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<i>Topic &amp; Summary</i>	<b>Three Phase Trasformer technical description and conditions assessment.</b>
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## **Abstract**

This document describes the technical specifications and conditions of a power transformer manufactured by Georgia Transformers which is ready for sale, never used, and currently stored by the manufacturer. The power transformer is an advanced unit designed for industrial and power distribution applications, with a nominal capacity of 69/92/115 MVA and a primary voltage of 138 kV. This three-phase, oil-cooled transformer (ONAN/ONAF/ONAF) ensures high reliability and optimal performance.

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## 1. Introduction

Three phase transformer available for sale, this document describes the various characteristics and its current status. The subject of the opportunity is as follows:

General Data	
Manufacturer	TTE Transformer
Serial No.	-
Quantity	1
Available from	January 2026
Country	USA

Technical Data	
Condition	New
Year of construction	2025
Rated Voltage	HV 138 kVp LV 34.5 kVp
Rated Power 65°C	69/92/115 MVA
Rated frequency	60 hz

## 2. Description of Supply

### 2.1 MV/HV Step-Up Power Transformer 138/34.5kV 69/92/115 MVA

Power Transformer is designed for industrial and power distribution applications, ensuring high reliability and efficiency. This transformer has been subjected to rigorous testing to ensure compliance with international standards and optimum performance.

## 2.2 Technical data

Parameter	Value
Model	69/34.5kV 60/80/100 MVA
Manufacturer	Georgia Transformer
Application	Industrial and Power Distribution
<b>Transformer Specifications</b>	
Rated Power	69/92/115 MVA
Primary Voltage (HV)	138 kV
Secondary Voltage (LV)	34.5 kV
Cooling Class	ONAN/ONAF1/ONAF2
Frequency	60 Hz
<b>Construction and dimensions</b>	
Total Transformer Weight (Including Oil)	125'600 kg
Shipping weight	85'200 kg
Dimension (LxWxH)	8.50x4.90x6.82 m
<b>Accessories</b>	
Winding Hot Spot Temperature Detector (RTD)	Yes
Winding Hot Spot Temperature Indicator Relay	Yes
<b>Field Services</b>	
- Offload	Yes
- Assembly and Oil Filling	Yes
- Field Inspections and Testing	Yes
<b>Spare Parts</b>	
- Complete Set of Gaskets	Yes
- One Gallon of Touch-Up Paint	Yes
- One High Voltage Line Bushing	Yes
- One Low Voltage Line Bushing	Yes
- One Neutral Bushing (Each Type)	Yes
- One Sudden Pressure Relay	Yes
- One Lot Breather Desiccant	Yes
<b>Reference Standards</b>	
International Standards	ANSI-IEEE, EGP.EEC.S.24.US.X.00000.16.002.00
ANSI C2	National Electrical Safety Code
ASTM Standards	Standards for liquid-immersed power transformers
IEEE C57 Series	Insulating oils and materials
Other Standards	NEMA, ASME

### 3. Tests performed

All tests were conducted by the manufacturer during the transformer's commissioning phase. Below is the list of tests performed, with detailed results available in the attached documents.

- **Insulating Level Tests:**
  - Basic Lightning Impulse Insulation Level
  - Low Frequency Voltage Insulation Level
- **Performance Data Tests:**
  - Performance based on 20 degrees Celsius reference temperature (no load loss)
  - Performance based on 85 degrees Celsius reference temperature (load loss)
  - Losses and Exciting Current Regulating kVA
  - Excitation (% Ex I)
  - No Load Loss (NLL)
  - Total Loss
  - Power Factor
  - Regulation
- **Auxiliary Losses:**
  - Auxiliary Losses for different kVA classes
- **Efficiency Tests:**
  - Efficiency measurements at various load levels (100%, 75%, 50%, 25%)
- **Impedance Tests:**
  - Percent Impedance Volts (%IZ) between kVA levels

## 4. Storage status

## 5. Scope of Supply

Position	Quantity	Description
1000	1	MV/HV Step-up Power Transformer 138/34.5/ kV 69/92/115 MVA

**Table 1:** scope of supply.

### 5.1 Exclusions

Scope not explicitly listed in the Scope of Supply (Table 1) is excluded.  
The following items are explicitly excluded:

<b>Mechanical</b>
Modification of any existing systems not explicitly cited.
Missing parts and components.
<b>Electrical</b>
Modification of existing systems not explicitly cited.
<b>Civil</b>
Land preparation
Temporary accesses and final accessing roads
Security plan and hardware.
Temporary accommodation
Finishing and fencing
First aid station and ambulances
Waste disposal facility

**Table 2:** exclusions from the Scope of Supply.

<b>Project Management</b>
Attainability of installation, commissioning and operation permits, or any other permit.
Assessment and acceptance of safety relevant issues.
Any study, engineering, documentation, or other service.
Additional works resulting from changes in laws or any other reasons, for which EECC is not responsible.
Building of Site Facilities of any kind (lights, water supply and treatment, heating, power supply, etc.).

Custom duties and taxes.
<b>Engineering</b>
Design and detailed engineering of existing equipment.

**Table 3:** exclusions from scope of Services.

## 5.2 Technical documentation

Following documents are part of the technical documentation (list is preliminary):

Pos.	Document	Available
<b>1</b>	<b>General</b>	
1.1	Document & drawing list	yes
1.2	Technical data sheet	yes
1.3	Component manuals	yes
1.4	Quality documentation	yes

**Table 4:** technical documentation

## Economic evaluation

General Data	
Manufacturer	TTE Transformer
Serial No.	-
Quantity	1
Available from	January 2026
Country	USA

Technical Data	
Condition	New
Year of construction	2025
Rated Voltage	HV 138 kVp LV 34.5 kVp
Rated Power 65°C	69/92/115 MVA
Rated frequency	60 hz

## Sales considerations

These transformers are ordered by design and manufactured according to specific grid and generation requirements. With its three transformation steps, this transformer can handle transmission, distribution and power generation. The specific data are for example short circuit currents. However, this transformer can also be used with only two transformation steps, making it versatile. Standard production times are around 3-4 years.

### Selling points:

- ⇒ OEM warranty still in force.
- ⇒ material is available today. No production time lag.
- ⇒ material is packaged and ready to be shipped.
- ⇒ the technology is up to date.

