

LEGISLATIVE ASSEMBLY OF THE NORTHERN TERRITORY

WRITTEN QUESTION

Electricity network

Mr Mills to Minister for Essential Services

1. What are the terms of reference given to Mr Mervyn Davies to investigate the problems with the NT electricity network?

This information was released by the Minister for Essential Services in a press release dated Friday 3 October 2008.

2. How many generators are being brought into Darwin to provide emergency/back up power? Break down by size and type.

There are 61 generators available to Power and Water.

Type	Size KVA	Type	Size KVA	Type	Size KVA
Aggreko	1250	Cat	600	Aggreko	800
Cat	1250	Cat	600	Aggreko	800
Cat	1250	Aggreko	500	Aggreko	800
Cat	1750	Cat	500	Aggreko	800
Cat	1750	Cat	350	Aust Rental	1000
Cat	1750	Coates	500	Aust Rental	1000
Aggreko	1650	Cat	250	Aust Rental	1000
Cat	1750	Cat	300	Aggreko	800
Cat	1750	Cat	750	Aggreko	500
Aggreko	1250	Cat	450	Aggreko	800
Aggreko	1250	Coates	500	Aggreko	800
Aggreko	1250	Aggreko	500	Aggreko	800
Cat	1250	Aggreko	500	Aggreko	500
Cat	1250	Aggreko	500	Aggreko	800
Aggreko	1250	Aggreko	500	Aggreko	800
Aggreko	1250	Aust Rental	750	Aggreko	800
Cat	750	Aggreko	800	Cat	450
Aggreko	800	Aggreko	800	Aggreko	800
Coates	125	Aggreko	800	Aggreko	500
Aggreko	800	Aggreko	800	Aggreko	800
Coates	200				

3. What is the total cost of transporting the generators to the Territory?

Transport costs were \$784,090.

4. Are the generators leased or has the government purchased the generators. How many and what generators have been purchased. How many and what generators have been leased.

All the generators have been leased.

5. If purchased how much has the government paid? Please itemise by type.

All the generators have been leased.

6. What are the lease arrangements for the borrowed generators? Where have they come from? How long will they be leased for? What is the cost per week to have the generators on loan?

The lease arrangement is operating under standard terms and conditions. The lease period is for eight weeks and Power and Water has an option to extend after this time. Cost per week, including generator lease, fuel and transformers is around \$430,000.

7. Are there arrangements to ensure the security of the generators once in place? Please outline those arrangements.

All generator sites are double fenced, locked and patrolled by Chubb security on a 24/7 basis.

8. Are there arrangements in place to guarantee the supply of diesel to the generators for the duration the generators are required? What are those arrangements?

Power and Water is utilising existing contracts for the supply of diesel. DIRECTHAUL is delivering the diesel to the generator sites based on expected usage and actual consumption.

9. What is the fuel consumption of each generator by type/size? Fuel consumption is based on loading for each generator. The following table is indicative of fuel consumption at different loads.

Generator Size (kW)	1/4 Load (l/hr)	1/2 Load (l/hr)	3/4 Load (l/hr)	Full Load (l/hr)
125	12	19	27	34
135	12	20	29	37
150	14	22	32	41
175	16	26	37	48
200	18	29	42	55
230	20	33	47	63
250	22	36	51	68
300	26	43	61	81
350	30	50	71	95
400	34	56	81	108
500	42	70	100	135
600	50	83	119	162
750	62	104	149	202
1000	82	138	197	269
1250	102	171	246	336
1500	122	206	294	403
1750	142	239	343	470
2000	162	273	392	537
2250	182	307	441	604

10. What is the cost per litre for diesel to run the generators?

The diesel is purchased under an existing contract, the terms of which are commercial in confidence.

11. What is the expected running time per day of each generator?

Generators at schools will operate 24/7 and will only be shut down for scheduled maintenance. Other generators will only be run to provide emergency backup power supply.

12. What are the running, servicing and refuelling arrangements for the generators?

The generators are currently checked three times a day by the suppliers of the generators. Generators will be serviced by the generator suppliers and this is based on their running time. Refuelling of the generators is undertaken by DIRECTHAUL and is scheduled to take place outside normal school hours.

13. What are the environmental protection measures in place for the sites that the generators will be located?

Operational Environmental Management Plans have been produced for the generation sites which address impact areas of air, water, land, biodiversity, resources and community. Noise surveys have been undertaken and results recorded.

14. What is the expected carbon footprint of the generators? Are there any carbon offset plans in place? If so, what are they?

An environmental fee of 1% is charged to Power and Water from the generator suppliers.

15. Are there any other major sub-stations in the Territory that are likely to experience similar failures to those experienced at Casuarina?

The independent review undertaken by Mervyn Davies will assess the possibility of similar incidents occurring in other substations. However, there is a greatly reduced risk of this occurring elsewhere, as the mode of failure of the circuit breaker is now understood, and this particular type of breaker is not in service elsewhere.

16. What measures are in place if the problems experienced in Casuarina are experienced at other major sub-stations in the Darwin region?

All zone substations are built to the n-1 capability, as is the Casuarina Zone Substation. This means that in the event of a similar failure, the substation can still carry the full load.

17. Are there any arrangements in place for generators elsewhere in the Darwin/Katherine grid to supply power back into the grid?

No.

18. How much have measures to supplement Casuarina sub-station cost the NT Government to date (9 Oct)?

Please see answer below.

19. What is the estimate of total costs before the Casuarina sub-station is back on line?

Power and Water has a \$4M capital provision for this Financial Year, and \$7M operational costs for the emergency standby generators.

20. How is the bill for the lease, running and transportation of the generators being paid?

All invoices are paid by Power and Water within seven days of receipt.

21. Will PAWA customers be expected to foot the bill? If so, what percentage of the bill will be added to electricity accounts?

No. Like any business, the additional cost will simply mean that Power and Water's profit forecast will be downgraded by these costs.

22. What are the expected law and order ramifications if there are further long term blackouts? What measures are in place to mitigate any problems?

This question should be referred to the appropriate NT Government agency.

23. What are the expected public health ramifications if there are further long term blackouts? What measures are in place to mitigate any problems?

This question should be referred to the appropriate NT Government agency.

24. Are there any compensation measures in place for residents and businesses affected by long term blackouts?

Power and Water voluntarily compensated customers affected by the Casuarina power outages; however, there is currently no Guaranteed Service Level Scheme. The Utilities Commission, as part of its Work Program, will examine the options for implementing a Guaranteed Service Level Scheme in early 2010.