QUESTION ON NOTICE

No. 442

asked on 5 June 2013

MR RICKUSS ASKED THE MINISTER FOR ENERGY AND WATER SUPPLY (MR MCARDLE)—

QUESTION:

Will the Minister advise (a) how much energy the power stations based in Queensland produce, (b) what is the peak demand required and (c) how much energy is being produced by solar in Queensland?

ANSWER:

(a) How much energy the power stations based in Queensland produce
It should be noted that the amount of generation produced by power stations depends on a number of factors including customer demand and wholesale market electricity prices. Accordingly, annual production from Queensland's generation fleet can vary significantly from year to year.

For the latest year, 2012[i], Queensland's electricity generators produced 56,793 gigawatt hours of electricity. Of this, 5,530 gigawatt hours was exported to New South Wales.

(b) What is the peak demand required?[ii]
The record electricity demand experienced in Queensland was 8,891 megawatts, occurring on 18 January 2010. In the most recent summer, the maximum demand recorded was 8,278 megawatts, occurring on 11 January 2013.

Queensland's electricity generation capacity in the National Electricity Market currently totals 12,399[iii] megawatts and is well in excess of peak demand levels.

It should be noted that the Australian Energy Market Operator requires a minimum level of reserve capacity in each region to ensure reliability. In Queensland this figure is 913[iv] megawatts.

In addition, the 12,399 megawatts includes the full capacity at Tarong Power Station. In response to the current excess of generating capacity, Stanwell has taken 700 megawatts of capacity out of service until 2014/15, effectively reducing available capacity to 11,699 megawatts.

(c) How much energy is being produced by solar in Queensland?[v]

At the end of April 2013, Queensland had 861 megawatts of solar generation capacity. This is not included in the 12,399 megawatts of generation capacity in the Queensland region of the National Electricity Market.

In 2012, solar generating systems registered under the Solar Bonus Scheme generated and exported 357 gigawatt hours of electricity. It is estimated that these systems produced a similar quantity of electricity again, but it was consumed directly in the home.

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[i] All figures in Question (a) sourced from NEM Review (subscription database of NEM data)
[ii] Figures on peak demand sourced from NEM Review (subscription database of NEM data)
[iii] AEMO Generation information as at 22 February 2013
[iv] AEMO - Assessing Reserve Adequacy in the NEM
[v] All solar figures in Question (c) from Renewable and Alternative Energy Unit