

PUBLIC COMPANY ORLEN LIETUVA

APPROVED BY

Deputy General Director
for Operations

____ November 2024
Order No TV1(1.2-1)-

**PROCEDURE FOR ACCEPTANCE OF ELECTRICAL AND AUTOMATION EQUIPMENT
AS FIT FOR SERVICE**

I. PURPOSE

1. The Procedure for Acceptance of Electrical and Automation Equipment as Fit for Service (hereinafter – the Procedure) outlines the documentation requirements for newly installed or reconstructed electrical, process control and automation equipment (hereinafter – the E&A) and specifies the process for transferring these documents to Public Company ORLEN Lietuva (hereinafter – the Company).

2. This Procedure governs the process of ensuring that the technical documentation for the E&A equipment accepted as fit for use complies with the legal requirements of the Republic of Lithuania and the standards of the Company.

II. SCOPE OF APPLICATION

3. This Procedure is binding on contractors who prepare documentation following the construction, installation or upgrade of E&A equipment according to technical solutions or engineering designs and submit such documentation for verification to responsible employees of the Company.

4. This Procedure is also binding on all employees of the Company whose activities are related to operation of E&A equipment and acceptance thereof as fit for service.

III. REFERENCES

5. Law of the Republic of Lithuania on Construction.
6. Law of the Republic of Lithuania on Metrology.
7. Technical Regulation for Construction STR 1.05.01 'Construction permits. Construction completion. Construction suspension. Remediation of unauthorized construction. Remediation of unauthorized construction under illegally issued construction permits.'
8. Technical Regulation for Construction STR 1.04.2017 'Design of construction. Expert examination of design documentation.'
9. General Rules for Installation of Electrical Facilities.
10. Electrical Equipment Operation Safety Regulations.
11. General Fire Safety Regulations.
12. Norms and Scope of Electrical Equipment Testing.
13. LST EN 62381 Automation Systems in the Process Industry - Factory Acceptance Test (FAT), Site Acceptance Test (SAT), and Site Integration Test (SIT).
14. LST EN 62382 Control Systems in the Process Industry - Electrical and Instrumentation Loop Check.

15. Index of As-Built Documentation under Designs for Construction, Including Construction and Maintenance of Process Units of Public Company ORLEN Lietuva.
16. Public Company ORLEN Lietuva Design Work Management Regulations.
17. Regulations for Factory Acceptance Tests in Automated Control Systems.
18. Public Company ORLEN Lietuva Regulations for the Archiving of Technical Documents.
19. Public Company ORLEN Lietuva Instruction Manual BE-1 for Commissioning and Operation of Electrical Equipment.

IV. KEY TERMS AND DEFINITIONS, ABBREVIATIONS

20. Terms and definitions:

Individual responsible for organizing the operation of electrical equipment – an employee appointed by the order of the Company's General Director, tasked with organizing the operation of electrical equipment.

Individual responsible for operation – an electrical, instrumentation, or control systems engineer assigned with organizing technical servicing, maintenance, measurements, testing, commissioning, and startup of E&A equipment.

Energization test – the process of applying voltage to newly-installed or reconstructed electrical equipment prior to its acceptance as fit for service and testing it according to the Norms and Scope of Electrical Equipment Testing and the requirements set forth in the Rules for Operation of Power Houses and Power Networks, as well as the equipment manufacturers' documents (including testing operation, checking automation devices and interlocks).

Work supervisor – a Company's employee indicated in a purchase order (work release).

DCS – distributed control system.

E – electricity.

EIT – a set of rules for the installation of electrical equipment.

E&A – for the purposes of this Procedure it means the relevant electrical, process control and automation equipment for electrical installations, process control and automation systems, crude and other engineering networks and buildings engineering systems.

Start of E&A service – the date of issue of the certificate on fitness of E&A equipment for service.

ESD – emergency shutdown system.

FAT – factory acceptance tests.

GKTR – Technical Regulation GKTR 2.01:2023 'Procedure for geodetic surveys of engineering network components and preparation of engineering network plans'.

Engineer – for the purposes of this Procedure, it is understood as the Company's employee in an engineering or technical role, holding the job title of engineer, senior engineer, or engineer expert.

Equipment technical documents – conformity declarations, certificates, technical specifications, passports, instructions, drawings, and other documents that specify the purpose, design, parameters of the equipment, mandatory safety requirements, and instructions for use.

Energization – switching on voltage to E&A equipment being put into service or tested;

Operational Service – one of the Company's organizational units, i.e. Energy Department's Response Section in Charge of Power House and Electrical and Automation Department's Electrical Equipment Operating Control Group or a contractor providing operational control of E&A equipment for the Company.

Certificate – certificate of acceptance as fit for use – a document testifying the acceptance of E&A equipment as fit for operation at the Company.

PLC – programmable logic controller.

DPM – a design part manager certified in accordance with the procedure established by Law on Construction.

Project manager – a Company employee appointed to manage a project.

Request for energization test – a document in the form annexed hereto outlining measures for safe testing of equipment.

PCA – process control and automation.

Contractor – an enterprise or organization (including its contractors) performing design, installation, measuring, commissioning, maintenance and testing of E&A equipment at the Company under a contract with the Company.

SAT – site acceptance tests.

SIT – site integration tests.

Technical documentation – construction completion documentation required by applicable legislation for newly constructed or reconstructed E&A equipment, accepted as fit for use. Documents are developed in the Lithuanian language. In exceptional cases, certain documents (FAT, testing, calibration reports) may be issued in English, provided this does not contradict the legislation of the Republic of Lithuania. The scope of technical documentation is defined by the construction legislation of the Republic of Lithuania, this Procedure, and the Company's As-Built Documentation Index of Construction Projects, including Process Unit Construction and Maintenance.

Technical solutions document – minutes of a technical meeting, technical analysis report, documents providing engineering solutions and calculations, diagrams, and drawings, based on which the scope of work can be defined and installation work performed.

TIAG – Technical Inspection and Analysis Group of the Company's Electrical and Automation Department.

VERT – Lithuania's National Energy Regulatory Council.

V. DEVELOPMENT OF TECHNICAL DOCUMENTATION

21. Technical documentation is divided into files (books) according to the parts of the design project (electrical, process control and automation, fire protection, building engineering systems and control, and other parts), based on the structure of the design project or other solutions.

22. The contractor shall collect and compile the technical documentation, mark and coordinate all design changes during the execution of works. Upon completing the installation, commissioning, measurement, and testing of newly constructed or reconstructed E&A equipment, as specified in the scope of works, the contractor shall prepare the required technical documentation. Technical documentation be developed in the state language (Lithuanian). The design and technical solutions documentation may also be prepared in English, provided it does not contradict the requirements of the valid legislation of the Republic of Lithuania.

23. Depending on the part of the design project and the scope of works, the technical documentation of the E&A equipment shall include the following documents and those specified in the relevant legal acts (applicable to E or PCA, or both):

23.1. Register of technical documentation. [E and PCA]. [Annex 1]. Submitted together with technical documentation. Each document of technical documentation shall be separately entered in the register. Documents shall be bound into a folder in the sequence they are entered into the register. Each folder or file shall have its separate register.

23.2. Design or technical solutions document. [E and PCA]. Design or technical solutions document – the contractor shall sign each sheet of detailed drawings of the completed design and each page of the technical solutions document, affixing the stamp '*AS BUILT*'. If any changes or deviations from the design or technical solutions document are made during installation, the contractor shall mark in red all such deviations, inaccuracies, or changes on the detailed drawings of the design and technical solutions document. These changes shall be agreed upon with the DPM or the person who prepared the technical solutions document and included in the log of changes and deviations.

23.3. Log of changes and deviations. [E and PCA]. [Annex 2]. All changes and deviations from the design or technical solutions document shall be recorded in the log of changes and deviations. Each change and deviation from the design or technical solutions document shall be listed separately. The log shall be signed by the representative of the Owner (Company), the contractor and the DPM.

23.4. Electrical equipment installation work handover-acceptance statement. [E]. [Annex 3].

23.4.1. After completing the installation, commissioning, and testing of E equipment, as well as familiarizing and training the Company's employee (if required under the scope of works or contract), the contractor shall prepare the technical documentation and notify the work supervisor.

23.4.2. The Company's work supervisor shall notify the individual responsible for operation. The individual responsible for operation shall inspect the completeness, quality, and scope of the performed work and sign the work handover-acceptance statement, if no deficiencies are determined. If deficiencies are determined, the individual responsible for operation shall indicate the identified deficiencies and deadlines for their remediation in the statement and decide whether the statement can be signed before the deficiencies are fixed.

23.4.3. The work handover-acceptance statement shall be signed by:

- Individual responsible for operation.
- Project manager or an appointed engineer.
- A person authorized by the contractor (work supervisor).

23.4.3. In the case of installing UPS, VFD, 6 kV relay protection, or HVAC, the acceptance of the work shall be attended by and the work handover-acceptance statement shall be signed by the manager or engineer of the Critical Equipment Maintenance Group of the Company's Electrical and Automation Department.

23.4.4. TIAG shall provide their conclusion in the E installation work handover-acceptance statement on the condition of the equipment and its fitness for service.

23.5. PCA installation work handover-acceptance statement. [PCA]. [Annex 8].

23.5.1. After completing the installation, commissioning, and testing of PCA equipment, as well as familiarizing and training the Company's employee (if required under the scope of works or contract), the contractor shall prepare the technical documentation and notify the work supervisor.

23.5.2. The Company's work supervisor shall notify the individual responsible for operation. The individual responsible for operation shall inspect the completeness, quality, and scope of the performed work and sign the work handover-acceptance statement, if no deficiencies are determined. If deficiencies are determined, the individual responsible for operation shall indicate the identified deficiencies and deadlines for their remediation in the statement and decide whether the statement can be signed before the deficiencies are fixed.

23.5.3. The installation work handover-acceptance statement shall be signed by:

- Individual responsible for operation.
- Project manager or an appointed engineer.
- A person authorized by the contractor (work supervisor).

23.5.4. TIAG shall provide their conclusion in the PCA installation work handover-acceptance statement on the condition of the equipment and its fitness for service.

23.6. Notice of demobilization of the installation team from the worksite. [E and PCA]. [Annex 4]. The document shall be prepared by the contractor. The document shall specify when and from which facility the E&A installation team was demobilized.

23.7. Declaration of conformity of electrical equipment. [E and PCA]. [Annex 5]. The contractor declares that the onsite installation work has been completed and the equipment installed have been tested and comply with the requirements of EJIT.

23.8. Documents (statements, reports) to track the commissioning and startup of the PCA equipment. [PCA]. After the technical testing and commissioning work has been carried out, such as checking the integrity of overhead lines, impulse lines (pneumatic cables), and/or other relevant work, the contractor shall draw up a technical testing report. This report shall state the conditions of the test, the results, and any other factors that can be used to assess the suitability of the equipment/devices tested, as well as the conclusion on the fitness of the equipment/device for use.

23.9. Switchgear (cabinet) maintenance report. [E]. [Annex 6]. The report shall specify which switchgear (cabinet) was repaired or modified, what work was performed, confirm that the work is complete, and state that the switchgear (cabinet) meets the EJIT requirements.

23.10. Engineering network plan. [E and PCA]. (Topographical survey of grounding conductors and cable lines.) The engineering network plan shall be prepared in accordance with the procedures specified in GKTR 2.01. A copy of the engineering network plan documentation (paper, PDF, and vector/GIS) shall be submitted to the geodetic engineer of the Project Engineering Group. The geodetic engineer shall sign the document transmittal, confirming the acceptance of the geodetic survey information. A copy of the signed transmittal shall be attached to the geodetic survey included as part of the technical documentation.

23.11. Declarations of conformity, specifications, data sheets, technical passports and instruction manuals of construction products. [E and PCA]. All products (equipment, materials, etc.) used in the implementation of the design project shall be accompanied by documents in the Lithuanian language confirming their compliance with the normative construction legislation of the Republic of Lithuania. Each document shall be recorded separately in the register of technical documents.

23.12. Calibration certificates for measuring instruments and metrological performance verification reports; if the measuring instrument is subject to legal metrology – verification certificates. [E and PCA].

23.13. Request for energization test. [E].

23.14. PCA installation, testing and commissioning reports (FAT, SAT, SIT) and statements of compliance with the requirements of EJIT,

These documents shall be prepared by the Control Systems Group of the Electrical and Automation Department and shall be accepted and signed by the individual responsible for operation. The documents shall be drawn up in accordance with the requirements of LST EN 62381:2007 'Automation systems in the process industry - Factory acceptance test (FAT), site acceptance test (SAT) and site integration test (SIT)'.

23.15. Work completion control documents. [E&A]. These documents shall be prepared by the contractor. The work shall be accepted, and the documents signed by the individual responsible for operation and/or the construction technical supervisor, if one is assigned. The documents shall be submitted based on the scopes of work performed.

23.15.1. Inspections of hidden construction work for grounding conductors.

23.15.2. Visual inspections and checking of busbar connectors.

23.15.3. Visual inspections of cables laid in trenches and cabling structures before they are covered up;

23.15.4. Visual inspections of installed cables.

23.15.5. Acceptance of trenches and cabling structures before installation of cables.

23.15.6. Heating of the cable on the drum prior to its installation at low temperatures.

23.15.7. Visual inspection and checking of the cable and the drum.

23.15.8. Visual inspections of pipes before they are covered up.

23.15.9. Visual inspections of installed wires before they are covered up.

23.15.10. Visual inspections of electric heat tracing cables before the installation of insulation,

Once this work has been completed, a separate document shall be prepared to record its completion. The document shall include the completion date, the facility, design project number, and title. It shall also include the name, title of the signatories and the date. The documents shall not contain any blank (incomplete) columns, fields or boxes. The contractor may use its standard forms for documents.

23.16. Certificate of the National Energy Regulatory Council (VERT). It is a document certifying the inspection of the technical condition of the equipment. This document is necessary when a construction permit is issued for the design project (works) or when this requirement is established in the contract.

23.17. Electrical equipment testing norms and scopes. Measuring and testing reports shall be submitted in accordance with the scopes of work performed. The reports shall include:

23.17.1. Work completion date (report date).

23.17.2. Name of the facility.

23.17.3. Instruments used for measuring: name, make, production serial number and the date of the inspection of the instrument;

23.17.4. Permissible ranges of measurement results.

23.17.5. Measuring results and conclusions.

Measuring results shall meet the requirements set forth in EIII and the Norms & Scopes for Electric Equipment Testing. Measuring / testing reports shall be signed by the persons that performed the tests and the work supervisor. The names, job titles of the signatories and the date shall be indicated. Reports shall not have any blank (incomplete) columns, fields or boxes. The contractor may use its standard forms for reports.

23.18. Analog/discrete loop checkouts shall be performed in accordance with the requirements of the standard LST EN 62381.

The documents shall be prepared by the contractor. The work shall be accepted and the document signed by the individual responsible for operation.

23.19. Operation manual for equipment designed for service in potentially explosive atmospheres. [E and PCA]. It shall be provided in the Lithuanian language. CE, ATEX certificates of manufacturers can be provided in English.

23.20. E&A equipment operation manuals. Operation manuals for E&A equipment (measuring and recording instruments, control devices, switchgears, control cabinets, motor control centers, UPS, power electronics, reactive power compensators, variable frequency converters), including, but not limited to, the above list, shall be submitted in the Lithuanian language. Operation manuals for other E&A equipment may be provided in English. Operation manuals for E&A equipment shall be prepared and submitted by the contractor.

Preparation of operation manuals for E&A equipment installed or reconstructed at the Company shall be organized by the project manager or, if the project manager has not been appointed, by an individual responsible for operation.

23.21. Electric equipment operational control manual. This manual shall be tailored to the specific needs and operating conditions of the Company. [E].

23.22. Control diagrams, alarm and protection diagrams, single-line diagrams. The individual responsible for operation shall organize the preparation of these diagrams based on the design documentation and in accordance with the Company's procedures.

23.22.1. In cases where, at the moment of submission of technical documentation, these diagrams are not available, the design diagrams, single-line diagrams from the technical solutions documents, or the existing diagrams with the marked hand-made corrections and the contractor's 'AS-BUILT' stamp may be used for the control of E&A equipment. These diagrams shall be verified and signed by:

- The contractor's representative who prepared the diagram.
- The individual responsible for operation.

23.22.2. In cases where, at the moment of submission of technical documentation, the single-line diagrams are not available, the design diagrams, single-line diagrams from the technical solutions documents, or the existing single-line diagrams with the marked hand-made corrections

and the contractor's 'AS-BUILT' stamp may be used for the operational control of E&A equipment. These diagrams shall be verified and signed by:

- The contractor's representative who prepared the diagram.
- The individual responsible for operation.
- Head of the Operational Service.

23.22.3. Single-line diagrams (from the design) with original signatures shall be added to the design documentation. The individual responsible for operation shall provide one copy to the Operational Service, place one copy in the folder kept in the electrical room, and organize the preparation of a single-line diagram in accordance with the Company's Procedure for Plotting of Diagrams.

23.22.4. Until a new single-line diagram is prepared in accordance with the Company's Procedure for Plotting Diagrams, the individual responsible for operation shall manually update the approved single-line diagram kept in the workplace of the head of Operational Service in the electrical room as well as the respective design diagram. Date and signature shall be provided under every change made to the diagrams.

VI. SUBMISSION OF TECHNICAL DOCUMENTATION FOR REVIEW

24. The technical documentation shall be bound in A4 or A3 size folders (files) for submission. The documents shall be organized in the folder according to the sequence listed in the register.

25. The technical documentation received by TIAG shall be recorded in the register for technical documentation of projects. All parties involved in the handover and acceptance of the technical documentation shall enter their name, surname and sign in the register.

26. The register of project technical documentation shall be maintained by the TIAG for 12 months after the last entry.

27. The TIAG engineer shall verify the technical documentation for:

27.1. Compliance with applicable legal requirements;

27.2. Completeness and quality of installation or reconstruction works of randomly selected E&A equipment, compliance with design solutions.

28. At least 3 working days shall be allocated for verification and presentation of conclusions. This period may be extended in case of remarks and deficiencies in the technical documentation. The TIAG engineer shall inform the project manager or, if no project manager has been appointed, the project coordinating engineer of the additional time required for the review of the documents and the preparation of the comments.

29. The contractor shall ensure and the TIAG engineer shall verify that prior to the commissioning the E&A equipment, control and alarm devices are properly marked, i.e., the

markings are in accordance with the design, the technical specifications, the scope of work, and the Company's procedures for assigning tag numbers. The contractor shall agree on the tags with the individual responsible for operation, who shall have them approved by the Operational Service and a representative from the Critical Equipment Maintenance Group.

30. Having completed the review, the TIAG engineer shall prepare a project supervision and technical documentation control statement. The statement shall list all deficiencies related to project execution, installation, commissioning, measurements and testing, and technical documentation, and specify the actions required to remedy the nonconformities. The technical documentation shall be returned to the contractor for the remedy of deficiencies.

31. In cases where UPS, VFD, voltage relay protection and automation equipment higher than 1000 V, HVAC, and relay protection and automation equipment for up to 1000 V distribution and control facilities have been installed, the technical documentation shall be transferred for review to a representative from the Critical Equipment Maintenance Group. The representative shall record all defects and nonconformities related to project execution, installation, measurements, commissioning, testing, and technical documentation in the project supervision and technical documentation control statement.

32. The contractor shall remedy all deficiencies and nonconformities and resubmit the technical documentation for review.

33. If no deficiencies and nonconformities are determined, the TIAG engineer shall draft a project supervision and technical documentation control statement, including a conclusion on the compliance of the installation works and the installed E&A equipment with the design solutions. The document shall be retained for 30 days after the start of service of E&A equipment.

34. The TIAG engineer shall inform the project manager or, if no project manager has been appointed, the project coordinating engineer of the completed review of the technical documentation.

35. The TIAG engineer shall prepare and sign a project supervision and technical documentation control statement.

36. After drafting and signing the project supervision and technical documentation control statement (Annex 3), the TIAG engineer shall email it to:

- The project manager;
- The individual responsible for operation;

VII. TESTING OF INSTALLED EQUIPMENT

37. Prior to the completion of the installation of E&A equipment, tests shall be performed for each individual piece of equipment and for each system in accordance with the requirements specified in the documentation of the equipment manufacturer, the Company's standards, and

applicable legislation. The E&A equipment testing shall be finalized by performing power-up tests for all main and auxiliary equipment.

38. The contractor shall prepare the technical documentation and submit it to TIAG for verification of the technical documentation and the technical condition of the E&A equipment at least four working days before the planned test.

39. If necessary (in accordance with the terms of the contract and the project), a VERT certificate on the technical condition of the electrical equipment ready for testing shall be obtained and attached.

40. After completing the installation or reconstruction of the E equipment, which require power-up tests, the contractor shall fill out the request for energization test. The request for energization test shall be coordinated by the contractor with:

- 40.1. The individual responsible for operation;
- 40.2. The individual responsible for organizing the operation of electric equipment;
- 40.3. The project manager;
- 40.4. The manager of the Technical Inspection and Analysis Group (TIAG);
- 40.5. The head of the Operational Service;
- 40.6. Other representatives of the Company specified by the manager of TIAG.

41. Energization of the equipment for testing and commissioning requires the following:

41.1. Receipt of all mandatory technical documentation prepared in accordance with the requirements set forth herein;

41.2. Receipt of the statement on the technical condition of E&A equipment and the statement on the review of metrological documentation; Remedy of the deficiencies indicated in the statement, except for deficiencies that cannot be fixed before energization, testing, and commissioning.

41.3. The TIAG manager, after evaluating the deficiencies and nonconformities indicated in the project supervision and technical documentation control statement, shall issue a certificate of electrical equipment fitness for testing, concluding whether the E&A equipment complies with applicable legislation and has been properly prepared for testing.

41.4. The TIAG manager shall sent a copy of the signed certificate on the fitness of electrical equipment for testing to:

- 41.4.1. The individual responsible for operation;
- 41.4.2. The project manager;
- 41.4.3. The person responsible for organizing the operation of electrical equipment;
- 41.4.4. The Chief Specialist for Electrical and Instrumentation Equipment Maintenance;
- 41.4.5. The contractor, if the contractor requested this in writing and indicated the method of submission in the technical documentation.

41.5. The individual responsible for operation, after receiving the certificate of electrical equipment fitness for testing and verifying that the conditions for the safe operation of E&A equipment and all instructions of the TIAG manager have been implemented, shall submit a requisition, within the limits of conferred powers, to the Operational Service for the energization of the E&A equipment.

42. The tests shall be organized by the Company and carried out by the contractor in the presence of the Company's personnel. The tests may be organized and carried out by the Company in the presence of the Contractor's personnel. The contractor shall provide methodological assistance during the tests and shall remedy any defects that may occur during and after the tests.

43. The tests may only be performed by qualified personnel holding certificates issued by the manufacturer or by a certified training body authorizing them to carry out the relevant tests.

44. The tests shall be performed in accordance with the test programs, methods, or process regulations agreed between the Company and the entity testing the E&A equipment, as well as the Company's current power supply diagrams, process flow diagrams, and AVS procedures.

45. The Operational Service, after receiving the request for energization test and verifying that the conditions for the safe operation of electrical equipment and all instructions of the TIAG manager have been implemented, shall energize the electrical equipment in accordance with the Company's procedures. The contractor shall attend the energizing of the equipment and immediately fix the defects (if any, within the limits of the design) identified by the Operational Service. Voltage shall be applied to the process unit (electric motors of pumps or compressors, electric drives, etc.) based on the requisition (BE-1) of the process engineer of particular process unit.

46. A person switching voltage to electric equipment shall first ensure that the conditions are safe to operate the electric equipment and then energize the equipment. The contractor shall attend the initial energization of the equipment and immediately fix any defects observed.

47. During the energization test, it shall be checked whether the equipment can operate in accordance with the process diagrams, whether all control systems (including automatic circuit breakers, protection and shutdown devices, alarms, and control and measuring instrumentation) have been adjusted, whether the equipment is ready for complex testing, and whether their operation is safe.

48. During the energization test, the contractor shall be responsible for the safety of tested equipment, its condition and preparation for testing.

49. At the time of energization and during the entire test, the contractor shall fix all defects and replace defective parts at its own cost (unless otherwise provided in the contract).

50. Since the inception of the energization test, the request for the energization test shall be kept at the Operational Service. The Head of the Operational Service shall be responsible for retaining this request for 12 months following the completion of the energization test.

VIII. ACCEPTANCE OF E&A EQUIPMENT AS FIT FOR SERVICE

51. After completing the installation, testing, and commissioning of the new or reconstructed E&A equipment, the contractor shall provide training to the Company's employees, prepare technical documentation, and submit it to TIAG for verification of the documentation and the technical condition of the E&A equipment at least four working days before the planned handover of the E&A equipment for use by the Company. If required, a VERT certificate on the technical condition of the electrical equipment shall be obtained and enclosed.

52. The TIAG manager, after evaluating the deficiencies and nonconformities indicated in the project supervision and technical documentation control statement, shall issue a certificate confirming the fitness of the E&A equipment for use, concluding whether the E&A equipment complies with applicable legislation, are suitable for use and can be acknowledged as properly functioning.

53. The TIAG manager shall sent a copy of the signed certificate on the fitness of E&A equipment for use to:

- 53.1. The person responsible for organizing the operation of electrical equipment;
- 53.2. The project manager (if appointed);
- 53.3. The individual responsible for operation;
- 53.4. The Chief Specialist for Electrical and Instrumentation Equipment Maintenance;
- 53.5. The contractor, if the contractor requested this in writing and indicated the method of submission in the technical documentation.

54. The individual responsible for operation, after receiving the certificate of on the fitness of E&A equipment for use and verifying that the conditions for the safe operation of E&A equipment and all instructions of the TIAG manager have been implemented, shall submit a requisition, within the limits of conferred powers, to the Operational Service for the energization of the E&A equipment.

55. A person switching voltage to electric equipment shall first ensure that the conditions are safe to operate the electric equipment and then energize the equipment. The contractor shall attend the initial energization of the equipment and immediately fix any defects observed.

IX. RESPONSIBILITIES

56. The TIAG manager is responsible for evaluating the fitness of the E&A equipment for use in accordance with the procedure outlined herein.

57. The contractor is responsible for:

- 57.1. Ensuring that the works performed and the equipment installed comply with the design or technical solutions document;

57.2. Ensuring that the works performed and the equipment installed comply with the requirements of the applicable legislation.

57.3. Coordinating changes, if any, to the design;

57.4. Stamping the design with the 'As-Built' mark.

57.5. Preparing the equipment and associated technical documentation and transferring them to the Company's representatives for acceptance as fit for service.

58. The work supervisor is responsible for overseeing the works, accepting completed works, and verifying their scope.

59. The individual responsible for operation is responsible for verifying the technical condition of the E&A installed by the Contractor and its compliance with the applicable legislation.

60. The TIAG engineer is responsible for conducting a visual inspection of E&A equipment and evaluating their compliance with the design solutions as outlined herein.

61. The Operational Service is responsible for ensuring the correct and safe energization of E&A equipment during its initial use (testing) by the Company.

62. The project manager or, if none has not been assigned, the individual responsible for operation, is responsible for organizing the preparation and collection technical documentation within the scope defined herein, ensuring the deadlines for the preparation and submission of such documentation are met, as well as providing necessary information to contractors in accordance with the Company's procedures.

63. The project manager, or if none has been assigned, the individual responsible for operation, is responsible for ensuring the transfer of technical documentation to the Company's archive in accordance with the Company's procedures.

X. FINAL PROVISIONS

64. Responsibility for periodic reviews and, if needed, updating of this Procedure shall lie with the Director of Maintenance of the Company.

XI. ANNEXES

Annex 1. Register of technical documentation (recommended form).

Annex 2. Log of changes and deviations (recommended form).

Annex 3. Electric equipment installation work handover and acceptance statement (recommended form).

Annex 4. Notice of demobilization of the installation team from the worksite (recommended form).

Annex 5. Declaration of conformity of electrical equipment (recommended form).

Annex 6. Switchgear (cabinet) maintenance report (recommended form).

Annex 7. Request for energization test (recommended form).

Annex 8. Process control and automation equipment installation work handover and acceptance statement (recommended form).

Procedure prepared by

Agreed with