

LEGISLATIVE ASSEMBLY OF THE NORTHERN TERRITORY

WRITTEN QUESTION

Mr Guyula to the Minister for Indigenous Essential Services:

Remote Access to Essential Services

Communities in Arnhem Land regularly lose access to power and phone services, often for days at a time. Without these services families cannot access essentials like shops, food, fuel and health and emergency services.

1. What is the Government doing to address the power and telecommunication infrastructure issues in remote communities?

Electrical Generation

- The Northern Territory (NT) Government makes significant investments in remote community electrical generation. Through annual grant funding to Power and Water Corporation's (PWC) not for profit subsidiary Indigenous Essential Services Pty Ltd, the NT Government provides funding for generating and maintaining power to 72 remote Aboriginal communities.
- In the 2020-21 financial year this included capital grant funding of \$10.8 million for power station upgrades and \$32.1 million for purchase of fuel for electrical generation.
- The NT Government has maintained its commitment to decrease reliance upon diesel powered electrical generation through completion of the Solar Energy Transformation Program (SETuP) and the recent announcement around the roadmap to renewables which includes a target of 50 per cent of electricity consumed in 2030 from grid connected installations, including all Aboriginal communities supplied by IES.
- The last of the 25 power stations to integrate 10MW of solar – and one 2MWh battery storage system – was jointly funded through PWC and the Australian Renewable Energy Agency with a total budget of \$59.3 million.
- The NT Government has also allocated \$6.6 million to an initiative that will see solar and battery storage systems installed at remote communities. The Renewable Remote Power Program will begin with a pilot project to supplement

power supply in the community of Wurrumiyanga, with renewables replacing diesel.

- PWC uses the System Average Interruption Duration Index (SAIDI) to determine the average quantity of time per customer, measured in minutes. The full year target for SAIDI for the 72 remote communities serviced by Indigenous Essential Services Pty Ltd (IES) is 496 minutes.
- At the end of December 2020, PWC advised that SAIDI was 219 minutes, or slightly below target of 227 minutes.
- To provide perspective, the Australian Energy Regulator (AER) has found that a typical Australian customer experiences around 200 minutes of outages per year – including planned and unplanned outages. Regional conditions affect this, as do major weather events – for example Tropical Cyclones in coastal communities of the NT.
- The most significant outages for each month up until end of December 2020 are outlined in Appendix A and list of all outages in Arnhem region is outlined in Appendix B.

Telecommunications Infrastructure

- Remote Territory communities and regional towns rely on the Telstra network for telecommunications services including landlines, mobile phones and internet. This includes NT Government sites (such as schools, health clinics and police stations) and consumer services used by citizens and businesses operating in the bush.
- Telecommunications is a policy responsibility of the Australian Government and operational responsibility of the telecommunications service providers (Telstra in remote communities).
- The NT Government, through the Minister for Corporate and Digital Development, the Hon Paul Kirby MLA, advocates strongly with the Australian Government and Telstra on behalf of the Territory regarding telecommunications service delivery and improvements.
- Discussions with Telstra have stressed the importance of telecommunications services, particularly in remote locations, and the essential requirements to restore services promptly.
- Recent and planned infrastructure projects to improve telecommunications services are outlined Appendix C.

Appendix A – Significant Power Outages Across NT Remote Communities (July – December 2020)

December

- Minyerri feeder for 3 hours on 31/12/2020 due to lightning.
- Tara Community for 1 ½ hours on 21/12/2020 due to equipment failure.
- Palumpa feeder 3 for 3 ½ hours on 04/12/2020 due to lightning.
- Galiwinku feeder 4 for ½ hour on 04/12/2020 due to equipment failure.

November

- Wadeye feeder 3 due to vandalism on the 5/11/2020.
- Palumpa feeder 3 due to lightning on the 9/11/2020, 19/11/2020 and 20/11/2020.

October

- Kalkarindji feeder due to lightning strike on the 01/10/2020 and the 2/10/2020.
- Palumpa feeder due to equipment failure on the 02/10/2020.
- Eva Valley feeder due to lightning on the 06/10/2020.
- Barunga UPS due to equipment failure on the 29/10/2020.

September

- Epenarra UPS due to equipment failure on the 14/09/2020.
- Kalkarindji feeder due to equipment failure on the 09/09/2020.
- Wurrumiyanga feeder 3 in the 14/09/2020.

August

- Gapuwiyak feeder 2 due to bats 30/08/2020.

July

- Bird strikes at Gunbalanya and Elliot on the 27/07/20 and 15/07/20.
- GCR operated (no cause found) at Hermannsburg on the 21/07/2020.
- EDO arm failed on the regulated network supply Santa Teresa on the 21/07/20.
- An internal fault on the step down transformer at Milyakburra on the 13/07/20.
- A faulty feeder circuit breaker at Palumpa on the 09/07/20.

Appendix B – Power Outages in Arnhem Region since July 2020

(Data supplied by IES)

Community name	Date	Duration	Reason	IES Comment
Angurugu	5/09/2020	8 hours 10 minutes	Planned Maintenance	
	13/11/2020	38 minutes	Third party supplier issue. (South 32 mining company supply power to IES)	
	22/11/2020	4hrs 11 minutes	Planned Maintenance	
	29/11/2020	18 minutes	Third party supplier issue. (South 32 mining company supply power to IES)	
	5/12/2020	8 hours 39 minutes	Third party supplier issue. (South 32 mining company supply power to IES)	
	6/12/2020	44 minutes	Third party supplier issue. (South 32 mining company supply power to IES)	
Galiwinku	17/08/2020	56 minutes	Equipment failure	
	16/09/2020	42 minutes	Equipment failure	
	16/09/2020	20 minutes	Equipment failure	
	8/10/2020	5 minutes	Equipment failure	
	2/11/2020	40 minutes	Planned Maintenance	
	3/12/2020	9 minutes	Equipment failure (Generator)	
	4/12/2020	8 minutes	Equipment failure (Generator)	
	14/12/2020	52 minutes	Planned Maintenance feeder 4	
	18/12/2020	10 minutes	Feeder 3 tripped	
	17/01/2021	12 minutes	Feeder 2 tripped	
	17/01/2021	12 minutes	Feeder 2 tripped	
	20/01/2021	1 hours 28 minutes	Planned Maintenance	
Gapuwiyak	30/08/2020	37 minutes	Animals or birds	
	11/11/2020	12 minutes	Planned Maintenance	
	6/12/2020	8 minutes	Generator circuit breaker failure	
	13/12/2020	48 minutes	Planned Maintenance	
	16/12/2020	57 minutes	Planned Maintenance	
Gunyangara				** We don't have any Pi Historian data on this community as the electricity is supplied from the mine. We have a limited data supply from pervasive data systems on the water and sewerage systems that could be reviewed we would need additional time to resolve if it is possible to detail all outages from this data

Gunbalanya	14/08/2020	1 hours 0 minutes	Planned Maintenance	
	11/09/2020	11 minutes	Operator Error	
	19/09/2020	11 minutes	Operator Error	
	29/09/2020	3 hours 50 minutes	Planned Maintenance	
	2/10/2020	33 minutes	Equipment failure	
	2/10/2020	26 minutes	Equipment failure	
	23/11/2020	5 minutes	Equipment failure	
	24/11/2020	5 minutes	Equipment failure	
Maningrida	25/08/2020	14 minutes	Equipment Failure	
	16/10/2020	6 minutes	Equipment Failure	
	26/10/2020	5 minutes	Animals or birds	
Milingimbi	6/11/2020	14 minutes	Planned Maintenance	
Milyakburra				No reported outages
Minjilang	16/09/2020	8 minutes	Equipment failure	
	14/10/2020	8 minutes	Equipment failure	
	1/12/2020	8 minutes	Operator Error	
Ramingining	10/08/2020		Equipment Failure	
	10/09/2020		Planned Maintenance	
	11/09/2020		Planned Maintenance	
	19/12/2020		Planned Maintenance	
Umbakumba	8/08/2020	8 minutes	Operator Error	
Yirrkala				** We don't have any Pi Historian data on this community as the electricity is supplied from the mine. We have a limited data supply from pervasive data systems on the water and sewerage systems that could be reviewed we would need additional time to resolve if it is possible to detail all outages from this data
Waruwi	16/10/2020	40 minutes	Planned Maintenance (Feeder 2)	
	17/10/2020	8 minutes	Equipment failure	
	7/11/2020		Operator Error	
	28/12/2020	7 minutes	Equipment failure	

Appendix C – NT Government Remote Telecommunications Programs

2019-2022 Remote Telecommunications Co-investment Program (RTCP)

- \$28 million over four years (2019-2022) for telecommunications infrastructure in remote communities, tourist locations and transport corridors.
- Telstra and NT Government both committing \$14 million over four years for the 2018-19 Program
- \$30 million program delivering new or upgraded telecommunications services to 18 remote communities.
- Tiwi Islands upgrades given high priority due to service outage issues being experienced. Works are underway and are scheduled for completion in February 2021.

Mobile Hotspots – Centre for Appropriate Technology (CfAT)

- Third program with CfAT to install six mobile hotspots in remote locations at the edge of mobile service range.

Kakadu Mobiles Program (NT Government/Telstra/Parks Australia)

- \$7.5 million program to install mobile telecommunications services at sites in Kakadu National Park (see brief #13 – Digital Connectivity and Strategy).

Groote Eylandt fibre upgrade project

- NT Government, Anindilyakwa Land Council, South 32 and Telstra contributing to upgrade the fibre link and provide the needed capacity increase. Total project cost in order of \$8 million.

Arnhem fibre upgrade project

- Total estimated cost \$7.5 to \$8 million with funding yet to be fully sourced.
- NT Government and Telstra have agreed to contribute \$3 million from RTCP as well as individually committing an extra \$1 million each.

Alice Springs Town Camps Wi-Fi

- Tangentyere Council Aboriginal Corporation is providing free, filtered WiFi services to 17 town camps around Alice Springs, in response to residents needs demonstrated through the COVID-19 pandemic.