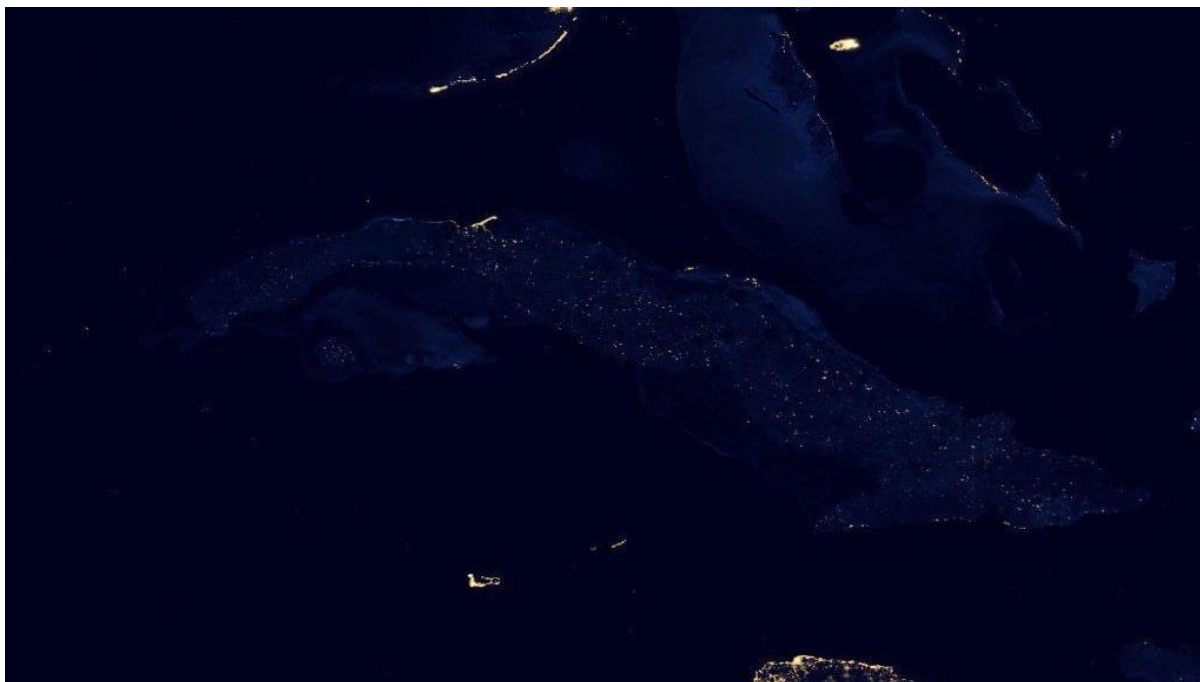


Energy crisis comes to a head: government takes position in special broadcast (Update: Cuba's power grid has collapsed)



Satellite image during a major blackout in 2022: The power supply situation in Cuba is currently critical again (source: [Twitter](#))

The tense situation in Cuba's electricity supply has worsened further. The daily generation deficit has been consistently in the four-digit range in recent weeks, and reached an extremely high value of 1678 megawatts on Thursday. This corresponds to a deficit of around 50 percent of demand. As a result of the tense situation, there were [isolated protests](#) in Holguín and Sancti Spíritus at the beginning of the week. Now President Miguel Díaz-Canel has [sent Prime Minister Marrero and Energy Minister O'Levy to make a special broadcast](#) to provide information about the current situation.

Massive outages now also in Havana

As the electricity supplier UNE [announced on](#) October 17, a peak deficit of 1678 megawatts was expected on Thursday, with a maximum demand of 3300 megawatts. This means that only about half of the electrical energy needed is available nationwide. The result is long-lasting daily power outages that affect both households and industry and now last at least six hours even in the otherwise more protected Havana, as can be seen from the [Telegram channel of the](#) supplier.

Currently, seven of the 20 power plant blocks are out of operation. four as a result of accidents and three due to maintenance work. "There are outages on the Antonio Maceo in Santiago de Cuba, which are expected to be back in operation today, as well as maintenance work on a unit of the CTE Carlos Manuel de Céspedes in Cienfuegos and a machine in Santa Cruz del Norte, which will take about six months," [said](#) UNE Director General Alfredo López in the special broadcast. López explained that two of the system's most important blocks, the Felton and the Guiteras, had to be shut down at short notice for technical maintenance.

Another setback occurred at a gas-fired power plant in Varadero, where a device failed. The plant is expected to resume operations on October 23 with 45 megawatts. In addition, a

small maintenance is scheduled for the Antonio Guiteras power plant in Matanzas and the Lidio Ramón Pérez plant in Felton. Furthermore, there are massive problems with the supporting decentralized diesel generators, which are affected by a lack of fuel. Due to the bottlenecks, an additional deficit of 800 megawatts was added in this area.

Infrastructure, fuel, and increased demand

Prime Minister Marrero cited “the state of the infrastructure, the lack of fuel, and the increase in demand” as the three biggest problems in the energy sector. López Valdés pointed out that energy demand has increased by 120 megawatts compared to last year, especially in the early morning hours due to the increase in electronic devices. Total consumption has exceeded the 3,000-megawatt mark – a figure that was unthinkable for Cuba for a long time.

The UNE general director emphasized the goal of increasing the use of domestic fuels and carrying out major maintenance work on several power plants over the next four years. Among other things, a unit in Felton is to be renewed, which would contribute 250 megawatts.

The fuel situation should improve starting this Friday, when a fuel oil ship will be unloaded. This will supply all power plants and provide an additional 2,000 tons of diesel for decentralized generators. A delivery originally planned for October 9 had to be postponed due to bad weather.

Starting next year, a solar program, which aims to install a total of 2,000 megawatts over the course of two years, should at least provide some relief. Until then, the situation is likely to remain tense. ([Cubaheute](#))

Update 5:30 p.m.: emergency plan in effect

Meanwhile, the electricity supplier UNE has [announced seven emergency measures](#) on its Facebook page, which are taking immediate effect on the instructions of the Prime Minister. As TV journalist Lázaro Manuel Alonso [reports](#), priority has been given to supplying residential areas, which is why drastic cuts are being made in the economic and institutional sectors:

1. All non-essential energy-consuming services will be suspended.
2. The Ministry of Culture has decided to suspend cultural activities in both the public and private sectors.
3. Only essential facilities such as hospitals and food processing plants will continue to be supplied.
4. Activities at nightclubs, recreation centers and other facilities that attract large crowds are suspended.
5. The Ministry of Education decides to suspend teaching from Friday to Sunday at all levels.
6. All energy councils are activated.
7. Only essential staff are present at workplaces.

“The Prime Minister’s instructions call for the shutdown of non-essential production facilities, the use of home offices, measures against large-scale consumers, and the establishment of consumption plans in the non-governmental sector,” Alonso adds. managers and administrative staff are encouraged to keep their cell phone batteries at least minimally charged in order to remain reachable. Households without electricity can keep up-to-date with *Radio Reloj* transmissions via the landline number 80073565.

Update 7:30 p.m.: Cuba's power grid has collapsed

As the Ministry of Energy and Mining (MINAS) has just [reported](#), the Cuban power grid has collapsed: “After the unforeseen shutdown of the CTE Antonio Guiterras, there was a complete interruption of the national power grid at 11 a.m. this morning. The Unión Eléctrica is working to restore it,” the message said. President Díaz-Canel [announced that](#) the country's leadership is giving ‘absolute priority and attention to the energy emergency.’ ‘There will be no respite until the grid is restored,’ he said.

The current collapse is the second complete collapse of the Cuban power grid within a few years and the first not to occur as a result of a hurricane. [The last time the Cuban power grid](#) collapsed was in September 2022, after Hurricane Ian damaged several main lines. It took several days to restore it back then.

Update 9:55 p.m.: Restoration work in progress

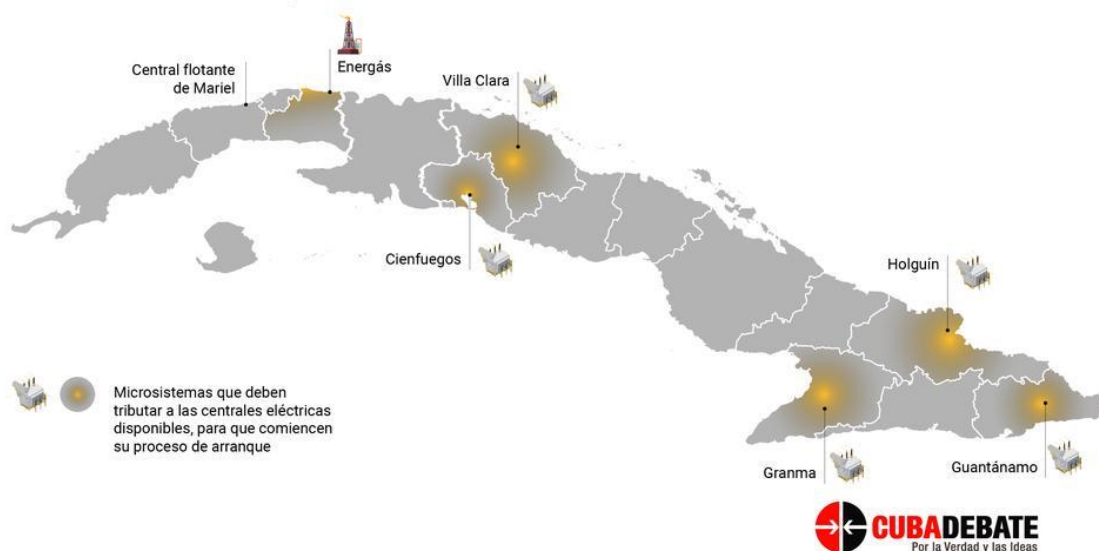
Lázaro Guerra, MINAS Director General for Electricity Supply, announced details of the ongoing work to ramp up the power grid on the Cuban midday news. Both gas turbines and decentralized diesel generators near the large heavy fuel oil power plants and the Turkish power plant ship off Mariel are being used to gradually increase the power fed into the grid. First, decentralized microsystems will be set up, which will then be reconnected to a unified network. The necessary fuel has already arrived at the appropriate key points. “We are in the midst of recovery,” said Guerra.

As a result of the power outage, there was a measurable drop in internet traffic in Cuba, as the analysts at [Netblocks illustrate with a graphic](#).

Update 22:40h: Microsystems are starting up

Restablecimiento gradual del Sistema Eléctrico Nacional

18 de octubre de 2024 | 3:00 pm



Map of the seven microsystem islands for starting the large power plants (source: [X](#))

As the Director General for Electricity Supply at the Ministry of Energy, Lázaro Guerra, [explained](#) on Cuban television at 3:30 p.m. local time, the first small circuits (so-called

microsystems) are now in operation to restore the power grid throughout the country and will be connected later. Microsystems are already in operation in the provinces of Villa Clara, Holguín, Guantánamo, Granma and Cienfuegos and only need to be connected to the large power plants so that they can start up again. Alternatives are currently being sought to supply the power plant unit in Nuevitas with energy, and in Santiago de Cuba a floating power plant is transmitting energy to the Renté power station, where work is currently being carried out to reconnect two units to the grid.

As Guerra emphasized, the process must be carried out slowly and gradually, otherwise the microsystems could collapse again. "All qualified experts are on the job," said Guerra.

Update 23:10h: Livestream from Havana

Due to the power grid collapse, the Reuters news agency started a [livestream from the heart of Havana](#) (Calle 23/Coppelia in Vedado). The stream has now ended. However, nothing out of the ordinary was seen during the 40-minute period, and traffic continued as normal.

Update 23:55h: Airports and hospitals continue to operate

As the Cuban airline CACSA [announced](#), the "facilities, services and systems" of all 10 international airports in the country have sufficient energy. The company emphasizes that "all measures have been taken to ensure that airlines and passengers are well looked after during flight operations to and from the national territory".

Health Minister José Angel Portal Miranda [reported on X](#) that hospitals are continuing their services using the generators in the building. In Santiago de Cuba, the central hospital and a children's hospital are [supplied by the local microgrid](#).

Saturday. Update 2:45 a.m.: First circuits connected

According to the latest reports from the electricity provider UNE, the construction of the microgrids is progressing and now covers all parts of the country. In several provinces, the first circuits are being supplied via a local system. UNE reported to Havana that the first 19,300 households in the capital could be supplied again from 7 p.m. local time, and four circuits are to be restored in the coming hours. "Currently we have microsystems in all provinces, except in Artemisa, where only limited power is available," said Guerra in a situation update on the Cuban evening news.

The restoration of the grid will take several hours. Intensive work is currently being carried out on the damaged Guiteras, where several line leaks are being sought as part of the repair work.

After the stabilization of the microgrids, the second phase is the start of the large power plants, for which no time frame has yet been announced. Most households in Cuba will spend the night without electricity, and hospitals and other medical facilities will be given priority in the recovery process.

Update 14h: Another outage after partial recovery

Last night, the partial restoration of the power grid was successful. Energy Minister Vicente de O'Levy [announced](#) at 1 a.m. (local time) on Saturday that the first 500 megawatts had been restored and that various substations in the west of the country had power again. At around 1:30 a.m., 58 circuits and 116 megawatts were reported in Havana. Two large power plants were in the process of restarting. At 6:15 a.m. local time, the electricity supplier [announced a setback](#): the western microgrid had failed again.

Update 15:50: Grids in eastern and central Cuba are stabilizing

Restablecimiento gradual del Sistema Eléctrico Nacional

19 de octubre de 2024 | 8:00 am



Status of the microsystems at 8 a.m. (local time) (source: [X](#))

As the electricity provider UNE [announced at](#) 8 a.m. local time, the microgrids in the east and center of the country have continued to consolidate despite the collapse of the western grid. Two small power plants in the eastern Cuban city of Moa have started up and are stable. In Camagüey, there is also a stable microgrid, which is why the power plant in Nuevitás has now started to ramp up. The Antonio Guiteras is also being started up at the moment, after all the damage from the accident has been repaired. The accident was caused by a “defect in one of the automatic systems in connection with the boiler, which is considered the reason for the leak”.

It is expected that several power plants will be back up and running by this afternoon and that at least partial regional coverage can be guaranteed. However, it will likely take even longer to fully restore the grid.

Cuba in the dark: SPON has [published](#) a gallery of pictures from the Reuters news agency showing scenes from yesterday and today. In Havana, smartphones are lit up, and fires have been lit in front of houses to cook perishable food. Offers of help for charging cell phones are circulating on social media. People are used to long power outages, which is why everyday life continues with Cuban stoicism after the total outage.



Revolutionary veteran Ramiro Valdés (left) and Díaz-Canel this morning at the national dispatching center (source: Telegram)

Update 5:40 p.m.: Progress in Havana

At 10:20 a.m. (local time), the provincial dispatching center in Havana reported that, following the collapse of the western grid that morning, the first areas in the capital to have electricity again were named: Berroa, Bacuranao, Ricabal, Santa Fe, Carretera Monumental, Peñalver, Los Mangos, and Alecrín.

As reported by the *Cubadebate* news portal, the University of Computer Sciences (UCI) has set up a charging station for students on campus. By 11:30 a.m. local time, a total of 15 circuits had been restored in the capital, including areas in the municipalities of Guanabacoa, Boyeros, San Miguel del Padrón, and Cotorro. When selecting the circuits, hospitals and water pumps are given priority.

Update 22h: Nationwide 370 megawatts restored

As of 2 p.m. local time, 370 megawatts have been restored nationwide in Cuba. This was announced by the electricity supplier UNE on its channels. The Santa Cruz and Mariel power plants are in the process of being ramped up. The Antonio Guiteras and Nuevitas plants are also in the process of restarting.

In Havana, 25 circuits with a capacity of 46.7 megawatts are being supplied again. In Pinar del Río, the first 9,000 customers have electricity again. At the same time, boats are being unloaded with fuel in the ports of Havana, Moa, and Mariel, which will be used to supply the decentralized diesel generators.

Meanwhile, a political news item has made headlines in the midst of the blackout: in the eastern Cuban province of Las Tunas, Governor Jaime Ernesto Chiang Vega was [dismissed](#) on the initiative of President Díaz-Canel due to “mistakes in the performance of his duties”.

His deputy Ernesto Luis Cruz Reyes also had to leave. Eduardo Walter Cuelí, the current coordinator for programs and goals of the provincial government, will now provisionally lead the province.



Charging station at the UCI (source: [Cubadebate](#))

Sunday. Update 1h: The Guiteras power plant is starting up



In Pinar del Río, the main line has power again, but it still does not have the capacity to supply more than a few thousand households. However, the step is of great importance for the stability of the subnetwork in the west. In Villa Clara, 62 megawatts are being fed in and in Havana, 54 circuits were back in service in the afternoon, roughly the same number as before the second outage on Saturday morning. By early evening, the number had risen to 94. According to the capital's José Martí Airport, all 60 announced flights were able to operate as scheduled on Saturday. In Varadero, all 13 scheduled flights also took place.

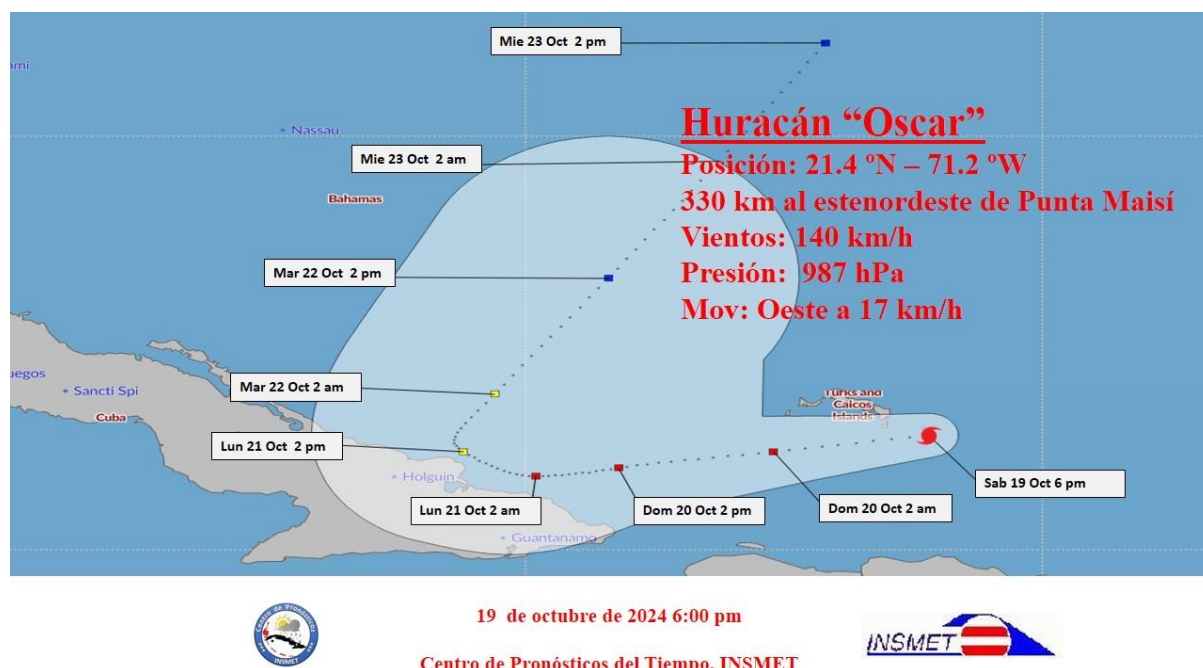
Now the focus is on ramping up the power plants. The most powerful power plant, Guiteras, started up around noon. Journalist José Miguel Solís, who has been closely following the plant's progress for years, [reports](#): "Boiler in operation since 1 p.m. The plant is taking up its operating parameters... When the turbine is running at 6500 revolutions per minute and remains stable, it will

be coordinated with the national dispatcher to increase the output of the Matanzas subsystem and possibly contribute to the ramp-up of the nearby power plants."

The key is that the Guiteras remains stable for a long time after starting – a step that did not go smoothly during the last power outage in 2022. The start of the Guiteras is one of the most critical milestones on the road to restoring the grid.

Meanwhile, Cuban civil defense has [issued a](#) warning about Tropical Storm Oscar, which is currently forming east of Cuba. According to the forecast center of the Cuban Institute of Meteorology (INSMET), the storm is moving west and “could bring rain and gale-force winds to the eastern region and swells to the north coast from Guantánamo to Las Tunas in the next 12 to 24 hours”.

Update 2:30 a.m.: Capacity increases to 695 megawatts



Forecast for Hurricane Oscar (source: [INSMET](#))

As Cuba's president announced on the evening news, 500 megawatts were generated early this evening, enough to supply 16 percent of customers. By 8 p.m., output had risen to 695 megawatts. The Santa Cruz power plant has been put into operation and work is underway to connect the Mariel power plant. In Matanzas, the local microgrid collapsed in the late afternoon, but it was partially restored by 7:30 p.m.

At the same time, [preparations are being made](#) in the provinces from Camagüey to Guantánamo for the arrival of [Hurricane Oscar](#), which will bring heavy winds of 85 to 100 kilometers per hour and precipitation to the northeast of the country starting on Sunday afternoon.

Update 11:50 a.m.: Western subnetwork collapsed again

There has been another setback in the restoration of the grid. As the Ministry of Energy [reported on](#) Xinhuanet, the western subnetwork collapsed again at around 10:15 p.m. local time. “The process of restoring the power grid is still complex,” the ministry wrote.

Update 19h: First sub-grids reconnected

Restablecimiento gradual del Sistema Eléctrico Nacional

20 de octubre de 2024 | 11:00 am



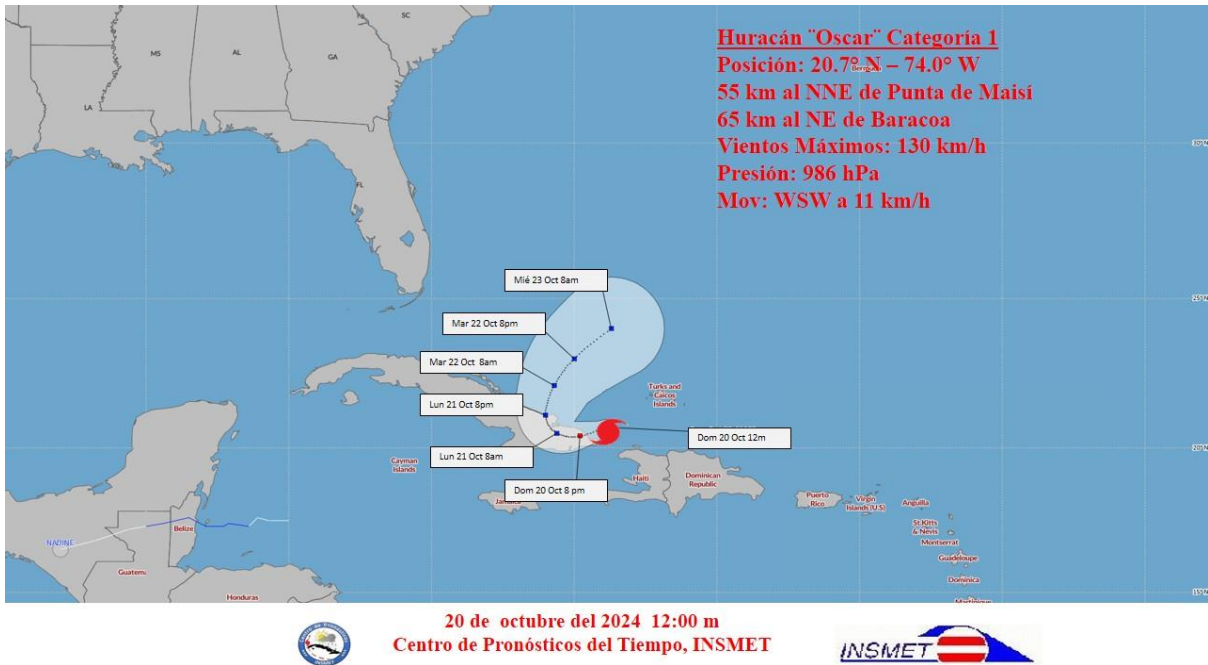
Status of the restoration on Sunday at 11 am (source: [Cubadebate](https://cubadebate.cu/))

Despite the setback in the west, the restoration work is progressing. The Guiteras could be connected to the local microgrid early Sunday morning and is feeding in stably. This has favored the start of further power plants. Meanwhile, the sub-grids of the provinces from Matanzas to Holguín could be connected, the power company UNE reported at 9 a.m. local time on Sunday. In addition to the Guiteras, the newly connected grid relies heavily on the output of the Renté in Santiago de Cuba, unit five of the Nuevitas, the Energas gas-fired power plant in Varadero, and decentralized diesel generators.

Meanwhile, the situation in Havana remains tense. Since the renewed collapse of the western grid, only 20 circuits with a capacity of 38 megawatts could be restored in the capital by midday. By 1 p.m., the number of circuits supplied had risen to 51. President Díaz-Canel spoke [on X at midday](#): “We were at the National Dispatcher Center in the early hours of the morning and this morning. The country’s microsystems are being reinforced and Havana will gradually be supplied with energy. It is a complex task, but we are ensuring that the necessary steps are taken. We have said that we will not rest until the electricity supply is fully restored,” he said.

Update 7:20 p.m.: Cuba orders schools to close until Wednesday

A hurricane alert has been in effect since 7 a.m. in the eastern provinces of Guantánamo, Santiago de Cuba, Holguín, Granma, and Las Tunas. At 11 a.m. the province of Camagüey was added. According to the Cuban meteorological service INSMET, the landfall of Hurricane Oscar is imminent. With wind speeds of 130 kilometers per hour, it is classified as a category 1 hurricane on the Saffir-Simpson scale. “Over the next 12 hours, the hurricane will continue its west to west-southwest movement and may strengthen. The current track and west-westerly to west-southwesterly movement indicate that Hurricane Oscar will make landfall this afternoon on the north coast near the provinces of Guantanamo and Holguin in Cuba,” the latest forecast report says. Precipitation is expected to range from 100 to 200 millimeters, and strong winds are expected to reach speeds of 85 to 100 kilometers per hour.



Forecast for Hurricane Oscar (source: [INSMET](https://www.insmet.cu/))

In view of the current situation of a hurricane in the midst of the nationwide blackout, the government has [ordered](#) the suspension of all teaching activities up to and including Wednesday. This affects both schools and universities. "Non-essential administrative activities" will also be suspended until then.

Update 20h: Western grid reconnected

Restablecimiento gradual del Sistema Eléctrico Nacional 20 de octubre de 2024 | 1:00 pm



Restoration status on Sunday at 1 p.m. (source: [Cubadebate](https://www.cubadebate.cu/))

There has been progress in western Cuba. As reported by the electricity supplier UNE, the networks from Mariel to Holguín were connected as of 1 p.m. local time. A gas turbine and two floating power plants were able to restart the Mariel power plant ship. At the moment, the Mariel power plant is also being restarted using this electricity. At that time, 57 circuits with a capacity of 130.5 megawatts were connected in Havana, enabling the supply of 165,154 people.

“The power grid is now more complete and reliable,” the utility announced. However, there are microsystems in the far east and west of the island that still need to be connected.

Meanwhile, Energy Minister Vicente de la O'Levy addressed representatives of the national and international press in the early afternoon. He criticized the ‘brutal economic blockade’ by the United States as one reason for the lack of fuel. “Ships entering Cuba are paid for in cash. Even though there is sometimes money in the banks, they make it impossible for us to pay,” said the minister. O'Levy announced that 52,000 workers are currently working across the country to restore the power grid.

Update 21:30h: Havana's power is coming back



Work on a turbine at a power station (Source: [Granma](#))

Restoration in the capital is now [progressing rapidly](#). By 3:30 p.m. local time, 260,016 customers had their electricity back. Ninety-one circuits were supplied with a capacity of 192 megawatts. In terms of critical infrastructure, five hospitals and four water pumps are still without electricity in the Cuban capital.

After more than 50 hours without electricity, the situation is tense in many places. Food is going bad, the water and cooking gas supply is interrupted, and even the cell phone towers that are kept running by generators are not functioning everywhere. The Reuters news agency [reports on](#) several small protests and pot-banging in Havana in recent days in response to the ongoing blackout.

Update 23:00h: power grid has collapsed again

As the electricity supplier UNE [announced at](#) 4:30 p.m. local time, the grid has collapsed again. “After a failure at the 10 de Octubre power plant, the system collapsed from Ciego de Ávila to Holguín, and then the west was disconnected from the grid due to the failure of the floating power plants.” The Ministry of Energy confirmed the incident and [announced](#) that restoration work had begun immediately.

Monday. Update 12:00h: Díaz-Canel: Cuba in a state of emergency



Meeting of the National Defense Council on Sunday evening (Source: [Cubadebate](#))

At around 9 p.m. local time on Sunday, Cuba's President Miguel Díaz-Canel addressed his fellow countrymen: “The country is in an exceptional situation,” [he said](#). This is characterized by two complex events: the ongoing energy emergency and the arrival of Hurricane Oscar, which made landfall a few hours earlier near the eastern Cuban city of Baracoa and is currently moving towards Guantánamo.

Meanwhile, more details have emerged about the fourth power outage of the grid. As the head of the national dispatching center, Félix Estrada Rodríguez, [explained](#), a fault occurred in a 110 kV line in the center of the country on Sunday after the subnetwork of the western province of Artemisa was connected. Now the process of building the microgrids has to start all over again, after which they will be reconnected to the overall grid. “The provinces will be reconnected by creating electricity islands by zone: Matanzas-Cienfuegos-Villa Clara; Ciego de Avila-Sancti Spiritus; Holguín-Granma-Santiago, and then these systems will be interconnected,” Estrada Rodríguez said. The aim is to minimize the frequent frequency fluctuations as much as possible to avoid further outages. The first microsystems were reactivated early Monday morning.

However, as with previous outages, recovery should be faster each time because key power plants remained online.

Update 1:20 p.m.: Half of Havana back under power

Good news from Havana: As the power company announced, half of the customers in the Cuban capital have been able to be served again since the early morning hours. The available power is 317 megawatts. By comparison, immediately before the fourth collapse on Sunday afternoon, the power in Havana was 192 megawatts.

Another piece of good news is that Oscar has weakened since making landfall and has been [downgraded to](#) a tropical storm. It is expected that it will move back out to sea towards the Caribbean at around 8 p.m. local time.

Update 4 p.m.: 700 megawatts restored

Restablecimiento gradual del Sistema Eléctrico Nacional

21 de octubre de 2024 | 8:00 am



Situation of the power grid at 8 a.m. on Monday (source: [Cubadebate](#))

At around eight o'clock tomorrow morning, 700 megawatts will be available again nationwide. The electricity supplier UNE reported: “The western microsystem has further consolidated. Block eight of the Mariel power plant is already in operation. The floating power plants of Havana, Mariel, and the Energás Boca de Jaruco gas plant are also in operation. This ensures the supply of Havana, Mayabeque, and Artemisa”.

The micro-system in the center of the country has 200 megawatts and “in the other provinces there are subsystems that have been built and are functioning since the total collapse of the system began.” At the moment, the Guterres, as well as a block of the Nuevitas and a block of the Renté, are starting up again.

In Havana, the first parts of the water pumps have been restored. The resumption of the drinking water supply has the highest priority. The first gas factories are also running again, which is a prerequisite for the supply of cooking gas.

Meanwhile, the first reconstruction work on power lines destroyed by Hurricane Oscar has begun in Guantánamo. The provinces of Villa Clara, Ciego de Ávila, Camagüey, Granma, and Santiago de Cuba have sent several teams of electricians to the eastern province to provide support.

Tuesday. Update 0:10h: Guiteras back online

The Guiteras plant was successfully restarted and is currently feeding 105 megawatts into the grid (its maximum capacity is 250 megawatts). In Havana, all households are again being supplied, but rationing is in effect. Consumers are being asked to avoid using energy-intensive appliances for the time being in order to prevent the grid from collapsing again due to overloading. There is still a lot to be done; only 35 of the capital city's 89 water pumps are currently back in operation.

Hurricane Oscar, which has been downgraded to a tropical storm, is currently over Holguín. It has weakened further and is moving north into the Caribbean Sea with wind speeds of 65 kilometers per hour.

Update 15h: Six dead due to Hurricane Oscar

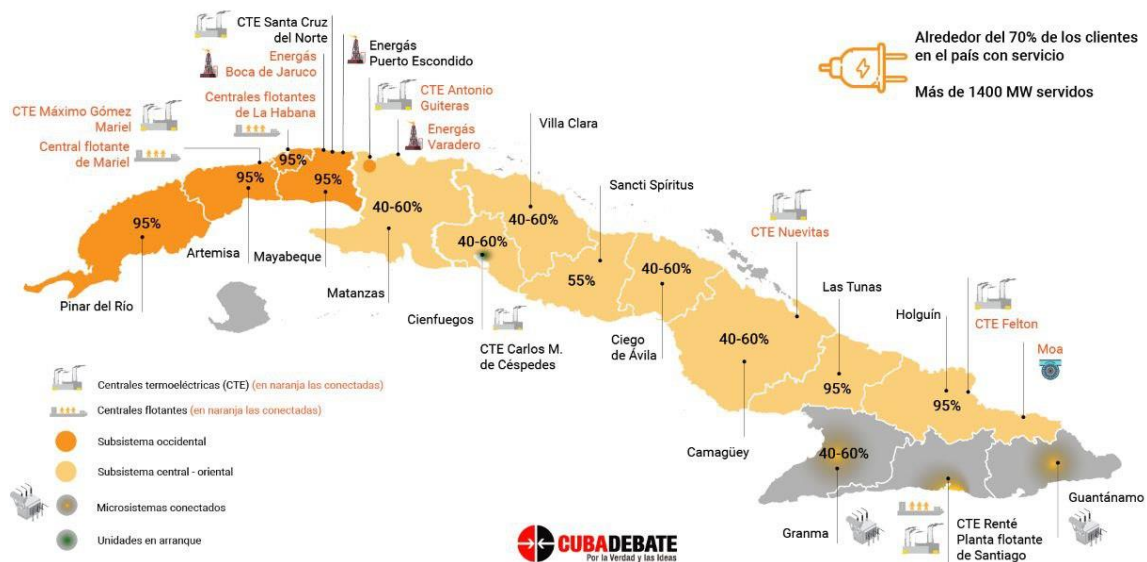


Rescue work in Baracoa (Source: [Cubadebate](#))

After Hurricane Oscar, downgraded to a tropical storm, passed through eastern Cuba, a preliminary assessment is now available. According to the Cuban civil defense, the storm claimed six lives. The victims are from the communities of Imías and San Antonio del Sur in Guantánamo. The armed forces and the interior ministry are currently leading the rescue efforts in these communities, where some areas are still inaccessible, [said](#) Díaz-Canel on X. In view of the current situation, he canceled his participation in the Brics summit.

Restablecimiento gradual del Sistema Eléctrico Nacional

22 de octubre de 2024 | 10:00 am



State of the power grid on Tuesday at 10 a.m. (Source: [Cubadebate](https://www.cubadebate.com))

Meanwhile, efforts to restore the power grid, which is still divided into an eastern and a western network, are continuing at full speed. Unit 6 in Nuevitas, unit 1 in Felton, and the generator group at the Moa nickel mines have recently been successfully commissioned, and unit 4 at the CTE Carlos Manuel de Céspedes in Cienfuegos is also starting up. “We will evaluate the security conditions of these two subsystems to build the national grid, but we will do so calmly and wait for it to stabilize,” the power company announced. As of 8 a.m., **70.89 percent of customers nationwide had power** again. The available power is 1400 megawatts.

Some information on the technical background to the recent events: Why does an electricity grid collapse at all? This question was answered by electrical engineer Miguel Castro Fernández from the Technical University of Havana (CUJAE) in a short text that [was published](#) in the newspaper *Trabajadores*. Excerpt:

I use this little bit of light and the rest of the charge in the cell phone to illustrate the following:

Electrical energy systems have two characteristics:

- 1. Production must correspond to demand at all times (the electricity produced cannot be stored to be available on demand, and it is necessary to produce at all times what is demanded at all times). This is known as the power balance.*
- 2. There are devices that automatically maintain this balance.*

If, for whatever reason, this balance cannot be achieved, very dangerous instability phenomena occur, which quickly bring the systems to a standstill without human intervention.

Total power failures (also known as blackouts) are very rare worldwide, but they do occur. In the case of Cuba (which has no neighbors to supply it with electricity), we have to start from small micro-systems that are connected to each other (synchronized) via the networks to give them the necessary robustness. An isolated micro-system is very vulnerable and can collapse due to

any event (increase in demand, short circuit in the network, etc.), so that everything has to start all over again.

In Cuba, for the reasons mentioned above, the restoration process always took days or even weeks, except that in the past nobody knew about these outages because the means of communication did not yet exist. The light came and went many times before the dispatching centers were able to establish a robust system capable of automatically supporting and compensating for the power imbalances that occurred.

Update 22h: Cuba's power grid restored!

As the electricity provider Unión Eléctrica [has announced](#), the power grid was restored at 2:44 p.m. (local time); for the first time since Friday, all subnetworks are reconnected.

Previously, several power plant units in the east of the country were successfully started up. This has made it possible to connect the previously decoupled subnetworks of Santiago, Guantánamo, and Granma.

According to reports from several provinces, shops have reopened today. In some regions, special sales booths have been set up on the streets. In many places, people are lining up to buy essentials such as food and cooking gas cylinders. Even outside the hurricane region, not all basic services have yet been restored. According to the local water utility, 612,000 customers in Havana are currently still without water, around 34.9 percent of the population. Water trucks are currently being mobilized to supply water to particularly affected areas.

According to the latest information, the number of victims of Hurricane Oscar has risen to seven. "We have learned that another person has been killed in Imías, bringing the total death toll to seven. We deeply regret this and offer our sincere condolences to their families and friends," [said President](#) Díaz-Canel at the meeting of the National Defense Council. The situation in the affected areas remains difficult. "We urge that the donations that are now coming from our people, from friendly countries and from international organizations, be quickly organized and forwarded. We are very grateful for these expressions of solidarity," said Díaz-Canel.

Wednesday Update 4 p.m.: Measures extended to October 27

As Cuba's government announced today, the measures to close educational institutions and dispensable office jobs have been extended until Sunday. Originally, the measures would have expired today, Wednesday. The country wants to use this to free up reserves to repair the damage caused by Hurricane Oscar and the collapse of the power grid.

On *Cubadebate*, there are now [initial images](#) of the particularly hard-hit San Antonio del Sur (Guantánamo) after Hurricane Oscar. Díaz-Canel has now [arrived in](#) Guantánamo together with Prime Minister Marrero to get an idea of the situation.

Friday Update 9:30 a.m.: Hurricane areas still cut off

Due to the ongoing flooding and destroyed roads, access to Imías by land is blocked, which is why the Revolutionary Armed Forces (FAR) [have set up](#) an airlift to supply the town. The

routes to Baracoa and Maísi are also restricted, and intercity buses to the communities have been suspended. In the affected regions, the power supply is still interrupted and the exact extent of the damage has not yet been determined.

Díaz-Canel announced extensive relief efforts for the affected communities and promised a quick recovery. Cuba's Ministry of Trade announced that it would distribute additional rations of basic food and hygiene products in the affected regions via the Libreta booklet.

On Wednesday, Mexico was one of the first countries to offer Cuba technical assistance. In addition, the dispatch of fuel to support power generation is being considered, announced Mexico's President Claudia Sheinbaum. The United Nations also announced aid deliveries.