its electricity.