

A BRIEFING NOTE

Nagarjuna Construction Company (NCC) Ltd, Gollagandi and Baruva, Sompeta, Srikakulam (Andhra Pradesh)

The fundamentals

Type of project	Coal-based power plant
Capacity	2,640 MW (4 x 660 MW)
Fuel	Indian and imported coal
Water requirement and sources	<p>Water source – sea water, with the hourly water requirement at around 28,700 m³</p> <p>The project will release around 22,337 m³/hour of hot cooling water back into the sea.</p>
EIA done by	Vimta Labs, a Hyderabad-based private laboratory
Land use pattern as per various department records and studies	<ul style="list-style-type: none"> As per revenue records, the land is classified as 'tampara' which means a swamp. The project developer claimed that the land is a wasteland -- referred to as 'government poramboke' -- as per revenue records. According to a Survey of India topo-sheet, the land is classified as a wetland. The EIA report says the project site is mostly barren and partly single-crop agricultural land. Allotted land is locally referred to as 'bela' or wetland. According to study reports conducted by various agencies for NCC -- including the National Institute of Oceanography (NIO) – the proposed site is not ecologically sensitive, nor is it a marshy land or mudflat.
Public hearing	Conducted on August 18, 2009
Environmental clearance (EC)	Granted vide Letter No J-13012/119/2008-IA.II (T) on December 9, 2009
Intervention by a minister	<ul style="list-style-type: none"> On July 5, 2010, during the Green India Mission Consultative Meeting, a protest demonstration was organised before the state minister at Visakhapatnam. The minister instructed the Regional Chief Conservator of Forests (RCCF) to submit a report on the issues and concerns raised by the NGOs and the local community.
Cancellation of the EC	<ul style="list-style-type: none"> Public agitation began against the construction work started by NCC. Two people were killed, while several were injured. The EC was cancelled by the National Environmental Appellate Authority (NEAA). On July 15, 2010, the EC was suspended by the Union ministry of environment and forests (MoEF). The ministry instructed the RCCF to submit a report.

The NEAA order	<p>Before quashing the EC, the NEAA had visited the site under the leadership of its member J C Kala, along with S Kaul, a wetland expert from the ministry. Based on its site visit, the NEAA -- in its order -- noted the following points:</p> <ul style="list-style-type: none"> • The land is, typically, a wetland of great ecological importance and an important source of water for adjoining villages. • The reports of the various agencies, including the Sub-committee of the EAC, was found to be misleading. The EAC was also carried away by these reports and reversed its (earlier) decision..... • The Authority is thus convinced that the environmental clearance accorded by the ministry was based on wrong information and thus, liable to be quashed. • The NEAA also directed that the ministry should undertake a survey of all wetlands in Srikakulam district for their ecological sensitiveness. Pending this, no project should be cleared in such a location.
Current position	Matter is pending in High Court.

Source: Site Inspection report

The EIA's terms of reference

The developer had approached the Union ministry of environment and forests (MoEF) in October 2008 for getting the terms of reference (ToR). The ministry's EAC observed that the proposed site was a marshy land, a mudflat and would attract the provisions of CRZ. Therefore, it directed the developer to identify an alternative site before ToR could be granted.

The application was resubmitted in February 2009 with a revised area of 1,890 acre of land. The application was supported with new scientific and technical studies.

A site visit was conducted by the EAC in April 2009. In the same month, the ministry issued the ToR, with a recommendation to leave aside 400 acre of land -- including 86 acre of water-logged area on the eastern side of the project.

The findings of the site inspection report

The site inspection was conducted by a team comprising of three experts nominated by the MoEF – K S Reddy, chief conservator of forests; N S Murali, deputy chief conservator of forests; and C Kaliyaperumal, scientist, E. A report was prepared based on a site visit, interaction with local people/NGOs and the views of the developer. According to the inspection report, the project was opposed by the people and the NGOs on the following grounds:

- The land allocated to developers is a wetland, rich in biodiversity, a house for migratory birds, supporting agriculture, providing fodder and sourcing livelihoods for the fishing community.
- The proposed power plant is coming up on a water body, locally known as *beela*. The *beela* is a low-lying swamp area, which is ecologically very rich. It is connected to two other wetlands, the 'China *beela*' and 'Tampara *beela*'. These wetlands extend over an area of 4,000 acre from Baruva to Kapaasuguddi.
- The area is fertile and holds a population of around 1.5 lakh. The *beela* supports cultivation of two crops. Three government-sanctioned lift irrigation schemes in the *beela* are also functioning.
- Over 120 species of birds inhabit the water body; migratory birds come here every year in the winter.
- Release of hot cooling water into the sea will alter the fish catch in the sea. Right now, 30 villagers are dependent on the sea for fishing.
- Local fishing rights have been given to the Bikiri Bhara Parishramika Co-operative Society. The permission is renewed every year. The society has already approached the court opposing the allocation of the *beela*/land to NCC.

The project developer quoted a number of studies and reports in support of the contention that the site is ecologically not sensitive. For instance, it said that none of the official studies – including those done by the NIO – had categorized the area as a wetland or under CRZ. A study done by the University of Hyderabad, which has been quoted by the state forest department, claimed that there were no threatened plants or animals in the area. The MoEF sub-committee had visited the site and recommended the project to be executed after leaving aside 200 acres of land and 86 acres of water-logged area. According to the collector of Srikakulam, the land acquired for the project is not a prime agricultural land. The developer claimed it had paid a compensation of Rs 50,000 for the construction of houses of 168 fisher families who are dependant on the *beela*.

Conclusions drawn by the inspection team:

- The land has all the features which can entitle it to be considered as a 'wetland'. The land is locally referred to as a *beela* which means a wetland.
- This *beela* is interconnected by canals for facilitating water supply.
- The private land at the project site is good agricultural land. The team believed that the arguments put forward by the NGOs/people are correct.
- The project is bound to have some impacts on the ecosystem, and no mitigation measures can compensate the overall change in the ecosystem.
- There are around 168 fisherfolk registered with the Inland Fishermens' Cooperative Society. Around 700 fisherfolk depend on inland fishing in the *beela*. The deputy director of fisheries informed the team that around 250 acres of '*pedda beela*' is leased out every year for fishing, which provides an annual income of Rs 10,000 to 20,000 to every family.

The CSE analysis

The NCC power plant's EIA contained gross misinformation, which was pointed out by the NEAA and reported in its site inspection report.

- The report did not give any information on the land use patterns of the acquired land – which is actually a wetland. This was in gross violation of the Terms of Reference (ToR) issued by the Union ministry of environment and forests (MoEF) on May 14, 2009, which had asked for information on "*land use pattern of study area as well as project area*".
- It provided misleading information on the types of land acquired for the project – it simply listed the land requirements for the various activities of a thermal power plant (such as the area required for the plant, ash disposal, green belt, colony etc), and not the land use of the land acquired.
- The EIA report states: "*The proposed land is mostly barren and partly single crop agriculture land. Out of 1,890 acre of land, 57 per cent is government land and 43 per cent is under private ownership The agricultural area in the proposed plant site does not have irrigation system and is only rain dependent*". This information contradicts the site inspection report, which was conducted by a team comprising of three experts.

The water bodies in this region are known as *beela* and *tampara*, which are home to diverse and rare species of birds and animals. Such wetlands, thus, play a significant role not only in irrigating local agricultural lands, but also in recharging groundwater and serving as a breeding ground for fish and migratory birds.

- The EIA consultant concluded that "*no major impact is envisaged on land use pattern of the project site or buffer zone*". This contradicts the information collected in the site inspection report. This clearly shows that the consultant tried to hide the factual information about the site and its surrounding areas. The inspection report revealed that around 756 acre of *bela* land was transferred to NCC, of which 86 acre remains submerged throughout the year; the remaining land is grassland and gets submerged during rains.

The plant will draw 28,700 m³ of water per hour from the sea, and release around 22,337 m³ per hour of hot cooling water back into the sea. According to the EIA report, a separate marine impact study conducted by M/s Indomer Hydraulic said that the "*discharge of hot cooling water into open sea does not cause any impact to the environment*". At the same time, the report says the area is biologically productive. But it does not discuss the impacts of hot cooling water on marine ecology and loss of fish catch. Currently, about 30 villagers are dependent on the sea for their livelihoods.