



TRANSMISSION & DISTRIBUTION WORLD

May 7, 2010

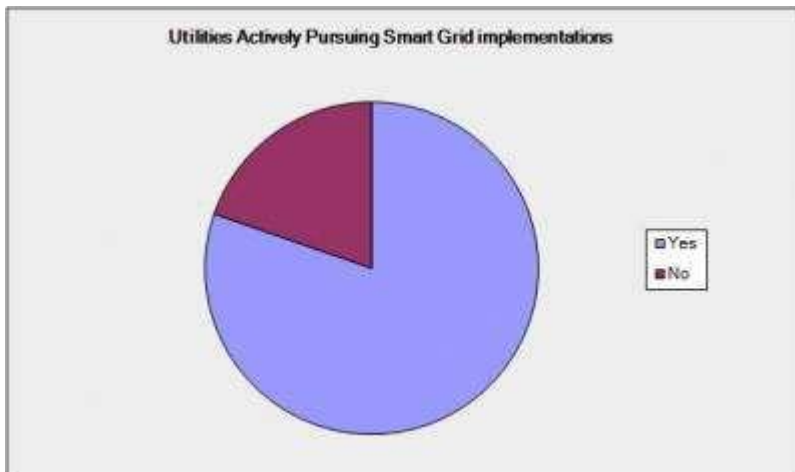
T&D World, Black & Veatch Release Smart Grid Survey Results

T&D World and Black & Veatch today released the results of a global survey to measure how electric utilities are progressing with smart grid initiatives. Managers of utility grids completed the online survey last month. About 80% of survey respondents are pursuing the implementation of smart grid initiatives, with reliability being the No. 1 reason and operations costs savings coming in as a close second.

About 23% of respondents indicated that they planned to spend \$5 million to \$10 million on the deployments, with 21% noting \$1 million to \$5 million. Advanced metering infrastructure was the top choice for the smart grid systems the utilities planned to deploy (79%). Distribution automation and load control and monitoring were also high on the list.

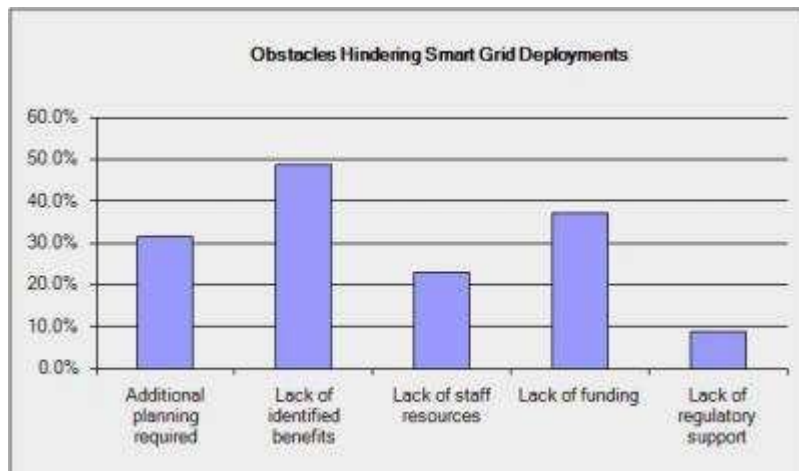
Black & Veatch and T&D World surveyed 91 electric utility professionals. Results are as follows:

Utilities Pursuing Smart Grid Implementation	
Yes	80.3%
No	19.7%



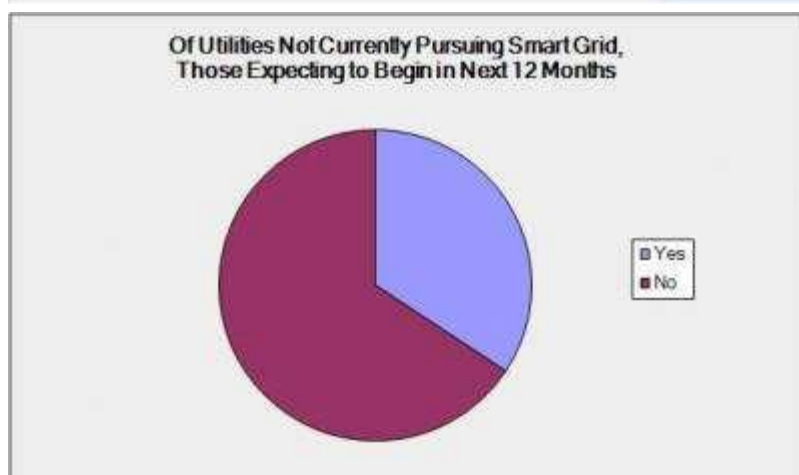
Obstacles Hindering Smart Grid Deployments

Additional planning required	31.4%
Lack of identified benefits	48.6%
Lack of staff resources	22.9%
Lack of funding	37.1%
Lack of regulatory support	8.6%



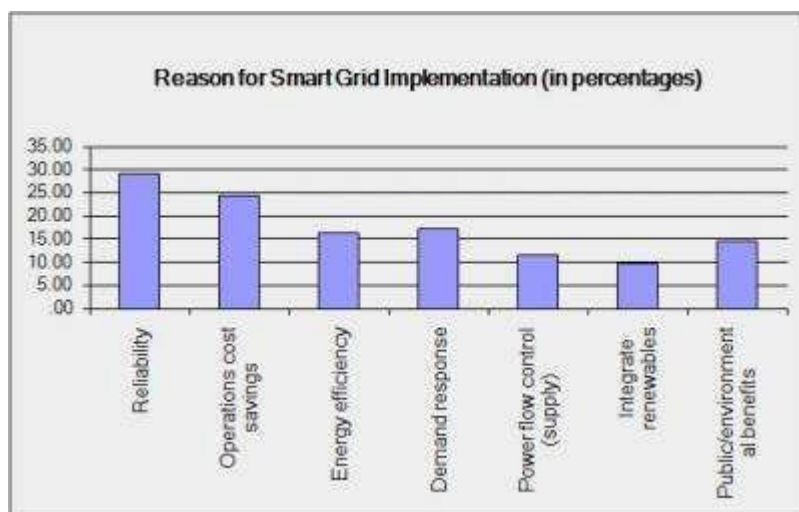
Utilities Not Pursuing Smart Grid That Expect to Begin in Next Year

Yes	34.3%
No	65.7%



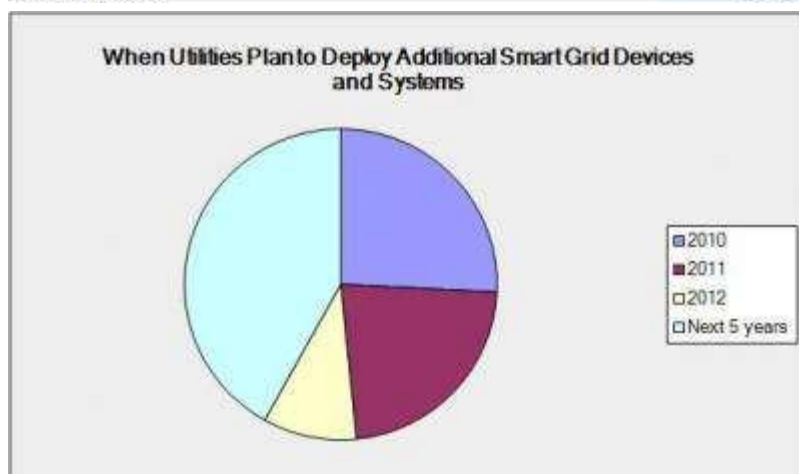
Reason for Smart Grid Implementation (in percentages)

Reliability	29.07
Operations cost savings	24.49
Energy efficiency	16.33
Demand response	17.07
Power flow control (supply)	11.63
Integrate renewables	9.66
Public/environmental benefits	14.40



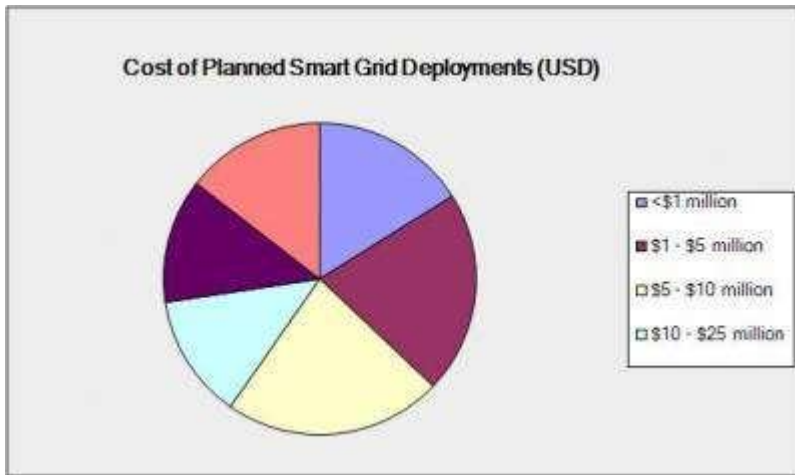
When Utilities Plan to Deploy Additional Smart Grid Systems

2010	25.8%
2011	22.6%
2012	9.7%
Next 5 years	41.9%



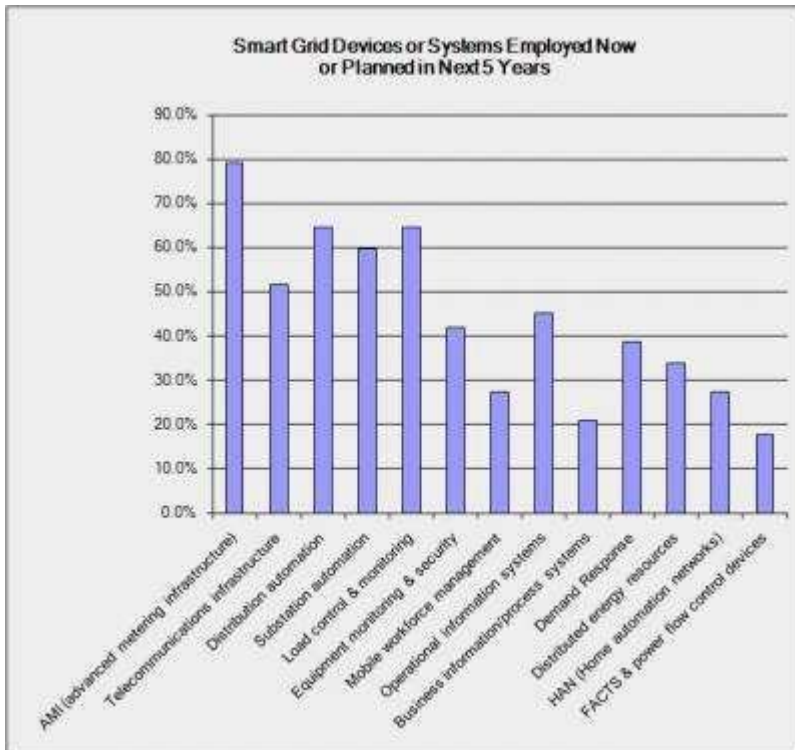
Cost of Planned Smart Grid Deployments (USD)

<\$1 million	16.1%
\$1 - \$5 million	21.0%
\$5 - \$10 million	22.6%
\$10 - \$25 million	12.9%
\$25 - \$100 million	12.9%
> \$100 million	14.5%

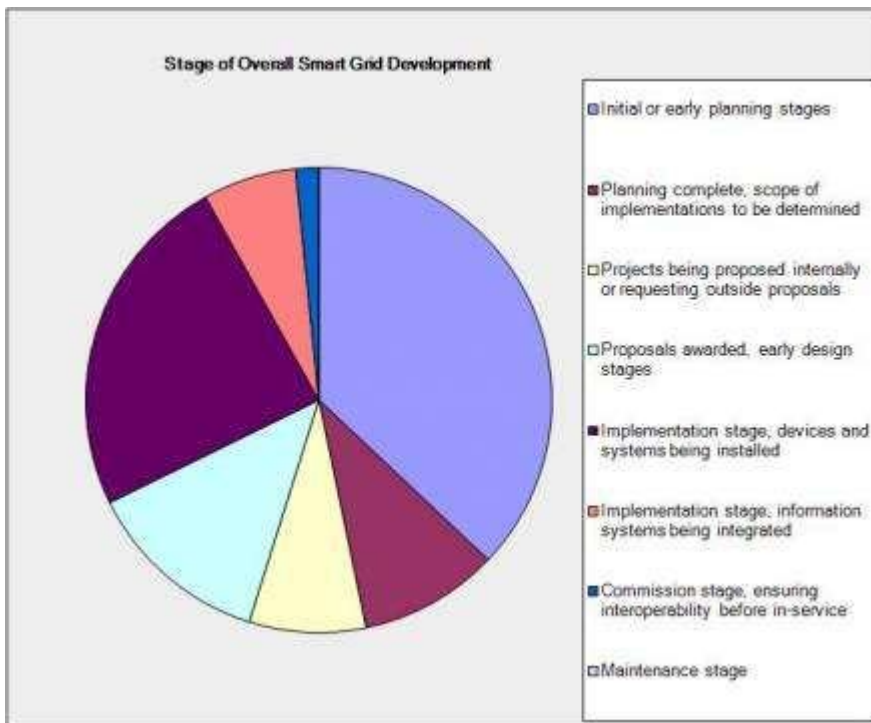


Smart Grid Systems Employed Now or Planned in Next 5 Years

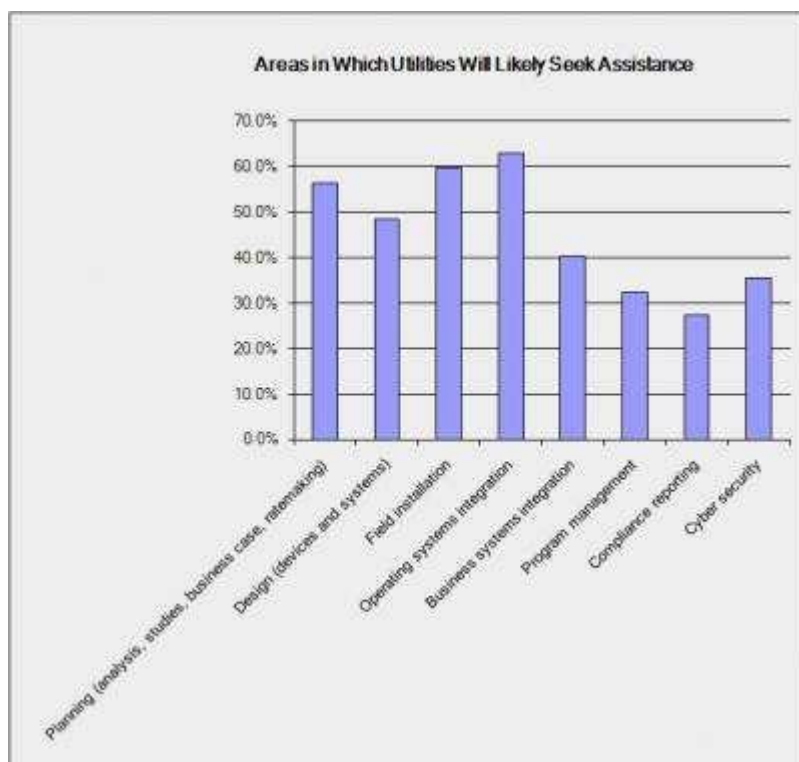
AMI (advanced metering infrastructure)	79.0%
Telecommunications infrastructure	51.6%
Distribution automation	64.5%
Substation automation	59.7%
Load control & monitoring	64.5%
Equipment monitoring & security	41.9%
Mobile workforce management	27.4%
Operational information systems	45.2%
Business information/process systems	21.0%
Demand Response	38.7%
Distributed energy resources	33.9%
HAN (Home automation networks)	27.4%
FACTS & power flow control devices	17.7%



Stage of Overall Smart Grid Development	
Initial or early planning stages	37.1%
Planning complete, scope of implementations to be determined	9.7%
Projects being proposed internally or requesting outside proposals	8.1%
Proposals awarded, early design stages	12.9%
Implementation stage, devices and systems being installed	24.2%
Implementation stage, information systems being integrated	6.5%
Commission stage, ensuring interoperability before in-service	1.6%
Maintenance stage	0.0%

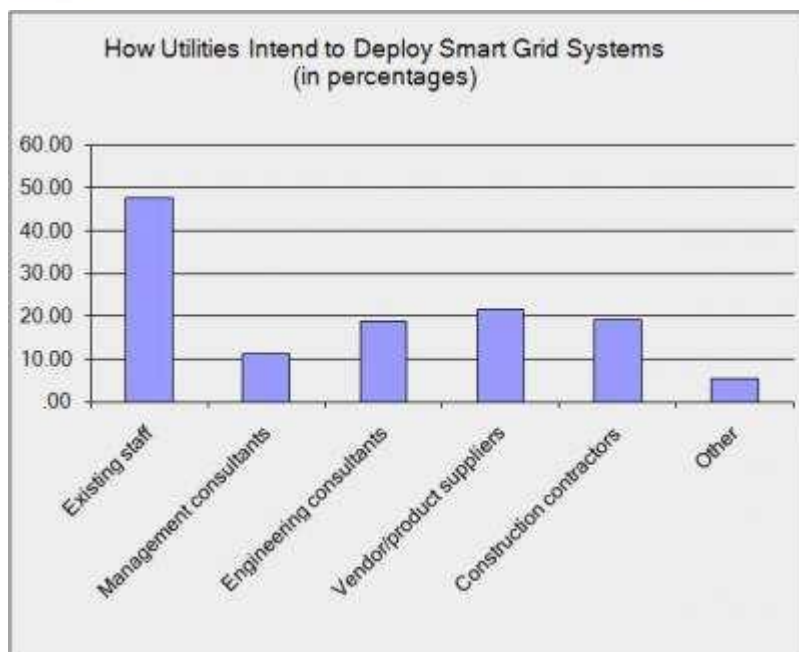


Areas in Which Utilities Will Likely Seek Assistance	
Planning (analysis, studies, business case,	56.5%
Design (devices and systems)	48.4%
Field installation	59.7%
Operating systems integration	62.9%
Business systems integration	40.3%
Program management	32.3%
Compliance reporting	27.4%
Cyber security	35.5%



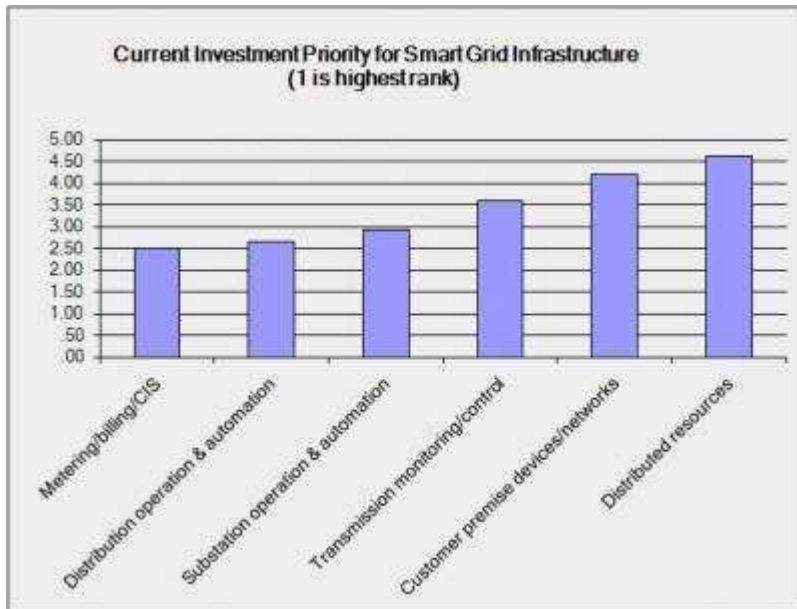
How Utilities Intend to Deploy Smart Grid Systems (in percentages)

Existing staff	47.70
Management consultants	11.18
Engineering consultants	18.70
Vendor/product suppliers	21.44
Construction contractors	19.20
Other	5.29



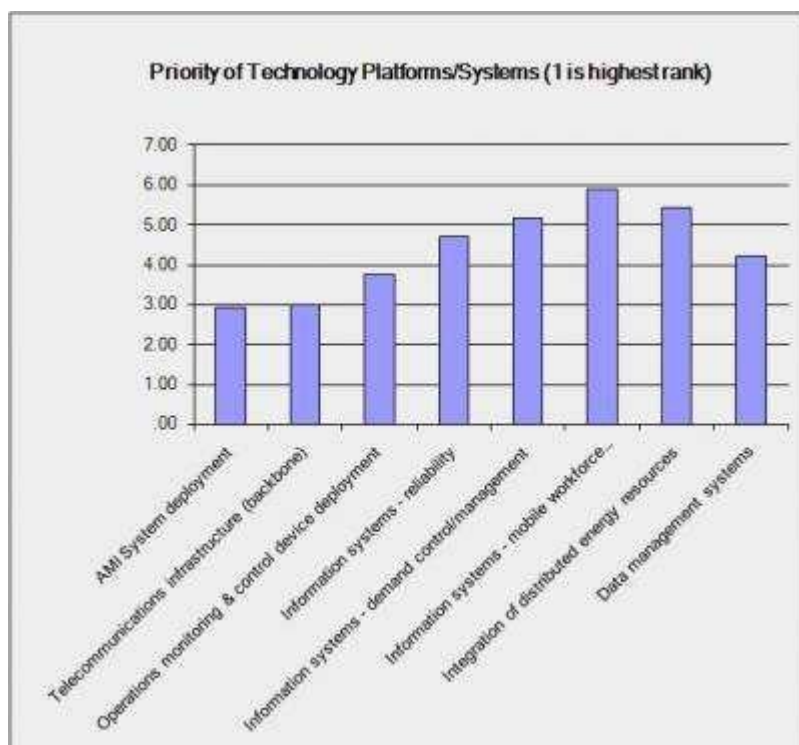
Current Investment Priority for Smart Grid Infrastructure (1 is highest rank)

Metering/billing/CIS	2.49
Distribution operation & automation	2.65
Substation operation & automation	2.93
Transmission monitoring/control	3.59
Customer premise devices/networks	4.21
Distributed resources	4.63



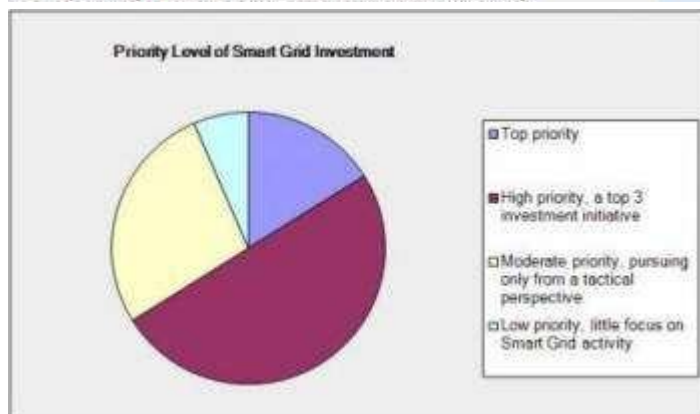
Priority of Technology Platforms/Systems (1 is highest rank)

AMI System deployment	2.92
Telecommunications infrastructure (backbone)	3.00
Operations monitoring & control device deployment	3.74
Information systems - reliability	4.71
Information systems - demand control/management	5.16
Information systems - mobile workforce management	5.88
Integration of distributed energy resources	5.42
Data management systems	4.23



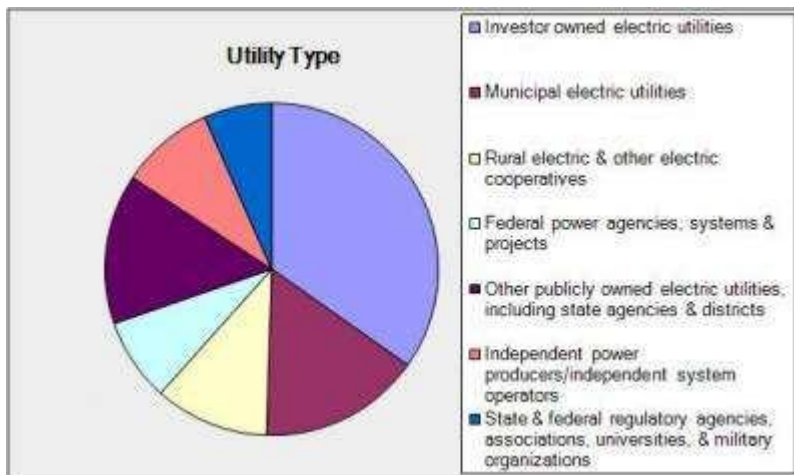
Priority Level of Smart Grid Investment

Top priority	16.1%
High priority, a top 3 investment initiative	50.0%
Moderate priority, pursuing only from a tactical	27.4%
Low priority, little focus on Smart Grid activity	6.5%



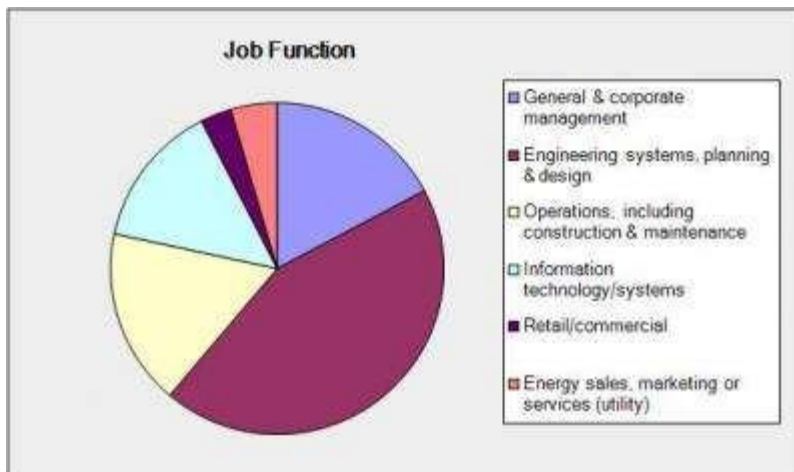
Type of Utility

Investor owned electric utilities	34.8%
Municipal electric utilities	15.7%
Rural electric & other electric cooperatives	11.1%
Federal power agencies, systems & projects	8.1%
Other publicly owned electric utilities, including state	14.6%
Independent power producers/independent system	9.1%
State & federal regulatory agencies, associations,	6.6%



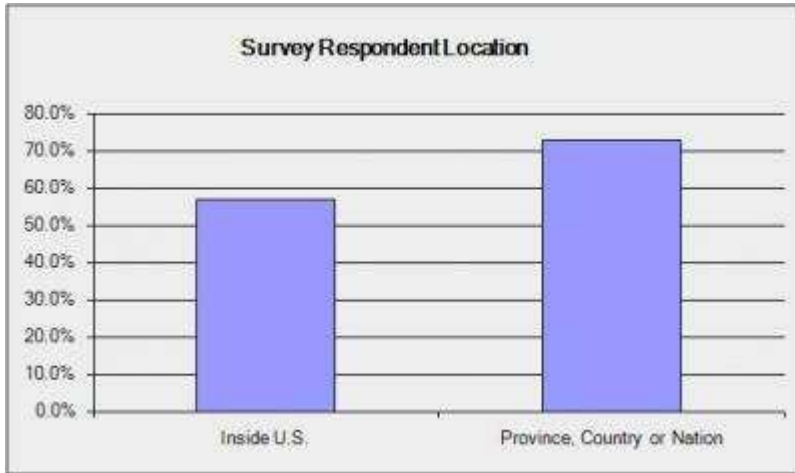
Job Function

General & corporate management	17.2%
Engineering systems, planning & design	43.9%
Operations, including construction & maintenance	17.2%
Information technology/systems	14.1%
Retail/commercial	3.0%
Energy sales, marketing or services (utility)	4.5%



Survey Respondent Location

Inside U.S.	56.8%
Province, Country or Nation	72.7%



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