

## **Socio-Environmental Regulatory Governance Aspects of Thermal Power Plants in Telangana: Issues, Challenges and Ways Forward**

The present work is based on a one-year study, enabled by a Fellowship from the Girish Sant Memorial Committee (GSMC), Pune and focuses on the regulatory institutional and procedural mechanisms governing the social and environmental aspects of Thermal Power Plants (TPPs) in the country, by way of an in-depth assessment of certain newly proposed/under construction (including expansion units) and old/operational plants in Telangana. Along with a detailed assessment of the socio-environmental gaps and issues around the four identified projects, the study tries to make certain generic observations and suggestions to strengthen the regulatory mechanisms. While some of these are process-specific related to EIA, public hearing and social impact areas, others are institution related i.e. on the role of PCB, EAC, MoEF & CC and civil society.

The identified TPPs constitute important case studies for understanding the governance gaps and challenges of various regulatory institutions with regard to scrupulous compliance of laws relating to social and environmental aspects of TPPs. Projects identified in this study include:

1. Bhadradri (4 x 270 MW) TPP – Dist. Kothagudem [*Operated by TSGENCO*]
2. Yadadri (8 x 500 MW) TPP – Dist. Nalgonda [*Operated by TSGENCO*]
3. Ramagundam (Old 2600 MW + 2 x 800 MW) TPP – Dist. Peddapalli [*Operated by NTPC*]
4. Kothagudem (Old 1720 MW + 1 x 800 MW) TPP – Dist. Kothagudem [*Operated by TSGENCO*]

**The broad purpose of the study is to:**

1. Understand the governance processes as well as role of key institutional actors involved in the socio-environmental regulatory governance of coal-fired thermal power plants in India, within the context of certain TPPs in Telangana.
2. Review existing mechanism of regulatory governance, especially the policy and legal framework and enable a sharper understanding of the regulatory systems, gaps and violations in order suggest both mid-term and long-term structural changes and ways forward.
3. Locate and strengthen space for participation of civil society actors in engaging with these institutions for ensuring compliance with the socio-environmental and legal obligations.

**The study methodology adopted included:**

- a. **Detailed Appraisal of Project Documents** including Application for EC (Form-I), Final EIA Report, correspondence between the PP and various authorities, submissions made by various stakeholders to the MoEF, guidelines and notifications of MoEF, EAC Minutes, clearances by MoEF and consent by PCB, submissions before the NGT, Orders of the NGT, media reports, critiques by independent experts etc. and also information from the web and in public domain.
- b. **Interactions** with EAC member, PCB Secretary, independent experts, environmentalists, media persons, activists, lawyers, researchers working on various aspects of TPPs [List annexed]
- c. **Field Visits** to the affected villages, detailed interactions with the affected persons, documenting field notes from project-affected areas. [Details in the Report]
- d. **Filing RTIs** with relevant govt. agencies and departments for information.

The study does not delve into the details of power requirements in the new state nor the actual socio-environmental impacts of TPPs. Instead, the thrust of the study is on the often less-addressed aspect of the social and environmental regulatory governance aspects, by looking at the role of key institutions such as the Pollution Control Board (PCB), Expert Appraisal Committee (EAC), Ministry of Environment, Forests and Climate Change (MoEF & CC) and to a certain extent the National Green Tribunal (NGT) and their interface with various actors such as the state government, project proponents, civil society, consultants, media etc. Some of the key issues covered in the study include environmental impact assessments and monitoring, environmental clearance, land acquisition and rehabilitation, covering the entire project life including planning, construction and operation.

Coal-Fired Thermal Power Plants (TPPs) contribute a lion's share to the installed power capacity of this country, about 76% of the total electricity produced. Over the decades, the social and environmental impacts and implications of these plants have been a major cause of concern, both to the government and civil society. A 2011 study by the Prayas Energy Group indicated that while the national installed thermal capacity was 1,13,000 MW, proposed additions were more than six times this capacity and more than three times the capacity required to meet the needs of the high renewables-high efficiency scenario for year 2032 projected by the Planning Commission's Integrated Energy Policy report.

It is widely perceived that while power generation and capacity additions have been duly prioritized, the social-environmental impacts of Thermal Power Plants and related governance issues have not received due attention from the authorities. The past two decades, however, witnessed the slow evolution of a legal and regulatory regime that governs these plants. While on the one hand, climate change and cheaper availability of renewable energy sources are pushing governments and project proponents to re-consider prioritizing thermal plants, we are still, as a country, grappling with the socio-environmental costs of numerous TPPs that have come up in the past decades as well as quite a few plants that are in the offing. At the heart of this, lies the role of the regulatory institutions that have a mandate to ensure compliance with law, protection of environment and rights of affected communities.

Telangana is the newest state of India, formed in June, 2014 after a protracted democratic struggle for separate statehood. One key aspect, which has been felt 'lacking' and therefore 'necessary' by the first Government is availability of power for various agricultural, domestic, industrial and commercial activities. It was this sense of perceived urgency that has led the Govt. to propose certain new thermal power plants in the state, along with expansion of capacities at some operational plants. Thus, the new plants Bhadradi (4 x 270 MW) TPP at Dist. Kothagudem, Yadadri (8 x 500 MW) TPP at Dist. Nalgonda and expansion units i.e. NTPC Ramagundam (2 x 800 MW) TPP at Dist. Peddapalli and Kothagudem (1 x 800 MW) TPP at Dist. Kothagudem were proposed since the formation of Telangana. This Study broadly tries to focus on two key areas: i) A gist of Key Environmental, Social, R&R Issues and Violations of the aforesaid projects ii) Key Observations and Suggestions on the institutional regulatory mechanisms and processes, in the light of these studies.

**Project Specific Concerns:** Of the aforesaid four projects, the 4 x 270 MW Bhadradi has remained controversial since inception, both for the choice of outdated, environmentally less efficient technology as also for beginning construction without due approvals from the regulatory authorities and continuing with construction even after a *status quo* Order by the NGT. It is indeed notable that neither of the regulatory authorities i.e. PCB and MoEF & CC took action against the TSGENCO, on their own, for undertaking construction without EC and CTE nor did the NGT take action for violating its *status quo* Order. The exemption granted by NGT to the TSGENCO from the polluter pays principle, on the ground that the costs have to be borne from the public exchequer is questionable and sets an unhealthy precedent.

The Order of the Tribunal directing criminal action against TSGENCO officials within 4 weeks and expeditious completion of prosecution was not complied with in true spirit, as even 15 months since the

Order, proceedings were reportedly initiated only against some lower-rung engineers, but not the senior, decision-making officials, as per local activists. The Public hearing was held in a climate of surveillance and voices that tried to raise socio-environmental concerns were muzzled. As per locals, relevant information about EIA, SIA, LAQ, R&R process was not given by officials, land records were not updated, women land holders have been denied R&R and 'non-advansi' land owners in Schedule V area have been compensated! Social Impact Assessment (SIA), as required under LARR Act, 2013 was not conducted and the various procedures to be followed under the Act were not scrupulously followed. Despite two extensions by the MoP to finish project work using sub-critical technology, the project is yet to be fully completed and take off!

A study of the issues around the 5 x 800 MW Yadadri Project also reveal similar concerns of underplaying the serious socio-environmental issues. While the Minutes of the Forest Advisory Committee (FAC), based on PP's figures state that '2503 families are likely to be displaced', the EIA at two different places states that 173 & 413 families would be affected ! Field visits also confirmed that Social Impact Assessment (SIA) was not done, leading to complete exclusion of large numbers of landless dalit families and injustice to assigned land holders, forest dwellers and adivasi cultivators in the R&R process. Public Hearing was held without adequate information to people regarding EIA, SIA report. Very little participation by women, landless etc was ensured by the PP and PCB in the entire process. The various procedures as stipulated in the LARR Act, 2013 were not followed.

Despite the EAC concluding that the initial EIA Report was 'plagiarized', MoEF granted exemption from re-doing the full EIA process including public hearing, violating its own OM of 5<sup>th</sup> Oct, 2011 and granting EC. This raises serious questions about the legal validity of the clearance granted to YTPP itself. Moreover, even after EAC discredited Consultant M/s Bhagavati Ana Labs Pvt. Ltd (BALPL) for 'plagiarism' and MoEF wrote to NABET to delist it, BALPL continues to be on the roll of accredited consultants of NABET ! The project is to be constructed on a 3.9 kms natural stream, thus eliminating it permanently, but the EAC's Sub-Committee ignored this crucial aspect. The project site is barely 0.8 kms from the Andhra border, but no public hearing has been conducted in that state, violating Clause 2.1 of EIA Notification.

The manner of clearing new / expansion units by MoEF and grant of consent to operate by PCB, even as complaints of non-compliance and violations due to old units persist, also brings forth a certain pattern of regulatory failure, as observed in the case of NTPC Ramagundam and Kothagudem TPPs. At both places, one of the most pressing issue continues to be the impacts of unregulated air and water pollution, lack of access to potable water and severe health concerns like cancer, asthma, respiratory, gynecological problems, back, knee, kidney related and other ailments, with little health care support from project-authorities. Impacts of pollution on livestock is also a crucial concern for many villagers. The Public Hearing for 2 x 800 expansion units of Ramagundam was held in May, 2015 wherein numerous issues of pollution due to existing units, lack of jobs and R&R were raised, but little redressal followed. The new units appears to have been recommended by EAC in a 'fast-track' mode, between two meetings spanning over a month, without the Committee carefully verifying the ground status, revealed partially by the monitoring report of MoEF's RO, obtaining complete details and ensuring full compliance of previous conditions. The EC, granted in Jan, 2016 is now challenged before the NGT. Notably, even the Cumulative Impact Assessment was done after EC was challenged before NGT.

The 1 x 800 MW expansion unit of Kothagudem Thermal Plant was cleared by MoEF on 16<sup>th</sup> July, 2015, subject to numerous conditions including no further expansion and land acquisition, phasing out of old units which, as per PCB's own records have been causing high pollution. Although Telangana PCB wrote to TSGENCO, pointing out serious air and water pollution and threatening refusal of permissions to the expansion of KTPS, it soon mellowed down and recommended to MoEF that the expansion unit can be cleared. As per PCB's former Environmental Engineer, between 2007-2014, the PCB issued 10 notices to

KTPS for environmental violations, but did not take penal action. Field visits confirm that untreated effluents from the Plant continue to be released into the *Karakavagu* and from there into the Kinnerasani river, causing water pollution. Similar to the public hearings of all projects studied, despite the presence of a few thousand people, only a handful had the opportunity to speak and most of them were political party representatives.

### Key Observations:

At a fundamental level, some of the minimum procedures prescribed in the EIA Notification, 2006 are also not fully followed ! The **Project Proponent and PCB hardly make an attempt to create meaningful and holistic awareness of Project and its impacts.** There appears to be **no cogent criteria for determination of ‘speakers’ at the public hearings - most speakers happen to be political party representatives,** and there is very limited space for women, adivasis, dalits, forest cultivators, landless, small farmers to voice concerns, in the projects studied. Project work and public hearing in particular is often undertaken in an **intimidatory atmosphere, with police presence** and harassment of civil society activists. **No Social Impact Assessment (SIA)** conducted in any of the projects studied ! Most procedures and safeguards in the Land Acquisition and Rehabilitation (LARR) Act, 2013 are not followed. The EIA itself has very limited details on R&R issues. There is **no verification of Social Impacts, R&R issues by EAC.**

**Weak scrutiny of EIA Report by the MoEF,** is a major concern. Grant of EC to expansion projects without full verification of due compliance of previous EC conditions (KTPS and Ramagundam) or grant of EC in violation of OM when plagiarism has been alleged by EAC (Yadadri), is a **serious omission at the highest level (MoEF).** There is a **clear paucity of staff (esp. legal officers) and capacities at Regional Offices** to monitor and pursue violations. Lack of co-ordination between MoEF, its ROs and PCB, such as on receipt of compliance reports and prompt action is indeed hampering efficient monitoring. **MoEF is yet to implement the range of recommendations issued by the CAG** in 2016, esp. on streamlining of its own circulars, processes, instituting surprise checks, strengthening PCBs etc.

**EAC’s *modus* of considering too many projects in too little time,** has a serious impact on quality of its appraisal. Issues raised during public hearing are not discussed and deliberated in the EAC meetings. The expert body clearly lacks a functional mechanism for detailed consideration of claims and counter-claims by Project Proponent, independent experts, civil society etc. The **PP is often represented by Consultant before EAC, but there no space for civil society and affected people’s views within EAC.** R&R Issues and Social Impacts poorly dealt with or often ignored by EAC, which also lacks expertise on these matters.

Despite established and admitted cases of violations, the **PCB has been very reluctant to initiate penal powers against polluters & violators.** The **Board has a restricted autonomy** and is governed, staffed mostly by state government officials. PCB has a weak legal cell, limited trained staff and monitoring capacities in districts and plant-areas. The Board has **granted consent to expansion projects despite gaps in compliance of previous consent conditions.** It is indeed revealing to find **no space for affected people and CSOs in the entire process of preparation of EIA.**

Likewise, the **views of affected communities and CSOs are not taken seriously by PPs, PCB, EAC, MoEF.** The ground situation indicates a clear **need for more capacity-building of CSOs.** Often, there is a lack of enough collaboration amongst civil society groups as well as **lack of long-term engagement by CSOs from the stage of project proposal to post-construction stages.** There is also an evident paucity of effective IEC materials in vernacular to generate awareness amongst people and activists, alike.



## Key Suggestions:

For effective public hearings, **PCB & Legal Service Authorities could hold mass awareness camps**, with new technology based IEC materials, for local bodies & communities, at least 2 months before hearing, with law, enviro, social work students as trained para-legals. Hearings could be held in a phased and interactive manner. **Authorities must ensure adequate representation of every category of affected - women, adivasis, dalits, forest cultivators, landless, small farmers in the hearings.** The **EC, EAC minutes, consent letters, monitoring reports and periodic compliance reports must also be translated into regional languages and widely publicized** in the affected areas, to enable local communities and local citizen's action groups to verify compliance of these conditions. Gram-Sabha level meetings by PCB, within 2 months from date of clearance can be held for updating the affected villages of clearance conditions, process of monitoring etc.

**PCB must initiate a process of annual / biennial project-specific hearings** from the date of grant of EC, to effectively understand and address the issues related to non-compliance on socio-environmental concerns and conditions in EC, CTE, CTO. An **Oversight Mechanism must be instituted to ensure full implementation of all provisions of LARR Act, 2013 & PESA, Act, 1996.** An Independent Environment Support Agency for overseeing the EIA process, environmental awareness, generation of IEC materials, pre-public hearing information dissemination etc., must be set-up at the earliest.

**MoEF must have a dedicated and competent Wing to thoroughly verify EIA Reports** before they are sent to EAC and after receipt of recommendations from EAC to ensure compliance with all ToRs, technical, legal and environmental stipulations. Instead of PP's directly selecting the Consultants, **MoEF & CC could randomly assign accredited consultants to PPs**, from a thematic pool. MoEF must ensure expeditious implementation of recommendations of CAG, esp. on streamlining of circulars, monitoring of compliance reports etc. The **Regional Offices of MoEF need to be strengthened** with adequate environmental, legal officers and they must be empowered to take action against violators. MoEF must withhold fresh EC, until all previous EC and consent conditions are complied with.

Akin to NGT Benches, appointing **Five Zonal Thematic EACs in North, South, East, North-East and West + Central zones, with credible experts, functioning at least 15 days a month** would help reduce work load and enable qualitative appraisal. **Environmental and social organizations must be permitted to make depositions / participate at key stages of the EAC deliberations** (esp. before grant of clearance). Like Consultants, a state-wise list of such experts and organizations could also be invited to be on a regular Panel of the MoEF. EAC must also comprise of independent experts from legal, social science backgrounds to look into these concerns.

In order to function effectively, **PCB must be autonomous and chaired by a reputed and credible environmentalist** and also have at least 3 independent environmentalists. State Governments, including the Government of Telangana must frame **recruitment rules for PCB as per SC Order dt. 22/9/17 immediately.** The Board must have a strong legal cell to pursue cases of violations and initiate action. Recruitment and capacity building of adequate staff, esp. enviro inspectors, legal officers in all the districts must be taken up. Affected people and **CSOs must be involved at various stages of the EIA process**, including during baseline data collection. **CSO Representation in EAC, PCB** is very much necessary. There is also need for regular channels of dialogue between CSOs, PCB and Government. Regular **Capacity Building of CSOs** by EPTRI, PCB and also non-state expert groups must be taken up. **Mass production and dissemination of IEC materials in vernacular** would strengthen the public hearing and post-EC monitoring process. There is a **need to sustain grassroots CSOs over longer periods** and build collaborations between them.

*This Report is a small addition to the significant body of work that is already in the public domain on the socio-environmental governance processes of power plants in the country. It is hoped that the observations and suggestions in this Report would be relevant to and considered in right earnest by the appropriate authorities, expert bodies, civil society groups and concerned citizens in strengthening the overall governance framework, in the interest of the environment, people and the nation. The Full Report in English is available on the website of the Prayas Energy Group at <http://www.prayasenergy.org/peg/memorial.html>. The researcher, Meera Sanghamitra can be contacted at [meeracomposes@gmail.com](mailto:meeracomposes@gmail.com) / Ph: 07337478993*