Full dams mask a grim reality

January 7, 2013

The Canberra Times

Editorial

A few wet years can cleanse the memories of last decade, when Canberra was struggling through its worst drought on record. Today, the city's dam levels are up to almost 95 per cent of their capacity and most of our parks, gardens and sportsgrounds are a fertile green. Yet this is the result of a very rare event: two consecutive La Nina cycles over 2010-11 and 2011-12, which dumped a generous volume of rain on the region. Climate scientists say these cycles will occur less often, and tend to be weaker, in the years and decades ahead.

The Bureau of Meteorology's *Annual Australian Climate Statement*, released last week, jolts us back to the realities of living on a warming planet. The extreme heatwave now affecting most of eastern Australia is not a one-off; forecasters worldwide already fear that 2013 will be the globe's hottest year on record. This not only means more of the intense heat, bushfires and severe storms from which Australians are now sheltering, but a return to the critical question of how we manage our water reserves.

Five-a-half-years ago, Canberra faced a crisis. Water utility Actew reported grimly: "By June 2007, water levels in our dams had dropped from 50 per cent a year earlier to 30.8 per cent, an all-time low." Plans were under way to enlarge Cotter Dam twentyfold and to build a high-tech purification plant that would add treated wastewater (including sewage) to the city's drinking water supplies.

Canberrans' reaction to this latter proposal was surprisingly supportive given the anger with which Toowoomba residents had greeted a similar proposal. Nonetheless, some high-profile opponents emerged, not least Canberra Hospital's head of microbiology and infectious diseases, Professor Peter Collignon. The ACT's then chief minister, Jon Stanhope, eventually dropped the proposal to recycle wastewater, and instead proceeded solely with the Cotter enlargement, which increased our dams' total capacity by 35 per cent.

Today, a near-overflowing Cotter Dam may appear to vindicate Mr Stanhope's decision. The ACT government also has the benefits of the newly built pipeline from the Murrumbidgee River to the Googong Dam and a deal to use it, if needed, to take water from Tantangera Dam in NSW.

Yet the ever-worsening prognoses for our climate suggest we should drink in the sight of a full Cotter now; it may be a very rare luxury. Nor should we assume that, when we need water from Tantangera, other communities in NSW won't make equally strong cases to use it. On top of that, the ACT's population is expected to soar from 370,000 now to about 500,000 in just 30 years. Unless we learn to use much less potable water per household, our demand will soon exceed even the newly expanded supplies of Actew.

It's likely that, sometime in the not-too-distant future, Canberra will again debate whether we should add purified wastewater to our drinking supplies. Perhaps we'll then reflect back on Mr Stanhope's cautious decision, and ask whether it was as wise as La Nina, and her fleeting charity, led us to believe.

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ECOLOGY

Threats from India's Himalaya Dams

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Summary

To meet surging domestic energy demand, provide power to the largest population in the world that lacks electricity (>400 million people), and reduce rapidly growing CO_2 emissions, the Government of India (GOI) has embarked on a fast-track dam-building program. Over the next several decades, the GOI aims to construct 292 dams throughout the Indian Himalaya, doubling current hydropower capacity and contributing ~6% to projected national energy needs by 2030 (*1*). With the use of coal set to expand, India's total carbon emissions are projected to more than double by 2030 (*2*). New dams can play a dual role, helping to limit emissions while providing power to needy people. But major problems loom. We discuss approaches to these as Himalaya hydropower expands.

India to build 292 dams in Himalayas

Posted on January 9, 2013

WASHINGTON (INP): The Indian government plans constructing 292 dams throughout the Indian Himalayas, roughly a dam every 20 miles by 2050 that would reduce the flow of water by 8 percent in Indus and 20 percent in Brahamputra.

A report in the New York Times said that when completed, the 7,000 to 11,000 megawatt dams would double the country's hydropower capacity and meet about 6 percent of the national energy needs projected for 2030. Scientists and citizens alike are crying foul, however, pointing out that the dams will probably displace millions and wreck ecosystems throughout the Himalayas.

For starters, impacts on species and ecosystems are likely to be significant. The dams are proposed in areas of the Himalayas that are rich in biodiversity. And their creation threatens to submerge over 130,000 acres of forest, which would probably push 22 plants and seven vertebrate groups into extinction by 2025, according to an estimate by Dr. Grumbine and Dr. Pandit that was published earlier this year in Conservation Biology. Estimates of the number of people already displaced by dams in past decades range from 16.4 million to 40 million. How these dams may affect communities and ecosystems in neighboring downstream countries like Bangladesh and Pakistan is little discussed.

Heavy rains bring record boost to dams

by Hana Namrouqa | Jan 08, 2013 | 16:31 Updated: Jan 08, 2013 | 20:34

AMMAN — Storage at the country's dams rose by an unprecedented 2.5 percentage points within a 24-hour period, with over five million cubic metres (mcm) of water flowing into them by Tuesday morning, according to officials.

Rainfall between Monday and Tuesday mornings raised the dams' water storage from 17 per cent to 19.5 per cent of their total capacity, Jordan Valley Authority (JVA) Secretary General Saad Abu Hammour said.

"It is rare for the dams to witness such a quick rise in water storage within one day. Water levels are now good, and more water is expected to enter the reservoirs this week," Abu Hammour told The Jordan Times on Tuesday, noting that 5.7mcm were channelled into the dams between Monday and Tuesday morning.

"The dams currently hold 62mcm or 19.5 per cent of their total capacity of 325mcm. This time last year they held 59.95mcm or 18.42 per cent."

The 75mcm King Talal Dam witnessed the highest influx of rainwater by Tuesday morning, receiving a record 250 cubic metres per second, according to the official, who said the dam now holds 8.38 per cent of its total capacity.

In addition, storage increased at the southern dams, which until recently were almost empty, as the depression and cold air mass that affected the country on Sunday brought heavy rain and snow to the Kingdom's southern mountains.

"The southern dams, including Waleh, Mujib and Tannour, received adequate amounts of water for the first time since the start of the wet season," Abu Hammour said.

This week's rainfall has also allowed the JVA to stop pumping water to farmers in the Jordan Valley.

"The rain has saved us from pumping around 500,000 cubic metres from the reservoirs for farmers to irrigate their crops. In addition, the rainwater is clean and will raise the quality of water stored at the dams," he said, noting that the heavy rain is also helping recharge aquifers.

Meanwhile, Ministry of Water and Irrigation Secretary General Bassem Tulfah said that the Kingdom had received 46.4 per cent of its long-term annual average rainfall of eight billion cubic metres since the start of this winter.

"The highest amounts of rainfall were registered in the capital and Balqa Governorate," Tulfah noted.

Meteorologists forecast a polar front to affect the country late Tuesday and early Wednesday, expecting more heavy rain and temperatures to drop well below average for this time of the year, to zero or lower during the night.

Omar Salameh, the water ministry's spokesperson, urged the public to protect their water gauges against freezing temperatures.

"People are urged to wrap their meters with a piece of cloth or rockwool insulation and place them inside a box to prevent the cold air and water from damaging them. If the meters are damaged, subscribers will be left without water and incur the cost of fixing them," Salameh told The Jordan Times.

He also called on the public to contact the ministry's call centre on 06/5100180 or the toll free number 080022142 with any complaints.

Début des travaux de construction d'un barrage hydroélectrique à Soubré (Côte d'Ivoire)

par TAPE ARNAUD ZAGBAI | modéré par Ousmane
http://www.mediaterre.org/energie/actu,20130107104436,5.html

Selon une dépêche de l'Agence Ivoirienne de Presse (AIP), les travaux de construction du barrage de Soubré (centre-ouest de la Côte d'Ivoire, région du Nawa) vont démarrer avant fin janvier 2012; selon l'AIP, l'information a été donnée mercredi 2 janvier 2012 par l'entreprise chinoise Sino Hydro qui est en charge de réaliser ce projet.

Le projet de construction du barrage de Soubré a un coût d'exécution de 572 millions d'euros, soit 375 milliards de FCFA. Il est financé grâce à un prêt de la Côte d'Ivoire auprès de la Banque Chinoise Eximbank. Il sera doté d'une capacité de 270 MW. Il sera l'un des centres de production d'énergie hydro-électrique du pays et le plus important pour l'heure.

Le porte parole de Sino Hydro a révélé aux autorités locales et aux chefs coutumiers ce mercredi, que la construction du barrage va induire la réalisation de projets sociaux notamment la construction d'un centre de santé, d'un château d'eau, d'un groupe scolaire, d'un système de drainage d'eau dans la ville de Soubré, et l'extension du réseaux électrique.

La supervision des travaux est confiée à l'entreprise franco-belge Tractebel pour un montant de 12 milliards de FCFA. Les turbines du barrage seront fournies par l'entreprise française Alstom.

Dr Arnaud Zagbaï

Source: AIP

‘Dam-building now part of global politics’

http://dawn.com/2013/01/10/dam-building-now-part-of-global-politics/

HYDERABAD, Jan 9: The dam-building industry has become a highly lucrative business for builders, investors, politicians and consultants who aggressively lobby for water reservoirs with little if any concern for the ecological degradation the dams wreak on tail-end areas, says Pakistan Fisherfolk Forum chairman Mohammad Ali Shah.

The dam construction had become part of global politics with a strong lobbying group. Only 21 of a total of 292 rivers of the world, including the Indus, reached their tail-ends while the rest had become dead because their flows had been blocked upstream with dams, said Mr Shah.

He was speaking at a national water conference organised by his NGO here on Wednesday. Pakistan People's Party leader Taj Haider and Sindh Taraqqi-pasand Party chairman Dr Qadir Magsi were also among the speakers.

Mr Shah said that about 50,000 large dams blocked flows of most big river systems around the globe, which was equal to 15 per cent of the world's annual freshwater run-off.

He said the delta communities had the first right to river water and the government should ensure they were supplied water through the river. Rise in sea level caused by dams might soon engulf entire districts of Thatta and Badin, he warned, adding the dams also changed water temperature which caused destruction of ecology.

He said the blockade of rivers had had serious impact on communities living in tail-end areas and along coasts. "Similarly, when we see Sindh, specially the Indus delta the dam industry is again bent upon destroying lives and livelihoods of hundreds of people living in Thatta and Badin districts," Mr Shah said.

PPP leader Taj Haider said quoting from A.N.G. Abbasi's assessment report prepared for the Musharraf government that Bhasha dam was being built despite the fact that there was no more water available in the river systems of the country.

"There is no operational criterion for Chashma-Jehlum Link Canal and Taunsa barrage. There should be consensus on criteria (for operating the controversial canal) to allay fears of small provinces," he said.

He said that growers had changed priorities for sowing crops and replaced production of grain with cash crops which might cause food insecurity.

Because of that Pakistan had to import food products from other countries, he said.

“We should adopt a multi-dimensional approach to utilise floodwater in an efficient manner,” he said, adding that increasing waterloggedness posed another serious challenge, which had affected 65 per cent of fertile land in Sindh.

STP chairman Dr Qadir Magsi rejected arguments put forward by successive governments for building dams and barrages, which had caused degradation of fertile land, forests and marine life. All Sindhi nationalist parties were on the same page with regard to dams and water share of the province, he said.

Awami Jamhoori Party leader Abrar Qazi, general secretary of Sindh United Party Dr Dodo Maheri, PML-N leader Ayub Shar and representatives of Strengthening Participatory Organisation Mustafa Baloch and others said that before the development of an irrigation system on the Indus, the river water flowed in its entirety through Sindh’s plains down to the Arabian Sea, branching out into 17 channels called creeks and forming the seventh largest delta of the world.

An annual flow of over 180 million acre feet (MAF) carrying a silt load of about 440 million tons passed through Indus into the Arabian Sea, they said.

They declared that water was a fundamental element of life on earth and thus access to water was a basic human right that must be protected for all people in all places.

The conference adopted a declaration, which said strong dam industry, in confluence with local and national governments, had been engaged all around the world to build dams and destroy rivers.

An estimated 40 to 80 million people had been displaced by dams around the world so far and at present perhaps two million people were displaced by large dams every year.

Dam had contributed to depletion of mangrove forests, leaving deltaic region vulnerable to greater damage from floods and cyclones.

Thousands of people living in Indus delta had migrated from the area, said the declaration.

The conference demanded a halt to work on greater Thal canal and compensation for the gross damage so far caused in the Indus delta as a result of water cuts for decades.

It said the UN agencies should take notice of human rights issues emanating from destruction of the Indus delta in order to make the state responsible for conservation of bio-diversity.

Human rights organisations should raise the issue of degradation of Indus delta at various forums and political parties should raise the issue not only on national level but also within an environmental and human rights perspective so as to win support of international stakeholders and UN bodies, it said.

Farmers laud rain, want more dams

Fri, 11 Jan 2013 5:26a.m.

Holidaymakers may be cursing the midsummer storms, but farmers say the rain will keep the wolf from the door.

Rain has caused havoc on the roads in the South Island, flooding rivers and streams and washing out bridges, but also filling the southern hydro lakes.

But Federated Farmers believes much of the country's farmland has benefited from summer rain, except Hawke's Bay and parts of Gisborne.

"Both the northern South Island and Wairarapa received some welcome rain, but we are also aware how quickly dry hot weather can sap that from the ground," adverse events spokeswoman Katie Milne said.

"It seems to be enough to keep the wolves at bay for now."

Gisborne was "spotty", with some areas having rain, but things were looking dry north of Tolaga Bay, she said.

Hawke's Bay appeared to have missed out, showing a water storage scheme on the Ruataniwha plains was vital, Mrs Milne said.

Soil moisture would become less of an economic lottery, she said.

"With surplus water also coming down rivers in Otago and Canterbury, it pretty much underlines why we need to capture it when we can.

"It is gutting to see electricity dams spilling water that only runs out to sea, when our economy is hostage to the vagaries of summer rainfall."

Read more: http://www.3news.co.nz/Farmers-laud-rain-want-more-dams/tabid/423/articleID/282651/Default.aspx#ixzz2Hf63njrV

Des turbines Alstom pour le plus grand barrage d'Afrique

Publié le 10 janvier 2013 par Lenergeek

Le groupe Alstom vient d'annoncer la signature d'un contrat avec Metals & Engineering Corporation (METEC) portant sur la fourniture de 8 turbines Francis et de leurs

alternateurs. Du matériel destiné à équiper la plus grande centrale hydroélectrique d'Afrique, le barrage de Grand Renaissance.

Situé sur le Nil Bleu, en Ethiopie, cette centrale aura une puissance totale de 6.000 MW. Elle sera mise en service par paliers, à partir de la fin de l'année 2013. Grâce à ce barrage, l'Ethiopie quadruplera sa capacité de production électrique.

Le barrage permettra à l'Ethiopie de fournir en électricité les pays frontaliers, tout en répondant à la hausse croissante de la demande au niveau domestique (+10% par an).

Bien implanté en Afrique, Alstom est en train d'équiper la nouvelle centrale hydroélectrique d'Ithezi-Thezi (turbines et alternateurs), en Zambie. Le groupe français est également chargé de la modernisation de la centrale hydroélectrique d'Inga 2A, en République Démocratique du Congo.

En savoir plus sur http://www.paperblog.fr/6040467/des-turbines-alstom-pour-le-plus-grand-barrage-d-afrique/#fKTOvZyPJAdsy89Z.99

Advanced Hydropower Gets New Funding from DOE and Interior Departments

Filed under: 1sdn,Green Business | Posted by: Chris de Morsella |

Reports on new funding by the DOE and the Department of Interior for various advanced hydro projects, including sustainable run of the river hydro and pumped storage as well. The announced $17 million in funding over the next three years is targeted for research and development projects to advance hydropower technology.

by Chris de Morsella, Green Economy Post Chris is the co-editor of The Green Executive Recruiter Directory. Follow Chris on Twitter @greeneconpost

When people think of hydropower what typically comes to mind are huge massive dams backing up large scale reservoirs behind them. While by far most existing hydropower is from large dams there are other ways to harvest the renewable energy of water flowing down rivers, such as run of th eriver systems, and that have significantly less impact on the overall river ecology than massive dams do.

Hydropower is an important energy resource, and moving water packs much more power in it than air moving at the same speed, because water is 830 times denser than air. In terms of generation contribution it is by far the single most important renewable energy resource. But big dams and the ecological havoc that they often create have caused many people to view hydropower in a very poor light. As someone who lives in the Pacific Northwest and has seen how the big dams up here along the Columbia/Snake river system have had a hugely negative impact on the river ecology of this

region that once supported massive wild Salmon runs I share the concerns of environmentalists vis a vis damming rivers and in so doing disrupting the natural hydrological flows and conditions.

Which is why it is heartening to see small scale micro-hydro and run-of-the-river hydro finally getting some attention and a little bit of funding — small potatoes for sure compared to the big funding winners lining up at the federal trough, but important funding for this small but promising energy sector never the less.

One reason I support the research and development of low head small scale free river hydro is because of its low environmental impact on the river biosystems both aquatic and along the banks, wetlands and floodplains that are reached by the river. Another reason is because these systems are inherently smaller scale and distributed. Distributed generation helps the grid be more robust than it otherwise would be and is often produced closer to where power is needed as well.

The Advanced Hydropower Funding Announcement

US Department Energy Secretary Steven Chu and US Department of the Interior Secretary Ken Salazar today announced nearly $17 million in funding over the next three years for research and development projects to advance hydropower technology. Sixteen projects in 11 states were selected through a competitive grant process for their ability to contribute to the development of innovative technologies that produce hydropower more efficiently, reduce costs, and increase sustainable hydropower generation. The funding will help advance the Obama Administration's goal of meeting 80% of our electricity needs from clean energy sources by 2035.

"By improving and deploying advanced hydropower technologies, we can maximize our use of this proven clean energy resource, create jobs, and reduce our reliance on fossil fuels," said Secretary Chu. "Hydropower can be used to store energy to help utilities better integrate other sources of renewable energy like wind and solar into the grid, improving our energy security and diversifying our clean energy resources."

*Related post: "**Remember Hydropower? Proven and Cost-Effective Clean Energy**", takes a more in depth look at the significant hydro power potential in the US.*

"This administration is supporting innovative development of hydropower—one of our largest renewable energy sources—with an emphasis on reducing or eliminating environmental impacts on ecosystems," Secretary Salazar said. "These research and development dollars will help make hydropower technology more efficient and cost-effective as we continue to promote clean energy resources and build an American renewable energy economy in an environmentally responsible manner."

These projects will advance sustainable renewable energy generation from small (less than 30 megawatts) hydropower resources, enhance environmental performance of hydropower, test innovative, cost-effective technologies for hydropower development at low-head (less than a 30 foot drop) sites such as irrigation canals and non-powered dams, and spur deployment of pumped storage hydropower. By allowing utility operators to pump water up to a dam or impoundment during periods of low electricity demand and release water during times of peak electricity demand, pumped storage hydropower improves the reliability of electric grids and helps increase the use of variable renewable energy resources such as wind and solar power.

Hydropower is a source of renewable energy that can be relied upon for long-term, stable production of domestic electricity. The hydropower industry currently employs more than 300,000 workers in the

United States, making it not only the oldest, but also the largest renewable power generation workforce in the nation.

The selections announced today focus on four approaches to advancing hydropower in the United States:

- Sustainable Small Hydropower: Nine projects awarded by DOE will receive a total of $5.8 million and one project jointly funded by DOE and DOI will receive $1.5 million to research, develop, and test low-head, small hydropower technologies that can be quickly and efficiently deployed at existing non-powered dams or constructed waterways. These projects will focus on system or component model development, as well as the real-world testing of these systems.
- Sustainable Pumped Storage Hydropower: Two projects awarded by DOE will receive a total of $6.8 million to spur deployment of advanced pumped storage hydropower in the United States. One award will conduct pre-construction, geotechnical evaluations for a pumped storage hydropower project in the early stages of development that will use advanced technology to dynamically respond to the electrical grid, enabling the integration of wind and solar energy. DOE is also supporting analyses that calculate the economic value of pumped storage hydropower.
- Environmental Mitigation Technologies for Conventional Hydropower: Three projects awarded by DOE will receive a total of $2 million to develop innovative hydropower technologies that will enhance environmental performance while increasing electricity generation, mitigating fish and habitat impacts and enhancing downstream water quality.
- Advanced Hydropower System Testing at a Bureau of Reclamation Facility: One project jointly funded by DOE and DOI will receive $746,000 to support system tests of innovative, low-head, small hydropower technologies at a non-powered site owned by the U.S. Department of the Interior's Bureau of Reclamation. DOE's funding is targeted at research and development, whereas the Bureau of Reclamation's funding is targeted at implementation. Energy cost reductions demonstrated at this site could be replicated at other Bureau of Reclamation sites.

The complete listing of funded projects is listed here.

*Related Post: "**Drive Energy Innovation to Grow the Clean Economy Says Brookings**", summarizes the new green jobs study by the Brookings Institute, noting that the study reports that the driving force behind the U.S. "clean economy" over the last decade has been emerging energy technologies.*

Read more: http://greeneconomypost.com/advanced-hydropower-funding-doe-interior-departments-19140.htm#ixzz2Hf74Fms4

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http://www.antaranews.com/en/news/86799/water-surface-in-several-dams-in-the-greater-jakarta-alarming

Water surface in several dams in the greater Jakarta alarming

Sun, January 13 2013 10:10 | 203 Views

KATULAMPA DAM (ANTARA/JAFKHAIRI)

Jakarta (ANTARA News) - The water levels in a number of dams in the Greater Jakarta areas are alarming on Sunday following almost incessant rains over the past week.

The water surface in the Katulampa dam, Depok dam and Manggarai dam that hold water to protect Jakarta from flooding, have reached almost the maximum levels that they have to open the gate to release part of the water.

On Saturday heavy rain caused flooding in some areas in the Greater Jakarta areas including Bintaro, Tangerang Selatan and Bogor inundating main roads including toll roads.

Heavy rain in mountain city of Bogor continued until Sunday morning feared to caused flooding in downstream area of Jakarta already inundated by rain water.

Government urged to construct irrigation dams nationwide

Page last updated at Friday, January 11, 2013 17:17 PM // Leave Your Comment

Mr. Iddrisu Yahya, 2012 best farmer for Tano North District in Brong Ahafo Region, has called on government to master the political will and construct irrigation dams throughout the 10 regions of Ghana, to ensure sustainable food supply.

He said successive governments had lacked the political will to construct sufficient irrigation dams to enhance all year smallholder farming.

Mr Yahya said these in an interview on the expectation of the President Mahama's regime, with the Ghana News Agency (GNA) on Friday.

He noted that despite the fact that smallholder farming was a source of food supply to many people, and employment to the youth, the rural poor farmer had not been adequately assisted to increase production.

Mr Yahya stressed that the Mahama administration should initiate measures to make farming more attractive, particularly to the youth, by creating buffer stocks to absorb excess food supply, to guarantee stable price.

He said "the rural farmer engages in yam, maize, cassava, pepper, garden eggs, pineapple, tomato, beans, onion and plantain production, to feed the urban rich, yet the support extended to the farmer, for example, in the form of agrochemicals and fertilizers supply is woefully inadequate."

Mr. Yahya expressed worry that fertilizers meant for farmers, usually arrive when the farming season had elapsed.

He, however, commended the government for ensuring the removal of fake agrochemicals from the market, but said such measures must not be a nine-day wonder, to guarantee genuine supply of chemicals to farmers.

Mr. Yahya, who undertakes farming in palm oil tree, coconut, teak, mango, cocoa, maize, pepper and also supplies fish and butter nut squash, advised the youth to venture into agriculture.

He said food production and sustainability is so vital to national growth and development that the “Mahama’s administration can fail in all other sectors, but not in agriculture”.

Source: GNA

Droughts causing concern for Brazilian hydro producers

BRASILIA, Brazil
01/08/2013

http://www.hydroworld.com/articles/2013/january/droughts-causing-concern-for-brazilian-hydro-producers.html?cmpid=EnlHydroJanuary152012

An extended drought has Brazilian officials worried about the country's ability to meet consumer energy demand with hydroelectric resources, HydroWorld.com has learned.

Sources report that Brazil's hot, dry summer is depriving hydropower plants of water -- straining the available power supply and causing fear that the country will face its first widespread energy rationing since 2001.

Brazil's national electrical system operator, ONS, said reservoirs in the northeast are at 31.61% capacity, while those in the north region are at 41.24%.

Meanwhile, the Brazilian Association of Independent Power Producers, Alpine, said reservoirs for hydroelectric plants in the southeast and midwest are at 28.9% -- just 0.8% above its risk aversion curve which quantifies the minimum levels required to meet demand at full load.

Already, state news outlet Agencia Brasil has reported that all of Brazil's backup thermoelectric generators are operating to meet the expected shortfall, though Energy Minister Edison Lobao said "there is no chance of rationing, no chance of shortages."

Given that hydroelectric power accounts for more than 65% of the country's power supply, Brazil's power sector monitoring committee, CMSE, will meet tomorrow to discuss the issue.

The news comes just days after Brazil's Itaipu Binacional announced it had set a new record for generation in 2012.