

PROCEEDINGS OF THE ENVIRONMENTAL PUBLIC HEARING FOR THE PROPOSED 4 X 270 MW COAL BASED THERMAL POWER PLANT BY M/S TELANGANA STATE POWER GENERATION CORPORATION LIMITED (M/S BHADRADRI THERMAL POWER STATION) AT RAMANUJAVARAM, EDULLABAYYARAM & SEETHARAMPURAM VILLAGES OF MANUGURU & PINAPAKA MANDALS, KHAMMAM DISTRICT ON 17.03.2016 AT 10.30 AM AT PYLON AREA IN THE PREMISES OF PROPOSED SITE OF BHADRADRI THERMAL POWER STATION, SEETHARAMPURAM (V), UPPAKA (GP), PINAPAKA (M), KHAMMAM DISTRICT.

The following panel members were present:

Sl. No.	Name of the Panel Member	
1.	Sri Lokesh Kumar, D.S., I.A.S., Collector & District Magistrate, Khammam	Chairman of the Public hearing Panel
2.	Sri V. Ravi Shankar, Environmental Engineer, T.S. Pollution Control Board, Regional Office, Kothagudem.	Member of the Public hearing Panel

The following departmental officials took part in the hearing:

Sl. No.	Name & Designation
1.	Smt. D. Divya, IAS, Joint Collector & Addl. Dist. Magistrate, Khammam
2.	Sri Rajeevgandhi Hanumanthu, IAS, Project Officer ITDA, Bhadrachalam
3.	Sri M.V. Raveendranath, Sub-Collector (FAC), Paloncha.
4.	Sri D. Thirumalachary, Tahsildar, Manuguru Mandal, Khammam District
5.	Sri B. Ganya, Tahsildar, Pinapaka Mandal, Khammam District
6.	Sri M. Venkat Narsu, AEE, TSPCB, RO, Kothagudem.

The following representatives of the industry were present:

S. No.	Name & Designation
1.	Sri D. Prabhakar Rao, Chairman & Managing Director, Telangana State Generation Corporation Limited, Hyderabad.
2.	Sri K. Venkata Narayana, Chairman & Managing Director, Telangana Northern Power Distribution Company Limited, Warangal.
3.	Sri C. Radhakrishna, Director (Projects), Telangana State Generation Corporation Limited, Hyderabad.
4.	Sri A. Ajay, Chief Engineer, Civil Thermal, Telangana State Generation Corporation Limited, Hyderabad.

At the outset, the Environmental Engineer, TSPCB, Regional Office, Kothagudem, while welcoming the District Collector, Khammam District, the Joint Collector, Public representative and public, explained about the EIA Notification 2006 of the Ministry of Environment and Forests, Government of India's EIA Notification No. S.O. 1533 (E) dated 14th September 2006. The Environmental Public hearing is made mandatory for certain category of projects to obtain prior environmental clearance. He stated that M/s Telangana State Power Generation Corporation Limited (M/s Bhadradri Thermal Power Station) has proposed 4 x270MW (1080 MW) Coal based Thermal Power Plant at Ramanujavaram, Edullabayyaram & Seetharampuram (H/o Uppaka Panchayath) Villages of Manuguru & Pinapaka Mandals, Khammam Dist.

The industry obtained TOR (Terms of Reference) from the Ministry of Environment and Forests (MoEF), GoI, New Delhi and submitted draft EIA report to the Pollution Control Board and requested to conduct public hearing.

Accordingly, a press notification was published in Telugu and English daily news papers on 13-02-2016 (i.e., Namaste Telangana Telugu Daily News paper and The Hindu English Daily News paper).

The said notification invited public suggestions, concerns, comments and objections, if any, on the proposed project. He added that the copies of Draft Environment Impact Assessment/Environmental Management Plan (EIA/EMP) report and the executive summary in Telugu & English were made available to the people as mentioned in the press notification.

He further informed that the hearing is intended only to record the views, opinions, objections and suggestions of the participants and same will be conducted in a transparent manner and the proceedings will be video recorded. The minutes of the hearing along with the representations will be forwarded to the MoEF, New Delhi for further course of action. He then requested the District Collector, Khammam to preside over the public hearing process.

A large public gathering, Hon'ble MP, Mahabubabad Constituency, Hon'ble MLA, Pinapaka Constituency and other public representatives have attended the public hearing.

The Collector & District Magistrate, Khammam requested the officials of the TSGENCO to explain in detail, the salient features of the proposed project.

Sri D. Prabhakar Rao, Chairman and Managing Director- TSGENCO welcomed the dignitaries and the public and expressed the following:

- He reported that all are aware of importance of power and power situation prior to Tealngana state formation.
- There is a power deficit of 2700 MW after formation of Telangana State for which the Government is purchasing power from other states at higher cost.
- In the ambitious goal of building a 'Golden Telangana', The Hon'ble Chief Minister has directed TSGENCO to produce additional power to overcome the power deficit and to meet the power requirement for Water Grid scheme, Lift irrigation, Industries and other needs.
- In this regard, TSGENCO has proposed to establish power plants in which 800 MW Kothagudem Thermal Power Station (Stage-VII) at Paloncha, 1080 MW (4x270 MW) Bhadradi Thermal Power Station at Manuguru in Khammam district and 4000 MW Yadadri Thermal Power Station at Damaracherla in Nalgonda district with total investment of Rs.39,000 Crores. For this, they obtained financial closure from REC and PFC which are Central Government agencies.
- Hence, the TSGENCO has proposed this 4 x 270 MW coal based thermal power project with project cost of Rs.7929.6 Crores at this location.

- Central Government Organisation, Bharat Heavy Electricals Ltd (BHEL) has come forward to complete this proposed project within 24 months, hence the construction of this project was entrusted to the BHEL so as to overcome the present power deficit.
- Application was made for Environmental Clearance to the Ministry of Environment & Forest (MoEF), Govt. of India, New Delhi in February 2015 and they issued Terms of Reference (TOR) in June 2015 for this project.
- Based on TOR, Environmental Impact Assessment study was completed in September 2015 and started the civil construction works in view of the target of the 24 months for project completion. Mean while, Human Rights Forum, Vizag has filed petition before the Hon'ble National Green Tribunal, Chennai. The Petitioner made the false propaganda on sub – critical technology which affects the environment.
- In this regard, he explained that the Thermal Power Plants have to meet the environmental standards prescribed by the MoEF & CC and State Pollution Control Board (SPCB) which are same for sub-critical technology and super critical technology. Accordingly, this project was designed and allocated Rs. 388 Crores to install Electro Static Precipitators, Effluent Treatment Plant, Ash water recovery system with recycling arrangement and Sewage Treatment Plant with latest technology for Environmental Protection.
- He informed that there is no violation of environmental norms and the project was taken up sub – critical technology and obtained consent from the Ministry of Power. The corporation adhered to the stipulated procedure in regard for the proposed power project.
- Under Corporate Social Responsibility activities, they proposed to provide roads, drainage, water supply and other activities etc. for which they allotted Rs. 29 crores. The CSR activities will be taken up in consultation with the district administration in the villages during project execution. A good green belt will be developed within the proposed plant premises.
- They deposited an amount of Rs. 59.50 crores with the District Collector for payment of compensation to the lands acquired for proposed project and they have information that most of the compensation distribution was completed. He requested the District Collector to distribute the compensation to the land owners if any one left. As per G.O. Ms. No. 98, jobs will be provided to the land losers based on their qualification. Initially they proposed 300 jobs to the project affected families and they have already given written assurance to the District Collector in this regard. They proposed to provide another 46 jobs (i.e., total of 346) by considering the request of the affected people. The jobs will be given after start of plant operations.
- The proposed project will give more direct and indirect employment, hence he requested the public strongly to extend their co-operation for the proposed project so as to complete the project early thereby lead to state development progressively.

The District Collector informed that R&R issues are mostly completed and few issues are pending and they received the written employment assurance from the project authority. He stated that these issues will be placed in R&R committee. He requested the management to explain the environmental issues of the project.

Sri C. Radhakrishna, Director/Projects-TSGENCO has expressed the following while explaining about the project:

- As per the guidelines of Central Electricity Authority (CEA), 48 months are required to complete any thermal power project. If the project is constructed speedily then the project can be completed within 46 months.
- After formation of Telangana, to overcome the present power deficit, the state government has allotted the proposed 4 x 270 MW (1080 MW) Coal based Thermal Power Plant to M/s Bharat Heavy Electricals Ltd (BHEL) as they have given commitment to complete this proposed project within 24 months.
- In the present situation, the issue was sub critical and super critical technologies in the proposed power plant.
- Now, the country has installed power generation capacity of around 2.5 lakh MW. In which 90% power generation is with the sub – critical technology. The power plants with super critical technology are started since 2014 in India.
- The power plants with 660 MW and above have super critical technology and below 660 MW power plants falls under the sub critical technology. In sub – critical technology, a drum exists in the boiler which produces steam to build required pressure for generation of power. For Super critical technology, no drum for boiler and only turbine have circuits and have three pumps to generate steam which leads to additional cost.
- 4% coal consumption in super critical technology is less than sub critical technology. Efficiency increases from 38 % to 42 % for super critical technology.
- Regarding environmental aspects, the environmental standards prescribed by MoEF & SPCB for super critical and sub critical technologies are same. The Suspended Particulate Matter (SPM) which is present in the flue gas emissions generated in combustion of coal. The SPM standard is prescribed as 50 mg/Nm³. Based on this norm, the boiler chimney is proposed for the height of 275 mts for better dispersion of flue gases in the surrounding environment.
- Regarding Sulphur dioxide (SO₂), there is no sulphur content in the coal mines existing in India. Sulphur content exists in the imported coal which is in the range of 1.8 to 2 %. There is a technology called FGD plant to control sulphur emissions.
- Regarding NO_x (i.e. Oxides of Nitrogen), there is a limit of 760 mg/Nm³ for NO_x in the flue gas emissions. They reduced the NO_x emissions to 100 mg/Nm³ by adopting CR (Catalytic Reactors) technology in the proposed project for which they provide equipments and change the boiler design. The rules & norms will be prescribed by the MoEF and accordingly they design the proposed project.

- Hence, he requested not to have any apprehension on sub-critical and super-critical technologies. There is no major difference between these technologies except design and efficiency.
- 765 KVA power transmission lines are required evacuation for super critical technology based power plants which are not exist at present and having only 400 KVA power transmission lines. These transmission lines are maintained by the Power Grid Corporation and they requested them to provide 765 KVA lines in view of the proposed power plants of KTPS, Bhadradi Power Plant and Damarcherla Power Plant. But, Power Grid Corporation informed that they have to take up 765 KVA in next Five Year Plan i.e. 13th Plan which will be started in April 2017. Hence, power evacuation has to be carried in existing 400 KVA transmission lines. Hence, the design of the project was taken up based on these aspects only.
- As per the 12th Five Year Plan which will end on 31.03.2017, there are 12 Power Projects with sub critical technology, which are under progress and 37 Power projects with sub critical technology are under construction which are to be completed in 13th Plan i.e. after 01.04.2017. Hence, there are 49 power projects with sub critical technology under progress all over India.
- The differences between sub-critical and super-critical technologies are drum, coal consumption and efficiency from 38 % to 42 %.
- He requested the public to extend their cooperation for the proposed project for Telangana State and TSGENCO so as to complete two units by 31.03.2017 as per target of the TSGENCO.

The District Collector has expressed that the project authority explained on the sub critical and super critical technology in detail and he opined that this will clear the apprehension among the public. He requested the management that they can explain further on sub critical technology. He requested the Hon'ble Member of Legislative Assembly, Pinapaka constituency to express his views in respect of the proposed thermal power plant.

Sri Payam Venkateswarlu, Hon'ble Member of Legislative Assembly, Pinapaka constituency while welcoming the proposed thermal power project, he explained following the events behind realising the dream of power plant in his constituency area:

- Earlier, the people made agitation with a demand for establishment of power plant by M/s NTPC in Mondikuntta area.
- He informed that he raised the need of power plant in Manuguru area in the first session of the Hon'ble Assembly after formation of Telangana State as this area is resourced with Railway line, River Godavari water and Coal. He reported that the Hon'ble CM has informed that there is a power deficit of 2700 MW and required to establish the power plants for state development and have Bangaru (Golden) Telangana, hence the Hon'ble CM has given assurance for establishment of power plant in Manuguru area and immediately directed the concerned to prepare the project reports.

- He made efforts in convincing the public to extend their co-operation for establishing the power plant in this area through canvassing in his constituency and also in preparing the project report and coal & water availability reports. He reported that the District Administration has extended their cooperation in materialising the project at the earliest.
- He emphasized the need of industries and to do justice to land losers. He reported that he expressed thanks to the Hon'ble CM for sanctioning the power project and requested to make justice for project affected people i.e. Tribals, Schedule Caste, Back word class and other castes etc.
- There is an apprehension on sub critical and super critical technology among the public and the officials of the project authority have clarified on this issue.
- The industry proposed to install Electro Static Precipitators (ESPs) for control of smoke emissions from the chimney.
- He requested the industry's management to implement latest technology in providing ESPs and increase their capacities periodically to control air pollution to the surrounding environment thereby save the health of the surrounding public.
- He requested to take strong decision in controlling the pollution to avoid affect on agricultural crop, land and water.
- The District Administration has completed compensation to the land losers for which they spend about Rs. 50 Crores. The TSGENCO has given Rs. 59.50 crores to the District Collector for payment of compensation to the lands losers. But, some of the actual land losers are not received compensation so far due to some mistakes by the local Revenue officials.
- He appreciated the District Administration and TSGENCO for their cooperation in giving the compensation. He requested to give compensation to genuine cases and also to people who irrigated in Government and private lands.
- He also requested to give compensation to the people who have lands under Pasupu – Kunkuma (land donated to the daughter during her marriage) and to the villagers residing outside due to their livelihood who are having lands in the village.
- He has noticed that compensation payment cheques are not served to the land losers who are residing outside the village and he requested to give cheques to the land losers even though they are residing outside.
- He requested the industry and District Administration to extend benefits to the youth even though some of them have 2 to 3 months less to the age of 18 years on humanitarian grounds.
- He requested the Revenue officials to finalise the list of land losers and submit to the District Collector as there are only 181 – 182 persons and also requested to give compensation to all.

- The youth have hope on 346 jobs as proposed by the industry and they also having worrying and apprehension in getting job.
- He requested to made agreement in providing jobs and joining to duty from the date operation of the plant at a time so as to provide self confidence and trust in the youth.
- He requested the management to give revised agreement to the District Collector for providing 346 jobs instead of 300 jobs as proposed earlier. He also requested to provide jobs to the children of workers and farmers who are lost their lands.
- He also requested provide jobs to the Rythu Coolies in Civil works and other works taken up by the project management at least on contract basis.
- He opined that there will be 1000 to 1200 direct employments and 2000 to 3000 indirect employment if the project starts its operations.
- The industry conducted environmental study in the radius of 10 kms. and villages in this area will affect due to pollution problems. He requested to adopt the villages located in the radius of 10 kms. such as Seethampuram, Chikkudugunta, Potireddypalli, Bayyaram, Uppaka, Bommarajupalli, Venkannagudem and Sambaigudem and also other villages in the area. He requested to give priority to adopt the immediate surrounding villages for integrated village development.
- He requested to develop the villages under CSR programme and spend more amount to maximum extent possible.
- He requested to provide Corpus fund for development of the Tribal area in accordance with the rules of the Central Government.
- He requested to take all steps in giving compensation, providing jobs and environmental protection.
- He requested to take steps in completion of the project as early as possible and develop this area.

The District Collector informed that the Hon'ble MLA has covered all issues such as R&R package, compensation, employment and environmental. He added that the district administration has covered 85-90% of compensation issues and the remaining will also be done in due course. He reported that the Joint Collector will address the R&R package issues. He also reported that the Hon'ble MLA and industry representatives have covered issues and clarified the apprehensions. He then requested the gathering to express specific points as most of the issues have already been covered and not to repeat the issues already rose as more people are aspiring to express their views. He further stated the project authorities will clarify the issues before concluding the hearing.

Sri ERM Nehru, President-Telangana Vidyut Engineers' Association has expressed the following:

- Hon'ble Chief Minister laid foundation stone for this thermal power project after formation of Telangana state as first project in the State.

- He expressed happiness in materialising the project which is their long-cherished dream as he pursuing since several years to establish the power plant in this area.
- Earlier i.e. in the year 1972, the public requested to establish the power plant as there is only power generation of 2280 MW and this area people is carrying irrigation through Bore wells and facing several problems even though River Godavari is flowing very near to them and the area become arid lands.
- He appreciated the local people and Hon'ble MLA for their efforts in brining this project.
- Issue of critical and sub critical is confusion matter and they were already deceived. Hence, there is a necessity to support this project so as to get jobs and livelihood.
- The smoke emissions due to coal combustion can be controlled by installing ESP which will work efficiently. The ESP will minimise the pollutants before let out into atmosphere thereby no affect to the surrounding environment and human health.
- He requested the public to welcome the project as this project will give thousands of direct & indirect employment.

Dr. Sammaiah, R/o Manuguru requested the public to utilise this opportunity for welcoming the project.

Sri Ramgopal Reddy, R/o Burgampadu expressed the following:

- There is an apprehension that the agricultural lands will affect due to ash from the proposed project as this area is with the delta lands which gives two crops and the agricultural lands in the 10 km radius will be affected.
- These paddy lands are yielding 30 to 35 quintal per acre.
- He has no objection if they will not cause any pollution.
- He requested not to cause any ash problems to the agricultural lands as they already facing several problems.

Sri T. Narender, TRS Leader has expressed the following:

- He emphasized the need of industries in the girijan corridor (Tribal area).
- The Hon'ble MP, Hon'ble MLA and Government officials have made efforts to bring this project and this project helpful to the Tribals and develop this area.
- There will be some minor issues regarding environmental problems and this has to be rectified.
- Some Tribals will have patta lands and others are not and he requested to help the all tribals.
- He requested to involve the Tribals in development of the area.

Sri Penukonda Naresh, Student and land looser's son has expressed the following:

- The youth in this area are having B.Tech, M.Tech and other qualifications and he requested to give jobs to all according to their qualifications.

- He is a MBA professional and now studying ITI course so as to get job in the proposed project.
- He requested to give assurance letter for employment in the project and a cheque of Rs. 50,000/-. They will not ready to accept the cheque of Rs. 50,000/- without job assurance letter.

Sri N. Nageswara Rao has expressed the following:

- He questioned the industry management that why this public hearing has not conducted earlier prior to start of the project works. The public hearing might be conducted earlier. Is it right to conduct public hearing after stopping the works in response to petition filed in the court.
- Earlier, some promises were made to provide jobs during PK – I Coal Mining project implementation in the year 1974, but not given jobs to most of the land losers.
- For the coal mine projects in the year 1989, jobs are not provided to the land losers of Manuguru area.
- M/s Heavy water plant affected people are still protesting to solve their problems for last 25 years.
- He expressed happiness for announcing 346 jobs by the industry and he requested to give all 346 jobs in first phase only.
- The TSGENCO has released an amount of Rs. 59 Crores and 89 Lakhs for compensation to affected persons and the same was not reached to all the affected people.
- The project authorities has acquired agricultural lands from the farmers and he requested to give better compensation to them.
- He requested to do justice to the Tribals as this area fall under the 1/70 Act.
- He requested to give job opportunity to the high qualified youth such as MBA, MCA, Law etc., if possible instead of taking manpower from other states.
- He demanded for jobs for their local youth and livelihood to public and render justice to them unlike the previous projects.

Sri Kataboina Nageswara Rao, Divisional Secretary, CPI(M) Party & Ex. Sarpanch, Samithisingaram expressed the following:

- He welcomed the project even though some farmers are affected. But, there is a discrimination in giving compensation to the affected people.
- He questioned that when will be the compensation given to the left over people, for which he requested assurance.
- Most of the land losers are tribals and their sole lives on the land. Hence, he requested to give another land in addition to the compensation package as there is a provision in the Act. But, not implemented in earlier projects such as Singareni and other projects.

- The tribals are losing their lands and also livelihood as they are not educated for getting jobs in the proposed project. Most of the Tribals are not having even ITI. Hence, he requested the District Administration to look into these issues and do justice to the tribals.

Sri Pathuri Lingaiah, R/o Sambaigudem complained against some unauthorised pass books, who are claiming rights over the lands. He requested the District Collector to consider their plight and resolve the grievance.

Sri Rega Kantha Rao, Ex-MLA, Pinapaka expressed the following:

- The tribals and other community people are present here and no one is objecting the proposed project. But, they opposed the way of conducting the public hearing.
- In the year 2009, the Central Government has framed certain guidelines for the power projects with above 600 MW. There is a guideline that not to adopt Sub critical technology and hence he questioned the industry why the sub-critical technology is adopted. The industry is going forward with the sub-critical technology even though oppose from the public.
- The industry started the project works without obtaining prior permissions on war foot and he demanded for the reasons for implementing the project. The project should be approved after consent of the 80% people in the Grama Sabha.
- The project authority clarified that there is not much difference between sub critical and super critical technologies. But, the public are having apprehensions on this issue and there is a necessity to clarify and required to have a debate on this issue.
- The industry informed that they allotted Rs. 29 crores towards CSR activities for which he expressed happiness. But, this will become first and final.
- There is a need to calculate by the Government how much CSR funds are to be allotted by the major projects like ITC, Singareni, Heavy Water Plant for public health and development programmes from the their establishment based on their profits. Accordingly, the project authority has to clarify on allocation of CSR funds and how to believe the industry.
- The affected tribal people are still doing agitations before Kothagudem Thermal Power Plant (KTPS) to solve their issues but, not resolved so far and we afraid that same situation will be arose for this project also. But, we are not taking any steps to oppose the project.
- The land losers are tribals and he requested to provide jobs to all tribal people by implementing Tribal Empowerment Policy.
- He requested the management to provide 346 jobs instead of 300 jobs as proposed earlier. He requested to made agreement in providing jobs and joining to duty from the date operation of the plant.

- The compensation was given to the land losers and some of the cheques of compensation were taken back due to lock of houses of the beneficiary. And now officials are moving with cheques to handover to beneficiary. There is discrepancy in the list of beneficiary and to the Gazette notification of the land acquisition. He requested for enjoyment survey for the lands and their party has demanded to give compensation to the actual enjoyer. But, the compensation cheques were given to the pattadar instead of enjoyer. Due to this, the actual enjoyer has fallen on road and lost their livelihood.
- The issues raised by Hon'ble MLA, like Pasupu-Kunkuma and requested to solve these issues and they will not oppose the project and participate in area development.
- The public are welcoming the project even though they fallen on road and lost their livelihood and hence, he requested the industry management that replace the machinery taken for the power plant units of sub critical technology with super critical technology machinery so as to reduce the pollution.
- He requested to adopt new technology to save the environment as the world is adopting pollution free technologies.

Sri Vongeti Bhadraiah, Congress leader & PACS Chairman expressed the following:

- He requested to list out all the land losers category wise i.e. Patta land, Government land etc., so as to avail compensation package.
- He requested to do justice to all land losers in providing jobs, compensation and other benefits, otherwise they will fight in the support of land losers.

Sri B. Ayodhya, CPI leader, Manuguru expressed the following:

- The farmers in this area are having 1 acre, 2 acre, 3 acre & 4 acre which are acquired for the project and the lands are irrigated for two crops. The area is endowed with rich fertile lands.
- The farmers have supported the survey for the project even paddy crop is exists.
- They have not objected the project and created awareness among the public regarding area development when project comes.
- The farmers are faced the problems from the local officials and same was brought to the notice of the District Administration. But, not solved the problems so far.
- He opined that all issues such as compensation and jobs may be settled before this hearing which will give happy for project affected people.
- He complained against the officials responsible in delaying the payment of compensation to the project affected families even several months after the completion of the land survey. They explained their problems even during the four successive PESA gram sabhas. There is a discrepancy in inclusion and exclusion of the affected people which leads to distress of the farmers.

- He informed that he already requested the project authority to issue job assurance letters to the affected people and not only cheque for Rs.50,000/- so as to provide trust in the youth. But, the management informed that they will look into the matter later.
- In response to this, the CMD, TSGENCO has clarified that they proposed to provide employment of 346 to the unemployed youth of the project affected families for which they already given assurance to the District Collector for 300 jobs and they will give 346 jobs including 46 jobs which are as per the request of the Hon'ble MP, Hon'ble MLA and speakers. This will be recorded in the minutes.
- On continuation, Sri B. Ayodhya has expressed happiness for providing 346 jobs and he clarified that his intention is only on the job assurance letters for youth of the affected families.
- He expressed that public have apprehension on providing jobs as affected people of the Kondapur Coal Mine project are not get jobs so far.
- The farmers have not expressed objection even after initiation of the project.
- He opined that the project may be established in barren lands available in the region instead of fertile agricultural lands.
- He is first person to welcome the project in this area.
- He requested the management to clarify the apprehensions among the public and also requested to inform how the surrounding villages are adopted and what are the benefits to be provided to the public and to take responsibility for anything happened in future. He requested to record the same in the minutes.

Sri Mukkula Venkata Narasareddy, R/o Edulla Bayyaram expressed the following:

- Everyone has expressed happiness for this project in this area and all farmers are cooperated in acquisition of valuable lands.
- He requested to give desired compensation to all farmers as the compensation amount is not considerable amount to the government.
- He narrated the plight of the non-tribal people living in the vicinity and requested to keep in mind and solve their problems.
- He requested to do justice to all Tribal and non Tribals.
- He admitted that all of them are in favour of the project.

Sri Ravi Kumar, Convenor of Small Scale Industries, Khammam expressed following:

- He requested Project Authority that such a massive project is coming up in the backward area and also requested the district administration to stipulate mandate to use only the products produced in the district for the proposed thermal power plant.
- He further requested the District Administration to establish industrial estate in this tribal area so as to encourage for establishing the small scale industries.

Sri Baig, TRS Party expressed following:

- He welcomed the project and informed that the proposed project gained support unanimously. He also stated that this proposal has to come up in this area three decades back. But, could not happen due to misleading by previous Government in united state.
- He deplored the contention of some people over sub-critical technology and project authority has clarified clearly.
- He has information that there is an injustice to the project affected families in compensation issue, jobs to local youth and other benefits. He requested to give compensation to all affected people including land enjoyer.
- He also requested to provide jobs to all unemployed youth as they already bitter experience not getting jobs in the issue of Paloncha Power plant. Hence, he requested not to repeat the same for this project.
- He requested to provide jobs to local people only and if any shortage, recruited from surrounding villages but not from other states.

Sri Koleti Bhavani Shankar, TDP Leader expressed following:

- He stated that there are two major issues with regard to the proposed project i.e. compensation to the land losers and apprehensions on the project.
- The government has paid compensation who are not having lands but not paid compensation to actual beneficiary.
- He requested the district administration to resolve grievances of genuine affected families.
- The people have apprehensions over sub-critical technology and the project authority has already clarified that there is no much difference between sub critical & super critical technologies. But, TSGENCO has proposed to adopt super critical technology in case of KTPS power plant and requested to examine the possibility of the same so as to avoid ash problems to the surrounding environment.
- We have no objections for the proposed project and already informed that this project will develop this area.
- He requested to give written assurance for 346 jobs to the youth of affected families so they can feel happy.
- He requested to depute one officer exclusively to oversee the implementation of compensation to land losers.

Smt. Aliyamma, ZPTC member- Eturunagaram, Warangal district expressed following:

- She stated that the people are unanimously welcoming the proposed thermal power plant, but they have some dissatisfaction regarding compensation and jobs.

- The Administration is not allowing compensation to the assigned lands and enjoyment lands in this area. This problem already faced by us in case of National Highway project in Warangal District and the Central Government has approved for this similar case. Hence, she requested the administration to give compensation to all affected people.
- The management should instil confidence in local educated youth and take them into mainstream by way of providing jobs so as to avoid them in going wrong way.
- She added that the state government is determined to provide nine-hours of power supply to agriculture and also giving continuous power to other sectors and there is requirement for establishment of power plants to overcome the power crisis.
- She requested to give support to this project for development in this area and also requested to give jobs to affected people.

Sri Chanda Lingaiah Dora, Ex-MLA, Burgampahad expressed following:

- He stated that earlier speakers are explained briefly and elaborately on the project.
- This area people are having much interest on this project so they can get jobs, compensation and other facilities.
- He requested the management to take appropriate steps to address the issues regarding compensation so as to clear the apprehensions.

Sri Thati Purnachander Rao, Sarpanch- Ramanujavaram expressed following:

- He informed that they have no objection to the plant being set up in their area but they are only concerned about a fair deal of compensation to the project affected families.
- He requested to accord top priority to the people, who are parting with the land for enabling the establishment of the project.
- He requested the management to rectify the problems if any.
- He added that the local people are unable to understand the technical implications of the super-critical and sub-critical technologies. Hence requested the industry to ensure that there should not be any harm to the public.
- He requested to do justice to all affected people for providing compensation and jobs.
- He requested to take steps towards safe environment and public health.

Sri Kunja Venkateswarlu, Sarpanch- Uppaka expressed following:

- There is an apprehension that there will be ash problems to the surrounding agricultural lands but the project authority has clarified that there is no ash problem.
- All are supporting this project.
- He requested to provide compensation to the affected people and give job assurance letters to the unemployed youth.
- The management noticed five gram panchayaths such as Manuguru, Pagideru, Uppaka, Bayyaram and Gummugudem in Cherla mandal that means there will be smoke affect

upto Gummugudem which is apprehension of them. He requested the management to clarify the same.

Sri Yadari Ramesh, MPTC Member-Manuguru expressed that there is not necessary to say anything as the Hon'ble MLA has already explained.

Smt. Komaram Sammakka, MPP, Pinapaka expressed following:

- She welcomed the project.
- She informed that certain people are unhappy for not getting compensation and she requested to give compensation to all affected people.
- She requested to take precautionary measure in implementing the project for the sake of their health and environment.
- She requested to provide hospital in their area and provide free treatment.

Smt. Chidem Anjamma, President-MPP, Manuguru expressed following:

- She informed that there will not be any issue if the project authority provides written assurance on jobs and a cheque of RS. 50,000/- as they are pursuing for last 1-2 years.
- She requested to consider female child in the project affected families and render them justice on par with others.
- She also requested to considered other children in the family in providing jobs as the management is giving to one child only.
- She also requested to provide livelihood to the coolies of this area in civil works of the project.
- She insisted that latest technology should be adopted in the project in order to avoid problems.
- She requested project authority to provide all the basic amenities to the surrounding villages which makes happy them then they will not raise any issue.

Sri K. Shiva, MPTC , Manuguru expressed following:

- He requested to understand the legitimate concerns expressed by the people gathered at the venue.
- He stated that about 8 PESA gram sabhas were conducted in their area with regard to the proposed project and given resolution on the project.
- Nobody is opposing the project but expecting jobs from this project.
- He requested to implement the package to all affected people.
- He requested to provide any job to these local panchayat only as they given their fertile lands and they suffering problems from poverty.

Sri Kondeti Ramu, MPTC , Uppaka Grampanchayat expressed following:

- This agency area will develop from this project and not to bother on the project.

- The affected farmers should not bother regarding compensation as the Hon'ble MP has assured in this matter.
- He requested the district administration to look into the matter of illegal real estate establishments in this area.
- He requested to provide 50% jobs to the local peoples of Manuguru and Pinapaka mandals.

Smt. Palvancha Durga, ZPTC member- Manuguru expressed thanks to the Hon'ble CM for sanctioning this project to their mandal and Khammam Dist. The compensation package was given to the affected and still some of people have not received the package. The farmers have given their lands with good intension and they expected for jobs to their children. She requested to give written assurance on jobs and a cheque of Rs. 50,000/-. She requested to give compensation to affected people and provide jobs to all affected people even casual labour jobs.

Dr. Azmeera Seetaram Naik, Hon'ble Member of Parliament, Mahabubabad Constituency expressed the following:

- He appreciated efforts made by the CMD of TSGENCO & Transco and his staff for giving power to the farmers and public.
- The EE, Pollution Control Board will record the minutes and vedio graph the entire proceedings of the public hearing and the same will be sent to Central Government.
- The Hon'ble MLA and Ex. MLAs are expressed their views for supporting the project unanimously irrespective of political party affiliation.
- The Central Government approves the projects when they incorporate all mitigation measures for environmental protection.
- At present the issue is not pertaining to environment and establishment of this project in this area as they requested the Hon'ble CM to sanction this project in this area.
- This are falls under 5th schedule and no autonomous status and custody with the Hon'ble President of the India and Hon'ble State Governor.
- Already discussed with the CMD and District Collector to form the committee in first week of April to address the problems.
- Even though this area falls under 1/70 Act, there is a necessity to give compensation to the non tribals who are irrigating since long period as these non tribals have faith on the Government to help them. Hence, the Hon'ble CM also has intention to help all the people including non tribals. Hence, the Government has allotted Rs.50,51,54,153/- to give compensation for Government & Assigned lands.
- He requested the industry to appoint Public Relation Officer and resolve the issues and also clarify apprehensions through media.
- Already there is a committee consisting of myself, Hon'ble MLA, three Sarpanches, the District Collector and Joint Collector and the committee will give clarity on the lands and

ascertain the actual owner as we have an amount of Rs.9 Crores which will be distributed towards compensation within 15 days. He requested the District Collector to take subsequent action.

- He reported that there is rule to provide atleast 80% jobs to the local people and not to bring any employees from other states. He informed that he will monitor the project for every 2 to 3 months and support in completion of the project.
- The Government already giving ITI training to the 150 students so as to get the jobs in the proposed project. The technician jobs are for ITI qualified person only and not to higher qualified persons.
- The committee will take a policy decision on providing jobs. Having apprehensions regarding jobs among the affected families is not wrong as they already experienced with the Singareni projects.
- When the promises are fulfilled then there will not be any issues from the locals.
- He requested to distribute all pending cheques to the land losers.
- He reported that no one stop the issue of your cheques.
- He reported that 346 jobs will be finalized through policy decision in the committee and he requested the management to give 346 jobs at the start of the plant and also give any other jobs including contract / casual labour jobs to this area people only and there is no right to others to have job in this area.
- The land issues will be addressed by the committee consisting of the Joint Collector & the RDO.
- This project should be completed by 31.03.2017 as the Government has plan to supply power to the farmers for 9 hours and also proposing to take up the water grid scheme in 11 constituencies and hence requested to support this project. He appreciated the decision to support the project by the public.
- He aggrieved against filing of the cases on the proposed project as this project already approved under provisions of PESA Act.
- He requested the industry to provide hospital under CSR funds as sought by MPP, Pinapaka similarly to your Bhoopalapalli hospital.
- He requested to observe the plant in Ramagundam which is operating with sub critical technology and there is no problem at all. If necessary all of us will have visit of the Ramagundam plant so as to clarify the doubts.

The District Collector has requested the management to clarify issues raised by the speakers such as compensation and R&R package even though they already clarified. He stated that the Joint Collector will explain about the implementation of R&R package.

Sri C. Radhakrishna, Director/Projects-TSGenco gave an explanation to the issues raised by the speakers as follows:

- 1) He explained that they have to make application to the MoEF for the proposed project and the environmental expert committee will review the application then they will accord Terms of Reference (ToR). As per ToR, the project authority has to prepare draft Environmental Impact Assessment (EIA) studies in the radius of 10 kms. of the project. We have to appoint consultant to conduct this EIA study. Subsequently we have to conduct public hearing and approach the MoEF to obtain Environmental Clearance. Meanwhile we received the stay on the project.
- 2) Regarding effect due to ash emissions, there is a latest technology to control ash emissions as proposed by the environmental department and equipment supplier. Ash will be generated due to burning of coal and ash is two types one is bottom ash and another one is fly ash. The bottom ash which is at 1000 °C to 1200 °C and same will be crushed and sent with water to the ash pond. The ash water will be re-circulated through Hydro bins. The separated ash can be utilized for road works and embankment. The fly ash will be collected through the ESPs which is equipped with 8 or 12 fields depending on the plant capacity. The ash is collected based on electro static phenomena with hammer mechanism. The ash is collected in the silos through vacuum system and same will be disposed to cement units and brick units. Hence there will be 100 % fly ash utilization. Hence he requested not to have apprehensions as he has several years of experience in power plants and already worked in KTPS plant.
- 3) He requested to support the project.
- 4) In response to the question raised by a participant, he stated that about 2500-3500 tonnes of ash will be generated and the same will be collected in silos. Each silo capacity is 1500 to 2000 tonnes. The ash is disposed to outside through tankers. The MOEF will ask clarification on this issue. The ash will be disposed to cement plants located in neighbouring Nalgonda district.
- 5) The participant has questioned that how much gaseous emissions are generated.

The representative of CPI(ML) New Democracy party sought clarification on certain issues and project authority informed that they submitted a detailed report to the MoEF.

The District Collector has requested the CMD to give some answer on this.

Sri D. Prabhakar Rao, Chairman and Managing Director- TSGENCO stated that all are wholeheartedly welcomed the proposed project and thanked the all on behalf of TSGENCO and the Government. The following issues raised by the speakers:

- Adopt of latest technology for the prevention of pollution.
- Revenue officials are unable to distribute the compensation.
- To take the 346 jobs on the date of start of the plant operation for which they sought agreement.

- To extend technical training support to the ITI people.
- To give suitable employment to the children of the affected families base on their qualification.
- To prove work to the local coolies.
- To adopt the surrounding villages for integral development.
- To provide Corpus fund as per the rules of the Govt. of India as this project fall under the tribal area.
- Apprehension of damage to the agricultural land due to ash.
- To give opportunity to Non locals with having land, Pasupu-Kunkuma, and already having employment.
- Why the project started without prior permission.
- Yester day, the issues already clarified before press meeting.
- A total of 346 jobs to the unemployed youth from the project affected families will be provided in the proposed power plant for which they given consent. These jobs will be provided on the day of commissioning of the plant as they proposed to commission two plants at a time and the same are recorded in the minutes. There is no possibility to give job assurance letters now as per the request of the affected people as these minutes has to submit to the MOEF and take necessary permissions. He assured the 346 jobs will be given at any cost.
- Regarding CSR activities, they proposed to take CSR activities for schools, drainage, water works within the radius of 10 Kms. after taking clearance from the internal committee. They proposed to allot not only Rs.29 Crores and subsequently, earmarked the 2% of the profits to carry CSR activities on continuous basis and assured the same.

The Joint Collector & Addl. District Magistrate stated that some seven categories of issues emerged in respect of land acquisition. Those are R & R package, local vs non-local, Pasupu-Kunkuma, family member enjoyment, employee & pensioner, small extents, job to cash and cash to job and there are 6 type of applications are with them and same will be addressed by constituting the special teams comprising of PO & RDO within a fortnight. It will be placed before the District Level Committee for review.

The District Collector, Khammam & the Chairman of the Public hearing Panel has concluded the hearing with a positive note as all the public who attended the public hearing have welcomed the project.

EE, TSPCB has expressed vote of thanks.

The representations (14 Nos.) received and the statement is annexed.

V. R. [Signature]
 Environmental Engineer, 28/3/2016
 T.S. Pollution Control Board,
 Regional Office, Kothagudem

[Signature]
 Collector & District Magistrate
 Khammam

ACTION PLAN FOR FULFILLMENT OF ASSURANCES GIVEN IN THE PUBLIC HEARING HELD ON 17-03-2016 on the proposed Manuguru (Bhadadri) Thermal power Station (4X270 MW)at Manuguru &Pinapaka mandals,Khammam Dist.

1. T.S. Pollution Control Board conducted the Public Hearing for Manuguru (Bhadadri) Thermal power Station (4X270 MW) at Manuguru &Pinapaka mandals,Khammam Dist.on 17.03.2016 in the premises of proposed site near pylon, Manuguru, Khammam District. About 2700 people attended the meeting along with Sri Ajmera Seetharam Naik,Hon'ble MP (TRS party) of Mahaboobabad constituency; Sri Payam Venkateswarlu,Hon'ble MLA (YSR Congress party) of Pinapaka constituency of Khammam District, other public representatives, general public, print and electronic media.
2. The Environmental Engineer, TSPCB, Regional Office, Kothaguden, while welcoming the District Collector, Khammam District, the Joint Collector, Public representatives and public, has explained about the the EIA Notification 2006 of the Ministry of Environment and Forests, Government of India's EIA notification No.S.O.1533(E) dated 14th September 2006. He has stated that, the Environmental Public hearing is made mandatory for certain category of projects to obtain prior environmental clearance. Further, he has also stated that,M/s Telangana State Power Generation Corporation Limited has proposed 4 x270 MW (1080 MW),Coal Based Thermal Power plant (M/s Bhadadri Thermal Power Station) at Ramanujavaram,Edullabayyaram & Seetharamapuram(H/oUppaka Panchayath) Villages of Manuguru &Pinapaka Mandals,Khammam Dist.
3. The Environmental Engineer, further informed that, the hearing is intended to record the views, opinions, objections and suggestions of the participants and same will be conducted in a transparent manner and the proceedings will be video recorded. The minutes of the hearing along with the representations will be forwarded to the MoEF&CC, GoI, New Delhi for further course of action. He then requested the District Collector, Khammam to preside over the public hearing process.
4. The Collector and District Magistrate, Khammam requested the officials of the TSGENCO to explain in detail, the salient features of the proposed project.
5. While welcoming and addressing the dignitaries and public gathering, **Sri D.Prabhakar Rao, Chairman &Managing Director/TSGENCO** has expressed that,
 - all are aware on importance of power and power situation prior to formation of new Telangana state. i.e prior to 02nd June 2014.
 - There is a power deficit of 2700 MW after formation of Telangana State for which the Government is purchasing power from other states at higher cost.
 - To over come the power deficit and to meet the power requirement for upcoming water grid scheme, lift irrigation projects, Industries and other needs in the

ambitious goal of building a 'Golden Telangana', the Hon'ble Chief Minister, Telangana State has directed TSGENCO to produce additional power.

- In this regard, TSGENCO has proposed to establish power plants in which 1x800MW Kothagudem Thermal Power station (stage VII) at Paloncha, 1080 MW (4 x270 MW) Bhadadri Thermal Power Station at Manuguru in Khammam dist. and 4000MW (5 x800 MW) Yadadri Thermal Power Station at Dameracherla in Nalgonda Dist. with total investment of **Rs.39,000 crores**. For this, financial closure from REC and PFC which are central Government agencies was achieved.
- Thus, TSGENCO has proposed this 4x270 MW coal based thermal power project with project cost of **Rs. 7929.60 crores** at this location.
- M/s Bharat Heavy Electrical Limited (BHEL), Central Government organization has come forward to complete this proposed project within 24 months, hence the construction of this project was entrusted to M/s BHEL so as to overcome the present power deficit.
- Application was made for Environmental clearance to the Ministry of Environment & Forest (MoEF &CC), Govt. of India, New Delhi in February 2015 and they have issued Terms of Reference (ToR) in June 2015 for this project.
- Based on standard ToR, Environmental Impact Assessment studies and preparation of EIA/EMP report was completed in September 2015 and started civil construction works in view of the target of the 24 months for project completion. Meanwhile, Human Rights Forum, Vizag has filed petition before Hon'ble National Green Tribunal, Chennai. The petitioner made false propaganda on sub-critical technology which affects the environment.
- In this regard, it is explained that, the Thermal Power Plants have to meet the environmental standards as prescribed by the MoEF&CC and state pollution Control Board (SPCB) either for sub critical technology or for super critical technology. Accordingly, this project was designed and allocated **Rs.388 crores** to install Electro static precipitators, Effluent treatment plant, ash water recovery system and sewage treatment plant with recycling arrangement for environmental protection as per the norms fixed by MoEF&CC, GoI, New Delhi and TSPCB, Hyderabad.
- Further, it is informed that, there is no violation of environmental norms and the project was taken up with sub- critical technology and obtained consent from the Ministry of Power. The corporation adhered to the stipulated procedure in regard for the proposed power project.
- Under Corporate Social Responsibility activities, it is proposed to provide roads, drainage, water supply and other developmental activities etc. for which Rs.29.crores

were allotted in the project cost. The CSR activities will be taken up in surrounding villages in consultation with the District administration simultaneously during project execution. A good green belt will be developed within the proposed plant premises as per norms prescribed by MoEF&CC, GoI, New Delhi.

- An amount of Rs.59.50 crores was deposited with District Collector, Khammam for payment of compensation including R&R package to the lands acquired for the proposed project and having information that, most of the compensation amount was disbursed to the beneficiaries.. Further, the Chairman & Managing Director, TSGENCO requested the District Collector to make the payment of compensation and R&R package to the balance land owners if any.. Further, it was assured that, as per G.O.Ms No 98, jobs will be provided to the land losers based on their qualification. It is proposed to employ 300 members from the project affected families and written assurance was given to the District Collector in this regard. **Another 46 jobs (i.e total of 346) has been proposed to provide by considering the request of the affected people and the said jobs will be given after start of plant operations.**
 - As the proposed project will give more direct and indirect employment, the Chairman & Managing Director, TSGENCO has requested the public to extend their co-operation for the proposed project so as to complete the project early thereby lead to state development progressively.
6. The District Collector informed that, the R&R issues mostly completed and few issues are pending and they received the written assurance of employment from the project authority. The District Collector, Khammam stated that, these issues will be placed in R&R committee and requested the TSGENCO management to explain the environmental issues of the project.
7. **C.Radhakrishna, Director/ Projects, TSGENCO** has expressed the following while explaining about the project.
- As per the guide lines of Central Electricity Authority (CEA), 48 months are required to complete any thermal power project. If the project is constructed speedily then the project can be completed within 46 months.
 - After formation of Telangana, to overcome the present power deficit, the state government has directed the TSGENCO to entrust the proposed 4 x270 MW(1080MW) coal based Thermal Power Plant to M/s Bharat Heavy Electricals Limited(BHEL) as they given commitment to complete this proposed project within 24 months.
 - In the present situation, the issue was sub critical and super critical technologies in the proposed power plant
 - Now, the country has installed power generation capacity of around 2.5 lakhs MW. In which 90% power generation is with the sub critical technology. The power plants with super critical technology are started since 2014 in India.
 - The Power plants with 660 MW and above are have super critical technology and below 660 MW power plants falls under the sub critical technology. In sub critical technology, a drum exists in the boiler which produces steam to build required

pressure for generation of power. For Super critical technology, no drum for boiler and only turbine have circuits and have three pumps to generate steam which leads to additional cost.

- 4% coal consumption in super critical technology is less than sub critical technology. Efficiency increases from 38 % to 42 % for super critical technology.
- Regarding environmental aspects, the environmental standards as prescribed by MoEF&CC,GoI & SPCB either for super critical or sub critical technologies will be followed and the systems will be designed accordingly. The Suspended Particulate Matter (SPM) which is present in the flue gas emissions generated in combustion of coal is prescribed as 50 mg/Nm³. Based on this norm, the chimney is proposed for the height of 275 mts for better dispersion of flue gases in the surrounding environment.
- Regarding Sulphur dioxide (SO₂), there is no sulphur content in the coal mines existing in India. Sulphur content exists in the imported coal which is in the range of 1.8 to 2 %. There is a technology called FGD plant to control sulphur emissions.
- Regarding NO_x (i.e. Oxides of Nitrogen), there is a limit of 760 mg/Nm³ for NO_x in the flue gas emissions. They reduced the NO_x emissions to 100 mg/Nm³ by adopting CR (Catalytic Reactors) technology in the proposed project for which they provide equipments and change the boiler design. The rules & norms will be prescribed by the MoEF and accordingly they design the proposed project.
- Hence, he requested not to have any apprehension on sub-critical and super-critical technologies. There is no major difference between these technologies except design and efficiency.
- 765 KVA power transmission lines are required for evacuation of power generated from super critical technology based power plants which are not exist at present and having only 400 KVA power transmission lines. These transmission lines are maintained by the Power Grid Corporation and they were requested them to provide 765 KVA lines in view of the proposed power plants of KTPS, and Damarcherla Power Plant. But, Power Grid Corporation informed that they have to take up 765 KVA in next Five Year Plan i.e. 13th Plan which will be started in April 2017. Hence, power evacuation has to be carried in existing 400 KVA transmission lines. Hence, the design of the project was taken up based on these aspects only.
- As per the 12th Five Year Plan which will end on 31.03.2017, there are 12 Power Projects with sub critical technology, which will be commissioned by the end of 12th plan and 37 Power projects with sub critical technology which are under construction to be completed in 13th Plan i.e. after 01.04.2017. Hence, there are total 49 power projects with sub critical technology under progress all over India.
- The differences between sub-critical and super-critical technologies are drum, coal consumption and efficiency from 38 % to 42 %.
- He requested the public to extend their cooperation for the proposed project for Telangana State and TSGENGO so as to complete two units by 31.03.2017 as per target of the TSGENCO.

8. The District Collector has expressed that, the project authority explained on the sub critical and super critical technology in detail and he opined that this will clear the

apprehensions among the public. He requested the management that they can explain further on sub critical technology. He requested the Hon'ble Member of Legislative Assembly, Pinapaka constituency to express his views in respect of the proposed thermal power plant and also welcomed the other public representatives and invited the views from the public on the proposed power plant duly requesting the project proponent to clarify the issues raised by speakers who have present during public hearing.

9. The proceedings of the public hearing as furnished by the Environmental Engineer, Regional Office, TSPCB, Kothagudem vide his letter no: 429/PCB/RO/KGM/PH/2016 Dated 29.03.2016 is incorporated herewith for perusal.
10. The action plan on the issues raised by the public representatives along with the public opinion is given below for kind perusal.

The points raised by the public/public representatives, response given by the project authorities and action plan for fulfillment of the assurances given to the public are furnished below:

S. No	Points raised by Public representative/public	Response/Commitment by project proponent	Action Plan to comply with the commitments
1.	<p>Sri Payam Venkateswarlu, Hon'ble Member of Legislative Assembly, Pinapaka constituency while welcoming the proposed thermal power project, he explained following events behind realising the dream of power plant in his constituency area:</p> <ul style="list-style-type: none"> ➤ Earlier, the people made agitation with a demand for establishment of power plant by M/s NTPC in this area. ➤ He informed that he raised the need of power plant in Manuguru area in the first session of the Hon'ble assembly after formation of Telangana State as this area is resourced with Railway line, River Godavari water and Coal. He reported that the Hon'ble CM has informed that there is a power deficit of 2700 MW and required to establish the power plants for state development and have Bangaru (Golden) Telangana, hence the Hon'ble CM has given assurance for establishment of power plant in Manuguru area and immediately directed the concerned to prepare the project reports. ➤ He made efforts in convincing the public to extend their co-operation for 	<p>The Chairman & Managing Director, TSGENCO has assured during the public hearing that, TSGENCO will provide employment to all the 346 applicants from the project affected families as requested by the Hon'ble MLA, Pinapaka instead of 300 jobs as assured earlier .He has also assured that, the surrounding villagers will be considered to engage as construction workers as unskilled/semi skilled /Skilled as per their eligibility in project construction works.</p> <p>An amount of Rs. 29.04 crores is provided in the project cost for taking up various development activities like construction of roads / drains, providing of drinking water supply, development of schools and other activities in the surrounding villages as proposed by the District Collector, Khammam..</p> <p>The Chairman & Managing Director, TSGENCO has also</p>	<p>Need based studies have been carried out in surrounding villages to study socio economic profiles, infrastructure availability and infrastructure requirement Accordingly EIA report is prepared for implementation of CSR activities ,necessary provision has been made towards drinking water, sanitation, education, health care, infra structure development, with a provision of Rs 29.04 crores @ 0.40% of the project cost towards CSR plan.</p> <p>Local villagers/agriculture labour (Project displaced persons) will be taken as unskilled/Semi skilled /skilled/ workers in Civil/E&M construction works as per their eligibility and they will be continued as outsource workers after commissioning of the unit as per plant requirement in labour oriented annual maintenance works such cleaning of roads, drains, up keeping of all buildings, maintenance of lawns and plantations, annual maintenance works in coal</p>

S. No	Points raised by Public representative/public	Response/Commitment by project proponent	Action Plan to comply with the commitments
	<p>establishing the power plant in this area through canvassing in his constituency and also in preparing the project report and coal & water availability reports. He reported that the District Administration has extended their cooperation in materialising the project at the earliest.</p> <ul style="list-style-type: none"> ➤ He emphasized the need of industries and to do justice to land losers. He reported that he expressed thanks to the Hon'ble CM for sanctioning this power project and requested to make justice for project affected people i.e. Tribals, Schedule Caste, Back ward class and other castes etc. ➤ There is an apprehension on sub critical and super critical technology among the public and the officials of the project authority have clarified on this issue. ➤ The industry proposed to install Electro Static Precipitators (ESPs) for control of smoke emissions from the chimney. ➤ He requested the industry's management to implement latest technology in providing ESPs and increase their capacities periodically to control air pollution to the 	<p>requested the District Collector, Khammam, to pay the balance compensation and R&R package to all the all the balance land losers if any to be paid as sufficient amount is available with them.</p>	<p>handling plant etc.</p> <ul style="list-style-type: none"> ➤ Nursery will be established and saplings will be supplied at free of costs to all the surrounding villages for development of green belt other than the power plant area. ➤ Green belt development will be taken up in the vacant areas of the power plant including proposed colony & around ash pond area to meet the environmental norms as fixed by MoEF&CC, GoI to protect the environment. ➤ Providing Electro static precipitators with 99.98% efficiency, construction of 275 meter high chimneys, effluent treatment plant, ash water recovery system, Seewage treatment plant with recycling arrangement, to mitigate the environment pollution levels. No plant effluent will be discharged in to the near by water bodies. ➤ Water Sprinkling system will be provided in ash ponds in order to prevent fugitive emissions from the ash ponds. ➤ Dust extraction &

S. No	Points raised by Public representative/public	Response/Commitment by project proponent	Action Plan to comply with the commitments
	<p>surrounding environment thereby save the health of the surrounding public.</p> <ul style="list-style-type: none"> ➤ He requested to take strong decision in controlling the pollution to avoid affect on agricultural crop, land and water. ➤ The District Administration has completed compensation to the land losers for which they spend about Rs. 50 Crores. The TSGENCO has given Rs. 59.50 crores to the District Collector for payment of compensation to the lands losers. But, some of the actual land losers are not received compensation so far due to some mistakes by the local Revenue officials. ➤ He appreciated the District Administration and TSGENCO for their cooperation in giving the compensation. He requested to give compensation to genuine cases and also to people who irrigated in Government and private lands. ➤ He also requested to give compensation to the people who have lands under Pasupu-Kunkuma (land donated to the daughter during her marriage) and to the villagers residing outside due to their livelihood who 		<p>suppression system will be provided in the coal handing areas to mitigate the fugitive emissions.</p> <p>✚ In order to comply with the environmental protection measures budgetary provision of Rs. 388 crores is made in the project cost for installing the above systems in the plant..</p> <p>✚ The letter addressed to the District Collector, Khammam, for providing employment to all 346 applicants from project affected families vide Ir no. CMD/TSGENCO/CE/C/Thermal/ F.BTPS/ D.No /16 Dt 02.04.2016 is attached here with for perusal.</p>

S. No	Points raised by Public representative/public	Response/Commitment by project proponent	Action Plan to comply with the commitments
	<p>are having lands in the village.</p> <ul style="list-style-type: none"> ➤ ➤ He has noticed that compensation payment cheques are not served to the land losers who are residing outside the village and he requested to give cheques to the land losers even though they are residing outside. ➤ He requested the industry and District Administration to extend benefits to the youth even though some of them have 2 to 3 months less to the age of 18 years on humanitarian grounds. ➤ He requested the Revenue officials to finalise the list of land losers and submit to the District Collector as there are only 181 – 182 persons and also requested to give compensation to all. ➤ The youth have hope on 346 jobs as proposed by the industry and they also having worry and apprehension in getting jobs. ➤ He requested the management to give revised agreement to the District Collector for providing 346 jobs instead of 300 jobs as proposed earlier. He also requested to provide jobs to the children of workers and farmers who are lost their lands. 		

S. No	Points raised by Public representative/public	Response/Commitment by project proponent	Action Plan to comply with the commitments
	<ul style="list-style-type: none"> ➤ He also requested provide jobs to the Rythu Coolies in Civil works and other works taken up by the project management at least on out sourced basis. ➤ He opined that there will be 1000 to 1200 direct employments and 2000 to 3000 indirect employment if the project starts its operations. ➤ The industry conducted environmental study in the radius of 10 kms. and villages in this area will affect due to pollution problems. He requested to adopt the villages located in the radius of 10 kms. such as Seetharampuram, Chikkuduunta, Potireddypalli, Bayyaram, Uppaka, Bommarajupalli, Venkannagudem and Sambaigudem and also other villages in the area. He requested to give priority to adopt the immediate surrounding villages for integrated village development. ➤ He requested to develop the villages under CSR programme and spend more amount to maximum extent possible. ➤ He requested to provide 		

S. No	Points raised by Public representative/public	Response/Commitment by project proponent	Action Plan to comply with the commitments
	<p>Corpus fund for development of the Tribal area in accordance with the rules of the Central Government.</p> <ul style="list-style-type: none"> ➤ He requested to take all steps in giving compensation, providing jobs and environmental protection. ➤ He requested to take steps in completion of the project as early as possible and develop this area. 		
2	<p>Sri ERM Nehru, President-Telangana Vidyut Engineers' Association has expressed the following:</p> <ul style="list-style-type: none"> ➤ Hon'ble Chief Minister laid foundation stone for this thermal power project after formation of Telangana state as first project in the State. ➤ He expressed happiness in materialising the project which is their long-cherished dream as he pursuing since several years to establish the power plant in this area. ➤ Earlier i.e. in the year 1972, 	<p>He has welcomed the project and no issues raised by him</p>	-

S. No	Points raised by Public representative/public	Response/Commitment by project proponent	Action Plan to comply with the commitments
	<p>the public requested to establish the power plant as there is only power generation of 2280 MW and this area people is carrying irrigation through Bore wells and facing several problems even though River Godavari is flowing very near to them and the area become arid lands.</p> <ul style="list-style-type: none"> ➤ He appreciated the local people and Hon'ble MLA for their efforts in brining this project. ➤ Issue of critical and sub critical is confusion matter and they were already deceived. Hence, there is a necessity to support this project so as to get jobs and livelihood. ➤ The smoke emissions due to coal combustion can be controlled by installing ESP which will work efficiently. The ESP will minimise the pollutants before let out into atmosphere thereby no affect to the surrounding 		

S. No	Points raised by Public representative/public	Response/Commitment by project proponent	Action Plan to comply with the commitments
	<p>environment and human health.</p> <p>➤ He requested the public to welcome the project as this project will give thousands of direct & indirect employment.</p>		
3	<p>Dr. Sammaiah, R/o Manuguru requested the public to utilise this opportunity for welcoming the project.</p>	Welcomed the project	-
4	<p>Sri Ramgopal Reddy, R/o Burgampadu expressed the following:</p> <p>➤ There is an apprehension that the agricultural lands will affect due to ash from the proposed project as this area is with the delta lands which gives two crops and the agricultural lands in the 10 km radius will be affected.</p> <p>➤ These paddy lands are yielding 30 to 35 quintal per acre.</p> <p>➤ He has no objection if they will not cause any pollution.</p> <p>➤ He requested not to cause any ash problems to the agricultural lands as they already facing several problems.</p>	He welcomed the project	<p>a)All the environment protection measures will be taken and the systems will be designed to maintain the norms as prescribed by MoEF&CC,Gol and State Pollution Control Board, Hyderabad.</p> <p>b)Accordingly a provision of Rs. 388 crores is made in the project cost to protect the environment.</p> <p>c)No plant effluent will be discharged in to the near by water bodies as all the plant effluent treatment systems will be designed with recycling arrangement so as to re use the treated water for cooling tower make-up, ashing purpose, in dust suppression system, green</p>

S. No	Points raised by Public representative/public	Response/Commitment by project proponent	Action Plan to comply with the commitments
			<p>belt development and floor wash etc.</p> <p>d)275 meter high chimneys are proposed for better dispersion of flue gases in the surrounding environment.</p> <p>e)Online air quality monitoring systems and effluent monitoring system will be provided to monitor the effluent parameters so as to take corrective measures when ever there is any deviation in the parameter values</p>
5.	<p>Sri T. Narender, TRS Leader has expressed the following:</p> <ul style="list-style-type: none"> ➤ He emphasized the need of industries in the girijan corridor (Tribal area). ➤ The Hon'ble MP, Hon'ble MLA and Government officials have made efforts to bring this project and this project helpful to the Tribals and develop this area. ➤ There will be some minor issues regarding environmental problems and this has to be rectified. ➤ Some Tribals have patta lands and others are not and he requested to help the all tribals. ➤ He requested to involve the Tribals in development of the area. 	He has welcomed the project	Local villagers/Agriculture labour (Project displaced persons) will be taken as unskilled/Semi skilled /skilled/ workers in Civil/E&M construction works as per their eligibilty and they will be continued as out sourced workers after commissioning of the unit in labour oriented annual maintenance works such cleaning of roads, drains, up keeping of all buildings, maintenance of lawns and plantations, labour oriented works in coal handling plant etc.

S. No	Points raised by Public representative/public	Response/Commitment by project proponent	Action Plan to comply with the commitments
6.	<p>➤ Sri Penukonda Naresh, Student and land looser's son has expressed the following:</p> <p>➤ The youth in this area are having B.Tech, M.Tech and other qualifications and he requested to give jobs to all according to their qualifications.</p> <p>➤ He is a MBA professional and now studying ITI course so as to get job in the proposed project.</p> <p>➤ He requested to give assurance letter for employment in the project and a cheque of Rs. 50,000/-. They will not ready to accept the cheque of Rs. 50,000/- without job assurance letter.</p>	<p>Employment will be provided in the plant operation as per plant requirement and as per the guide lines given in the GOMs No 98 dated 15th April 1986.</p>	<p>Letter already given to the District Collector vide Ir. No-Director/ HR/ CE/ C/ T/SE/TD-I/EE/C-I/F. Bhadradri/D.No.05/2016 dated 02.04.2016</p>
7	<p>Sri N. Nageswara Rao has expressed the following:</p> <p>➤ He questioned the industry management that why this public hearing has not conducted earlier prior to start of the project works. The public hearing might be conducted earlier. Is it right to conduct public hearing after stopping the works in response to petition filed in the court.</p> <p>➤ Earlier, some promises were made to provide jobs during PK – I Coal Mining project</p>	<p>He has welcomed the project</p> <p><u>Response by PP:</u></p> <p>As the Telangana state is a newly formed state and there is a deficit of 2700 MW of power , after the state came in to the force with effect from 2nd June 2014, and the 40% of the state power generation is going to only agricultural sector and state is purchasing power at higher rates from the neighboring states forced Government to go ahead with the project construction works once the EIA studies</p>	<p>With regard to payment of compensation and providing jobs action plan for the same has been given in the earlier response.</p>

S. No	Points raised by Public representative/public	Response/Commitment by project proponent	Action Plan to comply with the commitments
	<p>implementation in the year 1974, but not given jobs to most of the land losers.</p> <ul style="list-style-type: none"> ➤ For the coal mine projects in the year 1989, jobs are not provided to the land losers of Manuguru area. ➤ M/s Heavy water plant affected people are still protesting to solve their problems for last 25 years. ➤ He expressed happiness for announcing 346 jobs by the industry and he requested to give all 346 jobs in first phase only. ➤ The TSGENCO has released an amount of Rs. 59 Crores and 89 Lakhs for compensation to affected persons and the same was not reached to all the affected people. ➤ The project authorities has acquired agricultural lands from the farmers and he requested to give better compensation to them. ➤ He requested to do justice to the Tribals as this area fall under the 1/70 Act. ➤ He requested to give job opportunity to the high qualified youth such as MBA, MCA, Law etc., if possible instead of taking manpower from other states. ➤ He demanded for jobs for 	<p>are completed and EIA/EMP reports prepared by Sept'2014 so as to complete the project within 24 months as per the schedule given by M/s BHEL which is Central Government Organization to meet the above deficit.</p> <p>TSGENCO is in the process of obtaining environmental clearance for the project from MoEF&CC,Gol.</p> <p>Civil foundation works were commenced only after completion of EIA studies to save project completion time. Accordingly Public hearing is conducted in the month March 2016.</p>	

S. No	Points raised by Public representative/public	Response/Commitment by project proponent	Action Plan to comply with the commitments
	<p>their local youth and livelihood to public and render justice to them unlike the previous projects.</p>		
8.	<p>Sri Kataboina Nageswara Rao, Divisional Secretary, CPI(M) Party & Ex. Sarpanch, Samithisingaram expressed the following:</p> <ul style="list-style-type: none"> ➤ He welcomed the project even though some farmers are affected. But, there is a discrimination in giving compensation to the affected people. ➤ He questioned that when will be the compensation given to the left over people, for which he requested assurance. ➤ Most of the land losers are tribals and their sole lives on the land. Hence, he requested to give another land in addition to the compensation package as there is a provision in the Act. But, not implemented in earlier projects such as Singareni and other projects. ➤ The tribals are losing their lands and also livelihood as they are not educated for getting jobs in the proposed project. Most of the Tribals are not having even ITI. Hence, he requested the District Administration to look into these issues and do 	<p>The Chairman & Managing Director, TSGENCO has requested the District Collector and his team to settle all the pending land compensation and R&R package issues immediately so as to provide healthy atmosphere in the project area.</p>	<p>The District Collector has informed that, the District administration has covered 85 to 90 % compensation issues and remaining will also be done in due course. He reported that, the Joint Collector will address the R&R issues.</p> <p>The Joint Collector, Khammam stated that, there are seven categories of issues emerged in respect of land acquisition. Those are R&R package, local vs non -local, pasupu-kunkuma, family member enjoyment,, employ and pensioner, small extents, job to cash & cash to job, and there are 6 type of applications with them and the same will be addressed by constituting special teams comprising of PO & RDO within a fortnight and assured that all issues will be settled.</p>

S. No	Points raised by Public representative/public	Response/Commitment by project proponent	Action Plan to comply with the commitments
	justice to the tribals.		
9.	<p>Sri Pathuri Lingaiah, R/o Sambaigudem complained against some unauthorised pass books, who are claiming rights over the lands. He requested the District Collector to consider their plight and resolve the grievance</p>	-	Revenue authorities will take care of these issues as promised by Dist. Collector, Khammam.
10.	<p>Sri Rega Kantha Rao, Ex-MLA, Pinapaka expressed the following:</p> <ul style="list-style-type: none"> ➤ The tribals and other community people are present here and no one is objecting the proposed project. But, they opposed the way of conducting the public hearing. ➤ In the year 2009, the Central Government has framed certain guidelines for the power projects with above 600 MW. There is a guideline that not to adopt Sub critical technology and hence he questioned the industry why the sub-critical technology is adopted. The industry is going forward with the sub-critical technology even though oppose from the public. ➤ The industry started the project works without obtaining prior permissions on war foot and he demanded for the reasons for implementing the project. 	<p>He welcomed the project.</p> <p>The Director/Projects, TSGENCO has clarified on this issue at the starting of the meeting</p> <p>Already explained by the Director/Projects-TSGENCO</p>	

S. No	Points raised by Public representative/public	Response/Commitment by project proponent	Action Plan to comply with the commitments
	<p>The project should be approved after consent of the 80% people in the Grama Sabha.</p> <ul style="list-style-type: none"> ➤ The project authority clarified that there is not much difference between sub critical and super critical technologies. But, the public are having apprehensions on this issue and there is a necessity to clarify and required to have a debate on this issue. ➤ The industry informed that they allotted Rs. 29 crores towards CSR activities for which he expressed happiness. But, this will become first and final. ➤ There is a need to calculate by the Government how much CSR funds are to be allotted by the major projects like ITC, Singareni, Heavy Water Plant for public health & development programmes from the their establishment based on their profits. Accordingly, the project authority has to clarify on allocation of CSR funds and how to believe the industry. 	<p>The Grama sabhas were conducted by District administration at various villages surrounding the proposed project and the villagers have unanimously resolved for handing over the land for the above project.</p> <p>An amount of Rs. 5.89 crores was allotted as recurring expenses under CSR expenditure.</p> <p>The provision towards CSR activities is made in the project cost as per the norms fixed by the Govt. of India.</p>	

S. No	Points raised by Public representative/public	Response/Commitment by project proponent	Action Plan to comply with the commitments
	<ul style="list-style-type: none"> ➤ The affected tribal people are still doing agitations before Kothagudem Thermal Power Plant (KTPS) to solve their issues but, not resolved so far and we afraid that same situation will be arose for this project also. But, we are not taking any steps to oppose the project. ➤ The land losers are tribals and he requested to provide jobs to all tribal people by implementing Tribal Empowerment Policy. ➤ He requested the management to provide 346 jobs instead of 300 jobs as proposed earlier. He requested to made agreement in providing jobs and joining to duty from the date operation of the plant. ➤ The compensation was given to the land losers and some of the cheques of compensation were taken back due to lock of houses of the beneficiary. And now officials are moving with cheques to handover to beneficiary. There is discrepancy in the list of beneficiary and to the Gazette notification of the land acquisition. He requested for enjoyment survey for the lands and their party has demanded to give compensation to the actual 	<p>It is a false allegation that, the tribal people are still doing agitations before Kothagudem Thermal Power station, Paloncha. In this regard, it is to inform that</p> <p>a) 401 nos were recruited as JPAs and other cadres for KTPS complex under the land looser quota, out of which 190 nos are tribals appointed in the KTPS V&VI stage during the years 2007 and 2013.</p> <p>b) About 710 nos ST workers are working in KTPS V&VI stages in annual maintenance contracts in various works. They are getting 365 working days towards their livelihood. The annual expenditure incurred against them is about Rs. 8.00 crores.</p> <p>c) 50% of the hired vehicles (i.e 20 nos) engaged in KTPS V&VI stages for conveyance of departmental officials are reserved and engaged from schedule tribe local youth for providing livelihood to them.</p>	

S. No	Points raised by Public representative/public	Response/Commitment by project proponent	Action Plan to comply with the commitments
	<p>enjoyer. But, the compensation cheques were given to the pattadar instead of enjoyer. Due to this, the actual enjoyer has fallen on road and lost their livelihood.</p> <ul style="list-style-type: none"> ➤ The issues raised by Hon'ble MLA, like Pasupu-Kunkuma and requested to solve these issues and they will not oppose the project and participate in area development. ➤ The public are welcoming the project even though they fallen on road and lost their livelihood and hence, he requested the industry management that replace the machinery taken for the power plant units of sub critical technology with super critical technology machinery so as to reduce the pollution. ➤ He requested to adopt new technology to save the environment as the world is adopting pollution free technologies. 	<p>The District Collector, Khammam has assured to solve this issue as sufficient amount has been deposited by TSGENCO towards land compensation and R&R package.</p> <p>To protect the environment Rs. 388 crores has allocated towards installation of pollution control equipment's such as ESP's, ETP & STP and Ash water recovery system along with recycling system for reuse of the treated water.</p> <p>Latest technologies are being adopted which is</p>	

S. No	Points raised by Public representative/public	Response/Commitment by project proponent	Action Plan to comply with the commitments
		designed & supplied by M/s BHEL, which is Central Government organization to protect the environment.	
11.	<p>Sri Vongeti Bhadraiah, Congress leader & PACS Chairman expressed the following:</p> <ul style="list-style-type: none"> ➤ He requested to list out all the land losers category wise i.e. Patta land, Government land etc., so as to avail compensation package. ➤ He requested to do justice to all land losers in providing jobs, compensation and other benefits, otherwise they will fight in the support of land losers. 	<p>The District Administration has already listed out names of all land losers and compensation was already paid to 90% of land losers.</p> <p>It is already agreed to provide employment to 346 project displaced persons or his/her dependents.</p>	
12.	<p>Sri B. Ayodhya, CPI leader, Manuguru expressed the following:</p> <ul style="list-style-type: none"> ➤ The farmers in this area are having 1 acre, 2 acre, 3 acre & 4 acre which are acquired for the project and the lands are irrigated for two crops. The area is endowed with rich fertile lands. ➤ The farmers have supported the survey for the project even paddy crop is exists. ➤ They have not objected the project and created awareness among the public regarding area development 	He welcomed the project	The District Administration has assured to settle all the pending land compensation and R&R package issues by end of April 2016.

S. No	Points raised by Public representative/public	Response/Commitment by project proponent	Action Plan to comply with the commitments
	<p>when project comes.</p> <ul style="list-style-type: none"> ➤ The farmers are faced the problems from the local officials and same was brought to the notice of the District Administration. But, not solved the problems so far. ➤ He opined that all issues such as compensation and jobs may be settled before this hearing which will give happy for project affected people. ➤ He complained against the officials responsible in delaying the payment of compensation to the project affected families even several months after the completion of the land survey. They explained their problems even during the four successive PESA gram sabhas. There is a discrepancy in inclusion and exclusion of the affected people which leads to distress of the farmers. ➤ He informed that he already requested the project authority to issue job assurance letters to the affected people and not only cheque for Rs.50,000/- so as to provide trust in the youth. But, the management informed that they will look into the matter later. 		

S. No	Points raised by Public representative/public	Response/Commitment by project proponent	Action Plan to comply with the commitments
	<ul style="list-style-type: none"> ➤ In response to this, the CMD, TSGENCO has clarified that they proposed to provide employment of 346 to the unemployed youth of the project affected families for which they already given assurance to the District Collector for 300 jobs and they will give 346 jobs including 46 jobs which are as per the request of the Hon'ble MP, Hon'ble MLA and speakers. This will be recorded in the minutes. ➤ On continuation, Sri B. Ayodhya has expressed happiness for providing 346 jobs and he clarified that his intention is only on the job assurance letters for youth of the affected families. ➤ He expressed that public have apprehension on providing jobs as affected people of the Kondapur Coal Mine project are not get jobs so far. ➤ The farmers have not expressed objection even after initiation of the project. ➤ He opined that the project may be established in barren lands available in the region instead of fertile agricultural lands. ➤ He is first person to welcome the project in this area. 	<p>Assurance letter was already given to The District Collector, Khammam for providing 346 jobs vide letter no: Director/ HR/ CE/ C/ T/SE/TD-I/EE/C-I/F. Bhadradi/D.No.05/2016 dated 02.04.2016</p>	

S. No	Points raised by Public representative/public	Response/Commitment by project proponent	Action Plan to comply with the commitments
	<p>➤ He requested the management to clarify the apprehensions among the public and also requested to inform how the surrounding villages are adopted and what are the benefits to be provided to the public and to take responsibility for anything happened in future. He requested to record the same in the minutes.</p>	<p>CSR activities were already clarified in the earlier response.</p>	
13.	<p>Sri. Mukkula Venkata Narasa Reddy, R/o Edulla Bayyaram expressed the following:</p> <p>➤ Everyone has expressed happiness for this project in this area and all farmers are cooperated in acquisition of valuable lands.</p> <p>➤ He requested to give desired compensation to all farmers as the compensation amount is not considerable amount to the government.</p> <p>➤ He narrated the plight of the non-tribal people living in the vicinity and requested to keep in mind and solve their problems.</p> <p>➤ He requested to do justice to all Tribal and non Tribals.</p>	<p>He welcomed the project.</p> <p>The land compensation and R&R package was finalized as per the land acquisition act 2013. Even encroachers in the Govt land are also paid a good exgratia. All the land losers have expressed happiness in respect of land compensation / R&R package. There are no complaints in regard to compensation amount paid to them.</p>	-

S. No	Points raised by Public representative/public	Response/Commitment by project proponent	Action Plan to comply with the commitments
	<ul style="list-style-type: none"> ➤ He admitted that all of them are in favour of the project. 		
14.	<p>Sri Ravi Kumar, Convenor of Small Scale Industries, Khammam expressed following:</p> <ul style="list-style-type: none"> ➤ He requested Project Authority that such a massive project is coming up in the backward area and also requested the district administration to stipulate mandate to use only the products produced in the district for the proposed thermal power plant. ➤ He further requested the District Administration to establish industrial estate in this tribal area so as to encourage for establishing the small scale industries. 	<p>He welcomed the project. The local available construction materials of having good standards will be used in the project construction.</p> <p>Not in the purview of TSGENCO</p>	-
15.	<p>Sri Baig, TRS Party expressed following:</p> <ul style="list-style-type: none"> ➤ He welcomed the project and informed that the proposed project gained support unanimously. He also stated that this proposal has to come up in this area three decades back. But, could not happen due to misleading by previous Government in united state. ➤ He deplored the contention of some people over sub-critical technology and project authority has clarified clearly. 	He Welcomed the project.	-

S. No	Points raised by Public representative/public	Response/Commitment by project proponent	Action Plan to comply with the commitments
	<ul style="list-style-type: none"> ➤ He has information that there is an injustice to the project affected families in compensation issue, jobs to local youth and other benefits. He requested to give compensation to all affected people including land enjoyer. ➤ He also requested to provide jobs to all unemployed youth as they already bitter experience not getting jobs in the issue of Paloncha Power plant. Hence, he requested not to repeat the same for this project. ➤ He requested to provide jobs to local people only and if any shortage, recruited from surrounding villages but not from other states. 	<p>Already addressed in earlier response.</p> <p>-do-</p> <p>-do-</p>	
16.	<p>Sri Koleti Bhavani Shankar, TDP Leader expressed following:</p> <ul style="list-style-type: none"> ➤ He stated that there are two major issues with regard to the proposed project i.e. compensation to the land losers and apprehensions on the project. ➤ The government has paid compensation who are not having lands but not paid compensation to actual beneficiary. ➤ He requested the district administration to resolve 	<p>He welcomed the project.</p> <p>These issues were already explained.</p>	

S. No	Points raised by Public representative/public	Response/Commitment by project proponent	Action Plan to comply with the commitments
	<p data-bbox="240 360 659 432">grievances of genuine affected families.</p> <ul style="list-style-type: none"> <li data-bbox="201 450 659 1025">➤ The people have apprehensions over sub-critical technology and the project authority has already clarified that there is no much difference between sub critical & super critical technologies. But, TSGENCO has proposed to adopt super critical technology in case of KTPS power plant and requested to examine the possibility of the same so as to avoid ash problems to the surrounding environment. <li data-bbox="201 1043 659 1193">➤ We have no objections for the proposed project and already informed that this project will develop this area. <li data-bbox="201 1211 659 1361">➤ He requested to give written assurance for 346 jobs to the youth of affected families so they can feel happy. <li data-bbox="201 1435 659 1585">➤ He requested to depute one officer exclusively to oversee the implementation of compensation to land losers. 	<p data-bbox="839 465 898 495">-do-</p>	<p data-bbox="1082 1442 1490 1861">Action is initiated to appoint one of the SC/ST un-employed graduate as a Public Relation Officer (PRO) from the project affected families to co-ordinate between land losers and Revenue authorities so as to settle all the pending issues. He will be engaged by end of April 2016.</p>

S. No	Points raised by Public representative/public	Response/Commitment by project proponent	Action Plan to comply with the commitments
17.	<p>Smt. Aliyamma, ZPTC member- Eturunagaram, Warangal district expressed following:</p> <ul style="list-style-type: none"> ➤ She stated that the people are unanimously welcoming the proposed thermal power plant, but they have some dissatisfaction regarding compensation and jobs. ➤ The Administration is not allowing compensation to the assigned lands and enjoyment lands in this area. This problem already faced by us in case of National Highway project in Warangal District and the Central Government has approved for this similar case. Hence, she requested the administration to give compensation to all affected people. ➤ The management should instil confidence in local educated youth and take them into mainstream by way of providing jobs so as to avoid them in going wrong way. ➤ She added that the state government is determined to provide nine-hours of power supply to agriculture and also giving continuous power to other sectors and there is requirement for establishment of power 	<p>She welcomed the project</p> <p>These issues were already addressed in earlier response.</p>	

S. No	Points raised by Public representative/public	Response/Commitment by project proponent	Action Plan to comply with the commitments
	<p>plants to overcome the power crisis.</p> <ul style="list-style-type: none"> ➤ She requested to give support to this project for development in this area and also requested to give jobs to affected people. 		
18.	<p>Sri Chanda Lingaiah Dora, Ex-MLA, Burgampahad expressed following:</p> <ul style="list-style-type: none"> ➤ He stated that earlier speakers are explained briefly and elaborately on the project. ➤ This area people are having much interest on this project so they can get jobs, compensation and other facilities. ➤ He requested the management to take appropriate steps to address the issues regarding compensation so as to clear the apprehensions. 	He welcomed the project	
19.	<p>Sri Thati Purnachander Rao, Sarpanch- Ramanujavaram expressed following:</p> <ul style="list-style-type: none"> ➤ He informed that they have no objection to the plant being set up in their area but they are only concerned about a fair deal of compensation to the project affected families. ➤ He requested to accord top priority to the people, who 	He welcomed the project	

S. No	Points raised by Public representative/public	Response/Commitment by project proponent	Action Plan to comply with the commitments
	<p>are parting with the land for enabling the establishment of the project.</p> <ul style="list-style-type: none"> ➤ He requested the management to rectify the problems if any. ➤ He added that the local people are unable to understand the technical implications of the super-critical and sub-critical technologies. Hence requested the industry to ensure that there should not be any harm to the public. ➤ He requested to do justice to all affected people for providing compensation and jobs. ➤ He requested to take steps towards safe environment and public health. 		<p>The study on occupational health and endemic diseases of environmental origin of the study area was conducted and action plan is prepared. Action will be taken as per the action plan during construction stage and after commissioning of the project and the study report and action plan is incorporated in the EIA report.</p>
20.	<p>Sri Kunja Venkateswarlu, Sarpanch- Uppaka expressed following:</p> <ul style="list-style-type: none"> ➤ There is an apprehension that there will be ash problems to the surrounding agricultural lands but the project authority has clarified that there is no ash problem. ➤ All are supporting this project. ➤ He requested to provide compensation to the affected people and give job assurance letters to the 	<p>He welcomed the project</p>	<p>As already clarified, necessary ambient air quality monitoring systems will be provided in the surrounding areas so as to take necessary corrective measures to protect the environment.</p>

S. No	Points raised by Public representative/public	Response/Commitment by project proponent	Action Plan to comply with the commitments
	<p>unemployed youth.</p> <p>➤ The management noticed five gram panchayaths such as Manuguru, Pagideru, Uppaka, Bayyaram and Gummugudem in Cherla mandal that means there will be smoke affect upto Gummugudem which is apprehension of them. He requested the management to clarify the same.</p>		
21.	<p>Sri Yadari Ramesh, MPTC Member-Manuguru expressed that there is not necessary to say anything as the Hon'ble MLA has already explained.</p>	-	-
22.	<p>Smt. Komaram Sammakka, MPP, Pinapaka expressed following:</p> <p>➤ She welcomed the project.</p> <p>➤ She informed that certain people are unhappy for not getting compensation and she requested to give compensation to all affected people.</p> <p>➤ She requested to take precautionary measure in implementing the project for the sake of their health and environment.</p> <p>➤ She requested to provide hospital in their area and provide free treatment.</p>	<p>She welcomed the project</p> <p>The concerns were already clarified/explained in earlier response.</p>	

S. No	Points raised by Public representative/public	Response/Commitment by project proponent	Action Plan to comply with the commitments
23.	<p>Smt. Chidem Anjamma, President-MPP, Manuguru expressed following:</p> <ul style="list-style-type: none"> ➤ She informed that there will not be any issue if the project authority provides written assurance on jobs and a cheque of Rs. 50,000/- as they are pursuing for last 1-2 years. ➤ She requested to consider female child in the project affected families and render them justice on par with others. ➤ She also requested to considered other children in the family in providing jobs as the management is giving to one child only. ➤ She also requested to provide livelihood to the coolies of this area in civil works of the project. ➤ She insisted that latest technology should be adopted in the project in order to avoid problems. ➤ She requested project authority to provide all the basic amenities to the surrounding villages which makes happy them then they will not raise any issue. 	<p>She welcomed the project</p> <p>The concerns were already clarified/explained in earlier response.</p> <p>CSR activities will be taken up as per recommendations given by M/s CMSR, Hyderabad.</p> <p>The details of CSR activities are given in EIA report</p>	

S. No	Points raised by Public representative/public	Response/Commitment by project proponent	Action Plan to comply with the commitments
24.	<p>Sri K. Shiva, MPTC, Manuguru expressed following:</p> <ul style="list-style-type: none"> ➤ He requested to understand the legitimate concerns expressed by the people gathered at the venue. ➤ He stated that about 8 PESA gram sabhas were conducted in their area with regard to the proposed project and given resolution on the project. ➤ Nobody is opposing the project but expecting jobs from this project. ➤ He requested to implement the package to all affected people. ➤ He requested to provide any job to these local panchayat only as they given their fertile lands and they suffering problems from poverty. 	He welcomed the project	
25.	<p>Sri Kondeti Ramu, MPTC , Uppaka Grampanchayat expressed following:</p> <ul style="list-style-type: none"> ➤ This agency area will develop from this project and not to bother on the project. ➤ The affected farmers should not bother regarding compensation as the Hon'ble MP has assured in this matter. ➤ He requested the district administration to look into 	He welcomed the project	

S. No	Points raised by Public representative/public	Response/Commitment by project proponent	Action Plan to comply with the commitments
	<p>the matter of illegal real estate establishments in this area.</p> <p>➤ He requested to provide 50% jobs to the local peoples of Manuguru and Pinapaka mandals.</p>		
26.	<p>Smt. Palvancha Durga, ZPTC member- Manuguru expressed thanks to the Hon'ble CM for sanctioning this project to their mandal and Khammam Dist. The compensation package was given to the affected and still some of people have not received the package. The farmers have given their lands with good intension and they expected for jobs to their children. She requested to give written assurance on jobs and a cheque of Rs. 50,000/-. She requested to give compensation to affected people and provide jobs to all affected people even casual labour jobs.</p>	She welcomed the project	
27.	<p>Dr. Azmeera Seetaram Naik, Hon'ble Member of Parliament, Mahabubabad Constituency expressed the following:</p> <p>➤ He appreciated efforts made by the CMD of TSGENCO & Transco and his staff for giving power to the farmers and public.</p> <p>➤ The EE, Pollution Control Board will record the minutes and video graph the</p>	He welcomed the project and directed the District Administration to finalize the land compensation issues	

S. No	Points raised by Public representative/public	Response/Commitment by project proponent	Action Plan to comply with the commitments
	<p>entire proceedings of the public hearing and the same will be sent to Central Government.</p> <ul style="list-style-type: none"> ➤ The Hon'ble MLA and Ex. MLAs are expressed their views for supporting the project unanimously irrespective of political party affiliation. ➤ The Central Government approves the projects when they incorporate all mitigation measures for environmental protection. ➤ At present the issue is not pertaining to environment and establishment of this project in this area as they requested the Hon'ble CM to sanction this project in this area. ➤ This area falls under 5th schedule and no autonomous status and custody with the Hon'ble President of the India and Hon'ble State Governor. ➤ Already discussed with the CMD and District Collector to form the committee in first week of April to address the problems. ➤ Even though this area falls under 1/70 Act, there is a necessity to give compensation to the non tribals who are irrigating since long period as these 		

S. No	Points raised by Public representative/public	Response/Commitment by project proponent	Action Plan to comply with the commitments
	<p>non tribals have faith on the Government to help them. Hence, the Hon'ble CM also has intention to help all the people including non tribals. Hence, the Government has allotted Rs.50,51,54,153/- to give compensation for Government & Assigned lands.</p> <ul style="list-style-type: none"> ➤ He requested the industry to appoint Public Relation Officer and resolve the issues and also clarify apprehensions through media. ➤ Already there is a committee consisting of myself, Hon'ble MLA, three Sarpanches, the District Collector and Joint Collector and the committee will give clarity on the lands and ascertain the actual owner as we have an amount of Rs.9 Crores which will be distributed towards compensation within 15 days. He requested the District Collector to take subsequent action. ➤ He reported that there is rule to provide atleast 80% jobs to the local people and not to bring any employees from other states. He informed that he will monitor the project for every 2 to 3 months and support in completion of the project. 		<p>The Chairman & Managing Director/TSGENCO assured to provide employment to all 346 applicants under land losers quota and letter given to District Collector, vide Ir. No-Director/ HR/ CE/ C/ T/SE/TD-I/EE/C-I/F. Bhadradi/ D.No. 05/</p>

S. No	Points raised by Public representative/public	Response/Commitment by project proponent	Action Plan to comply with the commitments
	<ul style="list-style-type: none"> ➤ The Government already giving ITI training to the 150 students so as to get the jobs in the proposed project. The technician jobs are for ITI qualified person only and not to higher qualified persons. ➤ The committee will take a policy decision on providing jobs. Having apprehensions regarding jobs among the affected families is not wrong as they already experienced with the Singareni projects. ➤ When the promises are fulfilled then there will not be any issues from the locals. ➤ He requested to distribute all pending cheques to the land losers. ➤ He reported that no one stop the issue of your cheques. ➤ He reported that 346 jobs will be finalized through policy decision in the committee and he requested the management to give 346 jobs at the start of the plant and also give any other jobs including out sourced / casual labour jobs to this area people only and there is no right to others to have job in this area. ➤ The land issues will be addressed by the committee consisting of the Joint 		<p>2016 dated 02.04.2016</p> <p>The District Collector, Khammam has issued instructions to the Principal, Govt. ITI Manuguru to admit the unemployed youth those who are not having ITI qualification from project affected families to give ITI training course in different trades for acquiring them ITI qualification so as to have eligibility at the time of appointment in Bhadadri Thermal Power Station.</p>

S. No	Points raised by Public representative/public	Response/Commitment by project proponent	Action Plan to comply with the commitments
	<p>Collector & the RDO.</p> <ul style="list-style-type: none"> ➤ This project should be completed by 31.03.2017 as the Government has plan to supply power to the farmers for 9 hours and also proposing to take up the water grid scheme in 11 constituencies and hence requested to support this project. He appreciated the decision to support the project by the public. ➤ He aggrieved against filing of the cases on the proposed project as this project already approved under provisions of PESA Act. ➤ He requested the industry to provide hospital under CSR funds as sought by MPP, Pinapaka similarly to your Bhoopalapalli hospital. ➤ He requested to observe the plant in Ramagundam which is operating with sub critical technology and there is no problem at all. If necessary all of us will have visit of the Ramagundam plant so as to clarify the doubts. 		<p>PESA Grama sabhas held at various villages under Manuguru & Pinapaka mandals on 03.12.2014, 19.12.2014, 24.12.2014, 27.12.2014 and 29.12.2014 unanimously resolved to handover the lands for construction of above thermal power plant.</p>

The District Collector has requested the management to clarify issues raised by the speakers such as compensation and R&R package even though they already clarified. He stated that the Joint Collector will explain about the implementation of R&R package

Sri C. Radhakrishna, Director/Projects-TSGENCO gave a explanation to the issues raised by the speakers as follows:

- He explained that they have to make application to the MoEF for the proposed project and the environmental expert appraisal committee will review the application then they will accord approval for Terms of Reference (ToR). As per ToR, the project authority has to prepare draft Environmental Impact Assessment (EIA) studies in the radius of 10 kms. of the project. We have to appoint consultant to conduct this EIA study. Subsequently we have to conduct public hearing and approach the MoEF to obtain Environmental Clearance.
- Regarding effect due to ash emissions, there is a latest technology to control ash emissions as proposed by the environmental department and equipment supplier. Ash will be generated due to burning of coal and ash is two types one is bottom ash and another one is fly ash. The bottom ash which is at 1000 0C to 1200 0C and same will be crushed and sent with water to the ash pond. The ash water will be re-circulated through Hydro bins. The separated ash can be utilized for road works and embankment. The fly ash will be collected through the ESPs which is equipped with 8 or 12 fields depending on the plant capacity. The ash is collected based on electro static phenomena with hammer mechanism. The ash is collected in the silos through vacuum system and same will be disposed to cement units and brick units. Hence there will be 100 % fly ash utilization. Hence he requested not to have apprehensions as he has several years of experience in power plants and already worked in KTPS /RTPP plants.
- He requested to support the project.
- In response to the question raised by a participant, he stated that about 2500-3500 tonnes of ash will be generated and the same will be collected in silos. Each silo capacity is 1500 to 2000 tonnes. The ash is disposed to outside through tankers. The ash will be disposed to cement plants located in neighbouring Nalgonda district.
- The participant has questioned that how much gaseous emissions are generated.
- The representative of CPI(ML) New Democracy party sought to clarification on certain issues and project authority informed that they submitted a detailed report to the MoEF.

The District Collector has requested the CMD to give some answer on this.

Sri D. Prabhakar Rao, Chairman and Managing Director- TSGENCO stated that all are wholeheartedly welcomed the propose project and thanked the all on behalf of TSGENCO and the Government. The following issues raised by the speakers:

- Adopt of latest technology for the prevention of pollution.
- Revenue officials are unable to distribute the compensation.
- To take the 346 jobs on the date of start of the plant operation for which they sought agreement.
- To extend technical training support to the ITI people.
- To give suitable employment to the children of the affected families base on their qualification.
- To provide work to the local coolies.
- To adopt the surrounding villages for integral development.
- To provide Corpus fund as per the rules of the Govt. of India as this project fall under the tribal area.
- Apprehension of damage to the agricultural land due to ash.
- To give opportunity to Non locals with having land, Pasupu-Kunkuma, and already having employment.
- Why the project started without prior permission.
- Yester day, the issues already clarified before press meeting.
- A total of 346 jobs to the unemployed youth from the project affected families will be provided in the proposed power plant for which they given consent. These jobs will be provided on the day of commissioning of the plant as they proposed to commission two units at a time and the same are recorded in the minutes. There is no possibility to give job assurance letters now as per the request of the affected

people as these minutes has to submit to the MOEF and take necessary permissions. He assured the 346 jobs will be given at any cost.

- Regarding CSR activities, they proposed to take CSR activities insurrounding villages for construction of roads, drains ,supply of safe drinking water , conducting of medical camps development of school builings etc; within the radius of 10 Kms as per the proposals received from District Collector,Khammam. They proposed to allot not only Rs.29 Crores and subsequently, earmarked the 2% of the profits to carry CSR activities on continuous basis and assured the same.

The Joint Collector & Addl. District Magistrate stated that some seven categories of issues emerged in respect of land acquisition. Those are R & R package, local vs non-local, Pasupu-Kunkuma, family member enjoyment, employee & pensioner, small extents, job to cash and cash to job and there are 6 type of applications are with them and same will be addressed by constituting the special teams comprising of PO & RDO within a fortnight. It will be placed before the District Level Committee for review.

The District Collector,Khammam & the Chairman of the Public hearing panel has concluded the hearing with a positive note as all the public who attended the public hearing have welcomed the project.

**Replies to the points mentioned in the representations received w.r.to
Environmental Public Hearing held on 17.03.2016 by TSPCB –
Clarifications/Action Plan to fulfill the demands.**

S. No	Name of the Agency	Points mentioned in the representation	Clarification/Action Plan
1.	Sri.Datla Venkata Subba Raju, Sambaigudem Village, Manuguru Mandal, KhammamDist. Representation received Dated 08.03.2016.	Expressed the objections for the Project as they are not willing to give lands for the proposed project and requested to return their lands.	The lands for the proposed project are alienated/acquired by the District Collector, Khammam and handed over to TSGENCO.
2.	Sri.D.V.Narsimha Raju, & Sri.D.Ramakrishna Raju Sambaigudem Village, Manuguru Mandal, KhammamDist. representation received Dated 08.03.2016.	Expressed the objections for the Project as they are not willing to give lands for the proposed project and requested to return their lands.	An amount of Rs.59.5 crores was deposited with the District Collector, Khammam towards land compensation, exgratia and R&R package. The District Collector has informed that 90% of the amount already disbursed to the original beneficiaries and balance compensation will be paid after finalizing the genuine land losers. Any land related issues are to be dealt with the District Collector Khammam.
3	Sri.Datla Venkata Subba Raju, Manuguru Mandal, KhammamDist.		
4	Sri.D.V.Narsimha Raju, & Sri.D.Ramakrishna Raju Sambaigudem Village, Manuguru Mandal, KhammamDist.		
5.	Sri.D.Vijay Kumar Raju, Sri.D.Seetha Rama Raju, Sri.D.Surya Laxmana Kumar Raju,& Smt. P.Satya Kalavathi, Manuguru Mandal, Khammam Dist. representation received Dated 10.03.2016.	Expressed the objections for the Project as they are not willing to give lands for the proposed project and requested to return their lands.	

6.	Sri H.Madhu Babu, Rural Environment Education and Health Awareness Society (REEHAS), Manuguru, Khammam Dist. (received through E-mail Dated 15.03.2016)	He given suggestions to the project proponent and also expressed the benefits.	Suggestions made by the said representative will be taken into consideration.
7.	Sri. Prasad Khale,Excutive Trust, Conservation Action Trust,Mumbai-400086 (received through E-mail Dated 16.03.2016)		Replies by PP are enclosed in Annexure to the PH Action plan
8.	Sri Ashok Kumar, Secretary, CPI(ML),New Democracy,Manuguru SDLC, Aswapuram(V&M), Khammam Dist.		
9.	Dr.K.Venkat Reddy. Scientist (Retd.) H.No.12-13-418/1, Tarnaka, Hyderabad-500017.		
10.	Sri. Prasad Khale, Excutive Trust, Conservation Action Trust, Mumbai-400086		
11.	Sri.V.S.Krishna, General Secretary, Human Rights Forum		
12.	Sri. Prasad Khale, Excutive Trust, Conservation Action Trust, Mumbai-400086		
13.	Sri Ch. Ravi Kumar, Advocate Hyderabad		
14.	Dr. K. Venkat Reddy Scientist (Retd), H.No. 12-13-418/1 Tarnaka, Hyderabad-500017		

REPLIES TO QUERIES RAISED BY
CH RAVI KUMAR, ADVOCATE

Sr. No	Raised Questions/ Suggestions/ Issues etc.	Reply/ Commitment made by Project Proponent
1	The EAC in February, 2015 has declined to give you Terms of Reference. However, you have gone ahead and done the baseline studies for the period of March, 2015 to May, 2015 when you don't even have the Terms of Reference for the project. Why has it been so done?	<p>The Expert Appraisal Committee meeting was held in the month of Feb 2015 to discuss the project proposal for 4 x270 MW Bhadadri Thermal Power station at Manuguru, Khammam Dist for grant of TOR and EAC has deferred the proposal duly seeking certain information on the following points.</p> <ul style="list-style-type: none"> i. Minimum two alternate potential sites on a topo sheet ii. Optimize the land requirement as per CEA norms. iii. Revise the plant layout by shifting the locations of ash pond and town ship. <p>However, in order to capture one full season (pre monsoon) data and to avoid the delay due to the upcoming monsoon season the baseline monitoring was conducted during pre-monsoon season 2015 as per standard ToR of MoEF&CC.</p>
2	What are the Terms of Reference based on which baseline studies of the EIA were conducted for the period between March, 2015 to May, 2015?	Baseline studies were conducted as per the standard ToR of MoEF&CC.
3	Under EIA Notification, 2006, it is mandatory to get prepare the draft EIA report strictly in accordance with the Terms of Reference. Why have you not complied with the Terms of Reference by undertaking baseline EIA studies much before the Terms of Reference are granted for the project?	As explained above, the base line studies were conducted from March 2015 to May 2015, in order to capture one full non-monsoon season (90 days) baseline data before the onset of monsoon to save the time.
4	It is mandatory to put the draft EIA report before 30 days of Public Hearing in web portal of TSPCB. However, it has not been uploaded either on the PCB website or TSGENCO's website. What are the reasons for not uploading the draft EIA report on both the web portals?	The 16 sets of draft EIA report in hard copies and soft copies were submitted to the Member Secretary, TSPCB, Hyderabad and Environmental Engineer, Regional Office, TSPCB, Kothagudem. Vide Lr.No: CE/C/Th/SE/TCD-I/EE/C/TCD-I/F.BTPS/D.No.291/15-16, Dt. 03. 02.2016 for conducting
5	Isn't it that you have not provided enough prior information to common public by way of not uploading the draft EIA report on the above web portals?	public hearing duly following all procedures in vogue.The EE, PCB has issued a paper notification in Namaste Telangana telugu daily dated 13.02.2016 and Hindu English daily dated 13.02.2016 informing to all about the public hearing to be conducted on 17.03.2016 at plant site. In the above paper notification it is clearly mentioned the places of availability of executive summary and draft EIA/EMP of the proposed project

		including soft copy for interested parties to collect them. Also in the paper notification a notice is given stating that, the executive summary and the draft EIA/EMP reports are displayed at Board's website: http://tspcb.cgg.gov.in .
6	You do not have the Confirmed Fuel linkage as per the Office Memorandum of MoEF. In the absence of it, how can you give the Analysis of Coal in Table 2.5 of Draft EIA report?	<p>The boilers are designed for utilization of 50% Imported Coal+50% Domestic Coal (or) 100% Imported Coal. The typical quality parameters of widely available 'F' grade coal of SCCL and Indonesian origin Imported coal were considered for analysis. However, the domestic coal and imported coal samples were got analyzed by M/s BHEL to confirm the range of proposed quality parameters. Necessary coal linkages are being established.</p> <p>Subsequently M/s SCCL has offered for supply of coal from cost plus mines in the vicinity of the power station as per the guidelines issued by Ministry of Coal, Govt. of India vide letter no 23022/14/2008-CPD Dated 07th Oct'2008. Accordingly an MoU is entered with M/s SCCL for supply of 4.2 MTPA G-9/G-10 grade coal which is having the similar GCV (4550 Kcal/kg) as originally envisaged.</p>
7	Not only the Analysis of Fuel was given, in fact the Coal was even tested for Radioactivity at BARC. Where your coal linkage is and which coal have you sent to BARC for testing of Radioactivity?	Initially it was envisaged for utilization of imported coal. The radioactive analysis of Imported coal has been conducted at BARC by obtaining the coal sample of similar coal being utilized at NTPC Simhadri. For indigenous coal of SCCL, the analysis has been conducted through M/s VIMTA LABS LTD, Hyderabad. The copies of Test report are enclosed in EIA report.
8	How can even the rough Analysis of Fuel you have given be trusted in the absence of laboratorial reports providing analysis of the same?	The analysis of coal has been provided based on the typical quality parameters of SCCL coal & Imported coal.
9	What is route from which Imported Coal will reach the present project site? Which port does the Imported Coal reach from Australia/Indonesia? From the Port to Project Site, what is route from which the Coal will reach project site?	<p>Initially, Imported coal is proposed to be transported from the nearest ports viz. Machlipatnam/Kakinada/Krishnapatnam Ports. The proposed ports are connected to the existing railway network upto Manuguru railway station via Vijayawada-Dornakal-Manuguru section. The project site will be connected through a new railway line from Manuguru railway station.</p> <p>However M/s SCCL has now offered for supply of equivalent quality of coal from their nearby mines and it will be transported through the existing Railway network.</p>
10	How economical is the transportation of Imported Coal? Give us details.	The transportation charges from the proposed ports to the project site will be as per the actual freight chargeable by the Indian railways.

		However since M/s SCCL has offered indigenous coal from nearest mines, transportation is cheaper when compared to imported coal transportation.
11	Why sub-critical technology is being used for the presented project, when it is mandatory as per Ministry of Power Norms to use Super Critical technology?	As per the letter no.8/3/2002-Th-II (Vol.5) of Undersecretary to Govt. of India, the capacity addition in 13 th plan will be through super critical units only, whereas, the above power project is planned in the 12 th plan and proposed to complete by 31.03.2017.
12	What will be the additional Quantum of Pollution Load as a result of sub-critical technology when compared to Super Critical technology? Give us factual figures of the same	Coal consumption in super critical technology is 4% less than sub critical technology. The pollution control systems will be designed to maintain the environmental parameters as prescribed by MoEF&CC/TSPCB whether it is for sub critical/ super critical technology
13	What are going to be the different impacts of Water withdrawal from the Godavari River?	There won't be any impact on water withdrawal from River Godavari. Telangana state Govt. has allocated for drawl of 1.40 TMC of water for the above project after taking all factors in to consideration.
14	Why have two Streams (Nallahs) have already been filled up without any prior approval from the State Government or from the MoEF & CC ?	It is not true.
15	Will the Zero Liquid Discharge method be adopted even during the Monsoon season also? Is it feasible?	During the monsoon period the excess plant effluent water after treating in the effluent treatment plant will be discharged out duly maintaining the norms fixed by the MoEF&CC,GoI and TSPCB.
16	Why only first 7 pages of Hydro-geological report of National Institute of Hydrology, Kakinada have been provided and not the complete report?	Due to time constraint, only preliminary report is included in the draft EIA report. The detailed study is attached as Annexure in the final EIA report.
17	Your Main Plant is on one side of the State Highway Road and the Ash Pond on the other side of the Road. Isn't it such a peculiar design of the project where you components of the project on either side of a State Highway passing by?	It is neither a state Highway nor a national highway.
18	What is the method by Ash from Main plant is sent to the Ash Pond? What are going to be its impacts?	The details are provided in the EIA report
19	What is the total amount of fly ash that would be generated by the project per annum.	The details are provided in the EIA report
20	What are the fly ash buying firms/industries with which sale agreements were made so far	About 9 cement industries have shown their willingness to lift fly ash and several brick manufacturing units existing in the nearby areas are the potential fly ash consumers. The letters given by

		the cement industries are enclosed in EIA report.
21	How far the places/by location to which the fly ash from the project site will be transported	Within 200 km from the proposed project site.
22	What is the total extent of single-crop Agricultural land acquired for the project?	The total plant area is consisting of 87% of Government land and 13% of private land and present land use of the project area is of single crop agriculture land of 80% and balance 20% is covered with roads and drainage system.
23	What is the total extent of double-crop Agricultural land acquired for the project?	
24	What were different types of Crops grown in the Agricultural lands acquired for the project?	Paddy
25	What is the type of Soil in the Agricultural lands acquired for the project?	Black cotton soil, sandy silty soils
26	What is the number of people whose agricultural lands have been acquired for the project?	An extent of 148.11 acres was acquired from about 72 pattadars.
27	What is the number of tenant farmers who are dependent on the agricultural lands acquired for the project?	
28	What is the "Socio-Economic" impact because of the acquisition of Agricultural lands?	The details are provided in the EIA report
29	What is the total amount of CO ₂ , NO _x , SO ₂ , PM, Pb, Hg, Cr, etc. which will be released into the atmosphere per annum by the project?	The details are provided in the EIA report
30	What are the different types of ailments and diseases that people in the study area will suffer from the exposure of this pollution from the project, both in the short run as well as in the long run?	The details are provided in the EIA report
31	Why has the company not done any Health Impacts Assessment study of the project?	Not true, Report is enclosed in the EIA report.
32	Why is TSGENCO interested in producing Electricity through Coal-fired Power Plants which is conventional and non-renewable and ever polluting?	Thermal power plants are base load power plants and are most reliable and stable sources of power generation in the current scenario.

33	Why not explore the possibility of generating power by renewable sources such as Solar, Wind, etc.? For example, the Ministry of Statistics in its recent Energy Statistics report states that India's potential for generating Renewable Energy is as staggering as about 1,47,000 MW. This figure does not include the potential of Solar Energy. If the potential of Solar Energy also gets included, the net renewable energy potential will be much much higher. The report also highlights that 70% of the Renewable Energy can be generated from the Wind Energy. Telangana is one of the Potential States of both Wind and Solar Power Generation.	The possibility of generating power by renewable sources is also being explored. However, considering the potential industrial/agricultural/domestic growth of the newly formed Telangana state for reliable and constant power supply is essential, which is only possible through coal based thermal power plants in the current scenario.
34	If the potential of renewable energy is such higher, what is the fundamental need of going for conventional forms of energy as yet?	
35	You tout in the EIA report that Telangana State's Power requirement is about 3000MW. This is pittance in terms of potential of the renewable energy. Therefore, what prevents from you producing electricity by renewable power?	
36	Why was illegal construction of project undertaken in the absence of prior mandatory Environmental Clearance and Consent to Establish certificates?	To meet the immediate deficit of 2700 MW in the newly formed Telangana state and in the interest of public in particular and state in general some of the works were taken up after completion of EIA studies and after preparation EIA/EMP report to save the project construction time.
37	What is the total money spent so far on the illegal construction?	
38	Who are the concerned officials of TSGENCO responsible for illegal construction of Project?	
39	Isn't the undertaking of illegal construction work criminal offence under Air Act, Water Act and Environmental Protection Act?	
40	How can TSGENCO claim itself as a good corporate citizen and committed to Environmental Protection when the laws are so blatantly violated by itself?	
41	Is this the way the responsible "Public" corporate should conduct itself?	

TOR No	TOR Condition	Non-compliance	Response by PP
vi	The Project Proponent needs to identify minimum three potential sites based on environmental, ecological and environmental considerations, and choose one appropriate site having minimum impacts on ecology and environment. A detailed comparison of the sites in this regard shall be submitted	It has not been complied. Without providing any details of the alternative sites, the proponent has commenced the illegal project work at the site.	TSGENCO has identified three alternative sites for construction of power plant and presented to EAC committee during February 2105. After detailed examination of three sites, finally ToR granted for Manuguru site.
xii	Present land use (including land class/kism) as per the revenue records and State Govt. records of the proposed site shall be furnished. Information on land to be acquired including coal transportation system, laying of pipeline, ROW, transmission lines, etc. shall be specifically submitted. Status of land acquisition and litigation, if any, should be provided.	Site-specific land use has not been provided with reference to revenue records. No details of coal transportation system and transmission lines have been provided.	Answered in earlier queries M/s RITES is conducting detailed studies for finalization of rail route to the proposed BTPS project. TSTransco has conducted detailed study for power evacuation. It is proposed to provide four (4) 400 KV line bays for power evacuation from power plant.
xvii	A detailed study on the present land use pattern of the study area shall be carried out including identification of common property resources (such as grazing and community land, water resrouces, etc.) available and Action plan for its protection and management shall be formulated. If the acquisition of grazing land is involved, it shall be ensured that an equal area of grazing land be acquired and developed and detailed plan be submitted	No study on the present land usage in the core as well as the buffer zone has been done. Without any such precautionary study, the entire project land has been illegally bulldozed and cleared. No common property resources in the project site have been identified in the project site. No Grazing Land has also been identified	The total plant area is 936.92 acres, consisting of 87% of Government land and 13% of private land and project area consists of 80% agriculture single crop land and balance 20% is covered with roads and drainage system etc. Proposed site does not consists any forest area, grazing land, community land, water resources etc
xx	Details of fly ash utilization plan as per the latest fly ash Utilization Notification of GOI along with firm agreements/MoU with contracting parties including other usages etc. shall be submitted. The plan shall also include disposal	No details of Fly Ash utilization have been provided with firm agreements/MoUs. No details of disposal method of	Discussed in detail in the EIA report.

	method/mechanism of bottom ash.	bottom ash have been provided.	
xxii	Water body/Nallah (if any) passing across the site should not be disturbed as far as possible. In case any Nallah/drain is proposed to be diverted, it shall be ensured that the diversion shall not disturb the natural drainage pattern of the area. Details of proposed diversion shall be furnished duly approved by the concerned department of the State.	Two Streams passing through the project site have already been disturbed and filled up with no prior approval from the State government as well as Ministry of Environment, Forests and Climate Change.	Discussed in detail in the EIA report.
xxiii	It shall be ensured that a minimum of 500 m distance of plant boundary is kept from the HFL of river system/streams, etc. and the boundary of the site should also be located 500 m away from the railway track and National Highways	<p>The Ash Pond of the project is located in close proximity i.e. below the range of HFL + 500 meters of a Tank.</p> <p>Two Streams which are passing through project have already been disturbed and filled up. No distance of HFL + 500 meters has been kept from the streams.</p> <p>Project is located right across the State Highway connecting Manuguru Town and Etutunagaram Town. Main plant is on one of the Highway and Ash Pond is on the other. Hence, it is a violation of citing criteria and according TOR condition No. xxiii</p>	<p>The proposed project site is 800 m away from the HFL of the Godavari river.</p> <p>There is no national highway and railway line passing nearer to the project site.</p>
xxiv	Hydro-geological study of the area shall be carried out through an institute/organization of repute to assess the impact on Ground and Surface Water regimes. Specific mitigation measures shall be spelt out and time bound Action Plan for its implementation shall be submitted.	<p>Hydro-geological study carried out by National Institute of Hydrology, Kakinada has not been deliberately provided in the EIA report. Only the first 7 pages of the report have been provided.</p> <p>The clear intent of the Proponent is to try and not disclose as much information as possible.</p>	The detailed hydrogeology report has been included in the EIA report.
xxv	Detailed studies on the impacts of the ecology including fisheries of River/Estuary/Sea due to the proposed withdrawal of water/discharge	No studies have been carried out on impacts of Water With drawl from	NIH is conducted detailed studies and studies are in

	treated waste water into River, Sea, etc. shall be carried out and submitted along with the EIA Report. In case of requirement of marine impact assessment study, the location of intake and outfall shall be clearly specified along with depth of water drawl and discharge into open sea.	Water Source i.e. Godavari Rivers. On the point of discharge of effluent water, only a mere statement has been provided saying that the project will adopt Zero Liquid Discharge. However, technical details and its feasibility specific to the project area have not been provided.	progress. Plant is desgined on zero discharge concept except during non monsoon season.
xxxii	Socio-Economic study of the study area comprising of 10 Km from the plant site shall be carried out through a reputed institute/agency which shall consist of detail assessment of the impact on livelihood of the local communities	No Socio-Economic Impact Assessment study has been carried out. Only CSR Report identifying CSR intervention has been provided.	The Socio-economic study in 10 km radius was carried out by M/s Centre for Management & Social Research. The details of local employable youth for the proposed project were covered in socio economic study. A budget of Rs. 20.04 Crores has been allocated for taking up the CSR activities.
xxxiv	If the area has tribal population, it shall be ensured that the rights of the tribals are well protected. The project proponent shall accordingly identify tribal issues under various provisions of the law of the land.	No issues and no rights of the Tribals have been identified and detailed in the EIA report. No specific measures protecting the rights of the tribals have also been provided in the EIA report.	Detailed R&R study has been by conducted by the district administration and the tribal development plan is enclosed in the EIA report
xliv	Radio activity and heavy metal contents of the coal to be sourced shall be examined and submitted along with laboratory reports	How the Coal could be tested of Radioactivity when there is no confirmed fuel linkage. No documents supporting the confirmed fuel linkage have been submitted by the project proponent.	The coal sample for the analysis has been obtained from the existing KTPS project. It is proposed to source the same coal of similar characteristics for BTPS.
xlvi	Quantity of fuel required, its source and characteristics and documentary evidence to substantiate confirmed fuel linkage shall be furnished. The Ministry's Notification dated 02.01.2014 regarding ash content in coal shall be complied. For the expansion projects, the	The Source from which the Coal shall be obtained has not been disclosed. No documentary evidence with confirmed fuel linkage and fuel characteristics has also been	An MoU is entered with M/s SCCL for supply of G-9/G-10 grade which is having the similar GCV(4550 Kcal/kg)as originally envisaged.

	compliance of the existing units to the said Notification shall also be submitted.	submitted.	Coal supply agreement with SCCL is enclosed in Annexure-IX .
xlvi	Details of transportation of fuel from the source (including port handling) to the proposed plant and its impact on AAQ shall be suitably assessed and submitted. If transportation entails a long distance, it shall be ensured that rail transportation to the site shall be first assessed. Wagon loading at source shall preferably be through silo/conveyor belt.	No details of Port from which the Imported Coal shall be obtained, its transportation to the site, etc. details have been furnished. No according impact assessment has been carried out.	The coal will be transported from coalfields by Indian Railway network system. Imported coal will be received either at Kakinada/ Krishnapatnam/Gangavaram port and will be transported to site by Indian Railways. The rakes will be unloaded at Wagon Tippler & Track Hopper. RITES is conducting detailed studies for finalization of rail route to the proposed BTPS project.
xlvi	For proposals based on imported coal, inland transportation and port handling and rail movement shall be examined and details furnished. The approval of the port and Rail Authorities shall be submitted	No such details have been furnished, including the approvals from port and rail authorities.	M/s SCCL has agreed to supply required coal from the nearby mines and the coal will be transported by Indian railways network system.

PUBLIC HEARING ISSUES AND ACTION PLAN
RAISED BY PRASAD KHALE. CONSERVATION ACTION TRUST

Sr. No	Raised Questions/ Suggestions/ issues etc.	Reply/ commitment made by Project Proponent
1.	Why site monitoring was carried out only for 3 months representing pre-monsoon season and not for all four seasons viz. Pre-monsoon, Monsoon, Post-monsoon and Winter Season.	As per the ToR Point no. 40. The EAC has recommended in ToR to carry out the Environmental base line monitoring for one complete season (non-monsoon season). Monitoring for the pre-monsoon (March-May) 2015 was conducted. Further, baseline monitoring was also conducted during post monsoon 2015 and Winter season 2015-16.
2.	There is no data obtained from Indian Meteorological Department and comparison of the data obtained by onsite monitoring and data obtained from IMD.	IMD data of Khammam for the period of 1991-2000 year is incorporated in the section-3.5 of chapter-3 in the EIA report. Further, comparison of the Meteorological data of IMD Khammam and site specific data is given in the section-3.5.3.2 of chapter-3 in the EIA report.
3.	As the proposed thermal power plant unit is based on coal as energy source, please provide the details about the expected deterioration of ambient air quality due to emissions from the plant and its related activities.	Impact on ambient air quality due to the proposed power project is given in section-4.3.3.2 of chapter-4 in the EIA report.
4.	Also provide the details of expected plume behaviour as per the wind speed and wind direction data collected from IMD as well as onsite monitoring using 3 D models validated with ground monitoring.	As per the IMD published data the mixing heights in the project vicinity during pre-monsoon ranges upto 2700 mts. The surface temperatures in the proposed plant location were ranged from 20.7 – 45.80 C. which are favourable for dispersion of pollutants. Further, 2 stacks of Biflue of height 275 mt are proposed for wider dispersion.
5.	Surface water quality monitoring mentions only about the existing quality of water. Please provide the details on the expected deterioration of existing surface water quality due to proposed Thermal Power Plant Unit.	Details on impact on water resources and water quality is given in section-4.3.6. of Chapter-4.
6.	Similarly provide details about the expected deterioration of existing ground water quality parameters due to the proposed plant	No ground water will be sourced for plant operation purpose. Further, HDPE liners will be provided for ash pond. Hence, no ground water contamination is envisaged. It is proposed to monitor ground water quality at six locations by construction of piezometer wells around the ash pond periodically.

Sr. No	Raised Questions/ Suggestions/ issues etc.	Reply/ commitment made by Project Proponent
7.	Executive summary talks about only Temperature and Humidity under Meteorological studies conducted by the Project Proponent. Please provide the data for analysis of other meteorological parameters like wind speed, wind direction, atmospheric pressure, rainfall and cloud cover etc. Please provide the data for the period of last 10 years	IMD data of Khammam for the period of 1991-2000 year is incorporated in the section-3.5 of chapter-3 in the EIA report.
8.	What will be the impact on the existing soil quality due to deposition of pollutants from proposed coal thermal power plant?	The impact on soil quality due to the proposed power plant is given in section-4.3.2 of chapter-4 in the EIA report.
9.	Please provide the complete list of flora and fauna with its Schedule Category as per the Indian Wildlife (Protection) Act. Also provide the IUCN status of the species whether it is endemic, endangered or vulnerable etc.	<p>The complete list of flora and fauna with its schedule category is presented in section-3.0 and table-3.9.3 and table-3.9.4 of chapter-3.</p> <p>Detailed enumeration of fauna and floristic studies was undertaken and there is no presence of Schedule I mammals recorded in the 10 km radius of the study area. There are no Sch-I flora or fauna in the project area. Mammalian fauna found in the study area are confined in the following schedules of II, III and IV of the Indian Wildlife (Protection) Act, 1972 in the study area.</p>
10.	What will be the impact of this project on existing Flora and Fauna?	Details on the impact on the ecology due to the proposed power plant is given in section-4.3.11 of chapter-4 in the EIA report.
11.	What steps have been taken to minimize the entrapment of small aquatic flora and fauna? Have state of the art low aperture intake screens installed, along with fishnets around the intake? Please provide the details of the system proposed to be installed in order to minimize entrapment.	The water system of the project will be provided with infiltration galleries at intake structure
12.	What is the distance between proposed project boundary to that of boundary of Kinnersani Wildlife Sanctuary, Papikonda Wildlife Sanctuary, Pakhal Wildlife Sanctuary and Eturnagaram Wildlife Sanctuary?	<p>Kinnersani WLS is about 10.8 Km in SW direction.</p> <p>Pakhal WLS is located at a distance of 61 Km in West direction</p> <p>Papikonda WLS is situated at distance of 108 km in SE direction</p> <p>Eturnagaram WLS at a distance of 60 in NW direction.</p> <p>(Note: Distances mentioned above are aerial distances from boundary to boundary)</p>

Sr. No	Raised Questions/ Suggestions/ issues etc.	Reply/ commitment made by Project Proponent
13.	Are there any active wildlife corridors passing through the proposed project area? Have any studies being carried out for the same? Kindly provide mitigation measures for the same	There are no Wildlife Corridors passing through the study area.
14.	Please specify details of the mines, the means of transport, the composition, the radioactivity, the mercury content, the Sulphur content of the coal for the proposed thermal power plant.	Domestic coal is proposed to be sourced from the SCCL mines through railway network. Sulphur content in indigenous coal is <0.5% and imported coal is <0.9 %
15.	What will be losses of coal during transportation?	No losses anticipated during coal transportation.
16.	What measures will be taken to prevent coal dust?	
17.	What will be the environmental impact due to coal transportation inland? Kindly furnish with details of same	
18.	How will the coal be transported to power plant? Where would it be stored? Kindly provide co-ordinates and details of the coal storage yard.	Coal will be stored in coal storage yard within the plant premises.
19.	Please mention the source of imported and / or the indigenous coal	Originally the requirement of coal for the project is envisaged as 50% domestic and 50 % imported (GCV 4550 Kcal/kg or 100 % imported coal (5700 Kcal/kg). Subsequently M/s SCCL has offered for supply of coal on cost plus mines in the vicinity of the power station as per the guide lines issued by Ministry of Coal ,Govt. of India vide letter no 23022/14/2008-CPD Dated 07th Oct'2008.Accordingly an MoU is entered with M/s SCCL for supply of G-9/G-10 grade which is having the similar GCV(4550 Kcal/kg)as originally envisaged.
20.	Please furnish with the details of radioactivity and heavy metal content analysis of the coal proposed to be used. Report for the same should be submitted	Details of the radioactivity analysis of coal is enclosed in Annexure-IX of the EIA report
21.	What will be the dispersion of fly ash due to wind, and in what direction, and at what speed? What is the amount of fly ash expected to be dispersed due to wind? Please provide details of the same.	Flyash will be transported to the ash pond in High Concentration Slurry Disposal (HCS D) method and adequate water level will be maintained to reduce the dispersion of particulates from the ash pond.
22.	What are the co-ordinates of the proposed Effluent Treatment Plant? What is the area required for the same?	ETP & STP are marked in the layout plan and given in the EIA report
23.	What are the co-ordinates of the proposed Sewage Treatment Plant? What is the area required for the same?	

Sr. No	Raised Questions/ Suggestions/ issues etc.	Reply/ commitment made by Project Proponent
24.	Please provide the mercury content of the coal to be used	As per the heavy metal analysis of the coal Sample. Mercury content in coal is <0.1 mg/kg (BDL)
25.	What is the expected increase in traffic in the area? What will be the approximate increase in SOx and NOx emissions as well as SPM and noise pollution due to increased traffic because of the plant? Please furnish with the mitigation measures of same, if any	Details are given in EIA report.
26.	Which are the industries where the fly ash will be supplied? Please provide full details. Please also mention the distance of such industries from the proposed project area and mode of transportation for fly ash	About 9 cement industries have shown their willingness to lift fly ash and several brick manufacturing units existing in the nearby areas are the potential fly ash consumers. Flyash will be transported in closed trucks
27.	Please furnish full details of the field visits conducted to undertake the ecological study including copies of field notes. Please mention full details of the team members, their qualifications, and the number of man-days spent on the ecological data collection.	The field visit were conducted during the EIA study period (March-May 2015)
28.	What are the proposed facilities for the parking, washing, repairs and maintenance of trucks and other heavy equipment?	The proposed project will provide facilities such as parking, washing, repairs and maintenance of trucks and other heavy equipment
29.	FGD should be mandatory	Yes. Space provision for FGD unit was made.
30.	Is the EIA report in line with the EIA guidelines as specified by the MoEF & CC?	Yes, The EIA report for the proposed 4X270 MW BTPS plant has prepared as per the EIA Generic structure in the EIA notification and Approved ToR from MoEF&CC.
31.	The EIA report doesn't mention about the impact of coal dust, Fly ash and other emissions on crops and other agricultural produces. Please provide expected impacts of such emissions on agriculture of the area.	Details are provided in the EIA report
32.	What will be the impact of the fly ash on the people living in the vicinity of the project area? What are the health impacts? Kindly furnish with details of same	Detailed Health assessment studies were conducted by TSGENCO team for the proposed BTPS project. The proposed pollution control equipment's and mitigation measures shall reduce the impacts.
33.	Please provide the number of people expected to lose livelihoods or be displaced due to this project. Please provide detailed rehabilitation and resettlement plan for these people.	No homesteads are involved. An extent of 148.11 acres was acquired from about 72 pattadars.
34.	Please furnish copies of compliance reports and monitoring reports.	Not Applicable.

Sr. No	Raised Questions/ Suggestions/ issues etc.	Reply/ commitment made by Project Proponent
35.	How will this proposed project impact the bird life?	There are no notified bird life sanctuary in the study area of 10 km
36.	How will this proposed project impact the livelihoods of local community?	Details are given in EIA report
37.	Please provide details on how much area is going to be reclaimed for various activities for the proposed project	No reclamation of land is involved
38.	Please furnish details of the length of the intake and outfall channel	The Intake length for drawl of water from Godavari river will be about 9 km
39.	Please furnish the details on the aquatic ecology of Godavari River from which the water for the project is going to be withdraw and discharged	Details of aquatic ecology of Godavari river is given in section-3.9 of chapter-3 in the EIA report.
40.	Kindly furnish the list of industries in the study area	Industries and mining area within the study area are Singareni Collieries open cast coal mine (7.0 km, SS) near Manuguru. Details are given in table-1.1 of chapter-1 in the EIA report.
41.	Have cumulative assessment studies for the project being carried out as directed in the TORs? Please furnish details of same	Cumulative impact assessment for ambient air quality is given in Section-4.3.4.3 of chapter-4 in the EIA report.
42.	Please explain the mitigation measures for the noise generated from the plant machineries	Equipment will be designed to conform to noise levels prescribed by regulatory agencies. Provision of green belt and plantation would further help in attenuating noise.
43.	Seismic map of the area is not provided in Disaster Management Plan. Please provide the same	The proposed plant site falls in Seismic Zone-III as per IS 1893 (Part I): 2002 Details of the seismic zone are given in Table-1.1 of chapter-1 in the EIA report.
44.	Please furnish study on the impact on the ecology of the area during the site clearance, construction activities and operation activities of the proposed project	Impact on Ecology due to the proposed project are given in section-4.2.5 and section-4.3.11 of chapter-4 in the EIA report.
45.	Kindly furnish details of all the clearances granted to the proposed project – forest clearance, environment clearance	No forest clearance is required. TSGENCO is in the process of getting EC.
46.	Does the any area of intake & outfall channel for the plant coming under fishing zone?	Intake structures are not located in the fishing zone.

Sr. No	Raised Questions/ Suggestions/ issues etc.	Reply/ commitment made by Project Proponent
47.	Please furnish the details on the type of material being used for the landfill/reclamation	No reclamation of land is proposed. During leveling the plant site adequate filling material is available within the plant site and ash pond site.
48.	What is the life of this proposed project? And what is the lease period of the land given for this project?	About 30 years is the life of the project. The land required for the project is already acquired. No lease of land is involved.
49.	Has the work of the proposed project commenced? Please furnish with the details of same	Preliminary civil works have been taken up after completion of Environmental Impact Assessment (EIA) studies.
50.	After studying layout plan of proposed project, hazardous ash pond is critically closed to fresh water reservoir & surface water of the area. If any mishap will permanently damage the reservoirs. Kindly explain this. Also, furnish mitigation measures for same. Explain the justification of project at this site under such circumstances.	The area adjacent to the Perantala Cheruvu has been excluded as per the EAC recommendations to maintain sufficient distance from ash pond and the same area will be developed with heavy plantations.
51.	What will be the configuration of the thermal power plants? What will be the height of each unit?	4x270 MW will be the configuration of the proposed thermal power plant. Two Bi-flue stacks of each 275 m height will be provided.
52.	What will be configuration of stacks?	Two Bi-flue stacks of each 275 m height will be provided.
53.	What will be losses of coal during transportation?	Explained above
54.	What measures will be taken to prevent coal dust?	
55.	What will be the environmental impact due to coal transportation inland? Kindly furnish with details of same	
56.	Please furnish details on impact of the increase in water temperature on the aquatic life	
57.	Is there provision of FGD installation? What type of FGD units will be installed?	Yes, provision for FGD has been provided.
58.	Please furnish with Cumulative impact assessment of all sources of emissions (including transportation) on the AAQ of the area. Please also furnish with the details of the model used and the input data used for modelling shall also be provided	Cumulative Impact Assessment on Air Quality is given in section-4.3.4.3 of chapter-4 in the EIA report. Details of Model (Aermod Software) and input details are given in section-4.3.4 of chapter-4
59.	Please furnish details of green belt, along with map and area details	Details of green belt development for the proposed BTPS project is given in section-4.8 of chapter-4 in the EIA report
60.	What will be the quantity of fly ash generated from the proposed project?	Repeated.
61.	Please furnish details of proposed fly ash utilization as per	Repeated.

Sr. No	Raised Questions/ Suggestions/ issues etc.	Reply/ commitment made by Project Proponent
	the notification	
62.	Please list the details on the area of green belt around the fly ash dumping pond, width of this green belt, density of plants in this green belt and composition of plants of the green belt.	Details of green belt development for the proposed BTPS project is given in section-4.8 of chapter-4 in the EIA report
63. 64.	Has any carrying capacity study been conducted for the area? Please furnish with the same Considering the ecological importance of the area please justify the feasibility of the project. Please mention the impacts of project on the crops and river. Please also give the mitigation measures. Please furnish with details of compensation for the same to the project affect people.	No, carrying capacity study has not been conducted. Since it is a green field project and there are no major industries nearby. Ecological impacts are presented in EIA report. An amount of Rs. 9,06,47,640/- towards land compensation for patta land to an extent of 148.11 acres and other charges as per the demand note raised by the District Collector, khammam vide RC No. G/2243/14 dated 16.08.2015 was deposited with the Dist. Collector, Khammam on 21.09.2015 for disbursement to the land losers An amount of Rs. 50,51,54,153/- towards exgratia and R&R package to the land losers for both the assignes and non assignes (enchorchers) approved by the govt as per the memo no. 8352/Assn.I(1)/2014-2 dated 7.11.2014 of principal secretary to government Revenue dept. Government of Telangana was deposited with the Dist. Collector, Khammam, on 24.11.2014 for handing over advance possession of land to an extent of Ac. 1031.19 gts.
65.	What will be the capacity of the STP & ETP? How much water will be generated from STP & how much of it will be reused. Kindly furnish with full details	The details are provided in the EIA.
66.	Were any alternate studied for intake or outfall channel? Please mention in details about same.	Preliminary survey conducted, further studies will be taken up.
67.	How much water shall be drawn from the Godavari River & how much will be discharged back?	The water requirement for the proposed thermal power plant of 4 x 270 MW will be about 3291 m ³ /hr shall be sourced from the Godavari river. The intake water structure is proposed on Godavari river, located at a distance of about 9.0 km.
68.	Has the Project proponent carried out detailed Social impact assessment (SIA) study? If yes, please furnish with same.	Detailed R&R study has been by conducted by the district administration and the report is given in Annexure-XVIII of EIA

Sr. No	Raised Questions/ Suggestions/ issues etc.	Reply/ commitment made by Project Proponent
	If no, kindly explain.	report.
69.	How many villagers from villages has given permission for the project? How many are objecting the proposal? Kindly give information by village.	Gram sabha were conducted in the nearby villages and all the villagers are in favour of the proposed BTPS project. Further, the land owners were glad and willfully came forward to part with their lands for the public cause and expressed their comport and satisfaction over the power project in the area. The details are given in EIA report.
70.	What will be the impact of the additional transport of raw materials and the finished products on the road, rail?	Repeat.
71.	Please furnish details of the transportation studies conducted	The traffic studies were conducted during the base line studies and details are presented in the section-3.11 of chapter-3 in the EIA report
72.	What will be the impact of the utility corridor, roads, etc. required for this project?	The existing roads are adequate as per the traffic study findings.
73.	Please furnish No Objection Certificates, Consents, from the State Pollution Control Board for the projects involving discharge of effluents, solid wastes, and sewage waste under Environmental Protection Act 1986	This will be obtained after grant of EC.
74.	How much area of the Eco sensitive zones will be destroyed/disturbed due to the proposed project?	There no notified eco sensitive areas in the project area.
75.	How much percentage of the project cost shall be utilized for environment management? Please explain the execution plan for the same	Details are given in the EIA report.

PUBLIC HEARING ISSUES AND ACTION PLAN
RAISED BY DR. VENKAT REDDY.

Sr. No	Raised Questions/ Suggestions/ issues etc.	Reply/ commitment made by Project Proponent
1.	Most of section 3.2.4 on Geology is lifted verbatim from "Ground Water Brochure", Khammam District, and September 2013 of the Central Ground Water Board. Subsections on Crystalline Formations, Pakhals, Semi-consolidated Formations, Unconsolidated Formations, Depth to Water levels, Pre Monsoon Water levels, Water level Fluctuation, Long term water level trends were all copy pasted in the draft EIA without referring to the source. Text of the subsection 3.2.5.1 is lifted from another source Phadnis, V., Kulkarni, H. and Badarayani, U. Study of Pondhe watershed area, Purandar taluka, Pune district, Maharashtra. ACWADAM Technical Report ACWA/2005/H-1, 2005. Reference (Kulkarni and Deolankar, 1995) that is part of the text copied is retained but details of the reference are not included in the report anywhere. How does the proponent/consultant justify copy pasted parts in the report?	Secondary information on Geology and hydrogeology for the project site and the Khammam district was sourced n from Central Ground Water Authority (CGWA) report. The source of the data is mentioned in both the text and under the table mentioned in the section-3.2 of Chapter-3 in the EIA report.
2.	"The baseline studies are carried out for three months, representing pre-monsoon season (i.e. March 2015 to May 2015) in the various domains of environment." (Page C3-1) ToR for this project was obtained on 23 June 2015. Also as per the site inspection report of the Scientist, Regional Office, MoEFF&CC, Chennai dated 11 January 2011 "During the inspection, it has been observed that the Project Proponent has already commenced and continuing the construction activities/civil works of their proposed Thermal Power Plant without obtaining prior environmental clearance from MoEF&CC and 'Consent for Establishment' from the State PCB." Is it not a clear violation of the Environmental Protection Act, 1986?	The baseline studies were conducted during March – May 2015 as per the standard TOR for thermal power projects.
3.	Entire site was modified taking up civil works. Excavated foundations, constructed sheds, dumps of excavated material, heavy cranes, construction steel lying on the site etc are a visual proof of the violation of the environmental protection act, 1986 and MoEF&CC Notification 2006. What is the guarantee that the proponent indulging in such violations will adhere to all other environmental regulations in future?	Preliminary civil works were taken up after completion of EIA studies and preparation of EIA/EMP report to save project completion time in view of huge power deficit in the newly formed state.
4.	Draft EIA is silent on the climate impacts of BTPS post Paris deal. Several million tonnes of carbon dioxide are emitted each year from this plant. What is the impact of carbon emissions on the environment?	The flue gas exit temperature from the proposed stacks will be in the range of 151 ^o C. This temperature increase will have micro level climatological impacts confined to project surroundings. Further there are no major industries in the vicinity and macro level impacts on climate in long run were not anticipated from the proposed industrial activities.
5.	Draft EIA report has no information on the amount of greenhouse gases released	Greenhouse gases emissions such as CO ₂ , CH ₄ and N ₂ O

	<p>from the proposed 1080 MW project annually? What is the extent of mitigation of these gases by the proposed green belt? What is the proposal to mitigate the balance emissions? Give details.</p>	<p>are expected from the proposed thermal power plant. These gases will be released into the atmosphere through a tall stack of 275-m for wider dispersion. Further, a comprehensive green belt development plan is proposed to mitigate these emissions.</p>								
6.	<p>MoEF&CC announced new emission norms for coal fired power plants through a Gazette Notification dated 7 December 2015. As per that notification all coal fired power plants going on stream after 1 January 2017 have to meet emission norms as follows.</p> <table border="1" data-bbox="465 451 1229 582"> <tr> <td>Particulate Matter</td> <td>30 mg/Nm³</td> </tr> <tr> <td>Sulphur Dioxide (SO₂)</td> <td>100 mg/Nm³</td> </tr> <tr> <td>Oxides of Nitrogen (NO_x)</td> <td>100 mg/Nm³</td> </tr> <tr> <td>Mercury (Hg)</td> <td>0.03 mg/Nm³</td> </tr> </table> <p>But the EIA is made based on old norms. Particulate emissions are taken as 50 mg/Nm³, Sulphur dioxide and NO_x in stack gas are far beyond the norm. Sulphur dioxide is about 1742 mg/Nm³, NO_x is about 742 mg/Nm³. Proponent/Consultant should explain how this project is eligible for environmental clearance and compliance.</p> <p>For water the new norm is 2.5 m³/MWh. Actual consumption as per the EIA for 85% PLF is 3291/(1080 x 0.85) = 3.58 m³/MWh. How will the plant meet the new</p>	Particulate Matter	30 mg/Nm ³	Sulphur Dioxide (SO ₂)	100 mg/Nm ³	Oxides of Nitrogen (NO _x)	100 mg/Nm ³	Mercury (Hg)	0.03 mg/Nm ³	<p>EIA report was prepared based on the earlier MoEF notifications/norms.</p>
Particulate Matter	30 mg/Nm ³									
Sulphur Dioxide (SO ₂)	100 mg/Nm ³									
Oxides of Nitrogen (NO _x)	100 mg/Nm ³									
Mercury (Hg)	0.03 mg/Nm ³									
7.	<p>"The project will be scheduled to go into commercial operation in 33 months from the zero date i.e., from the date of placement of order for the boiler and turbine generator." (Page C2-32) How will the project be completed before the end of March 2017 to avoid the applicability of new emission norms? What will happen to the investment of Rs. 7290 crores if the project does not meet the new regulations</p>	<p>The project is aimed to complete in 24 months as M/S BHEL informed that major equipment for the power project are readily available.</p>								
8.	<p>Proponent does not have any firm allotment of coal for the project though ToR xlvii is specific to "Quantity of fuel required, its source and characteristics and documentary evidence to substantiate confirmed fuel linkage shall be furnished." Without knowing the source of coal, fictitious compositions are used for indigenous and imported coals. Heavy metal content of the coals is not given as per ToRs xlvii and xlv. Radioactive component analysis given for some coal sample has no authenticity without identity of the source and guarantee that the plant will use coal from that source only. In case imported coal alone is to be used or partly used for blending without the ultimate analysis of that coal sample</p>	<p>It is proposed to source domestic coal from SCCL mines. A firm coal allotment letter was obtained from SCCL and is attached in final EIA report.</p> <p>The coal characteristics presented in the draft EIA report are SCCL coal fields only.</p>								

	from the actual source to be imported the impact analysis presented has no meaning. EAC has earlier deferred all cases without firm allotment of coal. Has the proponent obtained firm allotment and if so why that information is not given to the people before the public hearing.	
9.	What are the health impacts of pollution generated from the plant? What is the fate of all the toxic elements released into the environment? Where will they disappear? Provide material balance for mercury and other heavy metals in the coal.	<p>The health status of studied population was found to be reasonable.</p> <p>The health related problems which were found during the study are of general health related problems like malaria, skin problems, mal nutrition and anemia. These were mainly due to living conditions and lifestyle.</p> <p>The proposed power plant will be operated with best industrial practices and all mitigation measures will be adopted to prevent occupational health hazards.</p>
10.	What are the externalities from the proposed plant? Latest IMF report put the global burden from externalities of fossil fuel use at \$10 million a minute. NEERI that did a study on NTPC, Ramagundam for a ministry in 2006 found several externalities and quantified the burden. TERI also did some work in that direction. Harvard school of public health quantified the externalities for coal use and the best estimate was \$345 billion a year in USA. Does the company agree that there are externalities from their operation that burden the society? Who will compensate the people for the suffering and loss?	The proposed thermal power plant will be operated in strict compliance/adherence to latest norms issued by MoEF&CC on 7 th December 2015.
11.	The discharge of waste materials (stack emission, wastewater and solid wastes) from process operations is expected to be insignificant and may not have potential impact on public safety and health." (Page C4-27) What is the basis in medical science to claim that the emissions within the NAAQS are harmless and have no impacts on people and the environment? A large European study done over several years and published in The Lancet, a prestigious Medical Journal showed that "for every increase of 5 microgrammes per cubic metre (5 microg/m ³) in annual exposure to fine-particle air pollution (PM _{2.5}), the risk of dying from natural causes rises by 7%." WHO limit for PM 2.5 is 10 µg/Nm ³ while Indian standard is six times this value at 60 µg/Nm ³ .	<p>The air emissions are controlled to less than 50 mg/NM³ through high efficiency ESP. other air pollutant control will be through tall bi-flue stack of 275-m height for wider dispersion of pollutants resulting in lower ground level concentrations. Further installation of dust extraction and dust suppression systems in coal and ash handling areas, bag filters in ash silos, plantation and afforestation in available areas etc., will minimize the impacts on the surroundings.</p> <p>The proposed power plant will be operated with best industrial practices and all mitigation measures will be</p>

12.	<p>"To achieve better efficiency of the plant and more competitive tariff a higher size unit of 525 MW can be adopted. However the outage of unit will result in total loss of the plant capacity. A configuration of 4x270 MW will be advantageous as at least 75% of generation is available with the outage of one unit. The plant capacity with two generating units also gives flexibility in operation by adjusting load as per supply & load demand." This is the justification given in Chapter 5 on 'Analysis of Alternative Technology' for use subcritical technology. By this logic all power plants in India should remain small and subcritical.</p> <p>H L Bajaj, Chairman, CEA in a foreword to the REPORT OF THE COMMITTEE TO RECOMMEND NEXT HIGHER SIZE OF COAL FIRED THERMAL POWER STATIONS in November 2003 wrote:</p> <p>"It was considered that inducting more efficient and higher size coal fired units rapidly is the most viable strategy to achieve the capacity addition required and the "Committee to Recommend Next Higher Unit Size of Coal Fired Thermal Power Stations" was set up by CEA under the chairmanship of Member (Thermal) CEA to recommend the most suitable unit size and steam parameters for adoption in the country. The Committee has representatives from BHEL, NTPC, Planning Commission and other major utilities in state and private sector. The Committee had prolonged and meaningful discussions on various issues involved. I am happy that the report of the Committee has been finalized.</p> <p>Considering the very successful operation of 500 MW units over the last decade, and with supercritical technology & large unit sizes achieving high reliability and availability internationally, it is recommended to adopt units of 800-1000 MW with supercritical parameters in the country. I am sure that adoption of large size units would provide much needed fillip to the pace of thermal capacity addition and also result in reduced impact on environment due to efficiency enhancement."</p> <p>Same consultant for the TSGENCO expansion of KTPS, Palvancha plant with an addition of a 800 MW unit gave the reasons for Adopting supercritical technology as the following advantages:</p> <ul style="list-style-type: none"> • Superior technology • Reduced greenhouse emissions • Environmental friendly / CDM benefits • Operational flexibility to grid fluctuations • Shorter start-up times • Reduced coal consumption • Savings in coal cost 	<p>adopted to prevent occupational health hazards.</p> <p>a) It's a fast track project to be completed in TWO years only by M/s BHEL on EPC basis to partly meet the heavy power demand of the newly formed state of Telangana at the earliest.</p> <p>b) The State grid requires certain (some) units of small capacity also</p> <p>i) As the hydel or gas spinning reserve is not sufficient to meet the peak power demand in the state, the thermal units are only meeting it. In case the higher capacity unit trips in peak demand time, it destabilizes the grid and public may face worst power cuts as the lower capacity old units of KTPS are going to be retired shortly.</p> <p>c) As G8/G9 grade coal is going to be used and as high efficient pollution control equipment will be installed, it is possible to operate the proposed units well within the prescribed norms of PCB.</p>
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- Improved ash management

Is the consultant objective in the analysis of alternatives? Monetary interests clouded the judgment here is very clear.
In this backdrop, what is the rationale in choosing a 270 MW unit with subcritical parameters?

13. Design Station Heat Rate for the proposed plant is given as 2300 kCal/kWh. But the design station heat rate for several units of supercritical plants in the process in AP and Telangana as per their respective EIA are:

Plant	Unit Capacity MW	Station Heat Rate kCal/kWh
NTPC, Pudimadaka	1000	2172.19
NTTPS, Ibrahimpatnam	800	2317
KTPS, Paloncha	800	2317
SDTPS, Nelaturu	800	2317

Given below is the data of actual performance of Thermal Power Stations in undivided AP. Station Heat rate of 2300 was never achieved. It appears mischievous to use that figure only to show low coal consumption and reduced pollution load.

APGENCO - Operational Performance of Thermal Power Stations

Sl. No.	Particulars	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
1	Installed Capacity (MW)	3172.5	3382.5	3382.5	3382.5	4592.5	5092.5	5092.5	5092.5
2	Specific Coal Consumption (Kg/Kwh)	0.72	0.75	0.75	0.74	0.73	0.71	0.73	0.78

Achieving the designed station heat rate (SHR) constantly is a rare phenomenon as rightly noted by the individual, since it depends on various practical conditions, leakages, wastages and ageing etc. However, based on the previous experience, TSGENCO is confident that designed SHR may be achieved during the PG Test conducted by M/s BHEL after commissioning because:

- a) M/s BHEL is designing BTG equipment to meet the specifications accepted.
- b) Higher GCV of coal is going to be used.

4	Overall Heat Rate (Kcal/KWh)	2450	2435	2389	2388	2347	2354	2402	2457																							
	Is there any thermal power station in Telangana that achieved the station heat rate of 2300 kCal/kWh consistently? Who will guarantee that figure in the operating plant?																															
14.	In Table 2.2 (Page C2-3) under serial no 7 for 4.07 MTPA of blended coal required with ash content of 40%, the ash generated is given as 1.11 MTPA. These numbers do not match. Ash content of blended coal has to be 27.27% only and not 40% to get 1.11 MTPA of total ash. But on page C2-18 the ash content of 34% is taken to calculate the ash generated. Which of these numbers are right? Why this confusion on fuel quality and quantity?									The ash content in Indian coal is 40% and blended coal would be 27.5%. To design ash handling system ash content of 34% (worst case) was considered for designing.																						
15.	<p>The claim made in section 4.8 on Greenbelt Development is “The greenbelt is an important sink for air pollutants, it also absorbs noise, and enhancing green cover not only mitigates pollutants but also improves the ecological conditions / aesthetics and reduces the adversities of extreme weather conditions.”</p> <p>It is now well known that trees emit hydrocarbon pollutants into the atmosphere. Published research on urban green area development produces growing scientific evidence of biogenic induction of ground-level ozone concentrations in urban and suburban areas due to interactions between plants and anthropogenic sources of NOx pollution. US EPA estimates that about two thirds of all VOCs released in the world to atmosphere are from the plants and trees. In the present case, BTPS acts as a source of NOx generation at 260 g/Gigajoule that is equivalent to 742.85 mg/Nm³ of stack gas for this subcritical technology based plant increasing the local concentration of NOx as in a city. With greenbelt around it being a source of biogenic volatile organic compounds (BVOC) the atmospheric chemistry between NOx and VOC produces ground level Ozone. About a million deaths per annum are associated with Ozone pollution and tens of billions worth of crop production is lost every year globally.</p>									<p>The following species of the trees are widely being grown as Air Pollution Tolerance Index tree species,</p> <table border="1" data-bbox="1364 750 2027 1109"> <thead> <tr> <th>Tree Species</th> <th>Common Names</th> </tr> </thead> <tbody> <tr> <td><i>Alstonia sholaris</i></td> <td>Saptaparni/ Devils tree</td> </tr> <tr> <td><i>Azadirachta indica</i></td> <td>Neem/Vepa</td> </tr> <tr> <td><i>Dalbergia sissoo</i></td> <td>Sissoo</td> </tr> <tr> <td><i>Tamarindus indica</i></td> <td>Chinta/Imli/Tamarind</td> </tr> <tr> <td><i>Terminalia arjuna</i></td> <td>Arjun/Tella Maddi</td> </tr> <tr> <td><i>Ficus bengalensis</i></td> <td>Banyan</td> </tr> <tr> <td><i>Pongamia pinnata</i></td> <td>Kanuga/Pongamia/Karanj</td> </tr> <tr> <td><i>Madhuca indica</i></td> <td>Ippa/Mahua</td> </tr> <tr> <td><i>Tectona grandis</i></td> <td>Teak</td> </tr> <tr> <td><i>Melia azadirach</i></td> <td>Turka Vepa/Persian Lilac</td> </tr> </tbody> </table> <p>The Telangana State Productivity Council and State Pollution Control Board have also conducted provenance trails on the Air Pollution Tolerance Index levels and these species are better suited to control SO₂, NO_x, and other researchers have also conducted similar</p>	Tree Species	Common Names	<i>Alstonia sholaris</i>	Saptaparni/ Devils tree	<i>Azadirachta indica</i>	Neem/Vepa	<i>Dalbergia sissoo</i>	Sissoo	<i>Tamarindus indica</i>	Chinta/Imli/Tamarind	<i>Terminalia arjuna</i>	Arjun/Tella Maddi	<i>Ficus bengalensis</i>	Banyan	<i>Pongamia pinnata</i>	Kanuga/Pongamia/Karanj	<i>Madhuca indica</i>	Ippa/Mahua	<i>Tectona grandis</i>	Teak	<i>Melia azadirach</i>	Turka Vepa/Persian Lilac
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"Nearly all plants emit biogenic volatile organic compounds (BVOC) during

Tree Species	Total VOC Emission Rate $\mu\text{gm gm}^{-1} \text{h}^{-1}$
Alstonia holaris	1.0
Azadirachta indica	4.2
Dalbergia sissoo	75.2
Tamarindus indica	3.9
Terminalia arjuna	1.0
Ficus bengalensis	48.1
Pongamia pinnata	28.0
Madhuca indica	61.1
Tectona grandis	15.5
Melia azadirach	0.5

reproduction, growth, and defense. The BVOCs are emitted by leaves, flowers, and fruits of plants. BVOC are used as a communication media between plants, on one hand, and between plants and insects, on the other hand (Laothawornkitkul et al., 2009). While trees emit mostly isoprene and monoterpenes, grasses produce oxygenated BVOCs and some monoterpenes. Generally BVOC emissions increase with temperature and light, but the production and/ or release of BVOCs also increase when the plants are exposed to severe drought, air pollution, or when plant tissue is damaged (Holopainen and Gershenzon, 2010)."

"Volatile organic compounds (VOC) are emitted by many plants. In this study, sixty common plant species of the Vidarbha region of Maharashtra, India were examined for VOC (isoprene and monoterpene) emissions. Plant species VOC emission rates ranged from undetectable to $75.2 \mu\text{g g}^{-1} \text{h}^{-1}$. *Dalbergia sissoo* exhibited a maximum VOC emission rate of $75.2 \mu\text{g g}^{-1} \text{h}^{-1}$. Ozone forming potentials (OFP) of the sixty plant species were also estimated using the method of Benjamin and Winer (1998). Maximum ozone forming potential of $77 \text{g O}_3 (\text{tree})^{-1} \text{d}^{-1}$ was observed in the case of *Mangifera indica*. Out of 60 species, 26 species (43.3 %) had low OFP (less than $1 \text{g O}_3 (\text{tree})^{-1} \text{d}^{-1}$), 18 species (30 %) had medium OFP (less than 1 to $10 \text{g O}_3 (\text{tree})^{-1} \text{d}^{-1}$) and 16 species (26.7 %) had high OFP (more than $10 \text{g O}_3 (\text{tree})^{-1} \text{d}^{-1}$)." (Rashmi

trails using the same species in diverse ecological location all over India.

Also these tree species are also well known medicinal plant tree species, listed in the ethno-botanical literature. References of these species are replete with innumerable references in classic Ayurvedic texts which are 2000 years old.

The most of the same species were observed by ecologists/ Horticulturalists for controlling pollutants across 20 states in India.

Their traditional uses, silvicultural adaptability and nativity were cross –checked and research trials were undertaken by several institutes choosing these species.

	<p>Singh et al (2014))</p> <p>VOC emission rates are dependent on the season and vary through the year. Emissions are higher during warmer periods. Data presented in a publication of Abhai Pratap Singh et al (2007) is given below.</p>																																																			
16.	<p>“Coal will be transported by using rail.” (Page C4-8) A citizen’s group in Australia sponsored a crowd funded study on particulate pollution caused by coal trains. Results of the study indicate a sharp increase in particulate pollution as the trains pass by.</p> <p>Table 6. Percentage differences of particulate concentrations (PM₁₀) associated with train signatures</p> <table border="1" data-bbox="398 497 1169 903"> <thead> <tr> <th>Signatures</th> <th>Pre-train PM₁₀ (µg/m³)</th> <th>Train period PM₁₀ (µg/m³)</th> <th>Difference</th> <th>Difference (%)</th> </tr> </thead> <tbody> <tr> <td>1 – loaded</td> <td>17.3</td> <td>33.6</td> <td>16.3</td> <td>94%</td> </tr> <tr> <td>2 – unloaded</td> <td>6.6</td> <td>66.7</td> <td>60.1</td> <td>911%</td> </tr> <tr> <td>3 – grain</td> <td>9.3</td> <td>15.5</td> <td>6.2</td> <td>67%</td> </tr> <tr> <td>4 – unloaded #1</td> <td>6.8</td> <td>63.4</td> <td>56.6</td> <td>832%</td> </tr> <tr> <td>4 – unloaded #2</td> <td>6.8</td> <td>39</td> <td>32.2</td> <td>474%</td> </tr> <tr> <td>5 – loaded</td> <td>9.3</td> <td>49</td> <td>39.7</td> <td>427%</td> </tr> <tr> <td>6 – unloaded</td> <td>4.2</td> <td>55</td> <td>50.8</td> <td>1210%</td> </tr> <tr> <td>7 – unloaded</td> <td>10</td> <td>39.3</td> <td>29.3</td> <td>293%</td> </tr> <tr> <td>8 – loaded</td> <td>5.8</td> <td>19.4</td> <td>13.6</td> <td>234%</td> </tr> </tbody> </table> <p>Note: The PM₁₀ levels depicted above are two minutes averages of pre-train and train pass-by and are not peak levels recorded.</p> <p>Impact of increase in air pollution due to transport of coal through rail is ignored in this report. The draft EIA is incomplete. Is the proponent/consultant aware of that rail transport also adds to particulate pollution?</p>	Signatures	Pre-train PM ₁₀ (µg/m ³)	Train period PM ₁₀ (µg/m ³)	Difference	Difference (%)	1 – loaded	17.3	33.6	16.3	94%	2 – unloaded	6.6	66.7	60.1	911%	3 – grain	9.3	15.5	6.2	67%	4 – unloaded #1	6.8	63.4	56.6	832%	4 – unloaded #2	6.8	39	32.2	474%	5 – loaded	9.3	49	39.7	427%	6 – unloaded	4.2	55	50.8	1210%	7 – unloaded	10	39.3	29.3	293%	8 – loaded	5.8	19.4	13.6	234%	<p>The coal will be transported in railway wagons in Indian railway network</p>
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18.	<p>Prospective ash utilization plan given 4.5.5.2 is unrealistic. KTPS next door is increasing power generation capacity by 800 MW. KTPS never met the ash utilization rule all these years. In the fly ash utilization report of CEA for the year 2014-15, the utilization at KTPS is less than 60%. There have been published a number of news items about fly ash being released into Kinnerasani river from this plant. (Sakshi, September 23,</p>	<p>Fly ash utilisation plan is given in the EIA report</p> <p>9 cement factories have expressed their willing ness to lift flyash for their internal usage.</p>																																																		

	<p>2013; Deccan Chronicle February 22, 2015) Nearby Heavy water plant also produces lot of ash. Which cement plant will utilize the fly ash generated here? Claim of use is not substantiated appropriately.</p>	
<p>19.</p>	<p>Cost per MW is about Rs 6.75 crores. Cost per MW of the 800 MW supercritical KTPS expansion project close by is about Rs 6.6 crores as per the data given in the EIA. A supercritical technology plant could be setup at that cost. Employment generated in BTPS given as 1000 in the EIA. A job ratio of 1 job per MW is not prevalent in any of the thermal power plants in India. But the locals were given the figure of 600 only. What is the reliability of the employment generation number given? Substantiate it with existing situation in the various plants under TSGENCO.</p>	<p>There was no land acquisition involved for 1X800 MW in KTPS for main plant, ash pond and town ship VII stage resulted in difference of cost/MW and also it is an expansion project. Whereas the BTPS project is a green field project.</p>