

**INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

JT/T 815.1-2019

Replacing JT/T 815.1-2012

**Shore-to-ship power supply system operating procedure - Part
1: High voltage**

港口船舶岸基供电系统操作技术规程 第1部分：高压供电 清晰版

(English Translation)

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Foreword

JT/T 815 "Technical Specifications for Operation of Shore-based Power Supply System for Port Ships" is divided into two parts.

--- Part 1. High-voltage power supply;

--- Part 2. Low voltage power supply.

This part is the first part of JT/T 815.

This section is in accordance with GB/T Draft the rules given in 1-2009.

This section replaces JT/T 815. 1-2012 "Technical Specifications for Operation of Shore-based Power Supply System for Port and Ship Part 1. High-Voltage Boarding". versus JT/T 815. Compared with 1-2012, in addition to editorial changes, the main technical changes are as follows.

--- Modified the scope of application for specialized terminals such as container, ro-ro, cruise, passenger, dry bulk, general cargo (see Chapter 1 and 2012) Chapter 1 of the Annual Edition);

- Added technical requirements for compatibility assessment of shore-based power supply systems (see 3.5);
- Increased the work flow framework of the shore-based power supply system (see 3.7 and Appendix B);
- Increased maintenance operation requirements (see Chapter 8);
- Modified the application form for ship electricity and data record form for shore-based power supply (see Appendix C and Appendix E, Appendix A of the 2012 edition and Appendix B).

This part is proposed and managed by the National Port Standardization Technical Committee (SAC/TC 530).

1 Scope

This part of JT/T 815 specifies the basic requirements for high-voltage power supply operation of shore-based power supply systems for ports and ships, as well as preparation, connection, Operating technical regulations for power, power outage and maintenance.

This section applies to ships, ro-ro, cruise ships, passenger transport, dry bulk, general cargo and other specialized berths.

Based power supply system.

2 Normative references

The following documents are essential for the application of this document. For dated references, only the dated version applies to this article Pieces. For undated references, the latest version (including all amendments) applies to this document.

GB/T 51305 Engineering technical standards for shore power facilities of wharf ships JT S 155 Technical Specifications for Construction of Quay Shore Power Facilities JT S 155-1 Technical Specifications for Detection of Quay Shore Power Facilities

3 Basic requirements

3. 1. The shore party shall establish a management system and emergency mechanism related to the ship's shore-based power supply system, and shall be managed by a special person.

3.2

The shore party shall be equipped with personnel for the management, operation and maintenance of the ship's shore-based power supply system.

3.3

The staff on the shore to operate the ship's shore-based power supply system shall be trained and certified to work.

3.4

The shore side and the ship side shall determine through consultation, and a special person will give unified command to the operation process.

3.5

Before the ship uses the shore-based power supply system of the berth ship for the first time, the shore side and the ship side shall perform shore-ship electrical compatibility of the ship's shore-based power supply system.

Performance analysis to determine the feasibility of the connection between the ship's shore-based power supply system and the ship's electrical system. The shore ship electrical compatibility analysis shall include the use of the ship Electrical requirements, expected short-circuit currents, grounding methods, power quality, and communications should also meet the requirements of GB/T 51305 and JT S 155. shore the main contents of the ship's electrical compatibility analysis are shown in Appendix A.

3.6

The shore party and the ship party should sign the ship's shore-based power supply service agreement or form a written confirmation document to clarify the responsibilities, safety responsibilities, and labor of both parties.

Make a demarcation point. The shore side and the ship side shall understand each other the configuration and technical parameters of the ship's shore-based power supply system and the ship-borne power receiving system.

3.7

The shore party shall formulate the work procedures for the preparation, connection, power supply and power failure of the ship's shore-based power supply system. Workflow framework of shore-based power supply system See Appendix B.

3.8

During the power supply service of the ship's shore-based power supply system, the shore-based power supply equipment shall hang warning signs.

3.9

The shore side shall do a good job in the safety protection of the ship's shore-based power supply system, regularly check and record, and notify the ship side if any problems are found.

3.10

The shore and ship shall keep the communication smooth and communicate in a timely manner.

3.11

Personal safety protection should be done when operating the ship's shore-based power supply system, safety protective equipment should be worn in accordance with regulations, and there should be supervision during operation.

3.12

When the terminal stops operating due to weather, the ship's shore-based power supply system should not be used.

3.13

Connectors should be connected and disconnected with power off.

3.14

The shore-based power supply of port ships shall have a power supply record.

3.15

The cable management device of the ship's shore-based power supply system should be used without affecting the berthing and loading and unloading operations of the ship, and should be cut off when not in use JT/T 815. 1-2019 Power supply, fixing connection cables, and protecting connectors.

4 Preparation

4. 1. Ships shall confirm that the onboard power receiving system is in normal working condition. The shore side shall confirm that the shore-based power supply system is in a normal working state.

4. 2. Before using shore power for the first time at a port of call, the ship party shall provide the ship's information and related technical parameters to the shore party in advance. Stopping Before using the shore power for the first time at a port, the ship owner shall provide the ship information and related technical parameters to the shore party at least 24h in advance.

4.3

When applying for berthing at the port, the shipowner shall fill in an application form for power consumption of the ship, and determine the name, voltage and frequency of the ship using shore-based power Rate, demand capacity, power receiving location, and ship contact information. The content of the ship electricity application form is shown in Appendix C.