



[CLICK TO VIEW](#)

[Table of Contents 2](#)

[List of Tables & Charts 3](#)

[Study Overview 4](#)

[Sample Text, Table & Study Coverage 5](#)

[Sample Profile, Table & Chart 6](#)

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# Electric Power Transmission & Distribution Equipment

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Industry Study with Forecasts for 2019 & 2024

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## Table of Contents

### EXECUTIVE SUMMARY

### MARKET ENVIRONMENT

General .....	4
Macroeconomic Environment.....	6
Fixed Investment.....	10
Construction Outlook.....	13
Electricity Generation .....	16
Generator.....	18
Fuel Type .....	19
Electric Generating Capacity .....	21
Electric Power Transmission & Distribution System.....	23
Electricity Consumption .....	26
Electric Power Equipment .....	28
Historical Market Trends.....	30
Pricing Trends.....	34
International Environment.....	38
World Market.....	39
US Foreign Trade .....	41
Imports .....	44
Exports.....	47

### REGULATIONS & TECHNOLOGY

General .....	50
Regulations & Standards .....	51
Electric Utility Deregulation .....	51
Wholesale Deregulation .....	51
Retail Deregulation.....	54
Growth of Distributed Generation.....	58
Net Metering .....	58
Renewable Energy Portfolio Standards.....	61
Impact on Electric Power Transmission & Distribution Equipment Markets.....	65
Environmental.....	66
Other.....	69
Technology .....	71
Smart Grid.....	72
Arc-Fault Circuit Interrupters.....	74
Amorphous Core Transformers .....	75
New Transformer Core Shapes.....	77
Variable Frequency Transformers.....	78
Sulfur Hexafluoride Emissions Reductions .....	78
High Temperature Superconducting Equipment.....	79
Other.....	80

### PRODUCTS

General .....	82
---------------	----

Switchgear & Switchboard Apparatus .....	85
Low Voltage Switchgear.....	89
Metal-Clad & Metal-Enclosed Switchgear.....	92
Power Circuit Breakers .....	94
Molded Case Circuit Breakers .....	97
Construction MCCBs.....	100
Transportation, Electronic, & Other MCCBs.....	102
Power Switching Equipment .....	103
Fuses & Fuse Equipment .....	105
Duct.....	109
Switchgear Relays.....	111
Other.....	114
Control Panels .....	116
High Voltage Fuses & Links.....	116
All Other Types .....	117
Transformers.....	117
Power .....	122
500 kVA to 10 MVA .....	126
10 MVA to 30 MVA.....	127
30 MVA to 100 MVA .....	127
Over 100 MVA .....	128
Secondary & Other.....	129
Distribution .....	129
Single Phase.....	134
Three Phase & Other .....	135
Specialty.....	136
High Intensity Discharge Ballasts .....	138
Instrument Transformers.....	140
Other Specialty Transformers .....	141
Nonutility.....	141
Other Transformers & Parts .....	143
Electric Meters.....	145
Demand by Technology.....	148
Demand by Type .....	150
Pole & Transmission Line Hardware .....	151

### MARKETS

General .....	155
Electric Utilities.....	158
Electric Utilities Outlook.....	158
Electric Power Transmission & Distribution Equipment Demand.....	161
Industrial & Nonutility Generators .....	165
Manufacturing & Nonutility Generation Outlook.....	166
Electric Power Transmission & Distribution Equipment Demand.....	171
Commercial Sector.....	175
Commercial Sector Outlook.....	176
Electric Power Transmission & Distribution Equipment Demand.....	177

Residential Sector .....	181
Residential Sector Outlook .....	182
Electric Power Transmission & Distribution Equipment Demand.....	185
Government & Institutions .....	188
Government & Institutions Outlook .....	189
Electric Power Transmission & Distribution Equipment Demand.....	191

### INDUSTRY STRUCTURE

General .....	194
Market Share .....	197
Product Development.....	201
Manufacturing .....	205
Marketing & Distribution .....	206
Cooperative Agreements.....	209
Mergers & Acquisitions.....	212

### COMPANY PROFILES

ABB Limited.....	216
Alstom SA.....	221
American Superconductor .....	224
AZZ Incorporated .....	225
Basler Electric .....	228
Carling Technologies.....	230
Central Moloney.....	232
Crompton Greaves .....	233
Eaton Corporation .....	235
Electro-Mechanical Corporation .....	242
G&W Electric .....	244
General Electric .....	247
Hammond Power Solutions .....	254
Hitachi Limited .....	257
Howard Industries.....	260
Hubbell Incorporated.....	262
Itron Incorporated .....	266
Kohler Company.....	268
LAPP Insulators .....	269
Littelfuse Incorporated .....	271
Melrose Industries.....	273
Mersen SA.....	277
Mitsubishi Electric.....	279
Panasonic Corporation .....	281
Powell Industries .....	283
Power Products .....	286
Royal Philips.....	289
S&C Electric .....	291
Schneider Electric .....	295
Sensus USA .....	299

(continued on following page)

## Table of Contents

### COMPANY PROFILES

(continued from previous page)

Siemens AG.....	300
SPX Corporation.....	305
TE Connectivity.....	308
Toshiba Corporation.....	310
Additional Companies in Electric Power T&D Equipment.....	314-318

## List of Tables

### EXECUTIVE SUMMARY

1 Summary Table.....	3
----------------------	---

### MARKET ENVIRONMENT

1 Macroeconomic Indicators.....	10
2 Nonresidential Fixed Investment Expenditures.....	13
3 Construction Expenditures.....	16
4 Electricity Generation by Generator & Fuel Type.....	17
5 Electric Generating Capacity.....	23
6 Electricity Demand by End User.....	27
7 Electric Power Equipment Demand.....	30
8 Electric Power T&D Equipment Market, 2004-2014.....	33
9 Electric Power T&D Equipment Price Deflators.....	37
10 World Electric Power T&D Equipment Demand.....	41
11 Foreign Trade in Electric Power T&D Equipment.....	44
12 US Electric Power T&D Equipment Imports by Source, 2004-2014.....	46
13 US Electric Power T&D Equipment Exports by Destination, 2004-2014.....	48

### REGULATIONS & TECHNOLOGY

1 State Renewable Energy Portfolio Standards & Goals.....	64
---	----

### PRODUCTS

1 Electric Power T&D Equipment Supply & Demand.....	84
2 Switchgear & Switchboard Apparatus Supply & Demand.....	88

3 Low Voltage Switchgear Supply & Demand	91
4 Metal-Clad & Metal-Enclosed Switchgear Supply & Demand.....	94
5 Power Circuit Breaker Supply & Demand.....	97
6 Molded Case Circuit Breaker Supply & Demand.....	100
7 Construction-Related MCCB Demand.....	102
8 Power Switching Equipment Supply & Demand.....	105
9 Fuse & Fuse Equipment Supply & Demand.....	109
10 Duct Supply & Demand.....	111
11 Switchgear Relay Supply & Demand.....	114
12 Other Switchgear Supply & Demand.....	115
13 Transformer Supply & Demand.....	121
14 Power Transformer Supply & Demand.....	126
15 Distribution Transformer Supply & Demand.....	134
16 Specialty Transformer Supply & Demand.....	138
17 Nonutility Transformer Supply & Demand.....	143
18 Other Transformer & Part Supply & Demand.....	145
19 Electric Meter Supply & Demand.....	148
20 Pole & Transmission Line Hardware Supply & Demand.....	154

### MARKETS

1 Electric Power T&D Equipment Demand by Market.....	157
2 Electric Utility Indicators.....	161
3 Electric Utilities Market for Electric Power T&D Equipment.....	164
4 Industrial & Nonutility Generator Sector Indicators.....	171
5 Industrial & Nonutility Generator Market for Electric Power T&D Equipment.....	174
6 Commercial Indicators.....	177
7 Commercial Market for Electric Power T&D Equipment.....	180
8 Residential Indicators.....	185
9 Residential Market for Electric Power T&D Equipment.....	187
10 Government Expenditures & Investment.....	190
11 Government & Institutional Market for Electric Power T&D Equipment.....	192

### INDUSTRY STRUCTURE

1 Electric Power T&D Equipment Sales by Company, 2014.....	196
2 Selected Cooperative Agreements.....	211
3 Selected Acquisitions & Divestitures.....	214

## List of Charts

### MARKET ENVIRONMENT

1 Electric Power Transmission & Distribution System.....	25
2 Electric Power T&D Equipment Market, 2004-2014.....	34
3 Electric Power T&D Equipment Pricing Patterns, 2004-2024.....	37
4 US Electric Power T&D Equipment Imports by Source, 2014.....	47
5 US Electric Power T&D Equipment Exports by Destination, 2014.....	49

### REGULATIONS & TECHNOLOGY

1 Status of Retail Electric Utility Deregulation, 2014.....	57
2 Net Metering Customers, 2004-2014.....	61

### PRODUCTS

1 Electric Power T&D Equipment Demand by Type, 2004-2024.....	85
2 Switchgear & Switchboard Apparatus Demand by Type, 2014.....	89
3 Transformer Demand by Type, 2014.....	122

### MARKETS

1 Electric Power T&D Equipment Demand by Market, 2004-2024.....	157
2 Electric Utilities Market for Electric Power T&D Equipment, 2004-2024.....	165
3 Industrial & Nonutility Generator Market for Electric Power T&D Equipment, 2004-2024.....	175
4 Commercial Market for Electric Power T&D Equipment, 2004-2024.....	181
5 Residential Market for Electric Power T&D Equipment, 2004-2024.....	188
6 Government & Institutional Market for Electric Power T&D Equipment, 2004-2024.....	193

### INDUSTRY STRUCTURE

1 Electric Power T&D Equipment Market Share, 2014.....	198
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*Growth in electricity generation by IPPs and NUGs, as well as greater electrical output using renewable resources, will boost sales as these operations are added to the electric grid.*

## US demand to rise 5.5% annually through 2019

US demand for electric power transmission and distribution (T&D) equipment is expected to rise 5.5 percent annually through 2019 to \$33.4 billion. Growth in electricity generation by independent power producers (IPPs) and nonutility generators (NUGs), as well as greater electrical output using renewable resources, will result in increased product sales, since these operations need to be appropriately equipped to deliver power to the electric grid. Furthermore, efforts to modernize the electric grid and to improve efficiency and reliability will support market advances via the incorporation of “smart” technologies that provide a number of advantages over, but also cost considerably more than, conventional equipment.

## Two-way meters to be fastest growing segment

Advanced metering infrastructure meters (those featuring two-way communication) are forecast to record the strongest demand gains of any electric power T&D equipment product. Suppliers will benefit from the ongoing development of the “smart grid” and related sales of “smart meters.” The ability of these meters to provide automated readings on electricity inflows and outflows, which are necessary for participation in distributed generation and net metering programs, will also boost product demand. Sales of power circuit breakers, metal-clad and metal-enclosed switchgear, and molded

## US Electric Power T&D Equipment Demand, 2019 (\$33.4 billion)



Switchgear

Transformers

Meters

Pole & Line Hardware

case circuit breakers, as well as power and nonutility transformers, will benefit from the expansion of the industrial and NUG market.

## Residential market to see most rapid growth

The largest and most traditional markets for electric power T&D equipment are the electric utilities and industrial sectors. In 2014, electric utilities accounted for 53 percent of total demand, with the industrial sector -- including NUGs -- representing an additional 32 percent. Growth in these markets will be supported by increasing electricity generation by IPPs and NUGs, which will require heavy investment by these firms to protect

sensitive industrial machinery and to connect new facilities to the grid. In addition, rising spending by electric utilities will provide opportunities, even though these increases will moderate from the strong pace of the past decade.

The much smaller residential electric power T&D equipment market will register the fastest gains through 2019 as residential construction continues its recovery from 2009 lows and updates to the National Electric Code lead to greater use of more advanced, but also more expensive, arc-fault circuit interrupters. In contrast, both the commercial and the government and institutional markets will post below average increases, with the latter expanding the slowest.

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## Sample Text, Table & Study Coverage

### MARKETS

#### Electric Power T&D Equipment Demand

Demand for electric power T&D equipment in the government and institutional market is projected to grow the slowest of all market segments. Demand for electric power T&D equipment in the government and institutional market is projected to grow the slowest of all market segments. Demand for electric power T&D equipment in the government and institutional market is projected to grow the slowest of all market segments.

**SAMPLE TEXT**

Nondefense spending will provide new sales opportunities in many government and institutional markets, particularly at the state and local levels. For example, programs aimed at improving government energy efficiency will spur increased demand for energy saving lighting, including high intensity discharge lights and, therefore, HID ballasts. Furthermore, the expected rebound in defense spending will boost sales of products like circuit breakers, fuses, and switchgear, which are used to protect circuitry in military vehicles.

As government spending on infrastructure projects accelerates, highway expenditures are expected to account for a sizeable share of the expenditures total. This trend will lead to increased sales of HID lamp ballasts and other transformers. Higher funding for improvements to bridges, overpasses, and tunnels will also stimulate sales gains for these products. The construction of new government buildings and military facilities typically plays a limited role in this market, yet these buildings generate a significant amount of replacement and repair product demand.

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**TABLE V-7**  
**COMMERCIAL MARKET**  
**FOR ELECTRIC POWER T&D EQUIPMENT**  
 (million dollars)

Item	2004	2009	2014	2019	2024
Commercial Electricity Demand (bil kWh)					
\$ T&D equipment/000 kWh electricity					
Commercial T&D Equipment Demand					
By Product:					
Switchgear					
Transformers					
By Sector:					
Mercantile & Service					
Office					
Lodging					
Food Sales & Service					
Warehouse & Other					
% commercial					
Total Electric Power T&D Equip Demand					

**SAMPLE TABLE**

Source: The Freedonia Group, Inc.

### STUDY COVERAGE

This 318-page Freedonia study, *Electric Power Transmission & Distribution Equipment*, presents historical demand data (2004, 2009, 2014) plus forecasts (2019, 2024) by product and market. The study also examines regulations and technology, analyzes market environment factors, assesses the industry structure, evaluates company market share and profiles 34 US industry competitors.

## Sample Profile, Table & Chart

### COMPANY PROFILES

**AZZ Incorporated**  
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 Fort Worth, TX 76107  
 817-810-1111  
<http://www.azzinc.com>

Revenue  
 Employed

Key Pro  
 duction e

**SAMPLE  
 PROFILE**

AZZ Incorporated manufactures and supplies lighting fixtures, bus duct, and electrical power distribution centers and assemblies for industrial, petrochemical, and power generation and transmission applications. The Company operates in two segments: Electrical and Industrial Products and Services, and Galvanizing Services.

The Company is active in the US electric power transmission and distribution equipment industry through the Electrical and Industrial Products and Services segment, which had revenues of \$416 million and employed 1,160 in FY 2014. Of the segment's total FY 2014 revenues, US product sales generated \$322 million. Via this segment, AZZ designs, manufactures, tests, and installs products that distribute electrical power under such brand names as CENTRAL ELECTRIC, CALVERT, ATKINSON, CGIT, and NLI.

The Electrical and Industrial Products and Services segment conducts production activities in the US at facilities in Crowley, Houston, Fort Worth, College Station, and Spring, Texas; Richland, Mississippi;

TABLE IV-3

### LOW VOLTAGE SWITCHGEAR SUPPLY & DEMAND (million dollars)

Item	2004	2009	2014	2019	2024
Building Construction Expenditures (bil \$) \$ low voltage/000\$ construction					
Low Voltage Switchgear Demand					
Panelboards					
Distribution Switchboards					
Switches					
Other Low Voltage Switchgear					
+ exports					
- imports					
Low Voltage Switchgear Shipments					

**SAMPLE  
 TABLE**

Source: The Freedonia Group, Inc.

### CHART III-1 STATUS OF RETAIL ELECTRIC UTILITY DEREGULATION, 2014

Source: The Freedonia Group, Inc.

**SAMPLE  
 CHART**



**RELATED STUDIES**

**Electric Motors**

US electric motor demand will rise 5.4 percent per year through 2018 to \$16.2 billion. Growth in the dominant AC motors segment will outpace DC types. The motor vehicle market will grow the fastest and remain the largest category, followed by the heating/cooling and machinery markets. IHP electric motors will outpace FHP types in both value and volume terms. This study analyzes the \$12.5 billion US electric motor industry, with forecasts for 2018 and 2023 by type, power rating, and market. The study also evaluates company market share and profiles industry players.

#3238 .....December 2014 ..... \$5200

**World Fuel Cells**

Global demand for commercial fuel cells will almost triple to \$4 billion in 2017 and then triple again by 2022 to \$12 billion. Motor vehicle, portable electronics, and industrial stationary/motive power applications will grow the fastest. Japan and the US will remain by far the largest markets, while China and South Korea will grow the fastest. This study analyzes the \$1.5 billion world fuel cell industry, with forecasts for 2017 and 2022 by product, chemistry, application, world region, and for 16 countries. The study also evaluates company market share and profiles industry players.

#3140 .....April 2014 ..... \$6300

**Wind Turbine Systems**

US demand for wind turbine systems is forecast to reach \$18.9 billion in 2018, a nearly ninefold increase over severely depressed 2013 levels. The market for wind turbines tends to be highly volatile due to its reliance on government incentives. Feed-in tariff payments and various grants from the Department of Energy will drive gains going forward. This study analyzes the \$2.1 billion US wind turbine system industry, with forecasts for 2018 and 2023 by type, component, application and US region. The study also evaluates company market share and profiles industry players.

#3139 .....March 2014..... \$5100

**World Electric Motors**

World demand for electric motors is projected to increase 6.5 percent per year to \$122.5 billion in 2017. The Asia/Pacific region will be the largest source of market growth through 2017. Demand for AC motors will outpace DC types. Motor vehicles and heating and cooling equipment will be the fastest growing markets. This study analyzes the \$89.4 billion world electric motor industry, with forecasts for 2017 and 2022 by product, market, world region, and for 30 countries. The study also evaluates company market share and profiles industry players.

#3055 .....October 2013 ..... \$6100

**World Electric Power Transmission & Distribution Equipment**

Global demand for electric transmission and distribution (T&D) equipment will rise 6.7 percent annually to \$177 billion in 2017. The Asia/Pacific region, led by China, will continue to post the fastest gains. In North America and Western Europe, advances will be driven by the increasing proliferation of renewable energy projects. This study analyzes the \$127 billion world electric T&D equipment industry, with forecasts for 2017 and 2022 by market, product, world region and for 20 countries. The study also evaluates company market share and profiles industry players.

#3071 .....September 2013..... \$5900

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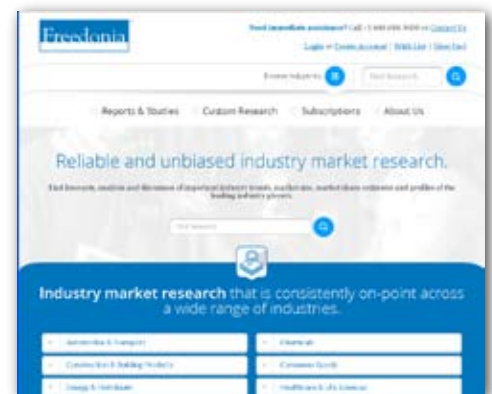
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