

- \* \$1.661BN USD FOR TCN PROJECTS IN START-UP STAGES
- \* SENATE SUPPORTS RE-CAPITALISATION OF DISCOS
- ★ GENCOs NOW FREQUENCY RESPONSIVE
- **GOMBE STATE GOVT. TO PARTNER WITH TCN**



### SENATE DECLARES SUPPORT FOR RE-CAPITALISATION OF DISCOS



By Kazah Bili Akau

he 9th Senate, under the leadership of the Senate President, has said that it would want to see a power sector road map that would be all inclusive of Generation, Transmission and Distribution, with a holistic picture of how power supply challenges would be resolved once and for all.

The senate also declared its support for the proposal to recapitalise Distribution Companies (DISCOs) and advised that the 40 percent holding of the Federal Government as stipulated in the Power Privatisation Act 2005 would be more beneficial to the nation if it is sold to foreign investors with technical knowhow.

The Senate President who made these known when he received the TCN Management team in his office recently at the National Assembly Complex in Abuja, also opined that it is not in the interest of government to keep disbursing bailout funds to Discos without commensurate improvement in power supply.

According to him, experts in the field should be given an opportunity to invest in the sector. He went on to assure that the Senate would continue to support TCN's Transmission Rehabilitation and Expansion Programme (TREP) with the objective of rehabilitating, stabilizing and providing necessary flexibility in the transmission grid.

The Senate President however expressed displeasure with the report on Supervisory Control and Data Acquisition (SCADA) contracts awarded three times in the past without success and called for a more stringent process of awarding contracts that would ensure that only competent firms are engaged or qualified to execute the project.

On his own part, the Deputy Senate President, Ovie Omo-Agege, who was impressed with the presentation of TCN team led by the MD/CEO TCN, Mr Usman Gur Mohammed, commended the company's efforts and expressed confidence in the capacity of the TCN team to solve the power quagmire in the country.

For the Senate Majority Leader, Yahaya Abubakar Abdullahi, reducing government bureaucracy in the power sector operations was key. He cited the difficulty in securing the supply of gas to thermal power companies as a major setback to power generation in the country.

Sen. Abdullahi who also agreed with the position of the Senate President on the sale of 40 percent holding of the government in the Discos to experts suggested that the Senate could re-open the power privatisation exercise carried out in 2013 and involve big foreign investors to allow for proper restructuring of the sector.

The Managing Director of TCN, Mr. Usman Gur Mohammed, who led his team to the National Assembly, earlier presented a

#### TCN Newsletter

report to the leadership of the Senate on TCN's achievement in the past two years and half.

These, according to him, include Stabilizing system frequency, executing the Transmission Expansion and Rehabilitation Programme (TREP), securing US\$1.57b from Multi-lateral financing agencies for execution of specific transmission projects nationwide, the evacuation of 755 containers containing power equipment from the ports as well as initiating the procurement of a functional SCADA and Spinning Reserve.



## POWER SUPPLY RESTORED TO TCN'S OTUKPO SUBSTATION AFTER ATTACKS BY YOUTH GROUP

By Mary Philip Udom

ulk power supply has been restored to the Otukpo 132/33kV Transmission Substation of Transmission Company of Nigeria (TCN), following an attack on the station by youth groups from ASA 2 Community in Otukpo Local Government Area of Benue State, who were protesting the poor power supply in the areas served by the Jos Electricity Distribution Company (JEDC).

The Assistant General Manager (Transmission), Apir Sub Region, Engr. Emmanuel Akpa, who made this known in a report said the violent protest which took place in July 2019, in Otukpo, led to the shutdown of the substation for four days by the management of TCN to guard against further vandalism by the rampaging youths who decided to ventilate their anger by pulling down the sign post, throwing stones, and threatening to burn down the substation, and even attacked the operators on duty.

According to him, the protest

was due to continued power outage in the community for two days as against stable power supply situation in their neighboring community ASA 1, and noted that the incident had been reported to the Police in Otukpo and management of TCN.

Engr Akpa further explained that in an effort to forestall future occurrence, TCN management gave conditions for restoring power to the station. These include; arrest of the ring leaders of the violent protest, replacement/repair of all damaged TCN property and extractions of written commitment from the leaders of the community pledging that the recalcitrant youths would not attack TCN's sub regional office again.

During the meeting with all stakeholders including Jos Disco, the Police, traditional rulers and youth leaders. The AGM informed representatives of the community that whatever grievances they had about power supply should be channeled to

Otukpo Business Unit of Jos Disco and not TCN as both do not share responsibilities.

The Jos Disco on their part complained of non-payment of electricity bills by ASA 2 community and equally gave them conditions including the installation of meters at transformer points to enhance accountability of power supply to the area.

Prior to this incident, there had been several demonstrations by youths of the area proclaiming their ancestral ownership of land where TCN substation was built, and they demanding the connection of their community to township 11kV feeder transformer, as well as a change of their feeder from Oju 33kV feeder to Taraku 33kV feeder.

TCN restored bulk supply to the station on Friday, 12<sup>th</sup> July, 2019, after the traditional rulers pledged to ensure that such violent demonstration will not take place again in their domain.



# GOMBE STATE GOVERNMENT READY TO PARTNER WITH TCN TO IMPROVE BULK POWER SUPPLY



MD/CEO TCN, Mr Usman Gur Mohammed, State Governor, Alhaji Muhammadu Yahaya with his delegates during the meeting

By Eric Ene Ephraim

he Gombe State government said it is ready to partner with the Transmission Company of Nigeria (TCN) to improve bulk power supply in the state in order to enhance the socioeconomic activities of its people.

The State Governor, Alhaji Muhammadu Inuwa Yahaya, made the pledge when he led a delegation to TCN on a courtesy visit on Friday, 23<sup>rd</sup> August 2019, at the TCN headquarters, Abuja.

The Governor said the visit became imperative to draw TCN's attention to the poor power supply situation in the state, and the entire North East zone of the country in general.

He lamented that even after the privatization of the power sector in 2012, no meaningful effort has been made to improve the power supply situation in Gombe state. He noted that the state in its quest for more quality and stable power supply for its people, had invested hugely as counterpart funding in a National Independent Power Project (NIPP), under the Niger Delta Power Holding Company (NDPHC).

He appealed to TCN to assist the state by building more substations and transmission lines in order to enhance bulk, quality and stable electricity supply for Jos Distribution Company to take to its people. This he noted, would help lift his people out of the several challenges associated with poor power supply.

Responding, the MD/CEO of TCN, Mr. Usman Gur Mohammed stated that efforts were being made by TCN to increase transmission capacity in Gombe State to 10MW. This he said, would boost the current poor voltage associated with long distance

transmission lines and consequently helpin stabilizing the grid.

M r . Mohammed stated that under the West African Power Pool (WAPP) Northern Corridor

Project, a new transmission line will be constructed from Calabar to Kano which would also help improve bulk power in the North East, as well as adding another source of bulk power supply to that axis.

According to him, poor access to electricity was responsible for the deplorable power situation in the North Eastern part of the country; he and assured the governor that TCN was doing everything possible to improve transmission infrastructure in Gombe and across the country.



A group photograph of TCN management and delegates from Gombe State





# \$1.661BILLION USD FOR TCN PROJECTS IN START-UP STAGES, INVESTMENT STILL ON-GOING By Ndidi Mbah

he Managing Director of the Transmission Company of Nigeria (TCN), Mr. U.G. Mohammed has said that only a fraction of the USD 1.661billion raised from multilateral financing agencies for investment in TCN has so far been invested in some of its projects. He stated that accessing the fund usually depend on the stage of project implementation, and therefore it is impossible for TCN to invest all the fund at the same time without adhering to due process as required by law and contracts agreement.

He explained that his administration has changed the way projects are being handled in TCN and that it was no longer business as usual, where funds for project implementation are drawn down arbitrarily, without ensuring that they were judiciously applied to projects they were meant for.

The MD of TCN made this known to the press at the site of the ongoing 2x60MVA Gagarawa Transmission Substation, Jigawa State, during a project inspection tour of transmission substations in Kano and Jigawa States recently.

According to him, such fundamental processes preceding draw down of the funds, include scoping, feasibility studies, land acquisition/Right of Way, procurement stages like prequalification, tendering, contract award and kick off meetings among others. These take time procedurally and cannot take place at the same time. The TCN MD said that even if TCN had made full payment on any project, which it has not, it would take between three to five years for the transmission projects to be completed.

The Reinforcement of High Voltage Transmission Ring Around Abuja - **Abuja**Feeding Scheme comprises 6 lots, with a project cost of \$170Million. The contract, he said, became effective as at April 2019, with the official ground breaking ceremony to signify the kickoff of the project held in Dawaki, Abuja on the 11<sup>th</sup> of April, 2019. The project, which should take about 3 years to complete, would be paid in tranches in line with the

contract agreements. The Abuja project is aimed at adding two (2) number 330kV substations, three (3) number 132kV substations and an additional 143KM 330kV transmission line from Lafia Substation to the proposed New Apo 330kV substation, bringing to three the sources of power supply into Abuja Metropolis.

Under lots 1&2, the project would put in place 81km of 132kV DC HV Transmission Lines from New Apo, to Old Apo and from proposed Kuje 132/33kV Substation to proposed West Main (Lugbe) 330/132/33kV Substation.

Advance payment has been made, sites hand- over (or official ground breaking ceremony) has been done, the subcontractor for geotechnical works has also been approved while the review and approval of preliminary design drawings/documents is in progress.

Lots 3&4 comprise 2x150MVA,

#### TCN Newsletter

330/132/33kV line bay at New Apo (Pigba), and 2x150MVA, 330/132/33kV hybrid Substation with 2x330kV line bays including 3x60MVA, 132/33kV substation, 4x132kV line bay GIS & 33kV metal clad at West Main (Lugbe) substation.

Advance Payment has been made for Lots 3&4 projects and sites handed over to the contractor while the review and approval of preliminary design drawings/documents are ongoing.

Lots 5&6 under the Abuja Wheeling Scheme include a new 3x60MVA, 132/33kV Kuje Substation with 4x132kV Line Bays; 2x60MVA, 132/33kV Substation with 2x132kV line bays at Wumba/Lokogoma including laying of 5KM length of underground XLPE Cable from New Apo to Wumba/Lokogoma as well as a new 2x60MVA, 132/33kV GIS Substation at Dawaki on existing 132kV double circuit with a Turn in & out, along the Katampe-Suleja Transmission Line.

For Lots 5&6, the advance payment has equally been made and sites handed over to contractors, the subcontractor of underground cable route from Wumba to New Apo Substation has also been approved even as the review and approval of preliminary design drawings/documents are already in progress.

The Nigeria Electricity Transmission Project (NETAP) seeks to redress certain deficiencies and operational constraints of the Nigerian Power Transmission System, to allow for efficient dispatch and transmission of power in the National Grid through additional transformer capacity. particular, it will complement efforts underway for both emergency and long-term measures now being taken to increase generation. The project is financed by World Bank at the cost of USD 486Million.

The project is in three (3) stages; two (2) have passed pre-qualification stage, while the third is at pre-qualification stage.

Pre-qualification of the Northern Corridor Project is almost completed. The project is funded by the French Development Agency (AFD)

and will cover the closing of loop between Sokoto to Kaura Namoda and Katsina. Environmental Impact Assessment (EIA) for this project as well as verification for compensation for the right of way are on-going. The project loan is USD 300Million.

The Lagos/Ogun transmission project worth USD 238Million is financed by JICA. The project design, EIA studies, technical studies and resettlement action plan and compensation have been concluded, compensation request has been forwarded to BPP for due diligence and is expected to be concluded by the third quarter of the year.

The MD further noted that the Lagos/Ogun transmission project is significant because this is the first time five substations of 330kV capacity would be built almost at the same time in Lagos/Ogun axis.

TCN is determined to continue to pursue its grid expansion drive and would do all it should to ensure quality project delivery in a timely manner.







#### **POWER GENERATING** PLANTS IN NIGERIA ARE NOW **FREQUENCY RESPONSIVE** - Mohammed

he management of Transmission Company of Nigeria (TCN) has disclosed that all the power generating plants in Nigeria are now frequency responsive and that has enabled the sector attain Frequency Control of 49.8 and 50.2hertz in the transmission network.

The Managing Director and Chief Executive Officer of TCN, Mr. Usman Gur Mohammed made this disclosure while speaking as a discussant at the 37<sup>th</sup> Nextier Power Dialogue with the theme "Evaluating Transmission Link for a Competitive Electricity Market", recently in Abuja.

Mr. Mohammed noted that the achievement of frequency control has gone a long way to stabilize the grid network as all the power generated are now being evacuated to the various load centers across the country for onward distribution to electricity customers.

He further stated that TCN has procured 260MW spinning Reserve, which payment would be completed by December 2019, as part of provision to fix deficiencies in the system.

Mohammed who described transmission as the bridge in the electricity value chain in the country, said that efforts to stabilize the grid is an ongoing one as TCN continues to diligently implement the Transmission, Rehabilitation and Expansion Programme (TREP).

One of the discussants at the event and former Chairman, Nigerian Electricity Regulatory Commission, NERC, Dr. Sam Amadi stated that building the capacity of the power sector ought to have been first thing before privatization.

According to him, all aspects of the power value chain were underdeveloped before the reform, with limitations in terms of covering critical places in TCN network, constraints from NERC giving license, and ease of evacuation of power, as well as other basic frailties which he stated still exist even after reformation took place in By Azorji Uloma the power sector. He stressed that most of the problems today, ranging

from communication backbone for fiber optic, frequency of outages and system collapses are still traceable to those frailties that were not taken care of before privatization.

On tariff, Mr. Amadi advised that tariff should be reviewed as at when due, adding that the problem of the Discos isn't tariff, but lack of financial capacity.

Key recommendations and action points from the forum included the need to run a competitive private electricity market by commercializing power transactions between Gencos, Transmission and Discos, Recapitalisation of the Discos, practicing a System Operator that is fair and a bankable management of power dispatch, and the need for Nigerian Electricity Regulatory Commission (NERC) to perform regulation impact assessments periodically to review and evaluate the efficiency of preset policies. Noting that the Nigerian electricity market is still very much in its early stages, and would transform at several occasions before it. stabilises.

#### PHOTO PAGE







The new Hon. Minister of Power, Engr Saleh Mamman along with the new Minister of State, Mr Goddy Judy Agba addressing the PS, Mr Louis Edozien and other top managers of the Power Sector agencies as they resume duty at the Ministry of Power HQ, Maitama, Abuja.On Thursday, 22nd August 2019





TCN signs collaboration agreement with Anambra State Government to facilitate the completion of on-going power transmission projects on Wednesday, 21st August 2019





Market Operator, Engr EA Eje addressing Electricity Market Participants during the 3rd Quarter, 2019 Interactive Forum, Theme: Rules & Compliance for Market Development & Sustenance On Wednesday, 21st August in Abuja.





TCN Management Team meeting with representatives of SIEMENS on possible areas of intervention to further grow and develop the National Grid, at TCN CHQ in Abuja. On Tuesday, 27th August, 2019

#### NAPTIN PAYS A COURTESY CALL ON TCN MANAGEME

By Joy Egbase



he Management team of the National Power Training Institute of Nigeria (NAPTIN), led by the Director General, Mr. Ahmad Nagode, recently paid a courtesy call on the management team of the Transmission Company of Nigeria (TCN) in appreciation of TCN's contributions to NAPTIN's successes.

The Managing Director of TCN and his team who received them at the Conference Room of TCN Head Quarters, on Monday, 29th July 2019, congratulated Mr. Nagode on his confirmation as the Director General of NAPTIN saying that it was a confirmation of his hard work towards the development of the company. He called on the Management of NAPTIN to handle the NAPTIN's project the way they will handle their personal project and encouraged the DG to create room for staff to express themselves so that they are able to give their best to the organization.

The Director General of NAPTIN, Mr. Ahmad Nagode

was full of praises for the MD of TCN, whom he said, delivered on his promise to establish NAPTIN as a center excellence in the West African Power

Pool (WAPP). He further expressed his appreciation for role of the MD TCN in making sure that NAPTIN's business plan to build Kainji Training Center, which will be of international repute and attract trainees from all parts of Africa and beyond, went through without hitches.

The DG said that NAPTIN has been able to train 120 staff of Liberia's Electricity Corporation (LEC). He revealed that through this training the organization has been able to earn foreign exchange, which has contributed to the TSA funding of Nigeria's revenue. He also revealed that

they had trained a total of 300 TCN engineers, who after monitoring t h e i r performance, are doing better at their jobs. He added that he was hopeful that NAPTIN

would train more.

The Head, Transmission Service Provider (TSP) congratulated the DG on his confirmation and appealed to the Management to include advanced trainings as part of their courses, so that staff on higher positions could also attend.

The Executive Director, Human Resources and Corporate Services (HR&CS), Mr. Justin Dodo who was thrilled by the fact that NAPTIN was taking care of part of his job schedule commended the DG on his confirmation.

A TCN Consultant from Power Africa, Seun Amoda called on NAPTIN to expand its curriculum beyond the engineering functionalities, and suggested that it should expand its responsibilities in terms of training the Power economics, Power accounting etc. He gave an example of the specific accounting functions of the power sector and called on the Nigerian Electricity Regulatory Commission (NERC) to liaise with NAPTIN to train staff on a uniform system of accounts.





#### TEAM SUBMITS EVALUATION REPORT ON PRE-QUALIFICATION OF NORTHERN CORRIDOR PROJECTS

By Azorji Uloma



he Pre-qualification Evaluation on the Design, Manufacture, Supply, Installation of Transmission lines and Associated Substations with respect to Northern Corridor projects has been submitted by a five man evaluation committee.

The Managing Director and Chief Executive Officer of TCN, Mr. Usman Gur Mohammed, who received the report in his office on Tuesday, 16<sup>th</sup> July 2019, disclosed that the Northern Corridor Project would serve as backbone for the North Core project which would enable interconnection within and beyond the West African Region and possibly up to Morocco's 1000MW solar power plant.

Mr. Mohammed noted that the Project, which seeks to strengthen some key transmission lines as well as build new ones in the North to close the transmission gap around the axis, is one of the major projects in TCN's Transmission, Rehabilitation and Expansion Programme (TREP).

He commended the team for a

job well
done and
promised to
review, as
well as
forward
their
submission
to the
French
Developme
nt Agency
(AFD)-the
donor
agency

financing the project.

Also commending the team, the Head, Transmission Service Provider (TSP), Engr. Victor Adewunmi, noted that TCN would ensure that only competent contractors are engaged to eventually execute the project, following a transparent and competitive procurement process.

Chairman of the Five-Man Committee, and General Manager (Engineering), Engr. Geoffrey Nwokoye, expressed appreciation to the management for the opportunity to chair such

important committee and noted that his team did a thorough job in the prequalificati n evaluation and was confident h submission was very credible.

The project is expected to form the back bone for the WAPP North Core project that will connect Nigeria, Niger, Benin and Burkina Faso via a 330kV Double Circuit (DC) transmission line. It is also expected to execute the Kainji-Birnin-Kebbi-Sokoto 330kV DC line, Katsina-Daura-Gwiwa-Jogana-Kura 330kV DC line, and equally reconstruct the seriously constrained Shiroro-Kaduna 330kV Single Circuit transmission lines into 330kV double circuit quad lines which will be the first of its kind in Nigeria.

Other projects also to be executed under the WAPP North Core Project include the construction of 330/132/33kV substations in Sokoto, Daura and Jogana-Kano, 132/33kV substations in Birnin Gwari, Argungu and Lambata in Niger State, as well as the rehabilitation of Jebba-Kainji switch yards to ensure adequate capacity to meet Mainstream's generation expansion plans.



Cross section of participants at the meeting



# N STAFF TASKED ON SOURCE AINTEGRITY OF DATA COLLECTION

By Kayode Omideji

taff of Transmission Company of Nigeria (TCN) in charge of data collection have been tasked to ensure that their data source is reliable, data collection and collation is accurate, data dispatch is credible and the data integrity is guaranteed.

The General Manager, Monitoring and Evaluation (M&E), Engr. Cornelius Asuzu, gave the task during a two day Data Collection and Processing Workshop, organized by the department recently for TCN staff in Osogbo Region.

Engr. Asuzu explained that accurate and prompt data inputs from Operations and Maintenance (O&M) department is necessary for proper monitoring and management of Transmission System Lines and Power Transformers in the network which in turn will impact positively, the revenue generation of the company.

According to him, there are six basic data frameworks that forms the structure used by M&E Department for data collection. These includes, information of all existing substations and their locations, Single Line Diagram (SLD), Transmission line terminals, Power Transformer Capacities, Grid Metering Points and Billing Meters Data.

He stated further that regions across the country are assessed monthly on the basis of their Operations and Maintenance (O&M) activities carried out by the various works stations (Sub Regions and Work Centers) as reported in the Monthly Progress Report (MPR) by the respective regions. He also stated that with the introduction of the Monthly Reporting Forms (MRFs) by the Monitoring and Evaluation Department, TCN has been able to capture up to 98 per cent of the outages that occur in the system as well as similar O&M monthly data being captured.

Earlier in his welcome address, the General Manager (Transmission), Osogbo Region, Engr. Oladele Olaniyi, commended the Monitoring and Evaluation department (M&E), for organizing the





A group photograph of participantes at the workshop

workshop in Osogbo Region.

He noted that accurate data collection and analysis is very germane for the successful operation, development and sustenance of the company.

He urged the participants to update their knowledge and ensure collection of accurate data, its analysis and reporting.



#### **MOHAMMED PLEDGES IMPROVED STAFF WELFARE AS REVENUE IMPROVES**

By Gabriel N. Gandu

he Managing Director of the Transmission Company of Nigeria (TCN), Mr. Usman Gur Mohammed, has assured staff of the company that issues of staff welfare would be addressed as soon as revenue improves.

He made this disclosure during the third quarter Town Hall Meeting of the company at TCN's Corporate Head Quarters on Thursday, 1st August, 2019. He expressed optimism that with the significant investment going on in various substations nationwide, in line with the Transmission Rehabilitation Expansion Programme (TREP), and anticipated recapitalization of the DISCO's, TCN's revenue would certainly improve.

The MD noted that TCN is equally exploring other avenues that would enable it earn additional income to shore up its revenue.

He called on all staff to continue to work in synergy with management, and that management would continue to explore ways to improve staff welfare. Mr. Usman debunked the rumour making the round that management intends to reduce staff size, saying that on the contrary, TCN requires more hands, especially engineers.

The MD equally congratulated the newly elected executive of the National Union of Electricity Employees (NUEE), TCN Chapter, promising to work with them to move the company forward.

He also appealed to staff to work hard to do take TCN to the "Next Level", noting that diligence is key and that it takes committed staff to diligently perform tasks properly in any organisation.

Responding, the newly elected NUEE Chairman, TCN Chapter, Comrade Christopher Adah, appealed to management to ensure that staff issues are given priority and encouraged management to a more open communication process.



MD/CEO TCN, Mr. Usman Gur Mohammed, adressing staff at the meeting



#### PRESS RELEASE

#### ON RECENT KEDCO'S CHEAP BLACKMAIL AGAINST TCN

he attention of the Transmission Company of Nigeria (TCN) has been drawn to the wild allegations and cheap blackmail by Kano Electricity Distribution Company (KEDCo) claiming that TCN was indebted to KEDCo, and that consequent upon this, it intentionally flouted the Market Participation Agreement it signed when the company was privatized, not minding the Market Rules nor the consequences of its actions.

While TCN would not want to join issues with KEDCo since KEDCo had taken TCN to court, it is constrained to note that KEDCo is deliberately misinforming the public on the true facts of the matter. It is important to state that KEDCo was never singled out for suspension, but was sanctioned alongside Port-Harcourt, Ikeja, Enugu and Eko DiSCos who have all cured their debt, except KEDCo.

As at May 2019, shortly before the Market Operator started enforcing 100% payment of Service Providers Invoices, KEDCO owed the Service Providers the sum of N23billion and KEDCo intentionally leaves this out in its narratives published in various newspapers. Just as it intentionally leaves out the fact that as at 2015, it owed the Service Provider's a total of N8.27 billion even as it claims that it is being owed N3.2 billion. The so-called imbalance of N3.2 billion is an outstanding on them from the Market. TCN is NOT indebted to KEDCo.

From February 2015 to December 2015, for a whole year, KEDCo refused to pay for any of its Service Provider invoices despite the fact that it was collecting monies belonging to the entire market from electricity consumers within their franchise areas. Characteristically, this pattern of indebtedness and flagrant disregard for rules continued to increase their indebtedness over the years.

On the Imbalance Mechanism used before TEM declaration in 2015, it provides that Discos that took energy more than their MYTO allocation compensates those that took less than their own allocation. KEDCo seized this opportunity to game the Market by consistently refusing to take load, so as to earn the imbalance payment. Faced with the reality of KEDCo's antics, the Regulator stopped the Imbalance Payment in 2015. This

stopped compensation payment to inefficient Disco's that lack the requisite experience to manage a power distribution company.

The suspension of KEDCo in line with the Market Rules provided for complete disconnection of KEDCo from the Grid but the Market Operator only disconnected two (2) feeders. KEDCo operates in three States Kano, Katsina and Jigawa States and TCN has a total of twelve (12) transmission substations with fifty-four (54) 33kV feeders through which it makes electricity available to KEDCo for delivery to customers in the three states. The only two (2) feeders disconnected are the ones supplying KEDCo Head office.

Finally, in the Leadership newspaper on-line publication of 2<sup>nd</sup> September, 2019, KEDCo submitted that it resorts to mass disconnection of its customers as a strategy to collect the outstanding revenue owed by customers. This is a self-confession that KEDCo has refused to distribute the power transmitted to it by TCN to its customers.

Daily average load availability in TCN's substations as well as the daily average load off-take by KEDCo for two (2) weeks are listed in the table below.

LOAD ALLOCATION AND ACTUAL LOAD (MW) UPTAKE BY KANO DISCO		
DATE	LOAD ALLOCATION BASED ON MYTO (MW)	KANO ACTUAL (MW)
8/13/2019	350.99	244.83
14/08/2019	370.67	225.56
15/08/2019	370.67	218.60
8/16/2019	370.67	213.21
8/17/2019	341.85	218.01
8/18/2019	341.09	181.95
8/19/2019	340.65	136.83
8/20/2019	348.76	164.39
8/21/2019	359.38	128.29
8/22/2019	359.38	154.17
8/23/2019	364.76	132.90
8/24/2019	362.46	134.23
8/25/2019	362.46	108.89
8/26/2019	342.78	140.65
8/27/2019	342.78	128.53
8/28/2019	3 4 2 . 7 8	147.46
8/29/2019	351.45	136.37
8/30/2019	237.19	111.03
8/31/2019	367.45	133.86
9/01/2019	3 4 7 . 7 7	135.94
AVERAGE	348.80	159.78

Transmission Company Of Nigeria 12



#### KNOW YOUR SUBSTATIONS; OLD ABEOKUTA TRANSMISSION SUBSTATION

CN has again completed the installation of 2x60MVA power transformers in this substation as part of the several projects by the President Buhari's administration to upgrade transmission substations with the view to ensure a more robust grid that would engender the socioeconomic growth and development of our nation.

The upgrade of the Old Abeokuta Transmission Substation with additional new 2x60MVA power transformers and outdoor switchyard is part of the Federal Government efforts to improve power supply and stability.

Prior to the installation of the new 2x60MVA transformers, the capacity of Abeokuta Substation was only 90MVA, made up of three number 30MVA power transformers. The new 60MVA transformers have however raised the capacity of the substation to 150MVA, which translates to additional capacities for Ibadan Electricity Distribution Company (IBEDC) to off-take for its teeming customers.

With the installation of 2X60MVA 132/33kV transformers in Old Abeokuta 132/33kV Substation, Abeokuta Metropolis, University of Agriculture (UNAAB) and major towns such as Lagos road, Imeko, Shagamu and Ibafo among others, taking supply from IBEDC would now experience improved power supply.

Under the Transmission Rehabilitation and Expansion Programme (TREP), TCN is also executing several other transmission projects in Ogun State such as Lagos-Ogun Transmission Project, which would put in place five 330kV transmission substations in the state at the same time. The 330kV substations would be sited in New Agbara, Mountain of Fire, Ogijo and Arigbajo, while the last one, a 132kV substation would be sited within Redeem Camp.

This is the first time in the history of Nigeria that four brand new 330kV and one 132kV transmission substation would be built in one state at the same time. This is because the Federal government recognizes the importance of Ogun State as an industrial hub and wants to further encourage its massive industrialization.

The new transformers recently installed in TCN's network, such as the new 2x60MVA 132/33kV power transformers, have an inbuilt "FAST DEPRESSURIZATION" preventive technology for transformers, which has been recognized as the only proven technology against transformer explosion. This would certainly contribute in forestalling transformers explosions and fires, due mainly to high voltage occasioned by sudden drop in load.



## TRANSMISSION TERMS

**Distribution Feeder Circuits:** These are the connections between the output terminals of a distribution substation and the input terminals of primary circuits. The distribution feeder circuit conductors leave the substation from a circuit breaker or circuit recloser via underground cables, called substation exit cables.

**Distribution Transformers:** Distribution transformers reduce the voltage of the primary circuit to the voltage required by customers.

**Lightning Arresters:** Lightning arresters are devices for protecting many different pieces of equipment such as, power poles and towers, power transformers, circuit breakers, bus structures, and steel superstructures, from damage from lightning strikes.

**Load:** Anything in an electrical circuit that, when the circuit is turned on, draws power from that circuit.

Metal-clad Switchgear: An outdoor metal-clad switchgear is a weatherproof housing for circuit breakers, protective relays, meters, current transformers, potential transformers, bus conductors, and other equipment. An indoor

switchgear must be protected from the environment and contains the same types of equipment as the outdoor type.

Megaohm: A unit of electrical resistance equal to one million ohms.

**Megaohmmeter:** An instrument for measuring extremely high resistance.

Oil Circuit Breakers: Oil circuit breakers are used to switch circuits and equipment in and out of a system in a substation. They are oil filled to provide cooling and to prevent arcing when the switch is activated.

**Potheads:** A type of insulator with a bell or pot-like shape used to connect underground electrical cables to overhead lines. It serves to separate the bunched-up conductors from one another in the cable to the much wider separation in the overhead line. It also seals the cable end from the weather.

**Potential Transformers:** Potential transformers are required to provide accurate voltages for meters used for billing industrial customers or utility companies.

# DD YDD KADW





#### Sitting All Day Could Shave Years Off Your Life

Sitting for lengthy periods is terrible for your body. Aches and pains are the least of your problems-sitting too much can lead to an early death. You face a higher risk of

muscular-skeletal disorders, obesity, diabetes, cancer, heart disease and more, even

if you work out regularly. If you're one of them who sit all day at work, it is recommended you change to positions often and take a two-minute "moving break" at least twice an hour.

#### Regularly Slouching In Your Chair Can Lead To Long-term Illness

If your job requires you to sit most of the day, it's best if you get a sitting device that allows you to straighten your poor posture. If not, you're contributing to a pool a chronic, long-term ailments- including arthritis and bursitis.

# FEEDBACKPAGE





Abdurrahman Abubakar Please let see that of other Discos. Discos are sabotaging Federal Government efforts for profit maximization. This Discos put us on permanent load shading mode.

Like Reply Message 4d Edited





Sam Amadi @SamAmadi · Aug 13

Replying to @TCN\_NIGERIA and @onemNigeria

@TCN\_NIGERIA great work you are doing. You have to do more in this circumstances. We have to get Nigerian grid working super. Kudos











Engr Avvacar Idris I hope and pray the MD of TCN will do his best to put more light and explain to the new minister on how disco's woefully failed.

Thereafter, disco's should be revoked from them let TCN or federal government continue to maintain its property even through the minister is also an Engr which I believe he knows what is on the ground.

Allah ya bamu nasara

Like Reply Message 1w





Bilyamin Abubakar Yes we hop to see change as I believed the Minister's will do that best in checking the discos and distribution of the mgw and the collection so help

Like - Reply - Message : 1w





Haruna Musa Sani This is a welcome development under TCN's TREP. Keep it up TCN until the designated goals is achieved. May God see you through.

Like - Reply - Message - 1w



A T Adudu @atadudu - Aug 22

You should find out from IBEDC why the area is on 24hr darkness. If it is base on load constraints, now they don't excuse for not giving out supply with the new upgrade from TCN









We appreciate your comments, please keep them coming!



#### TRANSMISSION COMPANY OF NIGERIA (TCN)



#### We are committed to the rehabilitation and expansion of grid network for efficient service delivery

TCN...transmitting electricity in the most efficient and effective manner

#### **EDITORIAL TEAM**

**Publisher:** 

U. G. Mohammed

**Editorial Advisers:** 

Engr. Victor Adewumi Engr. Mamman Lawal

**Editor in Chief:** 

Ndidi Mbah

**Editor:** 

**Ezeolisah Clement** Engr. Kabiru

Adamu

**Correspondents:** 

Orby Micheal-

Kazim

Mayowa Adewole Kazah-Akau Billi

Eric Ephraim Ene

Ejikonye Stella

Mary Philip-Udom Joy Egbase

Omideji Oluwakayode

Gabriel Gandu

Grace Sambe-Jauro

Maimuna Isah

**Graphics:** 

Azorji Uloma

Video/Photo: Mojeed Olawuwo