

NEWSLETTER

TRANSMISSION COMPANY OF NIGERIA (TCN)



- FG commissions 1st VSFH 12KW Solar Mini-Grid
- TCN to procure more spare parts for routine maintenance
- TCN to complete transmission projects in Ebonyi State
- Anambra State donates land to TCN
- TCN MD/CEO promises to operate open door policy



FG COMMISSIONS 1ST VSFH 12KWP SOLAR MINI-GRID AT PRIMARY HEALTH CENTER KARU

By Bili Kazah Akau

As part of efforts to address inadequate power supply in rural areas especially in healthcare facilities in the country, the Minister of State, Power, Hon. Goddy Jedy-Agba has commissioned the first Volsus Solar For Health (VSFH) 12kwp solar mini-grid with 58kwp Battery Bank at the Karu Primary Health Care (PHC) Center in Abuja.

The commissioned facility was installed by Volsus Energy Ltd under its Volsus Solar For Health (VSFH) Programme. The commissioning ceremony which took place on Tuesday, 1st September 2020, also witness the unveiling of the Sustainable Energy Africa Magazine.

Hon. Jedy-Agba in his address at the occasion lamented the inadequate power supply in various primary health centers across the country, which he said were the critical facilities in rural communities.

He noted that the supply of adequate power to those in rural communities had been a challenge but that with the coming of the 12kwp solar mini-grid with 58kwp Battery Bank, it has become a thing of the past.

He commended the initiators of the project, Volsus Energy Ltd for their critical role in complementing the efforts of the government to take electricity to all parts of the country. Volsus Energy Ltd are also the publishers of the "Sustainable Energy Africa" magazine, a magazine aimed at promoting wider reach of information on the evolution of the renewable energy subsector of the power sector in Nigeria in

particular, and the continent in general.

In his welcome address, the MD/CEO of Volsus Energy Ltd, Engr. Tomiwa Bayo-Ojo, said that "Volsus Energy Ltd is providing access to sustainable and uninterrupted electricity by deploying state-of-the-art solar power facilities across Primary Healthcare Centers (PHCs) nationwide. This initiative, he continued is the company's efforts to identify with focal drive of the Buhari administration to promote "rural and community based electrification as a means of boosting access to electricity in underserved and unserved places in Nigeria".

"The mini-grid is now providing 24 hours electricity to wards, laboratories, labour room and the entire building. There is also the component for a refrigerator to improve the storage process of vaccines for routine immunizations at the center... as well as provision for fans and cooling systems to improve the productivity and safety of the healthcare workers in the center', ha said.

He thus called on other private sector investors to promote solar and other renewable energy penetration across Nigeria.

The VSFH initiative is a revolutionary alternate energy project promoted by the Volsus Energy Ltd in collaboration with the office of the Minister of State, Power and considered to be the birth of hope for efficient energy provision to power the nations Primary Healthcare Centers across the country.

TCN PROMISES TO COMPLETE TRANSMISSION PROJECTS IN EBONYI STATE

By Eric Ephraim Ene

Arising from a meeting with the Ebonyi State Governor on the state of power in the state, the Management of Transmission Company of Nigeria (TCN) has promised to complete all on-going transmission substations and lines projects in Ebonyi to improve power supply within the state.

The Acting Managing Director and Chief Executive Officer of TCN, Engr. Sule Abdulaziz made this known when the Executive Governor of Ebonyi State, Dr. David Umahi, alongside some members of his cabinet and National Assembly members from the state, paid him a courtesy visit on Monday, 7th September 2020, in Abuja.

Speaking at the occasion, the Governor, while congratulating Engr. Sule Abdulaziz on his appointment as the Acting MD/CEO TCN, urged him to make a difference in the delivery of bulk power in the country.

Dr. Umahi, who expressed his unhappiness with the poor power situation in the state, said that lack of electricity has hindered investment in Ebonyi State, and described the state as having the least presence of electricity infrastructure in the country. He called for the review of the contract on an on-going transmission project in the state.

He further informed TCN Management that the state government had fulfilled its part of the agreement of the MoU with TCN and had equally acquired land for the Amasiri Substation project, promising to fence it and build security house to enhance the speedy completion of the project.

Responding, Engr. Abdulaziz informed his visitors that TCN was determined to complete the on-going 2x60MVA Substation in Amasiri and also a 150MVA 330/132kV Substation in



Abakaliki as well as transmission line projects within the state, noting that part of the delay in the project's execution is receiving due attention.

The Ag. MD/CEO further reiterated TCN's commitment to work with the Ebonyi State Government to complete existing and on-going transmission projects in the state, and noted that such collaboration will help in getting the substation completed on time.

Speaking also at the occasion, the Executive Director, Transmission Service Provider (TSP), Engr. Victor Adewumi, assured that TCN would execute its part of the agreement in the MoU which is the installation of all the electrical and mechanical work at the station while, the state government would provide the civil work for the project before the arrival of the power equipment.



ANAMBRA STATE

DONATES LAND TO TCN FOR CONSTRUCTION OF SUBSTATION

By Mary Philip-Udom

In a bid to increase the bulk power delivery to the distribution load centres, thus improve power supply to the residents of Anambra State, the state government has donated 8.7 hectares of land at Ogbunike/Ogidi communities to the management of Transmission Company of Nigeria (TCN) for the construction of a 2x60MVA transmission substation in the area.

The State Governor, Dr. Willie Obinano, who made the donation during handover ceremony on Tuesday, 1st September 2020, noted that the new sub-station was one of the (6) six new substations to be constructed across the state simultaneously.

The Governor, was represented at the ceremony by the Commissioner for Public Utilities, Engr. Emeka Ezenwanne, stated that the donation of land at Umuchu, Aguleri, Onitsha, Oba, Nnewi and Awka for the projects was part of the Memorandum of Understanding (MoU), signed with TCN in August, 2019.

He reiterated government's commitment in ensuring the availability of power for home and industrial use, which according to him, was a panacea for meaningful development and job creation.

Dr. Obinano, further disclosed that over 50 communities in Oyi, Idemili North, Dunukofia, Anambra East and West local government Areas would also benefit from the project and appealed to the host communities to support and ensure that the contractors deliver the project on time.

In his respond, the Acting Managing Director and Chief Executive Officer of TCN, Engr. Sule

Abdulaziz, represented by the General Manager (Engineering), Engr. Geoffrey Nwokoye, appreciated Governor Willie Obiano, for his extraordinary vision in partnering with TCN to deliver bulk power to the people of Anambra State.

He assured that TCN would continue to expand the grid network and deliver bulk power to distribution load centres through building of transmission infrastructure.

Engr. Nwokoye further stated that the 5 benefiting local council areas of the state were the project would be cited was arrived at through the field survey carried out by the TCN engineers four years ago to ascertain the locations.

According to him, "The project is the installation of 2x60MVA, 132kV sub-station and others accessories is expected to be completed within three years".

Speaking also at the occasion, the traditional ruler of Ogidi, one of the host communities, Igwe Pharm. Alex Onyido emphasized the need for steady power supply in all the towns in the state. He appreciated the Governor, Chief Willie Obiano for his wonderful policies and initiatives in the state. He noted that power is everything.

The climax of the occasion was the signing and handing over of the project documents to MBH Contractor.

The event was witnessed by the Regional Transmission Manager, Enugu, Engr. Emmanuel Nwani, MBH contractor and across section of indigenes of the two communities.

ACTING TCN MD PLEDGES TO OPERATE OPEN DOOR POLICY

By Joy Egbase

The new Acting Managing Director of TCN, Engr. Ahmed Abdulaziz, has disclosed that his management team would operate an open door policy that would carry everyone

positions have been placed on acting appointments.

The Acting MD also revealed that three months after his assumption to office the company achieved the highest ever national peak of

National Union of Electricity Employees (NUEE), Comrade Monday Johnson, described the Acting MD as a man of few words with a body of action and commended him for all he had achieved in few months.



Cross section of TCN Management staff

along and welcome constructive criticisms which will improve and move the company forward.

Engr. Abdulaziz who made this disclosure during a town hall meeting with TCN staff at the TCN Corporate Headquarters in Abuja, on Tuesday, 8th September 2020, said that his new team had begun a reform of the system with the promotion of staff, including the General Manager and Assistant General Manager levels.

He added that positions that were not existing before have been created and staff have been posted to fill them and some staff that have been promoted to fill vacant

5420.30MW on Tuesday, 18th August 2020. This he said was attained from the cooperation he got from staff and urged them to bring any issue of importance to management's attention using the right channels.

Engr. Abdulaziz also mentioned that five transmission projects were completed recently in Ikorodu and Sagamu, Ogba, Gagarawa, Iseyin and Kumbotso. He also commended the recent cordial relationship shared between TCN, DisCos and GenCos and stated that it was responsible for the increase in revenue generation in the power sector.

While welcoming the Acting MD, A representative of the

He called on the MD to look into salient staff issues that have been neglected for a while which include staff training, speedy payment of allowances and employing qualified wards of staff during recruitment exercise in TCN among others.

The Executive Director, Human Resources and Corporate Services, Bar. Justin Dodo, appreciated staff for their cooperation so far and assured them that all issues raised will receive due consideration and management would also come up with new innovations that would be beneficial to all staff.

TCN TO PROCURE MORE SPARE PARTS FOR ROUTINE MAINTENANCE OF ITS EQUIPMENT

By Eric Ephraim Ene



Cross section of TCN Management staff and Regional Transmission Managers

The Management of TCN has disclosed plans to procure more spare parts for routine maintenance of its equipment in substations and transmission lines to enhance grid reliability.

The Acting Managing Director and Chief Executive Officer of TCN, Engr. Sule Abdulaziz, made the disclosure when he declared open a one-day workshop for TCN's Regional Transmission Managers, titled "Provision of the December 2019 Minor Review of MYTO 2015, Minimum Remittance Order for 2020 and Service Level Agreement (SLA) with Discos", on Tuesday, 22nd September, 2020, in Abuja.

While welcoming the RTMs to the Workshop, Engr Abdulaziz said that procurement of more spare parts for TCN stores is important, to ensure readily available spares for planned and unforeseen equipment replacements, as the era of effective implementation of Service Level Agreement (SLA) kicks off. This, he noted, will allow the regional transmission managers readily access spare parts to ensure seamless operations within their areas of jurisdiction.

According to him, the workshop was to introduce new approaches that would reinforce the RTMs existing work process and also help reengineer them to further improve efficiency. The Ag. MD/CEO commended the Regional Managers, noting that they have been doing quite well and that feedback from the field attests to this. According to him, available reports also indicate that interface issues with the DISCOs are handled efficiently and with cordiality.

In his remarks, the Executive Director, Transmission Service Provider (TSP), Engr. Victor Adewumi, enjoined the RTMs to brace-up to the new reality, as all players in the value chain must play their part in the implementation of Service Level Agreement (SLA) as directed by Nigerian Electricity Regulatory Commission (NERC).

TCN Regional Transmission Managers, he continued, must as a matter of necessity be dynamic in their approach to job execution in line with the changes in the sector. He charged them to lead by example while approaching their work with responsibility.

Responding on behalf of his colleagues, the Regional Manager Transmission, Lagos Region, Engr. Adebola Lamina, pledged that they would work hard to ensure that TCN becomes the best component within the Nigeria Electricity Supply Industry (NESI).

The workshop featured three major paper presentations, including "Transition to Cost Reflective Tariff, TCN's Lookout" which focused on the realities of cost reflective tariff and the attendant sanctions for non-performing parties; "Service Reflective Tariff, A New Era", spotlighting TCN and Disco interface on wholesale and retail model of engagement at grid level, solution to Disco complaints, NERC Order December 2019, Service Band Adjustment and Force Majeure" as well as "Poor Maintenance Culture".



ED, (ISO), Engr. Mamman Lawal, addressing participants at the workshop

The Ag. Managing Director/Chief Executive Officer of the Transmission Company of Nigeria (TCN), Engr. Sule Ahmed Abdulaziz, has cautioned System Operators in TCN to avoid using native intelligence in conducting the affairs of the industry but rather act based on established industry norms and from the position of the existing ruling documents.

The Executive Director, Independent System Operations (ISO), Engr. Mamman Lawal who represented the Managing Director at the opening ceremony of a two-week workshop tagged, "Understanding Power Purchase Agreements (PPA)", said that the programme was designed to provide in-depth understanding of the practical realities of PPA agreements in the power

sector.

He advised Operators to make conscientious effort to grasp the key terminologies, their definitions and applications, which he described as generic within the industry but a foundation they must get right. He also urged them to actively participate and utilize the workshop as their day to day activities can significantly impact the execution of the PPA.

Speaking, the Assistant General Manager (Regulation/Compliance, Market Dev & International Relations), Mr. Ali Bukar Ahmad, said that PPAs govern the take or pay sale and purchase of power and that the System Operators who are charged with the task of load (generation) dispatch are invariably responsible for implementing a major part of the obligations of that agreement. He explained that all PPAs are unique and should not be treated as equal and that it would

therefore be wrong for dispatch controllers at the National Control Centre (NCC) to apply the same conditions to all parties, which is essentially why it is necessary for operators to understand their role in the implementation of the PPA provisions and protect their sanctity.

Power Africa Consultant to TCN and also a resource person at the workshop, Dr. Seun Amoda, who spoke during the second week of the "batch two" workshop, said that feedback coming from the field shows that participants of the "batch one" training workshop the previous week were already putting into practice what they had learnt. He noted that the workshop would have significant effect and would eventually translate into improved service delivery.

JICA TRAINS TCN ENGINEERS ON MANAGING DONOR FUNDED PROJECTS

Bili Kazah Akau

In the bid to facilitate the implementation of the Lagos-Ogun Power Transmission project sponsored by the Japanese government, the Japan International Cooperation Agency (JICA) has organized a workshop to equip TCN engineers on the concepts that would improve their skills in managing international donor funded project especially in the area of procurement.

The General Manager (Program Coordination)TCN, Engr. Joseph Ciroma, made this known at the venue of the workshop in Asokoro, Abuja, explaining further that the workshop would equip TCN engineers ability to adopt international best practices in project implementation and delivery not only in Nigeria, but also in Africa and the rest of the world.

Engr. Ciroma disclosed that the

federal government has secured a \$238m credit facility from Japan for construction of four 330/132/33kV Transmission Substations, two150MVA and two 60MVA in each of the new substations at the following locations; Likosi, Makogi, Ejio, and Ajegunle.

He said the project will also include construction of two (2nos) 132kV transmission substations with 2x60MVA transformers each at Abule Oba (Redemption camp) and Badagry. The substations, he continued, would be powered by 105km of 330kV transmission lines from Egbin and olorunsogo power station for the 330kV substations, and 106km of 132kV lines from the 330kV substations. The project when completed, would increase TCN's wheeling capacity by an additional 2,886MW based on simulation.

The Project Manager for JICA Project Implementation Unit (PIU), Engr. M. A Ajibade, who also spoke at the venue said that the Preparatory/Feasibility Studies, Environment and Social Impact Assessment Studies as well as Resettlement Action Plans which include compensations to the affected persons have been finalised with relevant approvals being pursued.

He added that participants have been exposed to international procurement guidelines which is not only applicable to JICA but could be relevant to all other multilateral agencies including World Bank, African Development Bank (AFDB), Agencé Francaise du Developpment (AFD), among others.



Cross section of participants at the workshop



NSE MAITAMA BRANCH BESTOWES AWARD ON TCN'S MD AT ITS 10TH ANNIVERSARY

By Joy Egbase

The Nigerian Society of Engineers (NSE), Maitama Branch has conferred the “Outstanding Nigerian Engineer Award” on the Ag. MD/CEO of TCN, Engr. Sule A. Abdulaziz and the Executive Director TCN-TSP, Engr. Victor Adewumi, as a mark of recognition for their performance in engineering profession.

The presentation of the awards was performed by the Deputy President of NSE, Engr. Gidari Wudil, during the 10th Anniversary and Annual General Meeting (AGM) of the NSE Maitama branch themed, “Engineering Education and its impact on National Development” on Thursday, 24th September 2020 in Abuja.

The Chairman of NSE, Maitama branch, Engr. Markus Choji Dye, in his welcome address described the last two years as challenging and rewarding, saying that the survival of the body, despite the many hurdles, was a testament of the team's commitment to the vision of building a reputable branch.

According to him, the high points of his chairmanship was the celebration of the 10th anniversary of the branch which incidentally is

also the winner of the best branch at the 2019 group dynamics competition for NSE branches.

In his remarks, the President of the NSE, Engr. Babagana Mohammed, represented by the Deputy President, Engr. Gidari Wudil commended members of the NSE Maitama Branch and challenged them to keep distinguishing themselves by continuing to work as a team, adding that the society will provide them with all the support they require from the national level.





TRANSMISSION TOWERS IN OSOGBO THREATEN BY ILLEGAL GOLD MINING

By Omideji Oluwakayode

The menace caused by illegal gold mining around the vicinity and even at the base of TCN's transmission towers is alarming. In line with this, the Osogbo Region of Transmission Company of Nigeria (TCN), has raised alarm over illegal gold mining along Kolajo Town, Oshogbo Ilesha road, in Osun State, saying that the activity is threatening the base of some critical transmission towers around Osogbo-Ihobor 330kV line as well as causing gaping gullies by these towers.

The Regional Transmission Manager, Osogbo, Engr. Kazeem Bakare, who made this known during a routine inspection of transmission lines in the area recently, said that towers 32 and 33 along Osogbo - Ihovbor transmission line; towers 50 and 51 along

Osogbo – Akure line and a host of other transmission lines projects along Benin – Akure line are all affected.

Engr. Bakare noted that illegal mining activities currently carried out by the miners within the transmission Right-of-Way (RoW) has caused ecological damages that poses potential risk to the towers even though TCN is taking steps to address the situation.

“The issue of illegal mining has been reported to appropriate authorities, including the Executive Governor, Osun State, Mr. Gboyega Oyetola; Nigerian Security and Civil Defense Corps (NSCDC) and the Department of State Service (DSS), due to the severe nature of the problem and the urgent need to bring the situation under control”, he

said.

According to him, all the trenches connected to the transmission towers along the axis were likely to be degraded and the integrity of protection scheme compromised and if urgent steps are not taken to address the situation, may collapse affected towers and with attendant consequences such as outage.

He called on the illegal miners to desist from the act which he described as inimical to improved power supply within the state and other states in the western axis of the federation, where these major transmission lines also take bulk electricity to. Engr. Bakare appealed to the miners to stay away from the Right of Way (RoW) of transmission lines.



Illegal mining site

RTM Osogbo, Engr. Kazeem Bakare and Ag. AGM (T), Osogbo Sub Region, Engr. Odukale Adetutu during the inspection of the illegal mining site near the transmission lines in Osogbo.



ACCOMPLISHMENTS

Highlights of some works by TCN engineers as the company continues to rehabilitate and expand the grid

1. Installation of new CB on 33kV Azare Feeder at Potiskum T/S was completed
2. Installation of Distance Protection Relay on 330kV Damaturu-Molai line at Damaturu T/S
3. Restoration of failed Substation SCADA Communication at Benin T/S was carried out
4. Successful commissioning of 30MVA 132/33kV Transformer T2 at Iseyin T/S was completed
5. Installation of 33kV CB on Asejire 33kV Feeder at Ibadan T/S was completed
6. Installation of GT02 500KVA 33/0.415kV Grounding Transformer at Rumosi T/S was completed
7. Pre-commissioning tests on T02 132/33kV 60 MVA Transformer at Rumuosi T/S was carried out
8. Installation of refurbished 170KVA 33/0.415KV Earthing transformer (ET2) at Okada TS was completed
9. Installation and commissioning of 2Nos 132kV circuit breaker at Abakaliki T/S was completed
10. Installation of 33kV Nnewi Industrial CB at Onitsha T/S was completed
11. Installation of new 33kV T02 Incomer Circuit Breaker at Rumosi T/S was completed
12. Construction of a new 33kV IGI Feeder at Aba 132KV T/S was completed
13. Installation of new 500KVA Grounding Transformer GT1 at Ekim T/S was completed
14. Replacement of 132kV Sokoto Line Isolator at Birnin Kebbi T/S was carried out
15. Replacement of 132kV Circuit Breaker on 60MVA 132/33kV TR1 at Kubwa T/S was carried out
16. Installation of ET5 500VA Earthing Transformer at Bauchi T/S was completed
17. Installation of 33kV CB on 33kV Airport Feeder at Mando TS was completed
18. Replacement of faulty 33kV CB on 33KV Zaria Road Feeder at Dan Agundi T.S was carried out
19. Replacement of faulty 132kV CB on the Bus coupler of 132kV Bus at Dangora T/S was carried out
20. Installation and commissioning of new Schneider 33kV VCB at Ilesha T.S was completed
21. Installation of 33kV Isolator on the Bus Coupler of Bus C and D at Iseyin was completed
22. Replacement of 132kV primary CB on 60MVA 132/33kV TR1 at Okenne T/S was carried out
23. Replacement of 33kV CB on 33kV Jabi Feeder was done

PHOTO PAGE



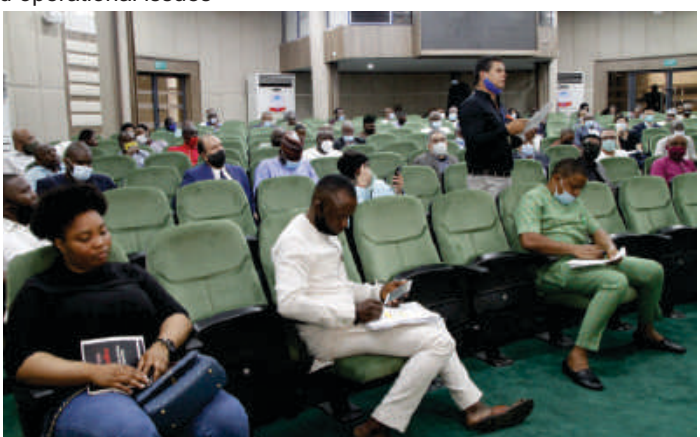
Inspection tour by the Minister of State for Power, Mr. Goddy Agba to Ayede Subregion, Ibadan



The Hon. Commissioner of Infrastructure & Public Utilities for Ekiti State, visits TCN in respect of ongoing projects and MoU between TCN and Ekiti State Government



TCN Management and Executives of National Union of Electricity Employees, NUEE, led by the Gen. Sec. Comrade Joe Ajearo meet to discuss specific staff and operational issues



Pre-Bid meeting for the construction of Transmission Lines and Substation Works In Jigawa and Katsina



ELECTRICAL SAFETY IN THE WORKPLACE

By Comrade Monday Johnson



Electricity is the flow of energy from one place to another. Everybody is familiar with electricity, but people tend to forget that electricity can kill. Electricity travels in complete circuits through the path of least resistance. Conductors allow electricity to flow. Insulators prevent electricity from flowing. Electrical cords/cables/wires are used to transmit current from points of generation to consumption.

It is therefore advisable to ensure that, All electrical systems and equipment must be suitable for the conditions found in the workplace and all electrical systems must be installed by competent (and certified) Electrical Engineer.

Also note that, electricity is the most commonly encountered hazard in the electrical industry. Death/injury can be caused from direct exposure to electrical hazards/shock.

ELECTRICAL HAZARDS

Hazards that may result from contact with electric current include;

- i. Electric shock
- ii. Electrical burns (Direct & Indirect)
- iii. Electrical fires and explosion (sparks, arcs, short circuits, overloading and old wiring, overheating conductors)

HOW DOES AN ELECTRICAL SHOCK OCCUR?

Most electrical accidents occur because individuals are working on or near electrical equipment which is thought to be dead but which is in fact live or is known to be live and those involved are without adequate training or appropriate equipment or have not taken adequate precautions.

EFFECT OF ELECTRIC SHOCK ON THE BODY

From Ohm's law;

$$\text{Voltage} = \text{Current} \times \text{Resistance} (V = I \times R)$$

AVERAGE BODY RESISTANCE is approximately 10,000 Ω

$$I = \frac{V}{R}, \text{ at 240 volts the average current is } \frac{240 \text{ V}}{10000 \Omega} = 24 \text{ mA}$$

| VOLTAGE (V) | CURRENT (mA) | |
|-------------|--------------|--|
| 10 | 1 | Barely perceptible |
| 105 | 10.5 | Let go threshold (Female) |
| 160 | 16 | Let go threshold (Male) |
| 200–300 | 20 - 30 | Breathing restricted, Possibly fatal |
| 500 | 50 | Heart disrupted Probably fatal |
| 2400 | 240 | Ventricular Fibrillation Almost always fatal |
| 20000 | 2000 | Fatal |



The Human Body allows the flow of electricity. Touching a **LIVE** circuit and **GROUND** can cause serious injury or death. The greatest risk of shock occurs when you touch with wet Hands.

'LOW VOLTAGE' does not mean **'LOW HAZARD'**

PRECAUTIONS

- i. Avoid working on or near **LIVE** parts.
 - ii. De-Energize all **LIVE** parts.
- To De-Energize **LIVE** parts:
- 1. Turn current off at switch box
 - 2. Lock and tag switch box
 - 3. Release any stored energy
 - 4. Verify equipment is shut down
 - 5. After Work Inform coworkers before restoring power
- iii. Take precautions to ensure dangerous **LIVE** parts are out of reach
 - iv. Never enter a space if you cannot see the live parts
 - v. Be careful when holding conductive materials.
 - vi. Do not wear conductive jewelry.
- In the event of an electrical incident, avoid housekeeping until area is safe.

WORKING SAFELY WITH PORTABLE ELECTRIC APPLIANCE

- i. Do not work with damaged cords
- ii. If cord is damaged, remove from service
- iii. Do not use if you or the environment is wet
- iv. Wet clothing, high humidity, and perspiration increase your chances of being electrocuted.

v. Any equipment should have **EARTH PROTECTION** and use 3-core cable and a three prong plug.

vi. Circuit Protecting Devices should be included as an added layer of protection. They shut off the flow of electricity, if level becomes too dangerous. Examples are Fuses, MCBs

vii. Be sure to turn off all appliances at the end of the day.

viii. If electrical equipment malfunctions or gives off strange/burning odour, disconnect it and call competent personnel.

ix. Keep extension cords clear from doorways or other areas where they can be stepped upon or scarred.

x. There should be sufficient sockets so that **ADAPTORS** or **EXTENSION BOXES** are not used.

xi. Look out for, Bare/Naked wires, Cut or damaged cables, Taped joints, Cracked or damaged equipment casing, Open electrical panels, switch, or cable outlets, Loose connections, Overheating marks on plugs or equipment.

xii. Avoid the use of one **EXTENSION BOX** plugged into another.

CLUES THAT ELECTRICAL HAZARDS EXIST

- i. Tripped circuit breakers or blown fuses
- ii Warm Tools, Wires, Cords, Connections, Sockets, switches, or junction boxes.
- iii. Worn or frayed insulation around wire or connection

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Some Personal Protective Equipment will Save Your Life are:



Industrial Protective Helmets and Rubber shoes



Rubber gloves

FEEDBACK PAGE

TCNNIGERIA
@TCN_NIGERIA

POWER SECTOR RECORDS NEW IMPROVED ALL-TIME PEAK OF 5,420.30MW

Qasim Niass @QasimNiase4 · Aug 20
Replying to @TCN_NIGERIA
Yeah this is good news May God continue to bless our dear country and help those who are truthfull in their sevice

Transmission Company of Nigeria
Published by tcn_nigeria [?] · 5d · 🌐
SCHEDULED ANNUAL MAINTENANCE ON EGBIN-AJAH TRANSMISSION LINES THREE AND FOUR

Raymond Anumiri I want to commend ur effort on varrios project u have commissioned across the country and also want to know if the one of obosi to ideator has been abandoned
Like Reply Message · 5d

Transmission Company of Nigeria
Published by tcn_nigeria [?] · 15 September · 🌐
CIGRE - WEST AFRICAN NATIONAL COMMITTEE HAS BEEN INAUGURATED WITH Ag. MD/CEO OF TCN AS THE CHAIRMAN

Muhammad Usman Tsagem Alhmdlhi Masha Allah May Allah Continue to Bless U wit Great Achievements Sir
Like Reply Message · 1w

Zahraddeen Ado Abubakar Congratulations sir on your new achievements
Like Reply Message · 1w

Transmission Company of Nigeria
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TCN Management and Executives of National Union of Electricity Employees, NUEE, led by the Gen. Sec. Comrade Joe Ajeoro meet to discuss specific staff and operational issues.

ahmedabarah8 NUEE the powerful union that has focus and vision for all it members demand Long live to our one and only Sarkin Yaki Comrade Joe Ajeoro and Long live TCN Solidarity forever



TRANSMISSION COMPANY OF NIGERIA

VISION

TO BE ONE OF THE LEADING ELECTRICITY
TRANSMISSION COMPANIES IN THE WORLD



MISSION

TO TRANSMIT ELECTRICITY IN THE MOST
EFFICIENT AND EFFECTIVE MANNER



CORE VALUES

INTEGRITY, TRANSPARENCY, SUSTAINABILITY,
PROFESSIONALISM, CUSTOMER FOCUS,
TEAMWORK AND SAFETY

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