

**Prasad V. Potluri Siddhartha Institute of Technology  
(Autonomous)**

**Kanuru, Vijayawada –520007**

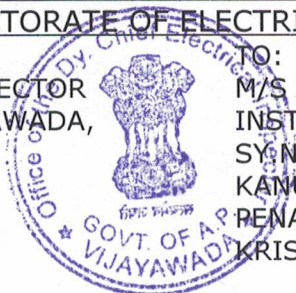
**(Affiliated to JNTUK, Accredited by NBA, ISO9001:2015 Certified Institution)**



**7.1.2 Permission document for installation of solar plant and  
connecting to the grid from the electricity authority**

**GOVERNMENT OF ANDHRA PRADESH**  
**DIRECTORATE OF ELECTRICAL SAFETY**

FROM:  
THE DY. CHIEF ELECTRICAL INSPECTOR  
TO GOVERNMENT: VIJAYAWADA,  
D.NO: 27-16-175, 3<sup>RD</sup> FLOOR,  
MUDDA SUBBAIAH STREET,  
GOVERNOR PET,  
VIJAYAWADA 520 002.



TO:  
M/S PRASAD V POTLURI SIDDHARTHA  
INSTITUTE OF TECHNOLOGY,  
SY.NO:281 & 282,,  
KANURU VILLAGE,  
PENAMALURU MANDAL,  
KRISHNA DISTRICT.

Lr. No. Dy.C.E.I.G./VJA/TECH/HT/VJA/D.No: 62 /18 Dated: 01-02-2018

Sir,

Sub:- The Electricity Act 2003 and the Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010. Electrical Installation of voltage exceeding 650V of M/S PRASAD V POTLURI SIDDHARTHA INSTITUTE OF TECHNOLOGY, SY.NO:281 & 282,, KANURU VILLAGE, PENAMALURU MANDAL, KRISHNA DISTRICT, - Statutory Approval under regulation 43(4) & section 54 of Electricity Act 2003 - Accorded.

Ref:- 1. This office Lr.No:Dy.C.E.I.G./VJA/TECH/VJA/D.No:62/18Dated:09-01-2018  
2. Inspection dated: 31-01-2018  
3. Your Compliance report received on: 01-02-2018

Under regulation 43(4) of the Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010 and Section 54 of the Electricity Act 2003, the following equipment of your Electrical Installation is approved for energisation.

**AS PER ANNEXURE ENCLOSED**

Under regulation 43(4) of the Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010, any additions or alterations to your above Electrical Installation shall not be connected to supply until and unless the same are approved in writing by this office.

Under regulation 13(4) and 46(7) of the Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010, you are solely responsible for the maintenance of the above installation in such condition as to be free from danger.

list of loads is approved and returned here with.

The above approval is accorded without prejudice to the statutory/mandatory obligations to be fulfilled by you under various other acts /regulations as the case may be and ipso facto does not confer any right to use for any other purpose.

Yours faithfully

  
DEPUTY CHIEF ELECTRICAL INSPECTOR(F.A.C)  
TO GOVERNMENT: VIJAYAWADA  
**Dy. Chief Electrical Inspector**  
**to Govt., VIJAYAWADA(F.A.C)**

Encl: 1. Load list  
2. Test Certificates

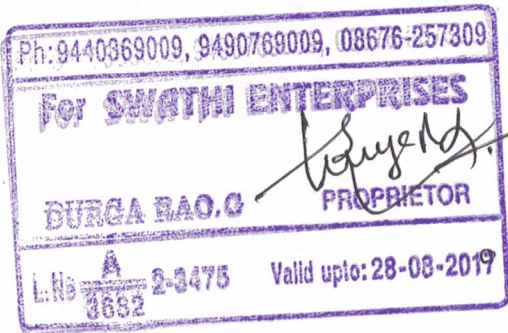
1. Copy to the Divisional Engineer/ Operation/ S.P.D.C.L of A.P/GUNADALA, for information. The date of release of supply to the above H.T. Installation may be intimated to the Deputy Electrical Inspector, VIJAYAWADA Sub-Division for information.
2. Copy to the Deputy Electrical Inspector, VIJAYAWADA Sub-Division, for information.

# PVP SIDDHARTHA INSTITUTE OF TECHNOLOGY

Kanuru, Vijayawada, Andhra Pradesh

## ADDITIONAL LOAD LIST OF 200 KW SOLAR PV POWER PLANT

S. No.	Name of the equipment	Details of the equipment
1	Inverter-1	Make: Zever Solar SL No: ZP033K1411760024 IN-01 Rating: 33 kW/415 V
2	Inverter-2	Make: Zever Solar SL No: ZP033K1411760041 IN-01 Rating: 33 kW/415 V
3	Inverter-3	M Make: Zever Solar SL No: ZP033K1411760023 IN-01 Rating: 33 kW/415 V
4	Inverter-4	Make: Zever Solar SL No: ZP033K1411760034 IN-01 Rating: 33 kW/415 V
5	Inverter-5	Make: Zever Solar SL No: ZP033K1411760016 IN-01 Rating: 33 kW/415 V
6	Inverter-6	Make: Zever Solar SL No: ZP033K1411760045 IN-01 Rating: 33 kW/415 V
7	Solar PV Modules	Make: RenewSys India Pvt Ltd Wattage: 315 Wp Qty= 636 Nos Total Capacity: 315 Wp x 636 Nos = 200.34 kWp



For Signature and Approval of Controller of  
**Technical Education**

*[Signature]*  
Secretary

**APPROVED**

*[Signature]*  
Dy. Chief Electrical Inspector  
to Govt. VIJAYAWADA (F.A.C)

**ఆంధ్రప్రదేశ్ ప్రభుత్వము**  
**విద్యుత్ భద్రత సంచలకుల శాఖ**

FROM: ప్రభుత్వ ఉప ప్రధాన విద్యుత్ తనిఖీ అధికారి,  
27-16-175, ముద్దా సుబ్బయ్య వీధి,  
ఇండియన్ బ్యాంక్ పైన, గవర్నరు పేట,  
విజయవాడ.

TO: M/S PRASAD V POTLURI SIDDHARTHA  
INSTITUTE OF TECHNOLOGY,  
SY.NO:281 & 282,  
KANURU VILLAGE,  
PENAMALURU MANDAL,  
KRISHNA DISTRICT.

లేఖ సంఖ్య.ఉ.ప్ర.వి.త.అ./విజయవాడ/టెక్నికల్/హెచ్.టి/VJA/బ.సంఖ్య/ 62 /18 తేది : 09-01-2018.

ఆర్య,

విషయము : విద్యుత్ చట్టము 2003 - కేంద్ర విద్యుత్ అధారిటీ (భద్రత మరియు విద్యుత్ సరఫరా) నిబంధనావళి 2010, లోని 43(4)వ నిబంధన క్రింద M/S PRASAD V POTLURI SIDDHARTHA INSTITUTE OF TECHNOLOGY, SY.NO:281 & 282,, KANURU VILLAGE, PENAMALURU MANDAL, KRISHNA DISTRICT వారి, విద్యుత్ స్థావరము యొక్క పటముల ఆమోదము గురించి.

నిర్దేశము : మీ లేఖ ఈ కార్యాలయమునకు చేరిన తేది:08-01-2018

\* \* \* \* \*

పై న తెలిపిన మీ లేఖతో పాటు పంపిన పటములు, వాటికి సంబంధించిన, నిర్దేశితమైన, షరతులకు లోబడి ఆమోదింపబడినవి. పని పూరి అయిన తరువాత, శాసనబద్ధమైన ఆమోదము యిచ్చుటకు ముందు ప్రభుత్వ ఉప ప్రధాన విద్యుత్ తనిఖీ అధికారి, పటములలో చూపించబడిన లోపములు, వదిలి వేతలను గురించి ప్రత్యేకముగా తనిఖీ చేయుదురు. అధికఫీడన విద్యుత్ స్థావరము తనిఖీకగు రుసుము రూ.4500.00లు. ఈ రుసుమును ఆంధ్రప్రదేశ్ ప్రభుత్వ టెజరీ కార్యాలయములో దిగువ తెలిపిన ఖాతా పద్దుకు చెల్లించవలసినది.

పెద్ద పద్దు 0043 విద్యుచ్ఛక్తి పైన పన్నులు మరియు సుంకహక్కుల  
చిన్న పద్దు 102 కేంద్ర విద్యుత్ అధారిటీ నిబంధనావళి 2010 ప్రకారము రుసుము  
డి.డి.ఓ. కోడు. 0516-0502-001

మీ సంతృప్తి మేరకు స్థావరము యొక్క పని పూరి అయిన తరువాత మీరు ప్రభుత్వ ఉప ప్రధాన విద్యుత్ తనిఖీ అధికారి విజయవాడ వారికి దిగువ తెలియ పరచిన పత్రములు మూడు ప్రతులు పంపిన, కేంద్ర విద్యుత్ అధారిటీ (భద్రత మరియు విద్యుత్ సరఫరా) నిబంధనావళి 2010 లోని 43(4)వ నిబంధన ప్రకారము మీ విద్యుత్ స్థావరము తనిఖీ చేయుదురు.

అ. క్రింద తెలిపిన ధృవపత్రములు.

- 1) ట్రాన్సుఫార్మరు. 2) ట్రాన్సుఫార్మరు నూనె. 3) ఎ.బి. స్విచ్. 4) మెరుపు నిరోధకము.

ఆ. స్థావరము లోని అధిక /మాద్యమిక/అల్ప ఫీడన/ లోడు వివరములు, మరియు జనరేటరుల వివరములు.

ఇ. లైసెన్సుడు కాంట్రాక్టరు యొక్క కమెన్స్ మెంటు మరియు కంప్లైషన్ / టెస్టు రిపోర్టులు.

విద్యుత్ సరఫరాదారు వినియోగదారుని అవరణలో ఒక కటవుట్ ను అమర్చవలెను. ఈ విషయమై సరఫరాదారునికి విడిగా తెలియజేయడమైనది. కటవుట్ ను అమర్చేవిషయమై మీరు వారి వద్దనుండి పని పూరి అయినట్లు ధృవపత్రమును పొంది మాకు సమర్పించవలెను. ట్రాన్సుఫార్మరు, ఎ.బి. స్విచ్ల తయారీదారు పరిక్ష ధృవపత్రములు మీ వద్ద లేకున్నచో ప్రభుత్వ ఆమోదము పొందిన ఇతర తయారీదారు చేతనైనను వానిని భారత ప్రమాణముల ప్రకారము పరిక్ష చేయించి, వారిచ్చు ధృవపత్రములను తనిఖీ అధికారికి అందజేయవలెను.

మీ విద్యుత్ స్థావరము, కేంద్ర విద్యుత్ అధారిటీ (భద్రత మరియు విద్యుత్ సరఫరా) నిబంధనావళి 2010 లోని సంబంధిత నిబంధనలకు అనుగుణముగా ఉండవలెను.

భవదీయుడు  


ప్రభుత్వ ఉప ప్రధాన విద్యుత్ తనిఖీ అధికారి  
విజయవాడ

అనుబంధములు: 5 పటములు, 1 నిర్దేశము.  
ప్రతి: ఉప విద్యుత్ తనిఖీ అధికారి, VIJAYAWADA వారికి.

The drawings pertaining to M/S PRASAD V POTLURI SIDDHARTHA INSTITUTE OF TECHNOLOGY, SY.NO:281 & 282,, KANURU VILLAGE, PENAMALURU MANDAL, KRISHNA DISTRICT, are provisionally approved under regulation 43(4) of the Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010, vide letter referred above, subject to the compliance of the following conditions:

**I POINT OF COMMENCEMENT OF SUPPLY:**

For the H.T. over head line if any, from the point of commencement of supply, guarding shall be provided underneath duly earthed.

**II TRANSFORMER:**

1. The Transformer plinth shall be constructed by the side of the D.P. Structure in the opposite direction of incoming H.V., supply at a distance between 1.5 to 2.0 Meters.(I.E.R., 29)
2. Inter-locks shall be provided between the isolators and their respective circuit breakers and earth switches.
3. When two or more transformers are operated in parallel, the system shall be so arranged as to trip the secondary breaker of a transformer in case the primary breaker of that transformer trips. [I.E.R.64 (A)(1)(d)]
4. Earth electrodes of neutral of the Transformers/Generators and lighting arrestors normally shall not be inter-connected.
5. Copper shall be used for Neutral and lighting arrestors earthing.
6. The circuit breaker shall be installed within 15 meters of walking distance.
7. The Bus duct shall be provided on the secondary side of the 750 KVA and above capacity Distribution Transformer. B.I.S.10028 PART 2
8. Where the Transformer capacity exceeds 630 KVA, a circuit breaker of adequate capacity shall Be installed on the secondary side of the Transformer.

**III CONTROL ROOM:**

1. The cables shall be dressed properly and fixed with inverted "U" clamps on the racks that are run in the cable trenches.
2. Cables of different voltages shall be run at different levels. Cables of A.C. and D.C. shall be separated.
3. All the hinged doors in the panel shall be earthed to their respective frames with flexible wires.
4. Identification, such as name of controlling equipment, cable size, length and load shall be noted at their respective control switches on the panel board.

**IV MACHINERY SECTION:**

1. The parallel earth bus shall be run all through the machinery sections with raiser at each equipment or machine. All motors, starters, switches and frames of the machines shall be provided with two body earths, each directly tapped from the two parallel earth buses. The earth wires so connected shall be less than 15ft in length and the size shall be as per the prescribed norms.
2. Normally bare copper or G.I. wire/flat shall be used for body earthing.
3. D.C. Machinery earthing system shall be of copper and shall not be mixed up with A.C., earthing system.
4. The long/cross travel and lifting motors of the E.O.T. Cranes shall be provided with earthing all along the rails earthed at both the ends with adequate size and continuous earth wire/flat.
5. Automatic P.F. controls shall be installed for the capacitors.

OR

Capacitors of adequate capacity shall be connected in shunt for each motor of capacity 20 HP and above. For motors of lesser capacity, consolidated capacitor bank shall be connected at the nearest to the distribution panel.

**V GENERATORS:**

1. When two or more generators are operated in parallel an automatic arrangement shall be made such that only one of the neutral earth links of the generators is closed. Due to any fault if that generator fails, then neutral contact of one of the other generators shall be closed automatically.
2. If the generators are to be run in parallel with Suppliers' grid, arrangement shall be made such that none of the neutral earth links of the generators are closed and for any reason, if Suppliers' grid fails, the said arrangement shall be such that neutral link of one of the generators shall be closed automatically.

**VI GENERAL:**

1. The location of D.B.s shall conform to Rule 51 of I.E. Rule 1956.
2. Installation of transformers shall be as per I.S. 1986.
3. Suitable provisions shall be made for immediate and automatic discharge of every Capacitor on disconnection of supply.
4. All plug sockets shall be of three pin type and the third pin shall be permanently and efficiently earthed.
5. Local control isolators shall be provided for the motors, wherever necessary and any instructions issued in this regard at the time of inspection shall be complied with.
6. Earth pits shall be constructed and maintained as per I.S.S.3043-1987. (I.E.R.33 (1))
7. Outdoor substation except pole type sub station shall be efficiently protected by fencing not less than 1.8 Meters in height or other means so as to prevent access to the electric supply lines and apparatus therein by unauthorized persons. (I.E.R.68 (B))
8. The earthing lead from (both ends of) the lightning arrester should not pass through any iron or steel pipe but shall be taken as directly as possible from the lightning arrester to a separate earth electrode subject to the avoidance of bends where ever practicable. (I.E.R.92 (2))
9. The bottom most portion of the insulator of live part should be at a height, not less than 9 feet from the ground level. (IER29).
10. Separate premises with gate to have access to his equipment from outside at all times shall be provided to the supplier. (I.E.R.64)
11. Clearances from the building to that of low and medium voltage lines and service lines shall conform to Rule 79 of I.E. Rule 1956.
12. The overhead line shall be protected with a device for rendering the line electrically harmless in case it breaks. (I.E.R.91 (1))
13. An efficient means should be adopted to divert to earth any electrical surges due to lightning on every overhead line. (I.E.R 92(1))
14. Panel Boards shall be made of dust and vermin proof.
15. The final sub-circuits of lighting shall not exceed 800 W or 10 points.
16. The Electrical installation work shall be executed only through a Licensed Electrical Contractor as per Rule 45 of I.E.1956.
17. The Electrical contractor shall submit his commencement report to this office immediately after commencing the Electrical Installation work duly indicating the name of the permit holders supervising and executing the work.
18. The Licensed Electrical Contractor who has executed the work shall submit his completion-cum-test report in the prescribed proforma after completing the work. And the person who has executed the work shall be present at the time of inspection.
19. The Licensed Electrical Contractor who has executed the work shall submit photos of the completed work at the time of submission of application for inspection.
20. The final sub-circuit of lighting load shall not exceed 800 Watts or 10 points.
21. The load on each generator shall be restricted to its capacity.
22. Identifications such as load particulars, item No's on switches starters, motors etc., as shown in the drawings and lists produced shall be marked on the panel boards.(IER 29).
23. All the portable and transportable equipment shall be connected to supply with flexible cable enclosed in a metallic covering with continuity. The earth wire of the cable shall be connected to one of the body earths. The Second body earth shall be earthed through the flexible covering.
24. The 4 pole change over switch and two independent mechanical isolators one for DISCOM supply and another for Generator shall be provided on either side of the changeover switch.
25. One meter clearance shall be maintained around the Generator and in front of switch Boards.
26. No service line or tapping shall be taken off an overhead line except at a point of support (IER89).
27. New register shall be opened and the values of the earth resistance of the various earth electrodes and insulation resistance values of the transformer shall be entered in the registers.
28. The Licensed contractor who executed the work and the authorized person must be present at the time of Inspection.
29. The consumer is advised to get the installation inspected within one year from the date of approval of drawings.
30. Approved drawings shall be displayed in the Factory Premises.
31. **This approval is provisional and valid up to one year from the date of approval. Supply shall be obtained only after obtaining the statutory approval under Rule 43(4) from the Deputy Chief Electrical Inspector, Vijayawada.**

No. of drawings approved: - 5

  
**DY. CHIEF ELECTRICAL INSPECTOR  
TO GOVERNMENT: VIJAYAWADA**