

Engineering Standard

SAES-O-111

26 October 2005

Power Supplies

Safety & Security Standards Committee Members

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Saudi Aramco DeskTop Standards

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1 General

This standard refers to Power Supplies for Saudi Aramco's vital industrial facilities per [SAES-O-100](#), paragraph 1.3. This Standard shall be used in conjunction with Safety and Security Directive No. 11 (SSD/11) of the Saudi Arabian Government Supreme Commission for Industrial Security.

2 Amendments

Safety and Security Directive No. 11 has not been amended by the Supreme Commission for Industrial Security.

3 Commentary

Certain clarifications have resulted from applying this standard to Saudi Aramco projects. The following items reflect a general understanding reached with representatives of the Supreme Commission for Industrial Security and should be verified through liaison by the Proponent with the General Manager of Industrial Security Operations and the Manager of the Consulting Services Department in case there are conflicts with other company engineering standards and materials specifications, standard drawings or Industry Codes.

3.1 Stand by electric power for emergency shall fulfill the requirements of SSD/11. Stand by electric power shall be sufficient to cope with the installations orderly shut down, power failure, lighting for security purposes, telecommunications pertaining to security, and emergency generator building ventilation/AC system.

3.2 Power Supplies for Vital Facilities ([SAES-O-100](#) paragraph 1.1.3) shall be designed in accordance with the Saudi Aramco Electrical Power Standards as amended by SSD/11, Power Supplies.

3.3 Wooden power poles shall not be used within process areas and tank farms (excluding stand alone Water Injection Plants and Water Treatment Plants). Hot-dipped galvanized steel, or seamless aluminum alloy, power poles are required within the overall security perimeter fences protecting the subject process areas and tank farms.

3.4 Reference Standards (Latest Edition)

Saudi Aramco Engineering Standards

[SAES-O-100](#)

Safety and Security, General Requirements

[SAES-O-109](#)

Buildings Housing Sensitive or Vital Equipment

[SAES-O-110](#)

Protection of Vital Equipment

<u>SAES-O-112</u>	<i>Communications</i>
<u>SAES-O-113</u>	<i>Security Lighting Systems</i>
<u>SAES-O-114</u>	<i>Check Point Lighting</i>
<u>SAES-O-126</u>	<i>Blast Resistant Control Buildings</i>
<i>SAES-P-100 thru 199</i>	<i>Electrical Power Standards</i>

Safety and Security Directive

<i>SSD/11</i>	<i>Power Supplies</i>
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Revision Summary

26 October, 2005

Revised the "Next Planned Update". Reaffirmed the contents of the document, and reissued with no other changes.