



 NIGELEC SEEKS TCN REVIEW IN ENERGY WHEELING CAPACITY
AKWA IBOM STATE GOV. SEEKS COLLABORATION WITH TCN
WE ARE SETTING THE PACE IN NESI
TCN SIGNS MoU WITH JIGAWA, KANO, KATSINA AND BAUCHI STATES ON RoW FOR TRANSMISSION PROJECTS





MD/CEO TCN, Mr. U. G Mohammed during his presentation WE ARE SETTING THE PACE IN THE NIGERIAN

ELECTRICITY SUPPLY INDUSTRY— MD TCN

By Maimuna Isah-Laden

he Transmission Company of Nigeria (TCN) has declared that the company is setting the pace in the Nigerian Electricity Supply Industry (NESI) with investment in lines and substations nationwide, over the past few years, which has significantly improved the transmission wheeling capacity from 5,500MW in 2017 to 8100MW as at December 2018.

The Managing Director/CEO of TCN, Mr. Usman Gur Mohammed made this assertion while speaking as a guest speaker at a Policy Dialogue on Power with the theme "Approaches to Sustainable Power Supply in Nigeria" organized by the Arewa Research and Development Project (ARDP), on Saturday, 1st February 2020, in Kaduna State.

According to him, since the present management of TCN took over in 2017, they have initiated proactive measures and programmes to stabilize the grid for optimum performance encapsulated in Transmission Rehabilitation and Expansion Programme, (TREP). TCN he said, has secured USD 1.661 million loan from multi-lateral financing agencies to fund the TREP projects.

Mr Mohammed further explained that through TREP, TCN -in- house engineers have over the past three years, installed and commissioned over 68 power transformers, while 795 out of 819 TCN containers with power project equipment stranded at various sea ports for over 10 years have been cleared, and taken to various transmission project sites across the country, where most of them have been utilized.

TCN, he added is giving priority to provision of functional Supervisory Control and Data Acquisition (SCADA), good communication back bone and a spinning reserve for effective grid management.

Mr Mohammed regretted that electricity customers have not felt the impact of these milestone achievements by TCN because the privatization of the Power Sector led to weak companies taking over ownership of Distribution Companies (DisCos) with no investment in their network, thus affecting the power value chain.

According to him, the on-going expansion projects and other planned investments in transmission would be endangered if there is no commensurate investment by the Discos.

He called on the Federal Government to provide pragmatic policy directive that will lead to the capitalization of the Discos, even as he urged the Nigerian Electricity Regulatory Commission (NERC) to come up with an effective regulatory framework to make the sector more efficient.

Mr. Mohammed reiterated that the Federal Government is determined to resolve issues

bedeviling the last line in the electricity value chain.

In his remarks, the convener of the event and coordinator of ARDP, Dr Usman Bugaje, urged the Federal Government to live up to its responsibility by ensuring adequate provision of power, adding that the country's present economic downturn was majorly caused by poor power supply.

The event was witnessed by the Controller General of the Nigerian Customs Service (NCS), Colonel Hamid Ali (rtd.), Prof. I.M Bugaje, Rector, Federal Polytechnic Kaduna, among others.



Cross section of participants at the event

The most difficult task is to make everybody happy, The simplest task is to be happy with everyone.





(L-R), Jigawa State Governor, Mr. Mohammed Baduru, GM, (Legal & Comp Sec), Mrs Fatima Muhtar and MD/CEO TCN, Mr. U.G Mohammed

(L-R), Jigawa State Governor, Mr. Mohammed Baduru, MD/CEO TCN, Mr. U.Gur Mohammed and Head TSP, Engr.Victor Adewumi

JIGAWA STATE, TCN SIGN PACT ON CONSTRUCTION OF TRANSMISSION LINES, AND SUBSTATION

he Jigawa State Government has signed a Memorandum of understanding (MoU) with the Transmission Company of Nigeria (TCN) on the construction of two 132kV Double Circuit (DC) transmission lines across Jigawa, Katsina, Kano and Bauchi States.

The State Governor, Mr. Mohammed Abubakar Baduru signed the Jigawa State part of the agreement when he paid a courtesy call on TCN at its Corporate Headquarters in Abuja on Friday, 17th January 2020.

During the signing ceremony, Governor Baduru commended TCN for her effort in rejuvenating Nigeria's economy through the provision of bulk power supply. He noted that the construction of the two 132kV transmission lines, as well as the completion of the Gagarawa substation which had been abandoned for almost 12years, will not only attract investors, but also help boost economic activities in the State.

He assured TCN of his commitment to providing necessary support that would ensure smooth and successful completion of power projects in the state. In his words, "We want power, and we believe to participate in getting the Right of Way, is a small contribution to the economic development of Jigawa State because with stable power, our economy will improve".

Speaking earlier, the Managing Director and Chief Executive Officer of TCN, Mr. U. G Mohammed, appreciated the governor for collaborating with TCN to ensure that critical transmission projects in the state are completed.

He stated that the agreement signed was a collaboration between TCN and the governments of Jigawa, Bauchi, Katsina and Kano States that would enable TCN build the 132kV Daura-Kazauri-Danbata-Kpabara transmission line and the 132kV transmission line from Asare-Misau-Gwaram-Birnin-Kudu to Dutse.

Mr Mohammed disclosed that TCN engineers were currently in the process of completing the Gagarawa Substation project after taking over the project from contractors who failed to complete it within the stipulated time, adding that TCN has concluded modalities for reconductoring the transmission line supplying Gagarawa Substation.

He informed the governor that TCN was executing several projects in the North East to improve bulk power supply within the axis. The projects includes the Eastern Backbone, one of the priority projects of WAPP, which seeks to build a 330kV transmission line from Calabar – Ikom – Ogoja – Kashimbilla – Mambilla – Yola – Hong – Biu – Damaturu – Potiskum – Azare – Dutse and Kano, adding that the project when completed will include 3 new 330kV substations which will be connected to the existing 132/33kV substation in Dutse, Jigawa State and that the substation project would boost electricity voltage profile and consequently, economic activities within the area.

NIGELEC SEEKS TCN REVIEW IN ENERGY WHEELING CHARGE

By Eric Ene Ephraim



Cross section of TCN and NIGELEC management team

he Management of Societe Nigerienne D'Electricite (NIGELEC), an electricity company of Niger Republic sought the review of the energy wheeling charge to them by Transmission Company of Nigeria (TCN) to enable them fulfil their obligation under the Bilateral Agreement on Power with Nigeria government.

The Director General of the company, Mr. Alhassane Halid made the request during a Technical Meeting with TCN and Mainstream Energy Solution on Tuesday, January 28, 2020, in Abuja. wheeling electricity from Nigeria to Niger through the grid, called on TCN to consider billing the wheeling charge from the boarder point between the two countries.

He reiterated the mission of the Minister of Energy of Niger Republic, Mrs. Amina Moumouni to renegotiate the wheeling charge to NIGELEC to enable them pay their bills as at when due and equally appealed TCN to clear the fault on the "critical" transmission line between Birinin Kebbi and Niamey.

In his response, the Managing Director and Chief Executive Officer, TCN, Mr. Usman Gur Mohammed expressed surprise at the call for the review of the wheeling charge before the expiration of the Bilateral Agreement entered into by the two countries. He noted that Nigeria has been very generous in terms of energy cost to all the countries it supplies electricity to such as Togo, Benin Republic including Niger and that more importantly, TCN would continue to abide by existing contract.

Mr. Mohammed assured the NIGELEC delegation that TCN was working assiduously to clear the transmission line. He also informed them that TCN was carrying out reconductoring of lines and upgrade of substations nationwide to ensure flexibility in the grid.



Transmission Company Of Nigeria 4

Mr. Halid who expressed concerns on the cost of



TCN SOLICITS COLLABORATION WITH KWARA STATE GOVERNMENT ON RIGHT OF WAY



(L-R), Kwara State Governor, Mr Abdulrahman Abdulrazaq and MD/CEO TCN, Mr U. G Mohammed

s part of efforts to expand the national grid, the management of the Transmission Company of Nigeria (TCN) has solicited collaboration with Kwara State Government in resolving the issue of Right of Way (RoW) for the construction of transmission lines in the state.

The Managing Director and Chief Executive Officer of TCN, Mr. Usman Gur Mohammed made this known when he led the management team on a courtesy visit to the Kwara State Governor, Mr. Abdulrahman Abdulrazaq, at the state's liaison office recently in Abuja.

Mr. Mohammed noted that one of TCN's major challenges in grid expansion is the Right of Way which has consistently slowed the pace of execution and completion of transmission lines projects nationwide, adding that management came up with the innovation of collaborating with state governments who are the owners, to resolve the issue.

He cited TCN's recent collaboration with the Enugu State Government which enabled it complete the 132kV transmission line, thereby bringing supply to 132kV transmission substation in Nsukka within two months.

The MD appealed for same kind of support from the Kwara State Government to enable it construct the Kainji-Kayama-Kishi-Shaki transmission line up to the 132kV substation in Iseyin. He assured the governor that with the completion of the line, bulk power will be delivered to the most neglected parts of the By Joy Egbase state to enhance industrial development.

In his response, the State Governor, Mr. Abdulrahman Abdulrazaq appreciated the TCN management for their contributions to electricity development in the country and appealed that TCN should equally facilitate the provision of bulk power supply to Ilesha Barute to engender development.

The Governor who acknowledged that TCN's visit was timely, disclosed that the state will need more of the company's presence to scale up ongoing plans to develop the state.

Also speaking at the meeting, the Senator representing Kwara North, Senator, Sadiq Umar commended TCN and also emphasized the need to expedite the execution of the various transmission projects in the state.



(Center), Governor Abdulrahman Abdulrazaq



he Governor of Akwa Ibom State, Mr. Udom Emmanuel has indicated interest in collaborating with TCN to solve the challenges of bulk power delivery as well as fast track the implementation of transmission projects within the state.

Mr Emmanuel gave this indication in a meeting with the management of TCN led by the MD/CEO, Mr. U. G. Mohammed, recently in Abuja.

Addressing the meeting, the governor noted that there were power projects that needed to be completed in the state such as the new transmission substation project in Oron Local Government of the state and the 45 kilometer transmission line between Eket and Oron Substation. These he noted, would greatly enhance power supply in the state when completed.

He applauded the management of TCN for several transmission projects being executed across the country, especially the company's support in executing the Ekim Substation project. This he noted, needs to be replicated in most parts of the state. He stated that team work and sharing of responsibility is the way forward to fast-track project execution so as to satisfy the yearnings for stable power supply by By Uloma Osuagwu

industries and factories across the state.

Governor Emmanuel reiterated his commitment to working with TCN to tackle the challenges of Right of Way in the state, adding that the practice of "sharing" responsibilities with TCN will help curb delay in projects implementation nationwide. "We've agreed that the state government will take up the responsibility to provide Right of Way, while TCN will do the engineering design and the construction" he said.

On his part, the MD/CEO TCN, Mr U. G Mohammed assured the governor of TCN's readiness to collaborate with the state government to explore areas of cooperation in expanding the grid, in order to ensure stability of power. According to him, "any state that will support us to provide the Right of Way, we will be happy to build a substation," he said.

Mohammed, who appreciated the governor for previous collaborations and support he had given TCN especially in building the 132kV substation at Ekim, also listed out ways in which the government can attract investors and boost economic activities in the state such as keying into the Eligible Customer policy where customers will be connected directly to the grid for more stable power supply.



(R-L), Akwa Ibom State Governor, Udom Emmanuel and MD/CEO TCN, Mr. U. G Mohammed

NEWLY RECRUITED ENGINEERS IN TCN **ADVISED TO MAKE** GOOD THEIR CAREER PATH

By Grace Sambe-Jauro



MD/CEO TCN, Mr. U. G Mohammed, addressing the newly recruited engineers

he Managing Director and Chief Executive Officer of the Transmission Company of Nigeria (TCN), Mr. Usman Gur Mohammed has advised the newly recruited engineers in the company to be proactive and to make good their career path in TCN.

Mr. Mohammed gave the advice at a two-day induction programme for pupil engineers in TCN on Wednesday, 22nd January 2020, at the TCN Auditorium in Abuja. While welcoming them to the TCN family, he congratulated them for being among the few who made it through the rigorous recruitment exercise. He said that they came into the system at a time when TCN was undergoing a lot of reforms to transform it into one of the best transmission companies in the world and that they were privileged to be a part of the reform process.

The Head, Transmission Service Provider (TSP), Engr. Victor Adewunmi, on his part, encouraged the new engineers to be obedient, dedicated and hardworking because the future holds much for them in TCN.

In his remark, the Head ISO, Engr. Maman Lawal charged the newly recruited engineers to embrace team work as they join hand with other staff to move TCN forward.

The Executive Director, Human Resources and Corporate Services, Mr. Justin Dodo encouraged them to take advantage of the new opportunity opened to them by their employment into TCN, and endeavour to abide by the rules and regulations guiding the company.

In her welcoming remarks, the Chairman, Pupillage Implementation Committee and GM (SO), Engr. Mrs. Nafisat Ali said that the one-year training programme which are in two phases was prepared to help them develop skills that would make them capable of handling their duties.

The two-day seminar featured different presentations on various aspects of the company's operations including a holistic picture of what the industry does, functions of various departments, policies, goal and projections as well as ethics and right attitude to work.



Cross section of the newly recruited engineers



INSTALLATION OF TRANSFORMERS BY TCN ENGINEERS



300MVA power transformer in Asaba Transmission Substation, Delta State, commissioned Friday, 10th January, 2020



100MVA 132/33kV power transformer in Ogba 13233kV Transmission Substation, Lagos State, commissioned Wednesday, 8th January, 2020



60MVA 132/33kV power transformer in Gusau Transmission Substation, Zamfara State, commissioned Thursday 23rd January 2020



60MVA 132/33KV Transformer at Aja Transmission Substation, Lagos State, commissioned Monday, 27th January, 2020







45MVA 132/33kV power transformer in Apapa 132/33kV Transmission Substation, Lagos State, commissioned Wednesday, 29th January, 2020





40MVA 132/33kV mobile power transformer installed in Etsako Transmission Substation, Edo State, commissioned Thursday, 9th January 2020









75MX Rector energized in Benin switchyard, Edo State, commissioned Monday, 20th January 2020



By Ismail Dalhatu



mong the outstanding and major challenges in the Power System are the losses. Power System losses refer to the energy that is lost as electricity is transmitted across the transmission network from generation, through the national grid to the point of distribution to the end users. Generally power losses are an unavoidable consequence of transporting electricity and the longer the distance energy travels, the greater the energy lost on transit.

Electrical energy is generated at power stations which are usually situated far away from load centers. As such, an extensive network of conductors between the power stations and the consumers is required. This network of conductors may be divided into two main components, called the transmission system and the distribution system. The transmission system is to deliver bulk power from power stations to distribution load centers and large industrial consumers while the distribution system is to deliver power from transmission substations to various consumers.

The efficiency of the transmission component of the electric power system is known to be hampered by a number of problems which include the application of inappropriate technology, inadequate materials, equipment, and man power. Transmission lines have some resistance associated with power losses in the conductor. Therefore, resistance and conductance are responsible for power losses on transmission lines. The Power system losses can be divided into two categories which are: the technical and nontechnical losses.

Technical losses are losses due to current flowing in the electrical network which is mainly caused by

p h y s i c a l electricity h a r m o n i c distortions, low voltage, loss due to aging and outdated equipment. Technical losses are directly dependent on the network characteristics and the mode of operation.

The efficiency of the transmission component of the electric power system is known to be hampered by a number of problems which include the application of inappropriate technology, inadequate materials, equipment, and man power.

Non-technical losses on the other hand are caused by actions that are external to the power system. They are losses not related to physical characteristics nor functions of the Power System and are more human related, thus making it difficult to measure. These loses are often unaccounted for by the System Operator, consequently, they are not recorded.

The most probable causes of non-technical losses are electricity theft, meter tampering, poor collection efficiency and errors in technical losses computation that often distort technical information. Transmitting electricity at high voltage reduces a fraction of power transmitted due to heating. For a given amount of power, higher voltage reduces the current and thus the resistive losses in the conductor.

During the Pre-Transitional stage of the electricity market, the commission pegged the TLF (MYTO) threshold to be 8.05% which meant that the GenCos will be invoiced for their total energy sent less 8.05%. Transmission loss above the MYTO approved rate of 8.05% was passed on to the GenCos irrespective of what it was. A complaint was thereafter made and a meeting with the CEO's of GenCos was held in NERC to deliberate on who eventually bears the excess transmission loss. At the end of deliberations, the commission resolved that the excess loss above the approved rate be passed on to the Transmission Service Provider (TSP) since it is the entity responsible for wheeling bulk energy.

In furtherance to the issue of TLF, the commission issued a supplementary order on TEM to address the financial surpluses or deficits arising from TSP's management of the Transmission Loss Factor (TLF) between TSP and the eleven DisCos as follows:

I. The Settlement Statement (or other document approved by the Commission) will state the actual aggregate TLF for the settlement cycle;

ii. The MO shall apportion the positive or negative difference between the actual TLF and 8.05% to the respective DisCos in line with their percentage of total consumption;

iii. In the event that the actual TLF is in excess of 8.05%, each DisCo may net off the amount due to it from the TSP, as a deduction from TSP's wheeling charges for the cycle;

iv. In the event that the actual TLF is below 8.05%, each DisCo will pay its portion of the differential to

TSP, in addition to the DisCo's wheeling charge for the cycle.

v. The amount to be paid by each DisCo will be calculated by applying a charge rate which is equivalent to the weighted average cost of energy and capacity for the settlement cycle; or any other amount approved by the Commission.

In summary, TLF varies monthly and in a billing month where the TLF is less than the bench mark of 8.05%, the TLF energy, which is the difference between the actual transmission loss and the regulated loss, is shared by the DisCos in proportion to the percentage share of total consumption. This reduces the actual energy delivered to the DisCos and the resultant effect is that Transmission Service Provider gets an increase in revenue having done a fantastic work on the grid to keep the TLF below the bench mark, with a corresponding increase in DisCos invoices. This means that the DisCos will pay more for services rendered by the service providers (MO, SO, TSP)

On the other hand, if the TLF is above 8.05%, the excess energy (TLF Energy) increases the actual energy delivered to the DisCos. The resultant effect is that TSP gets a deduction in its revenue for energy wheeled which also reduces the invoiced amount the DisCos will pay to service providers for services rendered.

The richest wealth is Wisdom. The strongest weapon is Patience. The best security is Faith. The greatest tonic is Laughter, & Surprisingly all are free.

HOW TO BECOME A MARKET

PARTICIPANT IN NESI By RC & MD/IR Department

The Market Rule 14.1 defines A

Market Participants as "any

person, who wishes to trade or

participate in the Wholesale

the Market Operator for

registration as a Participant in accordance with this Part of

these Rules."

Electricity Market, shall apply to

he Nigerian Electricity Supply Industry (NESI) is the power system value chain that ranges from the energy inputs for power generation to the final power consumers, mainly from generating plants through the transmission grid to distribution network and finally to the consumers. NESI has undergone

fundamental changes from 2005 to date with the implementation of the government's Power Sector Reform Programme which moved the power sector from a publicly run vertically integrated power system to an unbundled semi privately run power sector with the transmission system still owned and operated by the government.

The unbundling of the power sector created structural changes leading to the creation of the

Market Operator. The Market Operator is charged with the responsibility of dealing with all commercial wholesale transactions (trading) of electricity in Nigeria, making electricity a commodity capable of being bought and sold. Currently, the Nigerian Electricity Market is in the Transition stage as part of the reform stages of making the Nation's power system more competitive and liberal. The Market Operator, created in 2004, is currently one of the divisions of the Transmission Company of Nigeria and is mandated under the Power Sector Reform Act to carry on System Operation administering, implementing and operating the Nigerian Electricity Market in a manner that guarantees efficiency, transparency, and non-discriminatory market administration services to all Market

Participants.

The Market Operator engages in making, publishing, amending, administering and enforcing the Market Rules, Invoice Settlement and Payments among Market Participants.

Who is a Market Participant? The Market Rule 14.1 defines A Market Participants as "any person, who wishes to trade or participate in the Wholesale Electricity Market, shall apply to the Market Operator for registration as a Participant in

accordance with this Part of these Rules."

The purpose of registering Market Participants is to ensure they comply with the established framework and provisions of the Market Rules, Grid Code, Metering Code, Operating Procedures and Market Procedures amongst other Ruling Documents.

Who can apply to be a Market Participants?

1. Holders of a License to conduct Generation or Distribution Business.

2. Holders of a License to conduct Trader Business

3. Owners of authorized small Generation or Self-Generation Plant.

4. Eligible Customer

5. A Transmitter that owns Commercial Metering Systems through which another Participant's Energy flows are measured.

6. An authorized company from another country that participates in Regional Trading through a contract with a Participant located in Nigeria.

7. A member of the Regional Pool authorized to Participate in the Wholesale Electricity Market.

How to apply?

An Applicant Participant is any person listed above with the intention of becoming a Market Participant in the Wholesale Electricity Market.

The Market Rule 14.2 states: "A Participant is a person who has entered into a Market Participation Agreement with the Market Operator, upon fulfilment of the following requirements."

The Applicant Participant upon showing interest will have to submit the following documents to the Market Operator as stated in Market Rule 15 to initiate the process. Below are the requirements:

1. Application letter stating intention to the Market Operator

2. Completed Application forms

3. A Bank draft of N1.5M non-refundable applicable processing fee

4. Copy of Certificate of Incorporation

5. Copy of NERC License (If applicable)

6. Copy of Grid Connection Agreement or Provisional Approval to Connect to Transmission Service Provider or Distribution Service Provider. (For GenCos & Eligible Customer Only).

7. Proof of Security Cover (Only for DisCos)

8. Technical Data (to include Metering System, Single Line Diagram, Certificate of Compliance of Metering Equipment, etc)

If the Applicant Participant fulfils the requirements specified in Market Rule 15, the Market Operator will process the Applicant Participant Application and forward a Market Participation Agreement (MPA) to be duly executed by an authorized representative of the Applicant Participant.

Within 15 days after the submission of the MPA Agreement, the Market Operator will notify the Applicant Participant of its qualification to be accepted as a Participant. The Market Operator shall issue a Market Participation Certificate with the Participant's unique identification number and a copy of the duly executed Market Participation Agreement to the Participant.

The key benefit and importance of being a Market Participant, apart from making all ruling documents binding, is the fact that it guarantees an efficient, transparent and nondiscriminatory Market Administration Service to all participants. Also the participant is privy to all information and data which the Market Operator organizes and maintains centrally, which is pertinent for the smooth administration of the electricity market. One of the key advantages is that the rights and obligations of all participants with regards to operation processes with other participants, MO and other key administrators is stated. The Market Operator strives to ensure discipline and continuous development towards a sustainable competitive market and ensures the Nigerian Wholesale Electricity Market and its participants key into the regional electricity markets and its trading agreements.



KNOW YOUR SUBSTATIONS; AJA 330/132/33kV TRANSMISSION SUBSTATION

ja 330/132/33kV Substation was commissioned in April, 1986 with 2 x 150 MVA power transformer at 330/132/33kV and out-going Capacity of 2 x 60 MVA, 132/33kV power transformers. Located at km 42 Lekki Epe Express way immediately after the Aja Millennium Bridge, the substation gives supply to the growing population of Lekki and Aja, up to New Lekki Free Trade Zone and environs.

The substation receives supply from Egbin Thermal Power Station Ijede, through two 330kV transmission lines.

On the 18th of September, 1997, one 150MVA, 330/132/33kV and a 60MVA, 132/33kV power transformers were decommissioned due to fire incident. These were replaced with a new 150MVA, 330/132/33kV and a 60MVA 132/33kV which were commissioned in 2002.

In February 2006, the old 150MVA, 330/132/33kV failed integrity tests and was subsequently replaced with another 150MVA, 330/132/33kV Power Transformer which was commissioned on the 7th of June, 2006. The transformer was installed in-house by TCN engineers.

To further increase the capacity of the substation, a

100MVA, 132/33kV power Transformer was commissioned on the 18th July, 2013. This increased Aja Transmission Substation capacity to 220MW. On the 9th of September, another 150MVA, 330/132/33kV power transformer was installed in the substation, bringing to 3, the number of 150MVA, 330/132/33kV power transformers in the substation.

On the 30th November 2015, one of the 150MVA, 330/132/33kV power transformers developed fault and was isolated.

With the completion of upgrade of Alagbon Lines 1 and 2 in June 2016, Aja substation now also feeds the New Lekki and Alagbon 330/132/33kV Substation.

To further upgrade the capacity of the substation, TCN installed a 60MVA, 132/33kV Mobile Transformer which was commissioned on the 14th September, 2017.This increased Aja Transmission Substation Wheeling Capacity to 280MW.

Also, one of the failed 60MVA Power Transformers that was earlier decommissioned was refurbished and commissioned into service on the 27th January, 2020 by TCN Engineers. This brings the substation's capacity to 328MW.







TRANSMISSION COMPANY OF NIGERIA

We are the **Nexus** in the **Power Sector**, efficiently moving bulk electricity from Generation Companies (GenCos) to Distribution Companies (DisCos) nationwide

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

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