

All rights reserved.

This document contains PROPRIETARY and CONFIDENTIAL information, some or all of which may be legally privileged. It is intended for restricted users only and any unauthorized access or disclosure is prohibited.

<i>Client ID</i>	<i>Project ID</i> 40 MPT USA
------------------	-------------------------------------

<i>Title</i>	Three Phase Trasformer 66/88/110 MVA
--------------	---

<i>Topic & Summary</i>	Three Phase Trasformer technical description and conditions assessment.
----------------------------	--

<i>Document nr.</i>	EC0128540PR02	<i>Type</i>	Description
---------------------	----------------------	-------------	--------------------

<i>Issue</i>	A	<i>Status</i>	DRAFT
--------------	----------	---------------	--------------

<i>Branch</i>	EC – EECC Consulting	<i>References</i>	New Life
---------------	-----------------------------	-------------------	-----------------

<i>File</i>	EC0128540PR01A - Unit 21.docx
-------------	--------------------------------------

<i>Keywords</i>	Three phase Transformer, 110MVA
-----------------	--

<i>Issued by:</i>	G.Baratti	<i>date</i>	2025-12-12	<i>signature</i>
-------------------	------------------	-------------	-------------------	------------------

<i>Checked by:</i>	D.Hanselmann	<i>date</i>	2025-12-15	<i>signature</i>
--------------------	---------------------	-------------	-------------------	------------------

<i>Released by:</i>	D.Hanselmann	<i>date</i>	2025-12-15	<i>signature</i>
---------------------	---------------------	-------------	-------------------	------------------

<i>Revision History</i>	<i>Issue</i>	<i>Date</i>	<i>Reason</i>
	H		
	G		
	F		
	E		
	D		
	C		
	B		
	A	2025-12-12	First issue

This document has been issued according to state of the art documentation rules. Easy Energy Companies e Consulting SA is not liable for damages or problems derived from delivery of third party equipment and components or by the incorrect application of the information contained herein.
We reserve the right to make editorial and technical changes at any time and without prior notice. No claims for the modification of products that have already been supplied may be made on the basis of the data, diagrams and descriptions in this documentation.

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 66/88/110 MVA and a primary voltage of 69 kV. This three-phase, oil-cooled transformer (ONAN/ONAF/ONAF) ensures high reliability and optimal performance.

Table of Contents

1. Introduction.....	3
2. Description of Supply	3
2.1 MV/HV Step-Up Power Transformer 115/34.5kV 60/80/100 MVA	3
2.2 Technical data.....	4
3. Tests performed	5
4. Storage status	6
5. Scope of Supply	7
5.1 Exclusions.....	7
5.2 Technical documentation.....	8
Economic evaluation.....	9
6. Attachments.....	11

Index of Figures

Non è stata trovata alcuna voce dell'indice delle figure.

Index of Tables

Table 1: scope of supply.....	7
Table 2: exclusions from the Scope of Supply.	7
Table 3: exclusions from scope of Services.	8
Table 4: technical documentation.....	8

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	Georgia Transformer
Serial No.	-
Quantity	1
Available from	January 2026
Country	USA

Technical Data	
Condition	New
Year of construction	2025
Rated Voltage	HV 69 kVp LV 34.5 kVp
Rated Power 65°C	66/88/110 MVA
Rated frequency	60 hz

2. Description of Supply

2.1 MV/HV Step-Up Power Transformer 69/34.5kV 66/88/110 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 66/88/100 MVA
Manufacturer	Georgia Transformer
Application	Industrial and Power Distribution
Transformer Specifications	
Rated Power	66/88/110 MVA
Primary Voltage (HV)	69 kV
Secondary Voltage (LV)	34.5 kV
Cooling Class	ONAN/ONAF1/ONAF2
Frequency	60 Hz
Construction and dimensions	
Total Transformer Weight (Including Oil)	97'400 kg
Shipping weight	63'200 kg
Dimension (LxWxH)	8.50x4.50x6.50 m
Accessories	
Winding Hot Spot Temperature Detector (RTD)	Yes
Winding Hot Spot Temperature Indicator Relay	Yes
Field Services	
- Offload	Yes
- Assembly and Oil Filling	Yes
- Field Inspections and Testing	Yes
Spare Parts	
- 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
Reference Standards	
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 69/34.5/ kV 66/88/110 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:

Mechanical
Modification of any existing systems not explicitly cited.
Missing parts and components.
Electrical
Modification of existing systems not explicitly cited.
Civil
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.

Project Management
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.
Engineering
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
1	General	
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	Georgia Transformer
Serial No.	-
Quantity	1
Available from	January 2026
Country	USA

Technical Data	
Condition	New
Year of construction	2025
Rated Voltage	HV 69 kVp LV 34.5 kVp
Rated Power 65°C	66/88/110 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.

