

PANAFRICAN ENERGY TANZANIA LTD (PAET)
CUSTOMER SERVICE CHARTER

Background

PanAfrican Energy Tanzania Limited, with its office in Oyster Plaza, 5th Floor, Haile Selassie Road in Oyster Bay, P.O. Box 80139, Dar es Salaam, entered into a Production Sharing Agreement (PSA) with the Government of Tanzania (GoT) and the Tanzania Petroleum Development Corporation (TPDC) in 2001, for Exploration and Development Marketing and Sales of Additional Gas from the Songo Songo Gas Field. Following considerable investment, PAET has been successfully producing and supplying gas since 2004. The project is the first gas to power project in East Africa.

PAET owns and/or operates the eight current gas producing wells drilled on and slightly offshore Songo Songo Island (SSI). These wells feed gas to the Songas gas processing facility, which PAET operates on their behalf, and to the TPDC owned and operated National Natural Gas Infrastructure (NNGI) gas processing plant also on SSI.

The gas which is processed through the Songas processing facility is transported through a 225km pipeline to Dar es Salaam where it is fed at high pressure to several power generating plants, for generation of up to 70% of the Nation's power demand, subject to seasonal variances. Some of the gas from SSI also enters the PAET owned and operated 50+km low pressure gas distribution ring main in Dar es Salaam, where it is fed to more than 40 industrial customers for captive power generation, combustion and industrial heating to produce a range of services and products including cement, textiles, cooking oils, detergents, steel products, glass and numerous famous national beverages.

Further to the supply of gas through pipelines, PAET also supplies Compressed Natural Gas (CNG) to a local hotel, an off-grid industry and to an increasing number of private and commercial vehicles via its distribution point at Ubungo. The supply of CNG to vehicles ensures cheaper and more environmentally friendly fuels are available to a wider range of Tanzanians on an increasing basis. PAET believes it can deliver significant benefits to Tanzania and Tanzanians through the expansion of this arm of its business.

Having commenced negotiations in Tanzania in 1991, and having been consistently producing gas since 2004, Tanzanians across a full range of technical and support trades make up more than 98% of the company's workforce, in what is a highly professional company with a proven working knowledge of the safety, regulatory and legal frameworks within which we operate.

1. **Standards.**

PAET conducts its gas operations in strict adherence to applicable international standards, local laws, regulations and governing agreements, and to specific Gas Sales and Purchase Agreements signed between PAET and individual customers.

2. **Customers' rights.** Our customers have the:

- Right to access service in the most cost-effective way.
- Right to privacy and confidentiality of their information.
- Right to be provided with adequate, timely and accurate information.
- Right to obtain copies of the Gas Sales and Purchase Agreements (GSPAs) pertinent to the customer and in accordance with any confidentiality provisions therein.
- Right to participate and comment on obligations of service provider and to this customer service charter when contacted by the Company.
- Right to quality service.
- Right to compensation in accordance with negotiated and signed GSPAs in the event of stipulated failures on our side.
- Right to be treated with respect and courtesy.

3. **Our customers' obligations.** We expect our customers to observe the following:

- To use any information provided by PAET for intended purposes only.
- To treat our staff with courtesy and respect.
- To adhere to stipulations of signed GSPAs, including confidentiality clauses.
- To abide by legal requirements in order to be eligible for accessing the services sought;
- To provide complete, timely, and accurate information in respect of the services needed from PAET.
- To provide complete, timely and accurate information in respect of the services already provided by PAET, particularly in relation to reporting of safety issues pertaining to PAET's infrastructure
- Not to offer gifts, bribes, favours and inducements to PAET staff
- To undertake the construction, fabrication and installation of gas piping downstream of the PAET owned meter;
- To keep safe, the PAET's infrastructure within the customer's premises;
- To provide a safe working environment for PAET's personnel when working at the customer's facility.

4. Gas Supply to New and Existing Customers.

When a potential new customer approaches PAET seeking information on gas supply to its business or operation, the customer will be invited to complete a Marketing Questionnaire which seeks initial information on the customer's business, likely energy requirements and use of gas. On completion of the questionnaire, PAET's experienced technical team will visit the customer and analyse the customer's requirements and determine options to establish a gas supply to the facility, including volumes of gas required to meet energy demand, pressure and line sizing. Throughout this process we make it our personal and professional responsibility to assist the customer as much as needed in order to adequately design systems to meet their current and future needs without necessarily having to incur significant costs in the future. PAET will communicate with the customer throughout this process to ensure the final design is optimised.

Once the customer is satisfied with the engineering proposals PAET will provide either heads of terms or a draft Gas Sales Agreement for the customer's consideration. Negotiations may continue thereafter until the agreement is executed or the customer determines not to proceed. There is no obligation on the part of the customer or PAET to agree the contract following marketing, design and/or negotiation.

- **Gas Disconnection**

PAET may by notice in writing suspend gas flow to a customer by removal of the gas meter, the PRS or by closing the immediate isolation valve of service line at the battery limit due to one or all of the following:

- Fraud
- Theft
- Prolonged non-use of gas
- Damage/Destruction
- Prevention of access to PAET personnel for 3 consecutive instances
- Violation of any clause stipulated in the respective GSPA with the customer

When a customer requests gas disconnection, through an official letter or an email. PAET will discuss the request with the particular customer to establish the reason(s) for the disconnection. If the reason(s) are technical and within PAET's capability, we work with the customer to resolve them. If reason(s) are driven by economics or other matters, and the issues cannot be resolved, PAET shall carry out the gas disconnection. This shall be done by closing the outlet and inlet isolation valves and recording the figure on the meter at the time of closure of the valves.

- **Gas re-connection**

Gas supply reconnection to a customer after disconnection due to either of the reasons outlined above is initiated by the customer through an email or an official letter. Having established that the cause for disconnection has been addressed, the Downstream technical team will determine that all technical affairs are in order, both at PAET's owned PRSs and the customer's own piping and gas fired equipment. Gas supply to the customer will then be recommissioned.

- **Metering process**

Except for a few customers, the gas usage billing philosophy is "Pay as you consume" and as such when not in operation, the customer is not invoiced. Having recorded the reading on the meter at the time of closure of the valves, which may be triggered by any of the reasons outlined above, no further reading is taken until the customer's supply has resumed and the next billing cycle has been reached, and/or suspension of gas flow has been initiated, whichever comes first.

- **Unplanned interruptions**

We endeavour to maintain gas supply to our customers 24/7/365. However, in some instances we experience unplanned interruption of gas supply. This can be due to a number of reasons such as pipe damage by third parties, pipe relocation, power failure, blockage of delivery lines and clogging of filters.

Notwithstanding and given PAET's cordial working relationship with other stake holders in the natural gas business in Tanzania, PAET ensures that such interruptions are rectified in the shortest time possible through our robust and agile Emergency Response Plan. We have a rigorous maintenance schedule through which inspection for pigging of the blocked lines and replacement of clogged filters is carried out on a monthly and weekly basis respectively.

5. Construction.

PAET carries out construction work in strict adherence to recognized safety standards and to local regulations. As such, construction only commences after we are in receipt of all approvals, permits or right of entry/way granted by all relevant regulatory authorities.

Once again, all construction activities are carried out in accordance with approved designs, specifications and with recognized safety practices.

Proper material specifications, selection and efficient project management are core values in:

- (a) **Pipe Fusion and Welding.**

Both HDPE and Carbon Steel (CS) pipe are used in our network. We do both electrofusion and butt fusion as per established standards and procedures. Welding of CS pipe by both PAET and our customers is mainly Arc welding. We use the following standards¹ to achieve the best fusion and welding integrity. Our customers are requested to adhere with the same standards when performing welding and fusion of their (internal) piping:

- ASTM F2620-13- Standard Practice for Heat Fusion Joining of Polyethylene Pipe and Fittings
- ASTM D3261 - 16 - Standard Specification for Butt Heat Fusion Polyethylene (PE) Plastic Fittings for Polyethylene (PE) Plastic Pipe and Tubing
- API 1104-Welding of Pipelines and Related Facilities

(b) Distribution pipe and surface installations.

Determination of distribution and supply line size is based on the customer's current demand while allowing for expansions using various tools and methods such as software, spreadsheets and gas distribution and pressure drop equations. Pursuant to the various agreements, we ensure minimum requirements have been met by both parties in fabrication and installation of gas infrastructure. Specifically, the relevant codes and standards are the governing principles by which distribution pipes and surface installations are designed, fabricated and installed. Unless otherwise specified, the depth of burial is 1.5m. It is compulsory to install warning tape on top of all buried pipes. Marker posts are installed on the surface above all buried gas pipes and are spaced at a minimum of 20 meters.

(c) Cathodic Protection and Inspection.

We ensure infrastructure that is prone to corrosion is adequately protected to increase mechanical integrity and functional objectives. Our governing standard in this aspect is the National Anticorrosion Engineers Standard (NACE) which we ensure is employed by our personnel, and we urge that it is also employed by our customers. We also apply simple anticorrosion methods such as coating, selection of anti-resistant materials and cathodic protection using the Impressed Current method.

(d) Gas Composition.

Our gas is a sweet, dry natural gas with a gross calorific value of 1021 Btu/Scf and a net calorific value of 919 Btu/Scf. It is also very rich and thus produces more energy than lean natural gas. This ensures our customers attain value for money. To achieve this, we conduct monthly calorific value measurements at the processing facility at SSI using a gas chromatograph. We also conduct such measurements at the customer's request. This is done according to ASTM D 1945-03: *Standard Test Method for Analysis of Natural Gas by Gas Chromatography*.

¹ Standards are subject to review and will be updated to latest versions as and when appropriate.

(e) Delivery Pressure and Pipe Specification.

- **Low Pressure Customers:** Max 7 barG and min 2 barG upstream and downstream of the PRS respectively, depending on customer's Maximum Daily Quantities (MDQ).
- **High Pressure Customers:** Min 50 barG.
- **CNG Customers:**
 - Natural Gas Vehicles: 200 barG
 - Industrial: 3 barG
 - Hotels: 1 barG
- **LP piping specification:** PE 100 SDR 11 HDPE and ASME B31.3
- **HP Piping specification:** ANSI 600#.

(f) Odorization.

Like all sweet natural gases, the gas that PAET supplies is colourless and odourless. We therefore impregnate ethyl mercaptan into the gas at the Gas Processing Facility at SSI. Monthly concentration measurements are carried out at various locations within the network to determine the effectiveness of the odorant for easy determination of leaks. This improves safety, increases response time, increases production time and most importantly saves life and property.

(g) Right of Way (ROW) and Clearances.

Applications are lodged with the relevant Leave Owner on a case-by-case basis. These are TRC, TANROADS/TARURA & TAZAMA. Due to safety considerations and prevention of damage to other utilities, PAET is party to a Memorandum of Understanding (MOU) with all utility owners in Dar es Salaam within shared ROW. This ensures gas flow interruptions due to third party activities are minimized.

(h) Replacement/Relocation of Gas Pipes.

PAET works closely with all stakeholders to relocate, replace or protect its gas pipes within Dar Es Salaam, and on most occasions, this is at no cost to the customer. In certain circumstances, however, the customer may be required to meet all or part of the relocation costs; PAET will discuss this with the customer before proceeding with any work. Safety to personnel and environmental protection

is PAET's priority in all activities. Whenever possible we endeavor to give our customers 7 days' notice of any relocation activity that will impact gas flow to them, to enable time for them to plan for other sources of energy or to adjust operations efficiently.

(i) Customer Billing procedure and Receipts.

Pursuant to each GSPA and following international codes and standards i.e. American Gas Association (AGA), we conduct meter readings for all the customers in the network once a month. This is carried out by our personnel in the presence of TPDC's and the customer's representative using the previous month's reading as a reference/initial cumulative reading and the current month's reading as the final cumulative reading. The former is then subtracted from the latter to determine the customer's gas consumption for that month.

An invoice is then raised and submitted to the customer within five (5) business days of the reading. Customers are required to pay their invoices as per their respective contract, typically not more than 30 calendar days after receipt of the invoice.

Retail CNG customers at the Ubungo Station receive services as 'walk in customers' and are entitled to a fiscal receipt in accordance with the law. The price is clearly displayed at the facility for customer information.

(j) Emergency Response Plan.

Our personnel are available on call to deal with emergencies 24 hours a day, 7-days a week (24/7). As part of our Key Performance Indicators and Integrity Management, we respond to all emergencies in the shortest time possible. As a minimum, we aim to ensure our personnel arrive at the respective customer premises or site within 30 minutes of being formally notified. PAET subcontracts a local security company to handle all "non-gas" emergencies such as vandalism, theft, leakage etc. who are also available on call 24/7.

(k) Customer support (Technical).

PAET places great effort in being able to offer the best possible technical advice to our esteemed customers, in order to minimize production losses and gas flow interruptions, e.g. due to clogged filters in customer's lines.

6. Review and update of the charter.

This charter shall be reviewed regularly, and at least every 5 years, to ensure the information is current and relevant. When updated, PAET shall republish the charter.

7. Communication procedures and Complaints.

PAET places the highest value on customer service. We continually strive to improve the quality of all interactions with our customers. We encourage our customers to bring forward comments, suggestions or constructive advice as to how we can enhance our relationships.

PAET aims to acknowledge receipt of written queries or complaints within 10 business days and provide a response addressing the query or complaint within 20 business days.

For regulatory and reporting purposes, PAET defines any communication from a customer as a complaint if the customer expresses dissatisfaction regarding our service and expects PAET to provide a response or resolution.

To effectively handle customer requests, emergencies and complaints, we have put in place a communication hierarchy which has produced tangible results in relatively short/last minute instances. All customer calls are handled by our Downstream Stakeholder and Relations Manager who is available 24/7. Contact details are:

Downstream Stakeholder and Relations Manager

PanAfrican Energy Tanzania Limited
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Dar es Salaam

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Mobile: +255 (0) 789 215852
Email: jsamwel@panafricanenergy.com
Web: www.panafricanenergy.com

If a customer is not satisfied with how PAET has handled a complaint, the Customer can refer the complaint to EWURA for further action.

EWURA Director General

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Or:

EWURA Zonal Office in Dar es salaam

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