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Electric Transmission & Distribution Equipment

US Industry Study with Forecasts for **2013 & 2018**

Study #2503 | June 2009 | \$4600 | 323 pages

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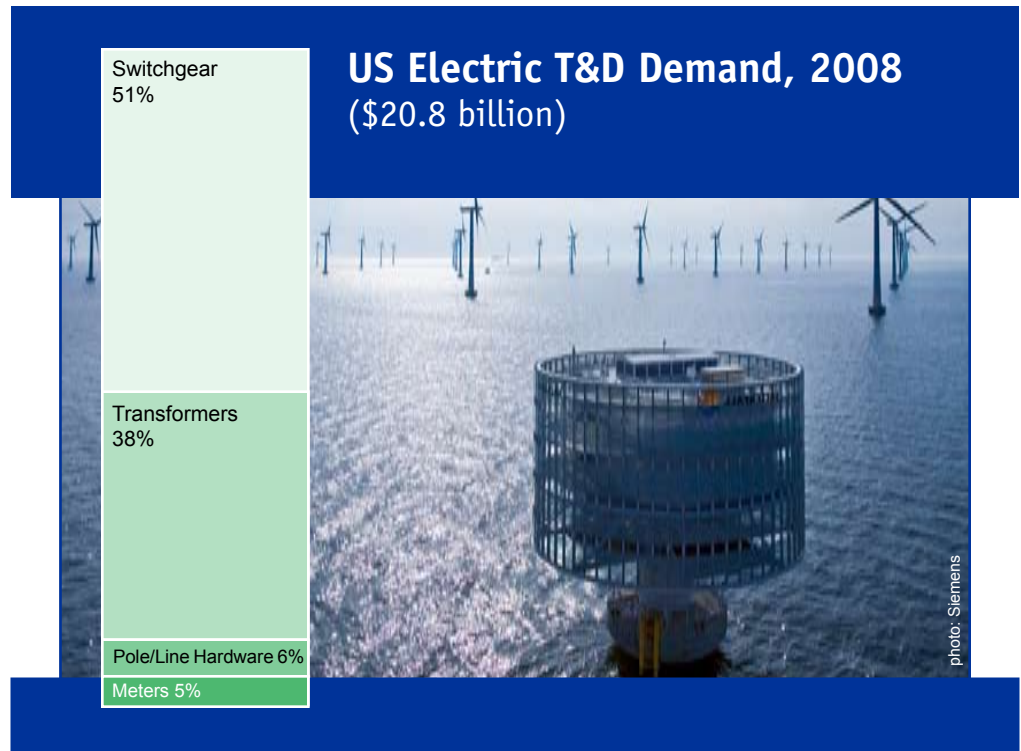
The need to upgrade and modernize the US electric grid -- supported by new laws designed to support transmission and distribution system upgrades -- will be an important driver of demand.

US demand to grow 2.6% annually through 2013

US demand for electric transmission and distribution (T&D) equipment is expected to increase 2.6 percent annually to \$24 billion in 2013. The need to upgrade and modernize the US electric grid -- supported by regulatory changes designed to support transmission and distribution system upgrades -- will be an important driver of demand. In addition, growth in electric power generation by nonutility suppliers and in renewable energy generation such as wind will provide opportunities for switchgear and transformers to control these power flows, as well as meters to measure them. An expected rebound in residential construction will also support increases. However, the slowing growth in both electric utility and overall capital spending will prevent even faster advances.

Independents, cogenerators to drive gains in key markets

In 2008, electric utilities accounted for 48 percent of total electric T&D demand, with the industrial sector -- including nonutility generators -- accounting for an additional 33 percent. Growth in these markets will be supported by increasing electricity generation by independent power producers and cogenerators. In addition, rising electric utility capital spending will provide opportunities -- even though the increases in this spending will moderate from the double digit pace seen in the past decade. The



smaller government and institutional market will see the fastest increases through 2013, with gains supported by growth in transportation construction spending and government fixed investment. The residential market will also see above average gains buoyed by the recovery in the housing market from a low 2008 base. Demand in the commercial sector is expected to rise at a below average pace, as growth in commercial construction moderates.

Switchgear, meters to be fastest growing products

The fastest growth will be in power switching equipment and electric meters. Demand for power switching equipment

will be supported by the trend toward automated and remote controlled equipment and by the construction of large substations. Electric meter demand will benefit from the growing market for "smart meters" that provide customers with pricing signals and thereby help limit electricity use. These smart meters, which typically cost around twice as much as traditional electric meter products, will form an important part of the developing "smart grid" and allow electricity providers to offer customers net metering capabilities or use automatic meter reading. Power circuit breakers, molded case circuit breakers and specialty transformers will also see solid increases.

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Sample Text, Table & Chart

PRODUCTS

Nonutility

Demand for nonutility transformers will increase. Gains will be supported by the economic recovery coming out of the economic downturn and by the increased use of electrical equipment and has high maintenance requirements. Nonutility transformers will continue to be used in specialized power disturbances and for the benefits of systems to equipment.

Higher power nonutility transformers (e.g., those 300 kVA) will offer the best growth prospects, benefitting industrial production and a rise in manufacturing. Voltage transformers will also experience above average growth cent annually through 2013. These transformers are typically used for voltage regulation, machinery speed and lighting control and the testing of electric equipment. Therefore, growth is related by the increasing use of computer numeric control computers and other electrical equipment sensitive to variations in power voltage levels.

Nonutility transformers are typically used in commercial and industrial applications in which electric machinery must be protected from fluctuations in the power supply. As the value of total shipments increases, there will be several changes in the product mix. Three-phase designs are expected to become more common, particularly at higher kVA ratings, where three-phase designs are often used to replace banks of three single-phase transformers. Other changes include the utilization of sealed and cast coil transformers in place of liquid-filled types in hazardous or severe environments. Sealed and cast coil transformers are less likely than liquid-filled types to experience explosive failures.

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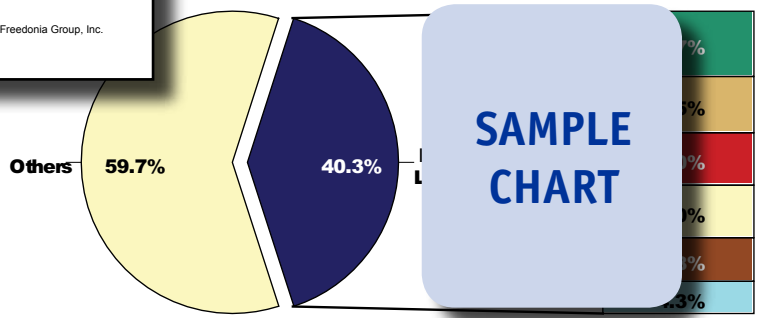
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TABLE IV-2
SWITCHGEAR & SWITCHBOARD APPARATUS
SUPPLY & DEMAND
 (million dollars)

Item	1998	2003	2008	2013	2018
Nonresidential Fixed Invest (bil \$)	100	100	100	100	100
\$ switchgear/000\$ investment	100	100	100	100	100
Switchgear & Switchboard Demand	100	100	100	100	100
Low Voltage Switchgear	100	100	100	100	100
Metal-Clad & Metal-Enclosed	100	100	100	100	100
Molded Case Circuit Breakers	100	100	100	100	100
Power Circuit Breakers	100	100	100	100	100
Power Switching Equipment	100	100	100	100	100
Fuses & Fuse Equipment	100	100	100	100	100
Duct	100	100	100	100	100
Switchgear Relays	100	100	100	100	100
Other Switchgear	100	100	100	100	100
+ exports	100	100	100	100	100
- imports	100	100	100	100	100
Switchgear & Switchboard Shipments	100	100	100	100	100
price deflator (2000=100)	100	100	100	100	100
Switchgr/Switchbrd Shpts (mil 2000\$)	8222	7507	7510	7740	8120

CHART VI-1

U.S. TRANSMISSION & DISTRIBUTION EQUIPMENT
MARKET SHARE BY COMPANY, 2008
 (\$20.8 billion)



Sample Profile, Table & Forecast

TABLE V-1
ELECTRIC TRANSMISSION & DISTRIBUTION EQUIPMENT DEMAND BY MARKET
 (million dollars)

Item	1998	2003	2008	2013	2018
Nonresidential Fixed Invest (bil \$)					35
\$ elec t&d equip/000\$ investment					2.6
Total Electric T&D Equip Demand					100
Electric Utilities					50
Industrial & Nonutility Generators					30
Commercial					20
Residential					10
Government/Institutional					10

SAMPLE
TABLE

COMPANY PROFILES

Itron Incorporated

2111 North Molter Road
 Liberty Lake, WA 99019
 509-924-9900
<http://www.itron.com>

Revenues: \$1.3 billion
 US and Canada
 Employment: 1,500

Key Products: meters, handheld computers, and mobile and fixed network automated meter reading (AMR), advanced meter infrastructure (AMI), water leak detection and related software and services, for electric, gas and water utilities. The Company operates in two segments: Itron North America and Actaris.

SAMPLE
PROFILE

Itron Incorporated manufactures meters, handheld computers, and mobile and fixed network automated meter reading (AMR), advanced meter infrastructure (AMI), water leak detection and related software and services, for electric, gas and water utilities. The Company operates in two segments: Itron North America and Actaris.

The Company is active in the electric transmission and distribution equipment industry through the Itron North America segment, which generated revenues of \$628 million in 2008. The segment's products include electricity meters, gas and water AMR modules, AMR data collection technologies and AMI technologies. These products are primarily sold in North America to electric, gas and water utilities. The segment maintains 15 manufacturing, assembly, service and distribution facilities in North America. Itron Incorporated's \$1.3 billion Actaris segment, which primarily operates in Europe, includes electromechanical and electronic electricity, water, heat and gas meters, among other products.

For electric utilities, Itron's products include QUANTUM Q1000, SENTINEL and CENTRON meters. QUANTUM Q1000 meters are .

"Demand for electric transmission and distribution equipment in the electric utility market will rise 1.9 percent annually to \$10.9 billion in 2013. While this is the slowest for any major market in percentage terms, the demand from utilities will be \$1 billion more in 2013 than in 2008, which represents over 35 percent of the total increase in the US electric transmission and distribution industry."

--Section V, pg. 176

OTHER STUDIES

World Electric Transmission & Distribution Equipment

This study analyzes the world electric power equipment industry. It presents historical demand data (1998, 2003, 2008) and forecasts for the years 2013 and 2018 by product (transformers, switchgear and switchboard apparatus), market (industrial, commercial and other; electric utilities; residential), world region (e.g., Asia/Pacific, North America, Western Europe) and major national market. The study also considers market environment factors, details industry structure, evaluates company market share and profiles industry players.

#2529 07/2009..... \$5700

World Fuel Cells

Global commercial fuel cell demand will triple through 2013 in dollar terms. Portable fuel cell systems will remain the dominant application by unit, while electric power generation will continue as the top use in value terms. PEM chemistry fuel cells will strengthen their dominant position over the next decade. This study analyzes the \$570 million world fuel cell industry, with forecasts for 2013 and 2018 by product, chemistry, application, world region and for 15 national markets. It also details market share and profiles major players.

#2502 05/2009..... \$5800

World Diesel Engines

Global diesel engine demand is forecast to rise 3.5% yearly through 2012. The Asia/Pacific region will remain the largest market while North America will be among the fastest growing based on increased heavy vehicle output and use of diesel engines in light vehicles. Stationary power will be the fastest growing end use segment. This study analyzes the \$129 billion world diesel engine industry, with forecasts for 2012 and 2017 by market, world region and for 26 countries. It also details market share and profiles industry players.

#2470 04/2009..... \$5700

Batteries

US demand for primary and secondary batteries will reach \$16.8 billion in 2012. Growth will be supported by healthy demand for battery-driven electronics and a shift toward higher-priced, better-performing batteries. In the secondary battery segment, the rapidly growing market for hybrid vehicles will boost demand for Ni-MH and Lilon batteries. This study analyzes the \$14.9 billion US battery industry, with forecasts for 2012 and 2017 by product and market. It also evaluates market share and profiles industry players.

#2449 01/2009..... \$4800

Wind Turbine Systems

US wind turbine system demand will grow 6.8% annually through 2012, driven by rising interest in domestic energy and government incentives. Public utilities will increase their market share while independent power producers remain dominant. The New England and Middle Atlantic subregions will grow the fastest. This study analyzes the \$7.3 billion US wind turbine system industry, with forecasts for 2012 and 2017 by type, component, application and region. It also evaluates market share and profiles industry players.

#2439 01/2009..... \$4600

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