BEFORE THE TELANGANA STATE ELECTRICITY REGULATORY COMMISSION

5th Floor Singareni Bhavan, Red Hills, Hyderabad – 500 004

OP No. 76 & 77 of 2015

IN THE MATTER OF
Petition requesting the Commission

1. Not to allow tariff hike proposed by DISCOM.
2. To review power purchase costs and avoid burden of short term power purchase costs.
3. To re-examine T&D costs claimed by DISCOMs
4. To direct DISCOMs to provide complete information claimed under FRP and true up.
5. To direct DISCOMs to improve safety and avoid deaths due to shocks.
6. To allow the objector to be heard in person before the Commission takes any decision on this application of the DISCOMs.

IN THE MATTER OF
Name and full address of the petitioner:

People's Monitoring Group on Electricity Regulation
139, Kakatiya Nagar, Hyderabad – 500008

Represented by
M. Thimma Reddy
Convenor
People's Monitoring Group on Electricity Regulation
139, Kakatiya Nagar, Hyderabad – 500008

And

Name and address of the Respondents:
Chairman and Managing Director
Northern Power Distribution Company of Telangana Ltd,
Southern Power Distribution Company of Telangana Ltd,

BEFORE THE TELANGANA STATE ELECTRICITY REGULATORY COMMISSION

5th Floor Singareni Bhavan, Lakdi-ka-pool, Red Hills, Hyderabad – 500 004

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AFFIDAVIT VERIFYING THE MEMORANDUM OF OBJECTIONS

I, M. Thimma Reddy, son of Late M. Pothi Reddy do hereby solemnly affirm and state as under:

1. I am the Convenor of the People's Monitoring Group on Electricity Regulation (PMGER), the applicant in the above matter and am duly authorised by the said applicant to make this memorandum of objections on its behalf.
2. The statements made in the paragraphs of the accompanying memorandum of objections now shown to me are true to my knowledge, derived from the Filing of ARR and Proposed Tariffs for FY 2015-16 of the two DISCOMs and the material gathered by PMGER and made available to me and are based on information and advice received which I believe to be true and correct.

Solemnly affirm

Deponent

03 –03 – 2015

Hyderabad

BEFORE THE TELANGANA STATE ELECTRICITY REGULATORY COMMISSION

*** 4th Floor Singareni Bhavan, Lakdi-ka-pool, Red Hills, Hyderabad – 500 004**

1.1 The following suggestions and objections are filed in response to the Public Notice published in the newspapers on 11th February, 2015.

Statutory and Regulatory Provisions

2.1 According to Section 64 (3) of the Electricity Act, 2003 licensees have to file application for determination for tariff one hundred and twenty days before the said tariffs come in to force. If the new tariff is to come in to force by 1st April 2015 application for new tariff should have reached the Commission by last week of November, 2014. TSDISCOMs are reported to have submitted ARR and Tariff on 7th February, 2015, involving high drama. According to newspaper reports even utility officials were not aware of this submission. Until the Public Notice was issued in the Newspapers on 11th February there were doubts about this submission. One of the reasons adduced to this delay was the mistakes that have crept in to this filing. But a cursory scan of the filings shows that there are still many errors. This also sows lack of transparency and accountability in this process.

2.2 The whole process under way to determine electricity tariff for the financial year 2015-16 appears to be violation of due process enshrined under the E – Act.

2.3 In the rush to come out with the tariff order by 23rd March the public has been denied sufficient time to scrutinize the filings of the DISCOMs. Under the new Act at least 30 days time should have been given to the public to respond in writing. The public shall be given al least 30 days time from the day of publication of new tariff proposals. According to the Public Notice issued on 11th February last date for filing suggestions/objections is 7th March and the first public hearing on tariff proposals will take place on 12th March. It is doubtful whether DISCOMs will be in a position to go through the suggestions/objections filed send their responses to the public as well as the Commission in such a short time. While the public hearings will be over by 14th March the Commission is expected to come out with the Tariff Order by 23rd March, after due consultation with the Government of Telangana State regarding the quantum of subsidy available, for the new tariffs to be applicable from 1st April. Under such unseemly haste it is doubtful whether the Commission will be able to do justice to the sector in general and also balance interests of all stakeholders in the sector.

2.4 Though state bifurcation may be one of the issues that have led to the delay DISCOMs cannot avoid their statutory duty to file the tariff applications in time and it is also one of the functions of the Commission to see that DISCOMs discharge their responsibilities efficiently.

Power availability

3.1.1 According to the provisions of the Andhra Pradesh Reorganisation Act, 2014 Telangana State and residuary state of Andhra Pradesh have to share power generated by power plants located in both the states. An examination of the ARR and Tariff filings of TSDISCOMs and APDISCOMS shows that there is no common understanding between the two states in sharing the power generated in both the states. In fact differences and its impact are substantial. The following table summarises these differences:

Issue	Telangana State DISCOMs	Andhra Pradesh DISCOMs
APGENCO thermal units – DSTPP	Claimed 53.89% power	Claimed 100% power
TSGENCO units – KTPP II	Claimed 53.89% power	Did not claim any power
Inter state Hydel units	Claimed 41.68% (population percentage) citing provisions of AP Reorganisation Act.	Claimed 100% power
GENCO Hydel units	Claimed 53.89% from units located in AP as well as Telangana	Claimed 100% power from hydel units located in AP and did not claim power from units located in Telangana
Central Generating Stations	Claimed 52.11% instead of 53.89% citing draft recommendations of CEA	Claimed 46.11%
IPPs - Hinduja	Claimed 53.89% power	Claimed 100% power
NCE - Wind	Claimed power from wind energy plants located in Anantapur and Kurnool districts of AP	Claimed 100% power

3.1.2 DISCOMs of both the states differ on total quantum of power available from each plant. For e.g., according to TSDISCOMs estimate power available from Dr NTTPS units I, II and III will be about 8,057 Mu and according to APDISCOMs it will be about 7,554 MU. Similarly, DISCOMs of both the states also differ on estimation of fixed cost burden from each plant.

3.1.3 TSDISCOMs in their filings submitted that generation tariffs based on the Generation Regulation are yet to be determined. This is particularly the case with state owned GENCOs. In the background of AP Reorganisation Act, 2014 the question arises as to who will determine the tariff for GENCO power plants? If it is the SERCs which determine tariffs then the next question will be which SERC will determine which plant's tariff. If the role devolves on CERC as the plants become inter state plants one would like to know the steps taken by the GENCOs as well as DISCOMs in getting CERC's approval for PPAs for these plants. Similar questions also arise in the case of tariff determination for HNPCL plant at Visakhapatnam and APPDC's DSTPP at Krishnapatnam.

3.1.4 Even when the Chief Minister of Telangana state is saying that the state has to endure power shortages for the next three years TSDISCOMs filings show that the state will have 8,150 MU of surplus power at its disposal. Similarly, according to APDISCOMs' filings AP will have 11,000 MU of surplus power. This anomalous situation arises due to the above differences in views related to power sharing and consequent estimation of power availability.

3.1.5 Without settling these issues it will not be possible to estimates the costs in supplying power to the consumers in both the states and also determine tariffs. One way to solve this is for the ERCs of AP and TS sit together evolve a mechanism. But the outcome from such exercise may not be acceptable to some on either side of the dispute. Another way is for the two state governments solve this through discussions. Under the present circumstances it may not be possible. Under the AP Reorganisation Act the central government has powers to arbitrate in the disputes between the two states and give directions. Part of this work is already done through a draft report submitted by CEA. TSERC may write to the Government of India to settle this issue preferably well before the Commission comes out with the tariff order for the ensuing year.

Why energy from IPPs not considered after PPA term?

3.2.1 DISCOMs estimated power availability from GVK plant up to June 2015 and from Lanco up to December 2015 due to expiry of PPAs with these power developers. Due to this TSDISCOMs will be losing about 580 MU power. As the gas allocation to these plants continues and these plants continue to generate power TSDISCOMs shall get their share of power from these plants after the above dates also.

3.2.2 At the same time we also would like to know the steps taken by the TSDISCOMs to extend these PPAs or take over these plants on completion of PPA terms.

3.3 Also, in the background of additional power to the extent of 450 MW being made available to both the states combined together from gas based power plants (TS share expected to be 242 MW) following change in gas allocation policy of GoI, whereby some of the gas allocated to fertiliser plants being diverted to gas based power plants in AP, and additional power being available during summer shall be taken in to account while computing total power available to the state.

3.4 Newspaper reports indicate that TSDISCOMs are planning to generate power from the gas based power plants using LNG/Naphtha. But the same does not appear in the present filings. DISCOMs are requested to clarify on quantum of power proposed to be generated using these fuels and its implication for cost of power procurement.

ARR Particulars 2015-16 (Rs/Cr)

Particulars	NPDCL	SPDCL	Total
ARR	7,598.95	18,874.82	26,473.77
Revenue from current tariffs	3,546.83	15,362.03	18,908.86
Revenue deficit	4,052.12	3,512.79	7,564.91
Revenue through proposed tariff	263.00	825.61	1,088.61
Expected subsidy	3,789.12	2,687.18	6,476.30
Power purchase cost	5,385.35	14,631.13	20,016.48

4.1.1 Against an aggregate revenue requirement of Rs. 26,473.77 crore during the year 2015-16 DISCOMs in the state envisage to receive Rs. 18,908.86 crore leaving a deficit of 7,564.91 crore. DISCOMs proposed to earn additional income of Rs. 1,088.61 crore from the proposed changes to tariffs and this amounts to 5.76% increase in tariffs.

4.1.2 76% of the above revenue requirement goes to meet power purchase costs. It is important to pay attention to this aspect. We are of the opinion that there are opportunities to bring down revenue requirement as well as power purchase costs. We place the following observations and suggestions before the Commissions for its consideration.

Power purchase costs – fixed costs

4.2.1 Draft PPAs of KTPS VI, KTPP I and KTPP II units of TSGENCO are pending before the Commission since 2009. Delay in disposing petitions related to these PPAs is one of the reasons for the prevailing confusion in allocation of plants between AP and Telangana. It is high time the Commission finalises them through public process.

4.2.2 Hinduja National Power Corporation Limited was selected in 1990s under fast track projects. PPA with it was entered in to by erstwhile APSEB in 1998. It was provided with sovereign guarantee. Along with this conditions were also laid that its cost shall be equal to NTPC's Simhadri unit II. As there was inordinate delay in setting up the project even after fuel linkage liquidated damages shall be collected form it as provided under the 1998 PPA. Reports indicate that changes are being made in this PPA. The same shall be examined through public hearings.

Fixed costs of GENCO plants

Capital Costs of GENCO New Plants, (Rs/U)

Station	Capacity MW	Fixed Cost
KTPS VI	500	1.79
KTPP I	500	1.79
KTPP II	600	2.25
UMPP – Mundra	4000	0.98

4.2.3 Several new thermal power plants are in operation in the state. These include KTPS – VI, KTPP – I, and KTPP – II. In the above table except the last one all other plants are set up by TSGENCO. Though they are already in operation PPAs with them are not yet cleared by the Commission. They are pending before the Commission for more than four years. Even then the Commission is allowing the DISCOMs to procure power from these plants. Moreover DISCOMs in their filings are claiming that they are adopting fixed costs as approved by the Commission. According the norms/regulations in operation after the enactment of power sector reform Acts both at state and central level at the first stage PPA between the generating company and distribution licensee shall be approved by the Commission followed by financial closure. After this erection of plant and machinery starts and COD needs to be declared before the distribution licensee starts receiving power from the generating station. All these steps are skipped in the case of the new GENCO plants. Though the draft PPAs are with the Commission for more than four years the Commission could not find time examine these PPAs.

4.2.4 Fixed costs of these new thermal power plants are high. Compared to the Ultra Mega Power Plant at Mundra in Gujarat set up by Tatas and which started power generation the fixed costs of the above plants proved to be very high. The fixed costs of these plants are higher by more than 75% to 100%.

4.2.5 The Comptroller and Auditor General's Report for the year 2010 clearly brings out excess expenditure incurred in the plants it examined. In its Report for the year 2010 CAG examined KTPP – I plant. According to this report excess spending in KTPP – I was Rs. 555.48 Crore (26.74%). There was also delay in operationalising of this plant. But DISCOMs did not bother to recover liquidated damages from the contractor. The electricity consumers in the state are being forced to bear this burden through higher tariffs. We request the Commission to see that this additional expenditure is not allowed and see that fixed cost burden is reduced.

Variable/Fuel cost

4.3.1 DISCOMs propose to adopt variable cost escalation of 2%. In case there is any change in fuel prices during the ensuing year the same may be addressed through the existing regulation or Fuel Surcharge Adjustment (FSA) may be reintroduced. There is no need to adopt the proposed variable cost escalation.

4.3.2 Variable cost of power from Hinduja National Power Corporation Limited's plant is estimated to be Rs. 1.86 per unit. Compared to this variable cost of power from NTPC's Simhadri units is estimated to be Rs. 2.60 per unit. While source of fuel (coal) for both the plants is the same (Mahanadi Coal Fields) NTPC's units' variable cost is higher by nearly 40%. This needs to be looked in to.

4.3.3 Variable cost of KTPS VI unit (Rs.2.73 per unit) is higher than other units located at Kothagudem. This is because of allocation of coal from Mahanadi Coal Fields rather than from Singareni units. As swapping/rationalisation of coal allocation is in operation KTPS VI

unit shall also get its fuel from Singareni units. This will help to bring down cost of power from this unit.

4.3.4 Use of imported coal continues to be source of concern, both in terms of price as well as quality. Following objections raised by the public during public hearings the Commission has given several directions in the case of utilisation of imported coal by central generating stations as well as APGENCO units. TSDISCOMs in their replies in response to these directions merely mentioned that TSGENCO plants would not be using imported coal. Under the provisions of the AP Reorganisation Act TSDISCOMs also will be accessing power from CGS and APGENCO thermal units which are using imported coal. In this regard TSDICOMs also need to pay attentions to the directives issued by the Commission related to utilisation of imported coal.

4.3.5 In its reply related to transit loss of coal TSDISCOMs mentioned that they were not considering the transit loss of coal, if loss was more than the normative one. This implies that excess transit loss of coal if any will be borne by GENCO. In this context we would like know what is the exact transit loss of coal of the coal based thermal power plants of TSGENCO and APGENCO from which TSDISCOMs are procuring power.

4.3.6 One of the important reasons for increase in power purchase costs is hike in natural gas price by the central government. Price of natural gas increased from $ 4.2 per MBTU to $ 5.61 per MBTU. Following this variable cost of power produced from gas based power plants increased.

Variable Cost Rs/U

Plant	**2013-14**	**2015-16**
GVK	2.19	2.62
Spectrum	2.48	2.76
Lanco	2.25	3.02
Reliance	1.64	3.44

4.3.7 The new natural gas price adopted by the GoI goes against the norms of price fixation, against the PSC and also orders of the Supreme Court. This shall not be allowed. As the consumers of Andhra Pradesh will be severely adversely affected by this APDISCOMs and GoAP should have taken initiative to see that this price is rolled back. These should have explored all avenues to bring down this price, including approaching the Supreme Court. As variable costs are pass through APDISCOMs are least bothered about this burden on the consumers. In the meantime E.A.S Sarma, former Secretary, GoI and Gurudas Dasgupta filed a petition in Supreme Court challenging the above gas price. We request the TSDISCOMs and the GoTS to implead in this case before the Supreme Court. This request is not a misguided one given the APERC's observations in its Order on GVK that DISCOMs will take care of consumers' interests.

How short term purchases are made without regulatory approval?

4.4 During the FY 2014-15 TSDISCOMs procured 8,713 MU through short term/market purchases constituting nearly 18% of the power procured in the state. Most of this power is procured without regulatory approval and in a non-transparent manner. Even when additional demand was only during peak period power through short term purchases was procured under round the clock (RTC) terms. Because of this during non-peak periods in order to accommodate short term purchases made under RTC terms cheaper GENCO plants were being backed down. This led to unnecessary burden on TSDISCOMs and in turn on consumers in the state. TSDISCOMs as the filings show will be procuring power through short term purchases during 2015-16. Also, state leadership is exhorting DISCOM officials to procure power at any cost. Keeping past experience in mind short term purchases shall be made in an optimum manner, specifically to meet peak deficits, but not on RTC terms.

Financial Restructuring Plan (FRP)

Particulars	TSSPDCL (Rs/Cr)	TSNPDCL (Rs/Cr)	Total (Rs/Cr)
Accumulated losses as on 31st March, 2013	6,455.68	3,512.00	9,967.68
Bonds issued by the State Govt	2,316.69	1,744.04	4,060.73
Balance losses to be structured as loan	4,138.99	1,767.96	5,906.95
Short term loans structured	1,225.00	1,225.00	2,450.00
Annual interest cost	141.00	141.00	282.00

5.1 Financial Restructuring Plan (FRP) is introduced by the GoI in the name of ensuring the financial viability of the DISCOMs. Though introduced by it the GoI does not take any financial responsibility of ensuring the financial viability of the DISCOMs. According to this Plan the state government will stand guarantee to the bonds issued to cover 50% of the accumulated losses. From DISCOMs' filing it is not clear whether the State Government will repay the bonds or DISCOMs have to pay them and in case of their default only the State Government will come in to the picture. Apart from this, the bonds issued by the state government covers only 40% of the accumulated losses, not 50%as envisaged in the Plan.

5.2 According to the TSDISCOMs' filings the remaining 60% losses need to be structured as loans with a three moratorium for paying principal amount. The two DISCOMs propose to convert losses to the extent of Rs. 2,450 crore in to short term loans, constituting only 40% of their burden. Then, what will happen to the remaining 60% of their loss burden?

5.3 TSDICOMs submitted, "The key components of above losses are unapproved portion of Fuel Surcharge Adjustment (FSA) for the years 2009-10 to 2011-12, FSA cases pending in courts and Govt receivables over and above Rs. 4,553.85 Crs which is agreed by Govt as final settlement". Apart from the DISCOMs did not provide any details on the sources of these accumulated losses. Unapproved FSA amounts cannot be recovered without sanction from the TSERC and the Courts in question. Again in the case of TSERC, it cannot approve the pending FSAs without following the public process as mandated by the High Court in

earlier cases. The above passage also mentions Govt receivables. From this it is not clear whether these are receivable by Govt from DISCOMs or by DISCOMs from Govt. In fact it should be receivables by DISCOMs from Govt. In the past the state government directed the DISCOMs to purchase power from market at high prices assuring that it will bear higher the expenditure. The DISCOMS also mentioned," The bonds issued cover the expensive power purchased by the TS DISCOMs for the period 2008-09 to 2013-14." (p.50 SPDCL Filing) After that it reneged on its assurance. According to the MYT framework surplus/deficit need to be analysed at the end of the control period in detail before approving the same. But it was not done in the case of first as well as second control periods. In the background of the above we request the Commission not to approve the above interest cost and direct the DISCOMs to make all information related to the above public.

True up/down

Particulars	TSSPDCL (Rs/Cr)	TSNPDCL (Rs/Cr)	Total (Rs/Cr)
Revenue Gap for FY 13-14	(161.74)	48.85	
Revenue Gap for FY 14-15	1283.56	292.63	
Total	1121.82	341.48	1463.30

6.1 TSDISCOMs claim Rs. 1,463.30 crore under true up for the FY 2013-14 and 2014-15. But they do not provide any justification for the same. Even whatever information provided by them is confusing. TSSPDCL in its filing (pp.50-51) mentioned revenue of Rs. 13,295 crore for the year 2013-14 and supply cost of Rs. 11,865 crore, but mentioned the difference between the two (true down) as Rs. 161.74 crore.

6.2 One of the important reasons for this revenue gap is higher fuel costs. According to a recent report of CAG (see Annexure I) Reliance Industries Ltd received higher price than allowed. According to this report, "As per the price discovery process undertaken by the operator (RIL)... it was categorically indicated that selling price would be rounded off to two decimal points... A review of records relating to sales of gas to consumers, however, revealed that the operator has been charging the gas price at the rate of $4.205 per unit (three decimal points) from its consumers in place of USD 4.20 per mmBtu, arrived at after rounding of 2 decimal points". The draft of the second audit of the field's books, submitted by the Comptroller and Auditor General to the oil ministry for comments, says Reliance was charging consumers by rounding off the price in three decimal units against the norm of two decimal units, leading to excess billing of $9.68 million in the first four years of production beginning 2009-10. TSDISCOMs shall be directed to recover the excess amount paid and to that extent true up amount shall be brought down.

6.3 According to newspaper reports (See Annexure II) the Directorate of Revenue Intelligence has unearthed a scam involving companies inflating the value of coal imports from Indonesia for their power plants. Initial estimates by the agency pegged the overvaluation at Rs 29,000 crore in the period 2011-2014. DRI has raided over 80 shipping companies, intermediaries and laboratories across the country including, Andhra Pradesh in

search of documents that show the real value of the imports. Almost all laboratories testing coal in India have been searched by the DRI to obtain the lab reports for verification of the calorific value of the imported coal. According to this investigation almost every importer, including the reputed corporate – public and private, have indulged in overvaluation of coal imports. DRI is learnt to have recovered documents showing the real value of the imports. The overvaluation has an impact on the tariff paid by consumers here as power companies could have a higher tariff fixation based on the inflated rates. It was estimated that the power tariff would be less by Re 1 per unit if the value of imported coal value was not inflated. In the past during public hearings objectors have pointed out many anomalies in imported coal including higher prices. As this is upheld by the investigation of DRI we request the Commission not to allow the true up demanded by DISCOMs to the extent of over valuation of imported coal.

Estimation of agriculture consumption

(MU)

	2013-14	**2014-15**	**2015-16**
NPDCL	4348	4715	4904
SPDCL	6694	7238	7528
Total	11042	11953	12432

7.1 Filings of NPDCL as well as SPDCL show that power consumption in the agriculture sector in Telangana is increasing irrespective of the situation on the ground. The above consumption figures are arrived at by the DISCOMs on the basis of their claim that they are supplying power for 7 hours per day (p.64, SPDCL). This is far from truth. Most of the time, farmers are not receiving not even four hours of supply in a day. As such the Commission shall not take the above consumption figures in to account.

7.2 The fact that the agriculture consumption figures provided by the DISCOMs are anomalous comes out from their filings. According to their filings while 9,78,028 pump sets under SPDCL will be consuming 7,528 MU during 2015-16, under NPDCL 10,73,870 pump sets will be consuming 4,904 MU. In other words per pump set consumption will be 7,528 units under SPDCL, it will be 4,567 units in the case of NPDCL. Per pump set consumption in SPDCL will be nearly 70% higher compared to NPDCL, even while hours of supply of electricity are the same under both DISCOMs.

<u>Agriculture consumption during 2013-14</u>

Particulars	**NPDCL**	**SPDCL**
Pump sets with DSM	9,75,729	10,93,743
Pump sets without DSM	3,086	5,275
Energy consumed by Pump sets with DSM (MU)	4,355.6	9157.93
Energy consumed by Pump sets without DSM (MU)	5.77	32.19
Average consumption of Pump sets with DSM (U)	4,464	8373
Average consumption of Pump sets without DSM (U)	1,870	6102

7.3 According to the above table 99% of the farmers with pump sets in Telangana have adopted DSM measures. The electricity consumption figures provided for pump sets with and without DSM measures also gives rise to doubts about the way agriculture consumption figures are provided. On the average pump sets with DSM measures consumed more power than the pump sets without DSM measures. In the case of NPDCL average consumption of pump sets with DSM measures was 4,464 units in an year compared to 1,870 units by pump sets without DSM measures. In the case of SPDCL average consumption of pump sets with DSM measures was 8,373 units in an year compared to 6,102 units by pump sets without DSM measures. This totally goes against the prevailing understanding on DSM measures as well as report on a pilot reported by TSSPDCL. DISCOMs are requested to clarify.

7.4 Subsidy towards free power to agricultural services is being provided on the basis of 7 hours of power supply to these services. But in reality farmers are getting power for less than five hours. This implies that DISCOMs were compensated more than necessary to supply free power to agriculture. The excess subsidy paid to DISCOMs in this regard shall be recovered.

7.5 In the absence of metering of agricultural connections DISCOMs claimed that they have arrived at these figures following the ISI methodology suggested by the Commission. But data collected under this methodology is also not complete. To overcome this we suggest that all DTRs serving the agriculture services should be metered so that the consumption estimates are realistic. The Task Force on electricity Sector appointed by the Government of Telangana State also suggested metering of DTRs serving agriculture loads.

7.6 In the past the Commission (Fresh Directive No. 2 of the Tariff Order for FY 2011-12) directed the DISCOMs to furnish meter-wise readings noted and transformer-wise, feeder-wise consumptions measured on all the DTRs and Feeders covered under HVDS scheme. But the DISCOMs are not paying heed to this direction. Information provided through these readings would have thrown much light on electricity consumption in agriculture sector as well as efficacy of HVDS scheme. We request the Commission to direct the DISCOMs once again to furnish the above information at the earliest.

Deaths due to shocks

7.7.1 Every year hundreds of farmers are meeting death due to electrical shocks. This is highly avoidable.

7.7.2 During 2013-14 in Telangana 436 people died due to electrical shocks. More than 50% of these cases under SPDCL took place in the circles/districts of Mahabubnagar and Nalgonda. Similar is the case in the first half of 2014-15. Further these figures are an under estimate of the reality. Farmers are the main victims of this phenomenon.

Table: Deaths Due to Electric Shocks

	2013-14	First Half of 2014-15
NPDCL	185	87

Mahabubnagar	115	69
Nalgonda	84	25
SPDCL	251	129
Total Telangana	436	216

7.7.3 The DISCOMs did not provide complete details of these incidents like for how many cases DISCOMs took responsibility and in how many cases compensation was paid and amount paid towards compensation. NPDCL mentioned that compensation was paid in 56 cases out of 185 deaths in 2013-14 and in 11 cases out of 87 deaths during the first half of 2014-15. Procedures need to be simplified to see that all victims receive compensation at the earliest.

7.7.4 Even in the electrocution deaths that the DISCOMs had taken responsibility the amount paid (about Rs. 1 lakh per person) is very meagre. Even this meagre amount was not paid properly. There is need to revise the compensation upwards like in the case of railways.

7.7.5 There shall also be separate mechanism to pin responsibility for deaths due to electricity shocks. In the present case perpetrator it self is the judge. To avoid this anomaly a committee comprising different stakeholders shall go into these deaths and pronounce whether DISCOMs are responsible for these tragedies or not.

7.7.6 More than this these deaths are highly avoidable. These deaths are taking place due to neglect of rural network by the DISCOMs. Every year the Commission allowed Rs. 5 crore to be spent by the DISCOMs on safety measures to avoid such deaths. But DISCOMs did not care to utilise them. NPDCL spent Rs. 34.25 lakh during 2013-14 and Rs. 12.29 crore during first half of 2014-15. If the safety of DTRs were improved many of these deaths could have been avoided.

7.7.7 In most of these cases it was the farmers who met this tragic end. These deaths could have been avoided if there were timely and sufficient technical support at the ground level and good quality electrical network. Most of the technical posts like linemen in rural areas are vacant and farmers are forced to attend to repair work on their own with fatal consequences. Thousands of line men posts are lying vacant since a long time. Recently Telangana State Government announced that hundreds of electrical engineers will be recruited shortly. But there is no word about recruiting line men. Filling line men posts not only bring down deaths due to shocks but also help to bring down T&D losses and their by add to the income of the DISCOMs.

Quality of Power

7.8.1 Electricity received by the farmers was of uneven quality with unpredictable interruptions. Power supply timings announced by the Licensees are not being adhered to. It

is the responsibility of the Commission under Section 86 (1) (i) of the Electricity Act, 2003 to enforce standards with respect to quality, continuity and reliability of service by licensees.

7.8.2 In the past DISCOMs used to post feeder-wise electricity supply details on their websites. But they stopped this practice suddenly some time back. We request the Commission to direct the DISCOMs to post all relevant information on quantum and quality of supply on their websites.

DTR failure/repair

7.8.4 DISCOMs are also not attending to maintenance of DTRs properly. Farmers are being forced to incur expenditure in transporting the DTRs. DTRs are also not being repaired in time. DISCOM staff are also collecting money from farmers to repair DTRs. They are not attending to repairs until the farmers pay up. In Kanugutta village of Both mandal in Adilabad district it took 10 days to repair the DTR. In Madaka village of Odelu mandal in Karimnagar district it took more than one week to repair the transformer while under Standards of Performance DTRs in rural areas shall be repaired within 48 hours.

7.8.5 Low quality of power in rural areas is also because of crumbling transmission and distribution network in rural areas. Decades old conductors are hanging low endangering lives as well as resulting high transmission losses. Many of the DTRs are more than decade old and should have been replaced. Added to this many of these DTRs do not have even AB switches. Depreciated and old parts of T&D network shall be replaced in keeping with prudent maintenance of the network in good health.

DSM Measures

7.9.1 To be eligible for free power, farmers have to undertake demand side management (DSM) measures i.e., installation of capacitors, ISI marked pump sets, HDPE or RPVC piping and frictionless foot-valve. These measures are proposed to bring down quantum electricity consumption in the agriculture sector there by reducing financial burden both on the state government and farmers. Farmers also would like to contribute to this endeavour. Though farmers are interested in taking them up they are facing hurdles in implementing them.

7.9.2 DISCOM officials are claiming that more than 90% of the farmers have installed capacitors. But truth is that not even 10% of the farmers installed capacitors. Farmers do not have technical assistance in the form of access to linemen or assistant linemen, to take this up. thousands of line men posts in rural areas are lying vacant. Even where linemen or assistant linemen are available they do not have proper knowledge in installation of capacitors. Installation of capacitors at a wrong point led to burning of pump sets, which scared other farmers from doing the same.

7.9.3 A pilot implemented by SPDCL (p.88) power consumption declined by nearly 10% after installation of capacitors. This implies that by spending Rs. 60 crore to install capacitors at 20 lakh pump sets in Telangana DISCOMs will be able to save about Rs. 500 crore. This alone shall spur the DISCOMs to implement capacitor programme on war footing.

7.9.4 Use of ISI standard pump set is another important DSM measure. Present pump set efficiency in the State is only 25% and this could be increased to 50% by using ISI standard motors. For proper operation of ISI standard pump sets minimum voltages are required. Under prevailing low voltages in the state these ISI motors do not work. Because of this low voltage, farmers are forced to go in for locally made pump sets which operate even under low voltages. One of the reasons for low voltage is overloading of distribution transformers (DTR) installed for agricultural purposes. This overload is to the extent of 25 to 50%. If this overload problem is addressed successfully farmers can think of using ISI standard motors. This can be addressed by increasing the number of DTRs of adequate capacity in the agriculture sector. We request the state government and DISCOMs to install additional DTRs to solve low voltage problem so that farmers will be emboldened to go in for ISI standard motors.

7.9.5 Though the farmers may be willing to install ISI standard motors in the event of voltages improving the financial burden on them will be onerous and it will be good to explore the ways of minimizing burden on them in replacing the non-standard motors with ISI standards motors. In Tamil Nadu, the State government and utilities are said to have taken up a programme where a third party – Electricity Service Company (ESC) – takes the responsibility of replacing the motors and is given a share in the savings of electricity consequent to installation of standard motors. We request the State government to explore this option also as it will not burden the state government as well as the farmers.

HVDS:

7.10.1 Since 2005 HVDS programme is taken up in the state as a solution to the low voltage problem. Until now thousands of crores of rupees were spent on this but not even 10% of the pump sets were covered. A HVDS transformer is five times costlier than the regular DTRs being used at present. It was felt that if the same amount was spent on adding regular DTRs by this time the low voltage problem would have been solved. Even if the present additional load on existing DTRs is assumed as 50% then the estimated expenditure would be 50% of the cost of the existing DTRs. If we want to replace all the DTRs with HVDS DTRs the expenditure would be five times. The question is why spend 550% more when we could achieve with 50% only. We may be wrong in these calculations. Farming community in the state does not have any information on or insight in to this HVDS programme. Farming community in the state should have been taken in to confidence while formulating solution to low voltage in rural areas. This is not too late. We request the state government as well as the DISCOMs to place all the information related to HVDS before the public including farmers

for an informed discussion on the problems being faced by both the DISCOMs and farmers in the state that will lead to a solution that is beneficial to all stakeholders.

7.10.2 Over the last few years hundreds of crores were spent on implementing HVDS for agriculture pump-sets. The present filings also show that DISCOMs plan to spend more money on this. Before taking this programme forward there should have been a thorough review of its implementation until now. But there appears to be no such exercise. Given the serious implications of this investment (Consumers have to bear this burden in the form of higher cost of service) we place below our analysis of the investment under HVDS.

7.10.3 For the following analysis we have compared LT – DTR and HVDS. We have taken the transformer capacity as 63 kVA. Hours of supply in a day is assumed as 7 hours and number of days as 240 days. Cost of power is assumed as Rs. 3.00 per unit. We examined this under three power factor capacities – 0.6, 0.7 and 0.8

The results of our analysis are presented in the following table. In this table reduction in line losses are taken as returns on investing on HVDS.

Power Factor	**Cost of HVDS (Rs.)**	**Cost of Lt – DTR (Rs.)**	**Additional Cost (Rs.)**	**Returns per year from HVDS (Rs.)**	**Payback period (Years)**
0.6	6,29,628	1,15,000	5,14,628	18,949	27.16
0.7	6,29,628	1,15,000	5,14,628	13,923	**36.96**
0.8	6,29,628	1,15,000	5,14,628	10,660	**48.28**

7.10.4 In Andhra Pradesh a power factors of 0.70/0.80 reflect the prevailing situation. Under these conditions it takes 37 to 48 years to recover the investment made in to the HVDS system, let alone profits over it. In other words the payback period for these investments is about 37 to 48 years. The guaranteed life of these transformers is about 3 years and its life may extend up to 10 years, but its' payback period is several times more. Thus, financially speaking the HVDS does not appear to be attractive. Still the DISCOMs in the state are rushing in to implement it on large scale. And farmers are being coerced in to accepting it.

7.10.5 One of the important reasons shown in promoting the HVDS system was elimination of unauthorised agriculture connections and theft. Experience in other states like Rajasthan and Uttar Pradesh shows that HVDS is not a deterrent to these practices and even under HVDS system theft continues to take place. We hear that Noida Power Company Limited (NDPL) in UP which went in to HVDS on a large scale is now thinking about winding it up.

7.10.6 Though the returns from this HVDS scheme are doubtful it will surely end up as a huge burden on the consumers in the form of Cost of Service (COS) as these transformers are four times more costly than the present transformers.

7.10.7 Based on these facts we request the Commission to review the past implementation of the HVDS in the state and also to put the presently proposed scheme with the support of JIBC to strictest test. We also request the Commission to direct the DISCOMs to provide us information on amount spent on HVDS and number of pump sets converted to HVDS each year since the programme was taken up.

Directives on running neutral wire

7.10.8 In the past the Commission directed the DISCOMs to run neutral wire from 33/11 kV substations to all single phase transformers, particularly in the back ground accidents with single phase HVDS transformers. TSSPDCL replied that instruction were issued for preparation of estimates under T&D improvements and furnishing proposals under feeder works for executing the work of running of neutral wire in villages. One thing is even after such a long time they are still in the stage of preparing the estimates. Another thing is that as DPRs of HVDS includes cost of running neutral wire from HVDS DTR to the substation preparation of estimates and new expenditure shall not arise. The whole affair also shows that DISCOMs are least bothered about safety of the consumers.

Solar based power for agriculture:

7.11 Government of India and Telangana have taken steps to pilot solar based agriculture pumps. While this is welcome, it will be good to pilot a few projects where the agriculture feeder is powered by solar. With falling prices of solar, and with MNRE subsidy and soft loans this option may be economically viable and become very attractive.

T&D Losses and Malpractices

DISCOM	2013-14	2014-15	2015-16
NPDCL	13.31%	11.97%	15.56%
SPDCL	13.20	11.49%	14.91%

8.1 Filings of both the TSDISCOMs show that on the T&D losses front the situation in fact is deteriorating. During 2015-16 T&D losses in NPDCL area will be 15.56% and in SPDCL area 14.91%. There is scope to bring down these losses below 7%. Way back in 2010-11 EPDCL of Andhra Pradesh clocked T&D losses of 6.96%. DISCOMS shall be directed to take concerted action to bring down these losses. Lower T&D losses lead to lower power purchase cost and lower tariff burden.

8.2 Within TSSPDCL the Hyderabad South Circle T&D losses are in the range of nearly 50% of the power supplied. During the past hearings also we have brought this to the notice of the Commission. Last year the High Court treated a letter written by an electricity consumer as a petition and after hearing different parties directed the authorities to take steps to bring down these losses. Following this some raids were conducted in some of the areas falling under this circle. According to a newspaper report out of 887 services inspected there

were 20 instances of theft and 350 instances of meter tampering (The Hindu, 14th April, 2014). But these raids seem to have stopped in the wake of elections to Lok Sabha and state Assembly and were not resumed after the elections. We request the Commission to direct the TSSPDCL to resume inspection of services. Bringing down these losses in Hyderabad South Circle alone will bring additional revenue of about Rs.300 crore per year.

8.3 According to TSSPDCL's filings during FY 2013-14 cases were booked in 21.37% of the services inspected for malpractice. During FY 2014-15, up to 30th September 2014 cases were booked in 18.90% of the services inspected. This may be because of lack of awareness on the part of consumers or intent to benefit from malpractices and lack of proper vigilance on the part the DISCOM. TSNPDCL did not report information related to inspections. We request the Commission to direct the DISCOMs to create awareness among consumers and deal strictly with malpractices among consumers as well as DISCOM staff.

Arrears

9.1 Arrears pending for over six months to be received from consumers (with arrears above Rs. 50,000)as on 30th September 2014 stands at Rs. 2,146.34 crore (SPDCL – Rs. 1,796.07 crore and NPDCL - Rs. 350.27 crore). HT industries account for 50% of these arrears. If ordinary domestic consumers delay payments by two weeks their services are disconnected promptly. Even farmers who receive free power faces the humiliation of the starters and some times even motors being taken away by DISCOM employees if they fail to pay customer charges. But, how do these people with arrears to the tune of crores continue to receive power. In the past information related to court cases related to these arrears used to be provided. At present the same is missing.

Prayer to the Commission:

1. Not to allow tariff hike proposed by DISCOM.
2. To review power purchase costs and avoid burden of short term power purchase costs.
3. To re-examine T&D costs claimed by DISCOMs
4. To direct DISCOMs to provide complete information claimed under FRP and true up.
5. To direct DISCOMs to improve safety and avoid deaths due to shocks.
6. To allow the objector to be heard in person before the Commission takes any decision on this application of the DISCOMs.

Annexure I

RIL short-changed govt, CAG says

TNN | May 30, 2014, 06.30AM IST

NEW DELHI: After criticizing the government over Reliance Industries Ltd and the KG-D6 gas field, the federal auditor has rapped India's biggest private oil company for charging marketing margin, but not including the income for calculating royalty and government's share.

The draft of the second audit of the field's books, submitted by the Comptroller and Auditor General to the oil ministry for comments, says Reliance was charging consumers by rounding off the price in three decimal units against the norm of two decimal units, leading to excess billing of $9.68 million in the first four years of production beginning 2009-10.

"As per the price discovery process undertaken by the operator (RIL)... it was categorically indicated that selling price would be rounded off to two decimal points... A review of records relating to sales of gas to consumers, however, revealed that the operator has been charging the gas price at the rate of $4.205 per unit (three decimal points) from its consumers in place of USD 4.20 per mmBtu, arrived at after rounding of 2 decimal points," the report says.

On top of this sale price, RIL charged a marketing margin of $0.135 per unit to cover its marketing risks.

"It has also been noticed that while computing the profit petroleum (government's share of production) and royalty, the operator is considering the price of $4.205 per unit instead of $4.34 being charged from consumers, as the revenue earned through marketing margin is not being treated as revenue for the purpose of calculating cost recovery, profit petroleum and royalty," says the report.

RIL, CAG in the draft report said, had collected an amount of $261.33 million towards the marketing margin which has not been accounted for in the books.

"Consequently, cost recovery of $235.20 million (90%) has not been adjusted in the recovered cost up to 2012-13 and there was a short remittance of government share of profit petroleum and royalty by $2.61 million and $13.12 million, respectively, for the year 2009-10 to 2012-13 to the government," CAG says.

http://timesofindia.indiatimes.com/business/india-business/RIL-short-changed-govt-CAG-says/articleshow/35754509.cms

Annexure II

DRI unearths Rs 29,000 cr coal import scam

C Unnikrishnan, TNN | Dec 18, 2014, 02.35AM IST

MUMBAI: The Directorate of Revenue Intelligence has unearthed a scam involving companies inflating the value of coal imports from Indonesia for their power plants thus siphoning money abroad.

Initial estimates by the agency pegged the overvaluation at Rs 29,000 crore in the period 2011-2014. DRI has raided over 80 shipping companies, intermediaries and laboratories across the country including, Maharashtra, Delhi, Gujarat, Karnataka, Andhra Pradesh, Odisha, West Bengal and Kerala in search of documents that show the real value of the imports. Almost all laboratories testing coal in India have been searched by the DRI to obtain the lab reports for verification of the calorific value of the imported coal.

The overvaluation also has an impact on the tariff paid by consumers here as power companies could have a higher tariff fixation based on the inflated rates. DRI is also investigating some of the public sector companies that have indulged in overvaluation. The overvaluation of the imported coal has a direct effect on the tariff fixation. In other words, the power tariff would be less - possibly Re 1 per unit - if the value of imported coal value was not inflated.

An official said that almost every importer, including the reputed corporates, have indulged in overvaluation of coal imports. DRI is learnt to have recovered documents showing the real value of the imports. Indian companies including public sector ones imported 77 million tonnes of coal from Indonesia, in the financial year 2012-13.

Industry sources estimate that around 12 crore MT of coal has been imported from Indonesia in the year 2012-14. The sources added that the imported coal from Indonesia is overvalued to the extent of at least two times the actual value declared in the country of origin.

The modus operandi adopted by the companies is that while coal imports would directly be shipped from Indonesia, the invoices will be routed through an intermediary based either in Hong Kong, Singapore or Dubai. "The inflated amount will be sent to the intermediary who, in turn, would remit the actual value to the Indonesian supplier. The overvalued component would be diverted to tax havens," the source said. The intermediary is either related to the importer or handles such operations on commission basis, sources said.

DRI has found that the companies did not avail of the Preferential Trade Agreement that extended concessional duties for imports from Indonesia. Steam coal imported from Indonesia attracts zero rate of duty and the companies are required to produce country of origin certificate issued by the supplier. "The companies did not avail of this facility because in such a scenario, the companies would have to produce the certificate which would carry the real value,"' the source added.

http://timesofindia.indiatimes.com/india/DRI-unearths-Rs-29000-cr-coal-import-scam/articleshow/45555438.cms