

PUCSL DG THROWS LIGHT ON AVOIDING BREAKDOWNS AT NOROCHCHOLAI COAL POWER PLANT

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The electricity crisis in the country caught the attention of all in recent times triggering a public outcry. The Ceylon Electricity Board (CEB) meanwhile, proposed a least cost long term generation plan to cater to the energy deficiency in Sri Lanka which the Public Utilities Commission (PUCSL) approved. Despite the plan, the PUCSL envisages an energy shortage

in 2018/2019 unless the plants identified in the approved plan are implemented on time.

These warning signs were further exacerbated with the ongoing power-shortage following the automatic shut-down of the 900MW Norochcholai Coal Power Plant on October 15, as a result of a breakdown of a key transmission line.

As a result, the CEB had to impose power cuts up to one and a half hours in many areas excluding greater Colombo.

However, PUCSL director general Damitha Kumarasinghe told the Daily News that the commission is bound to provide a customer satisfactory service adding that the commission will conduct an independent investigation in to the breakdown at the Norochcholai coal power plant.

He said PUCSL will look into measures that need to be taken to avoid break downs at the Norochcholai power plant as the power plant had malfunctioned several times in the past as well resulting in similar power cuts.

Q: Could you explain what was proposed in the CEB's Least Cost Long Term Generation Expansion Plan (LCLTGP)?

A: PUCSL granted approval to the plan and the plants listed in the LCLTGP for the period of 2017 - 2020, should be immediately constructed and operated, to prevent the possible power shortage in 2018.

These plants include two thermal power plants with the capacity of 170 MW in Southern region, 105 MW gas turbines, 300 MW natural gas power plant and several renewable energy power plants with the capacity of 700 MW which include three major hydro power plants. Accordingly, about 1,275 MW would be added to the national grid during next four years.

The current installed capacity is 3,900MW and it is expected the total installed capacity to be 4,955 MW by the year 2020.

Q: Have you taken into account climate mitigation strategies in this proposed plan?

A: The approved LCLTGP plan is for the 2017 to 2020 period. All plants which are listed after 2020 will have to be revalidated with climate change mitigation proposals and government policies regarding energy.

The CEB has been advised to submit a fresh plan for 2018 - 2037 by April next year.

The current plan drafted for 2017 - 2020 is sufficient to start the construction of the proposed plants which are required for immediate supply of energy to the system.

The 2017-2037 plan will address all long term issues pertaining to the electricity generation and supply.

Q: What are the major challenges when implementing the proposed long term generation plan?

A: The major challenge is to cater to the energy requirement which demands that many new energy generation units be in place within a short period. We should also strengthen the transmission lines to distribute power produced from these plants to other parts of the country.

The plants proposed in the 2017 to 2020 plan require around 1,200 megawatts of plants to be constructed during that period, which is one third of the existing capacity of the system.

That is huge in terms of capacity and the time frame is three to four years maximum.

Q: Is it practically possible to meet all these

demands in three years?

A: Yes, it is possible, if the CEB implements the plan immediately. The CEB will come up with the schedule for the implementation plan. The commission has informed the CEB to send the implementation schedule for all plants to be commissioned up to 2020.

The plan is due by October 28, 2016. The time frame and the steps to executing these plants will be decided and if the CEB executes the plan according to the schedule, there will not be any issues pertaining to power and energy.

However, the generation and transmission plans will have to go together to reap the benefits in a shorter period.

Q: In what fields have the electricity demand gone high?

A: The electricity demand has gone up in all fields. We see a greater demand in electricity with urbanisation and as many industries are coming up these days. The recent studies conducted by the commission revealed that there is a greater demand for air conditioning in many places.

Q: The hydro power generation capacity in our country has been reduced significantly with many existing hydro plants reducing their relative contribution to hydro power in the country's electricity generation. How is it going to be dealt with?

A: There are many issues related to the contribution of hydro power due to prevailing weather conditions. We need to have additional plants to cater to those issues. Probably renewable energy sources such as wind and solar will be introduced and all these issues will be addressed when formulating the 2018 - 2037 generation plan.

Q: What are the other major energy options considered to meet the future demands?

A: There are many options such as renewable energy, LNG and other resources but using them for energy generation will be decided based on the government's energy policy which will be formulated very soon. The 2017 - 2037 generation plan will take into account the government's energy policies on the energy sources which will be submitted in April 2017.

Conventional energy options such as the time tested energy sources provide 24 hours energy supply like coal, diesel, LNG and mostly they are thermal generation. Large hydro generation is considered as non-conventional energy and this includes wind, solar and other renewable energy sources. At present the non-conventional energy sources are also fast becoming conventional.

Q: What is the current status on the India-Sri Lanka electricity grid interconnection option?

A: It is an interconnection between two electricity grids in India and Sri Lanka through direct current link with 500 megawatts which can be increased to 1000 megawatts in future and that was the plan.

We are not sure about the implementation of it, because it is an agreement with the two countries, only the regulation part was done by the PUCSL. The interconnection between the countries are common, India is interconnected to Nepal, Bhutan and Bangladesh. The only feasible country left out in the

SAARC grid is Sri Lanka. It is not about connecting to India but to the world.

If the cost of electricity supply here is high, we have the opportunity to get electricity from other generators for a cheaper price. If we have cheap electricity generation in our country compared to other countries, we have the option of exporting energy and earn foreign exchange.

Even in a situation the country is now, we have the option of purchasing from other countries to cater to the energy deficiencies. These interconnections are widely used so this cannot be expensive. There are many submarine cables being used all over the world.

Q: Could you please explain the current situation regarding the energy crisis?

A: When the water level is low and required megawatts are not available there are issues in catering to the electricity demand. If Norochcholai is functioning properly there is no problem. Once Norochcholai is repaired there will be no problems. The CEB has informed the commission that there is some capacity shortage.

There were some studies earlier, but the issues are not the same every time. There were some issues with the transmission line and the Commission will study this and submit a report with mitigation measures.

The electricity demand growth has been five to six percent over the recent past, but now we have observed that it has increased to nine to 10 percent in the first half of this year and that continues. We have asked the CEB to revisit the demand forecasting method and take into account these new developments, new growth patterns and new requirements into consideration.

The drafted three year generation plan has considered the five to six percent growth and the 2018 - 2037 plan will cater to the rising electricity demands.

Q: The Norochcholai power plant has suffered frequent break downs. What is the commission going to do about it?

A: An independent investigation will be conducted by the Public Utilities Commission in to the breakdown at the Norochcholai coal power plant.

The PUCSL conducted investigations when the power station was disrupted due to various other reasons in the past.

Earlier when the Norochcholai power plant was shut down, the CEB had to announce power cuts country wide for longer hours. The commission advised the CEB on the measures that could be taken to avoid country wide power cuts for longer hours and we were able to limit it to one and half hours this time and that is a step forward.

The PUCSL gazetted four new regulations namely electricity (distribution) performance standard regulations, electricity (transmission) performance standards regulations, Electricity (safety, quality and continuity) regulations and utility driven demand side management (DSM) regulations in the areas of customer satisfaction in service, quality, electrical safety and energy conservation adding that even the issues pertaining to Norochcholai power plant will be addressed through the imposed regulations.