

# SA power outage: How did it happen?

28 Sep 2016, 10:09pm

Updated



**Photo:** [A map on the SA Power Networks website shows outages across South Australia. \(SA Power Networks\)](#)

**Related Story:** ['Serious questions' as power cuts leave SA in chaos](#)

**Related Story:** [Adelaide CBD power out as massive storm hits SA](#)

**Related Story:** [As it happened: South Australia loses power as wild weather lashes state](#)

**South Australia and its 1.7 million residents were left without power on Wednesday evening following severe storms.**

So have recent events and a focus on renewable energy created the 'perfect storm' for a state-wide blackout?

## **First, what happened?**

SA Premier Jay Weatherill confirmed two tornados destroyed three elements

of critical infrastructure, which led to the power system protecting itself with a shutdown.

"Essentially what happened is a massive set of power was removed and when that happens it trips the system," he said in a press conference on Wednesday evening.

Earlier he told ABC radio in Adelaide the weather has caused damage to power infrastructure near Port Augusta.

"It appears there was a weather event that damaged infrastructure in the Port Augusta area. Energy generation assets remain intact. At this stage there does not seem to be any damage to the interconnector with Victoria," he said.

SA Power Networks' Paul Roberts said they were investigating whether a network shutdown as a protection was the cause.

"We believe — and this is only early information — that there may have been some issue with the interconnector but the state's power system is shut down I think possibly as a protection," he said.

"It means we're not receiving any electricity supply from generators to be able to supply to generators."

## **Surely South Australia has some sort of back-up power?**

Well, it does, but it has to reset the system.

"There are a series of back-up generators," Premier Weatherill said.

"Power is restored but the number of hours this may take is something that we don't yet know."

## **Where does SA's power come from?**

The state is powered by a mix of wind, solar and gas.

In May, Alinta's Northern power station at Port Augusta closed, which means coal has been cut out of South Australia's electricity production equation.

### [Video: What went wrong with SA's power supply? \(Lateline\)](#)

At the time, Australian Energy Council chief executive Matthew Warren said the power station's closure meant the state would have less back-up energy available on days of peak demand.

He also said the state would have a greater reliance on renewable energy and on the interconnector from Victoria for base-load power.

"The reality for South Australians is that we're in uncharted waters," he said in May.

"There's an increased level of risk that we really haven't seen before anywhere in the world, so it doesn't mean we'll have more blackouts, hopefully if we're smart we can sort out solutions so power supply can be the same as usual, but it's an increased risk."

### **Did that impact Wednesday's event?**

The Premier says no.

"This would have happened with the Port Augusta power station in place," he said.

"We have sufficient back-up baseload power.

"The interconnector is still up and running."

### **So, surely SA can get power from this interconnector?**

One of the two interconnectors between SA and Victoria was down for a few days in July to allow upgrade work to increase its capacity by 40 per cent.

The interconnector being switched off during the storm appears to be unrelated to the July incident.

Federal Energy Minister Josh Frydenberg spoke to Sky News earlier and said questions would be raised over how the collapse of the entire SA power network could happen.

"There are actually two interconnectors between Victoria and South Australia," he said.

"One's called the Murray Link and the other one is called the Heywood Interconnector and the recent spike in prices in the South Australian spot market for electricity was due in part to the upgrade to that interconnector.

"Now clearly, questions will be raised, serious questions will be raised, that need to be answered as to how this extreme weather event could take out the whole of the electricity supply across a major state such as South Australia."

But Premier Weatherill said the interconnector played no role in the blackout.

## **What about its wind power?**

Wind farms actually stop operating when it's too windy.

However, this was ruled out as the cause of the blackout.

## **Did anyone else see this coming?**

There have been several blackouts in recent years throughout various suburbs including 10,000 properties without power earlier this month during another wet weather event.

This is on top of SA Power Networks bumbles this year and last year which left customers on life-support machines without electricity.

Senator Nick Xenophon described the event as a disgrace.

"If heads have to roll, so be it," Senator Xenophon said.

Federal Energy Minister Josh Frydenberg was also not pleased.

"It's clearly not adequate because the ramifications are huge for so many people involved," he said on 7.30.

"So these are the questions that myself and the Prime Minister and the Energy Ministers and the premiers across the states and indeed across the territories, are asking in the coming weeks.

"We have a COAG energy council which I chair and I'm proposing to bring those members together as soon as possible to get to the bottom of exactly what has occurred and what needs to be done to ensure it doesn't happen again."

This week ABC political editor Chris Uhlmann also wrote about South Australia's electricity price spike and the challenges for an energy market in transition from fossil fuel to renewables, [like the one in South Australia](#).

## **What now?**

The Premier did not want to speculate on a time-frame, but there have been reports of power coming on in some suburbs.

When asked about who would be liable for the event, he remained tight-lipped.

"At this stage we're focused on looking after people's safety, restoring the

power and communicating messages to keep people safe," he said.

## **More on this story:**

- [Analysis: Rushing to renewables risks sector's reputation](#)
- [SA blackout: Why and how?](#)
- [Woman on operating table during blackout recounts her ordeal](#)
- [Renewables not to blame for blackout, experts say](#)

**Topics:** [weather](#), [storm-event](#), [electricity-energy-and-utilities](#), [alternative-energy](#), [sa](#)

First posted 28 Sep 2016, 6:39am