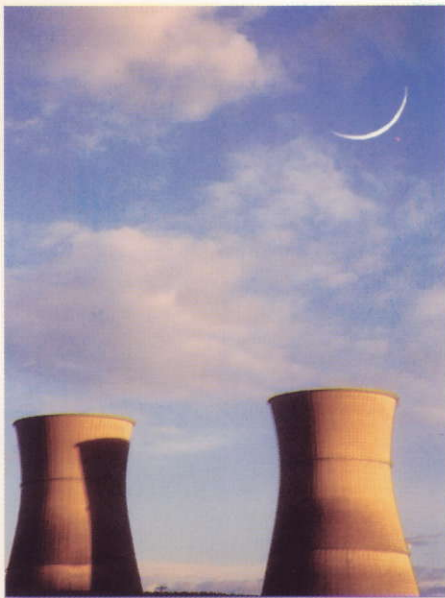
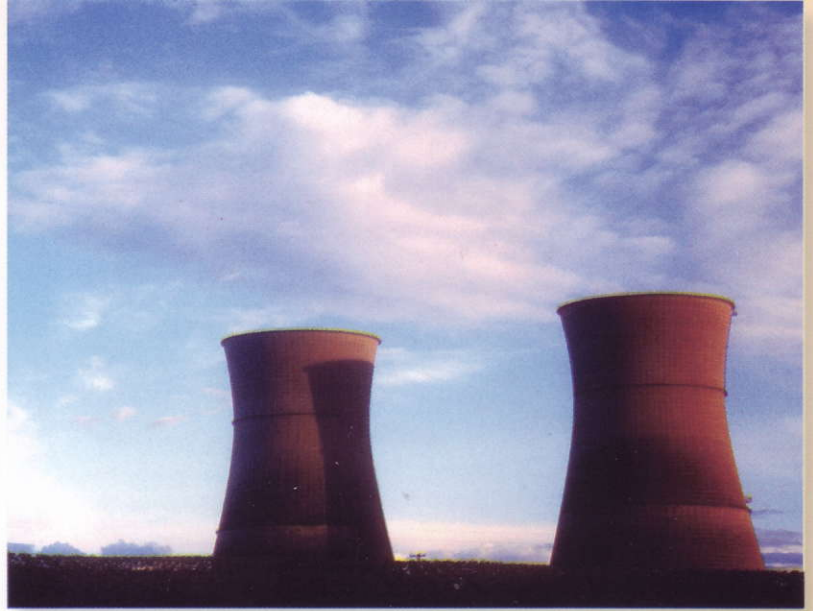
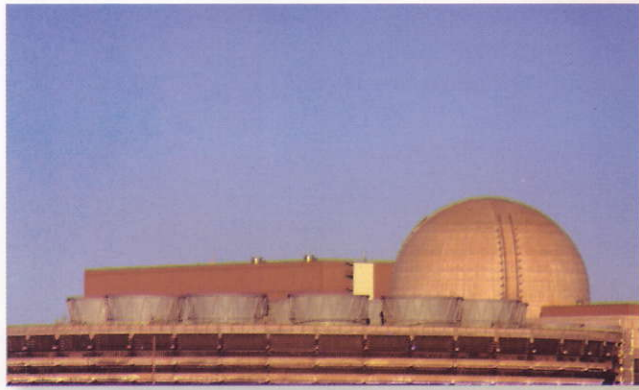


# OKONITE CABLES

For Nuclear Generating Stations



Medium Voltage  
Low Voltage Power  
Control  
Instrumentation



**THE  
OKONITE  
COMPANY**



Okonite Materials Laboratory in Paterson, New Jersey.

Since the mid 1960's, Okonite has provided the industry with nuclear qualified cables. Okonite continues to be a pioneer in the design and manufacture of cables for the Nuclear Power Generating Industry.



Material research staff meeting

Recently, Okonite completed an extensive Class 1E qualification protocol of its nuclear generating station cables encompassing power, control and instrumentation types.

The recent development of a new grade of polymer by Exxon Mobil Chemical prompted Okonite's Material research staff to formulate an Okonite FMR-N (Flame, Moisture and Radiation Resistant-Nuclear) insulation compound for the new qualification program.



Long term electrical moisture stability testing of insulation compounds.



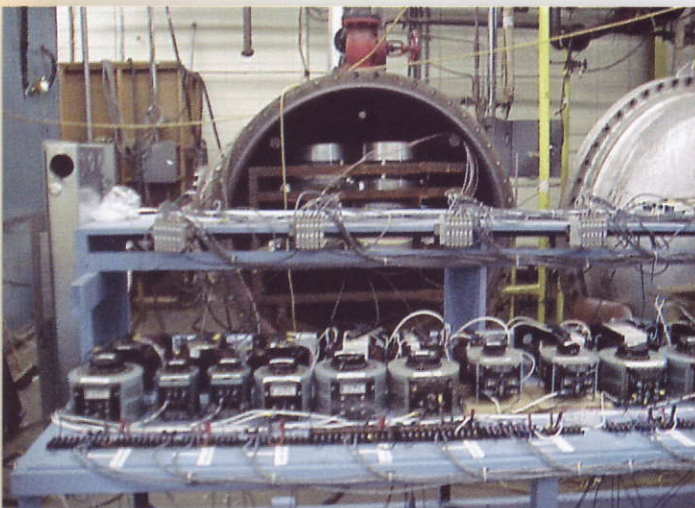
Physical testing of installation and jackets for tensile strength and ultimate elongation

# Okonite Cables For Nuclear Generating Stations



Insulated conductors on prepared mandrels for LOCA simulation

This commitment to the Nuclear Industry continues in the Materials Research and Cable Evaluation Laboratories, Application Engineering, Manufacturing and Quality Assurance divisions of the Company. Five Okonite manufacturing plants are qualified to manufacture nuclear grade products within their respective equipment capabilities.



LOCA chamber and electrical load controls where samples on mandrels are exposed to steam and elevated temperatures

The Loss of Coolant Accident (LOCA) Qualification Program, executed by Wyle Laboratories in Huntsville, Alabama, took nearly one year to complete including the Okonite development of multiple cable prototypes.

Nuclear Environmental Qualification Testing was conducted in accordance with IEEE Standards for both single and multi-conductor cables through LOCA simulations to qualify the cable as Class 1E.



Loading mandrels in LOCA test vessel awaiting commencement of test

All nuclear qualified cables are manufactured in accordance with Okonite's Quality Assurance Program which complies with the applicable requirements of 10 CFR 50 Appendix B, ANSI 45.2 and current Regulatory Guides. This includes an extensive traceability program which identifies all ingredients and materials utilized within the cable as well as a unique quality control length numbering system identifying date and sequence of manufacture.

This compliment of products, 600 Volt Power, Control and Instrumentation cables, joins our existing Okoguard Medium Voltage Cables to provide a full spectrum of Class 1E products required for the Nuclear Power Industry.

The products offered encompass a broad range of cables for the nuclear industry and are listed below:

**MV Shielded Power Cables** – 5 kV and above insulated with Okoguard<sup>(1)</sup> insulation and an Okolon<sup>(2)</sup> jacket

**LV Power Cables** – 1/C Okonite FMR-N<sup>(3)</sup> or Multi-Conductor Okonite/FMR-N/Okolon<sup>(2)</sup> Jacket

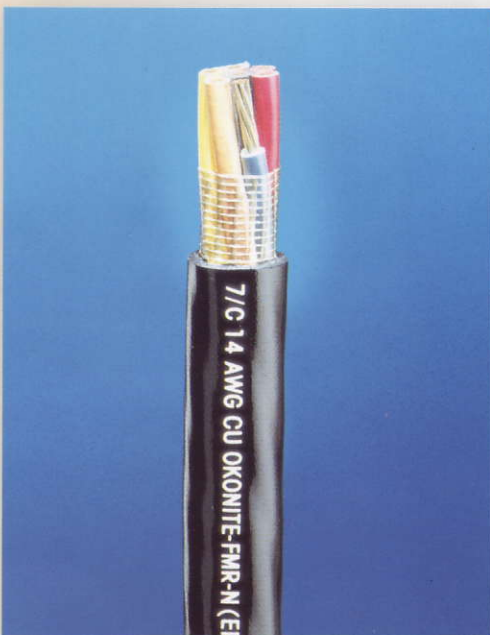
**Control Cable** -Multi-Conductor Okonite FMR-N/Okolon<sup>(2)</sup> Jacket



Okoguard medium voltage power cable



State of the art dimensional measuring equipment for wall thickness in our Orangeburg, S.C. cable plant



Okonite-FMR-N/Okolon Control Cable



Okonite FMR-N/Okolon Shielded Control Cable

### Instrumentation Cable

- Multi Pair/Triad Okonite FMR-N/XLPO Jacket
- Multi Pair/Triad Okozel/Okozel<sup>(4)</sup> Jacket (for reduced diameter requirements)

<sup>(1)</sup> Okoguard is Okonite's premium thermoset EPR medium voltage insulation.

<sup>(2)</sup> Okolon is Okonite's thermoset, flame retardant CSPE jacket material.

<sup>(3)</sup> Okonite FMR-N is Okonite's thermoset low voltage flame, moisture and radiation resistant EP insulation

<sup>(4)</sup> Okozel is Okonite's designation for DuPont Tefzel.



Instrumentation Cable



Thermocouple Extension Cable



Low Voltage Power Cable

Qualification data and documentation are available upon request. Please contact your nearest Okonite Field Sales Office or visit [www.okonite.com](http://www.okonite.com)