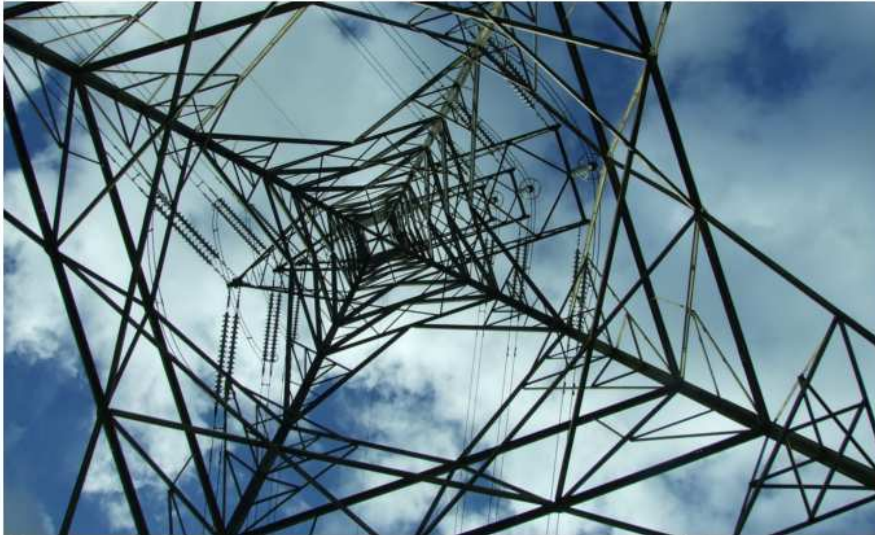




Newton-Evans Research Company's

Market Trends Digest

March 2012



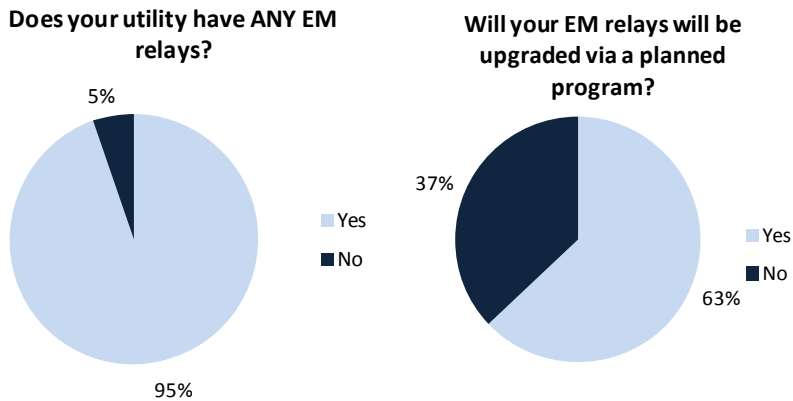
- 2 Interim Findings from the 2012 Worldwide Study of the Protective Relay Marketplace in Electric Utilities
- 5 Initial Take on the January 30, 2012 ABB Acquisition of Thomas & Betts
- 7 Automatic Generation Control: An Analysis of AGC Usage Patterns in U.S. Electric Power ISO/RTOs and Major Utilities
- 9 Market for Third Party Services for Control Center Systems



Interim Findings from the North American Protective Relay Marketplace

The following charts and figures represent a survey sample of 17 investor-owned utilities, 16 municipal/public power utilities, 13 cooperatives and 10 Canadian utilities for a total of 56 respondents as of February 15th 2012. This sample serves approximately 22.5 million electricity customers in the U.S. and Canada. The complete study will be available March 26 2012. As of March 9, more than 100 utilities from 32 countries have participated in this study.

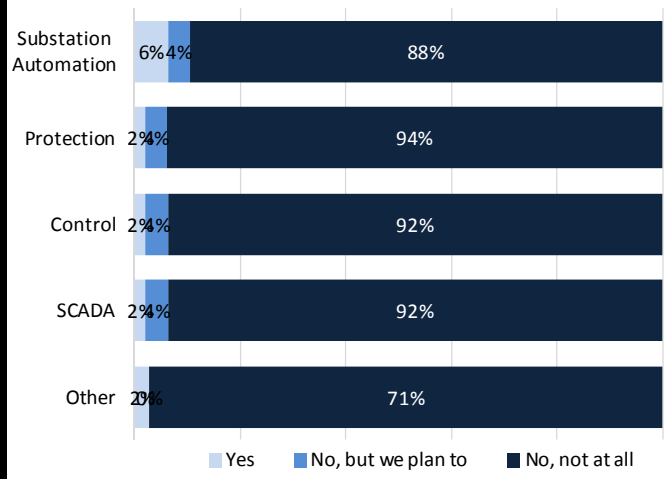
There is a small portion of electric utilities in North America that does not use any electromechanical (EM) relays at all (5% of our sample so far.) More than half of respondents (63%) indicated that EM relays are to be upgraded via a planned program. We included the question in this year's survey to determine whether there is a future need for EM relays.



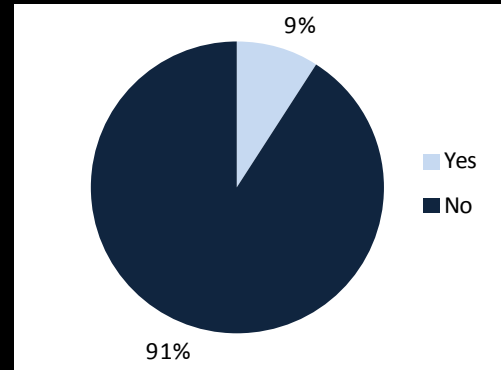
Responses to the protocol question continue to befuddle international industry experts, as the majority of North American utilities continue to rely on, and to plan for upgrades to, DNP3 (now an IEEE standard protocol) rather than migrate to the more prevalent international protocol and architecture of IEC 61850.

Modbus is the runner up protocol for relay communications in both transmission and distribution after DNP3. When asked if the utility control system used 61850, an overwhelming majority responded “No, not at all” for any of the listed applications.

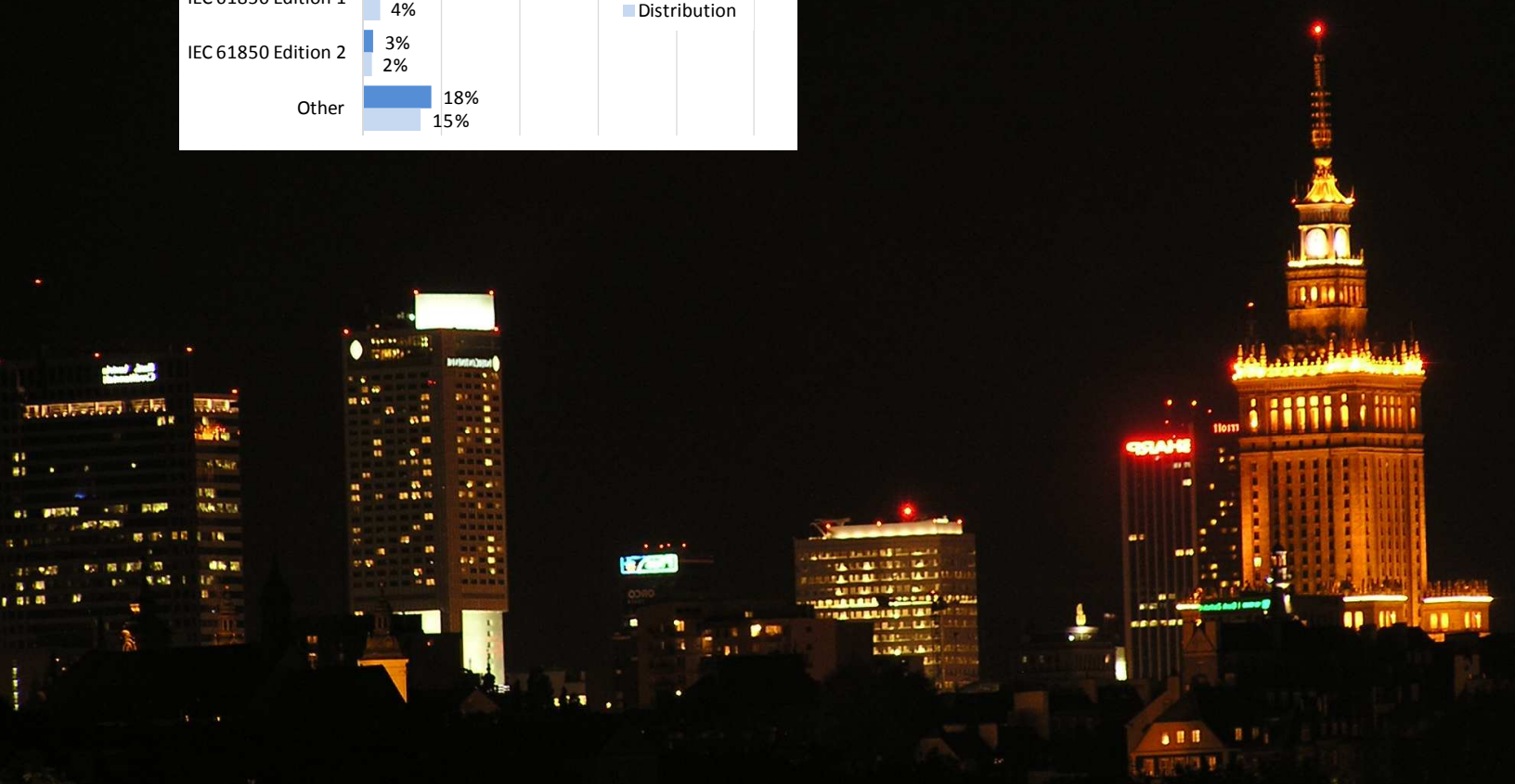
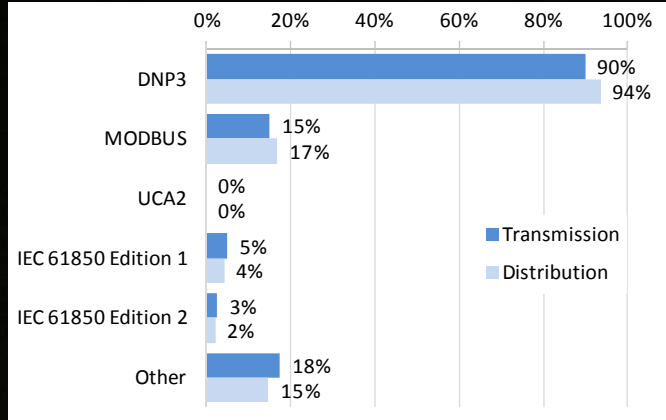
Does your utility's control system use protocol IEC61850?



Does your utility use IEC 61850 within the substation?

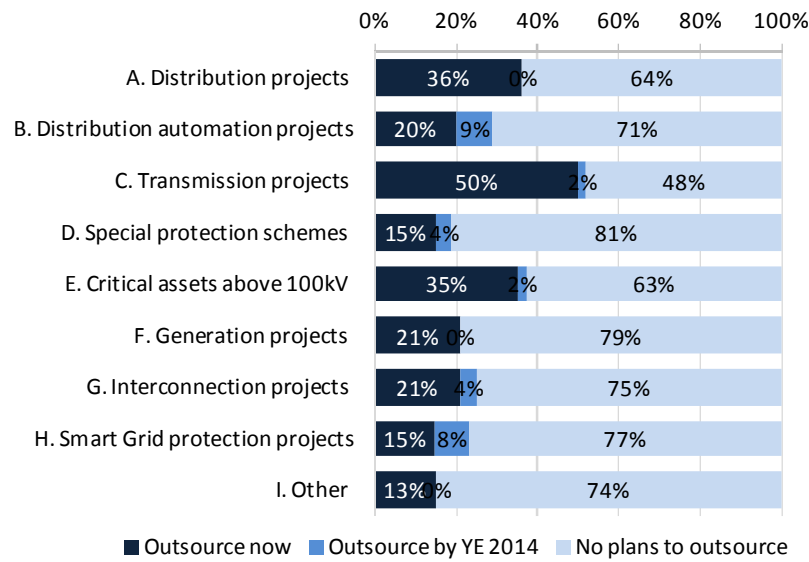


Please indicate your current relay protocol requirements.



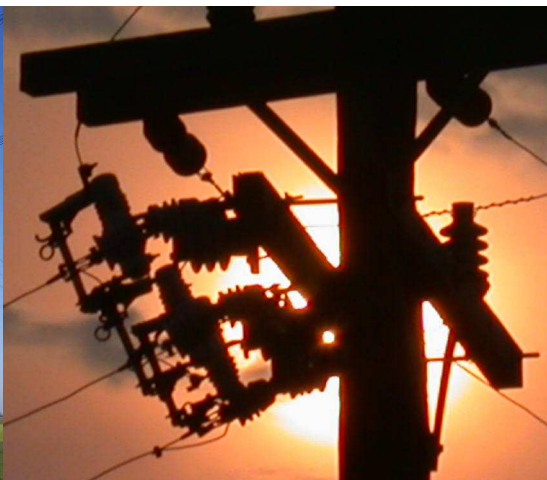
Note in the chart below, the fairly important role of third party consultants in transmission projects and for critical (transmission-related) assets above 100kV.

Do you currently/plan to outsource preliminary and/or detailed engineering related to protection for any of the following:



This four volume study also includes vendor profiles, international survey findings, and a global market outlook. The full report will be available March 26th 2012; visit our website for details on how to order:

http://www.newton-evans.com/?page_id=7



Initial Take on the January 30, 2012 ABB Acquisition of Thomas & Betts

ABB now “Walking in Memphis” with Thomas & Betts, after singing “Georgia on My Mind” with its 2010 purchase of Ventyx and the “Song of Arkansas” for its 2011 acquisition of Baldor Electric.

-Chuck Newton

After ABB’s May 2010 acquisition of Ventyx that now appears to have strengthened its hand somewhat in the control center-based systems market for EMS, SCADA and DMS (see www.newton-evans.com/?p=646), and the company’s follow-on purchase of Baldor Electric Company (Fort Smith, Arkansas), a leader in electric motor manufacturing, ABB has now announced its intent to acquire Thomas & Betts. T&B is a leading supplier of low voltage gear, and a respectable share participant (via its own recent acquisition of Joslyn Hi Voltage) in the market for medium voltage switchgear. Among its products serving the utility and construction markets are: digital static transfer switches, integrated systems – dual feed & static switch PDUs, power distribution systems, circuit management, industrial UPS, surge protection devices and power quality services are among its MV/LV products.

Joslyn Hi-Voltage manufactures power transmission and distribution equipment for electric utilities. The company’s offerings include reclosers, sectionalizers, capacitor switches and controls, transfer switches, distribution automation equipment, disconnect switches, load break switches, underground switches, and VacStat vacuum interrupter monitors. Fisher Pierce distribution products manufactured by Joslyn Hi-Voltage include Powerflex and AutoCap capacitor controls and Smartset software, faulted circuit indicators (FCIs), line post current sensors, and Smartlink communications.

So, what’s behind the spate of U.S. acquisitions made by ABB over the past 24 months? Here are four solid reasons that we think support ABB’s strategic and decisive actions:

First, the strategic planners within ABB are certainly looking to strengthen the company’s position in the three related utility-centric markets of power generation, transmission and distribution. Ventyx has helped with the company’s total array of “smart grid” related offerings with its IT and OT

capabilities. Baldor had provided ABB with additional inroads to the motor market, and now T&B will provide the company with access and distribution channels for low voltage products, and help fill in product line gaps with its Joslyn HV/MV product offerings.

Secondly, look at the gain in ABB's access to the construction and industrial segments, both of which may see some upswing by mid-2012. T&B plays an important role as well in serving the needs of mid-size utilities across the country and to some extent, internationally. This provides ABB with additional openings into the public power utilities and cooperative utility communities.

Thirdly, I think ABB has correctly identified the "new elephant" in the global electric power marketplace as Schneider Electric. This acquisition marks the first significant industry reaction to Schneider's key role around the world in low voltage equipment (as well as some MV offerings by virtue of the division of assets of the former Areva T&D) and Schneider's extremely well-developed marketing channel strategy.

Fourthly, is ABB's response to the near-term global economic outlook. By virtue of its continuing focus on North American acquisitions, ABB is avoiding the as-yet unresolved Euro-crisis in terms of purchase prices and values, and near-term European market outlook. Coupled with the fact that North American construction and industrial activity will likely pick up the pace this year (given what we have seen thus far into 2012), the acquisition certainly makes sense to me.

As far as downsides to the string of acquisitions, the biggest complaint I have seen among financial analysts commenting in the press for all three acquisitions, is the premium paid for these companies, relative to earnings, market value or recent year revenues. On the other hand, ABB has the financial resources and the access to capital markets that together enable the company to take these decisive strategic actions to improve its overall market position in North America, and around the world.

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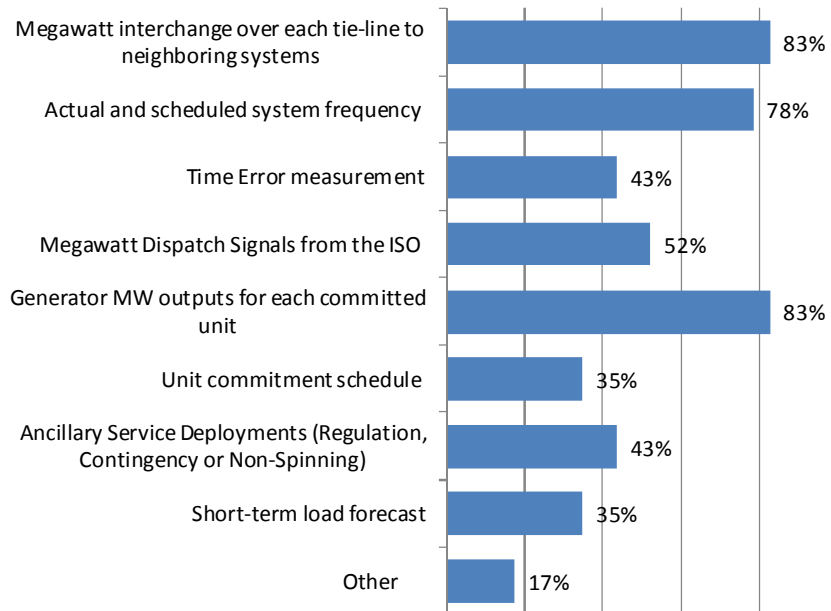


Automatic Generation Control: An Analysis of AGC Usage Patterns in U.S. Electric Power ISO/RTOs and Major Utilities

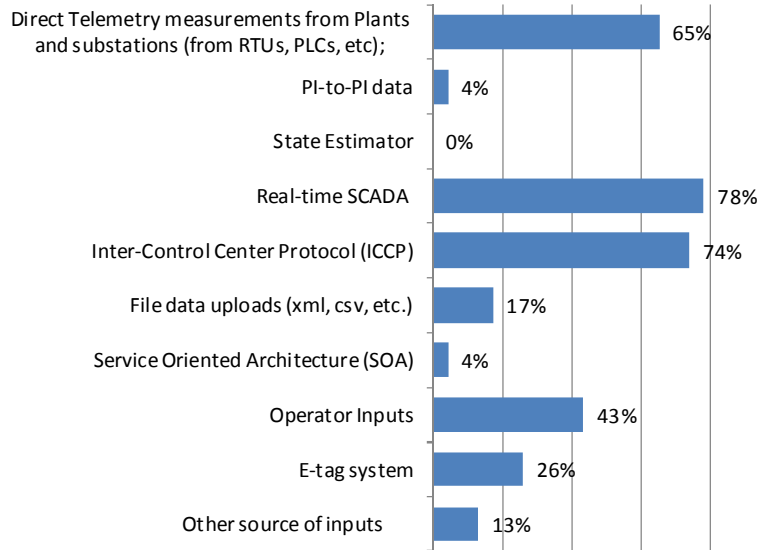
The following has been excerpted from a recent Newton-Evans survey on the use of Automatic Generation Control in U.S. electric utilities. Survey responses from 41 utilities were collected in December of 2011.

What data is required at the control center to implement an Automatic Generation Control (AGC) system?

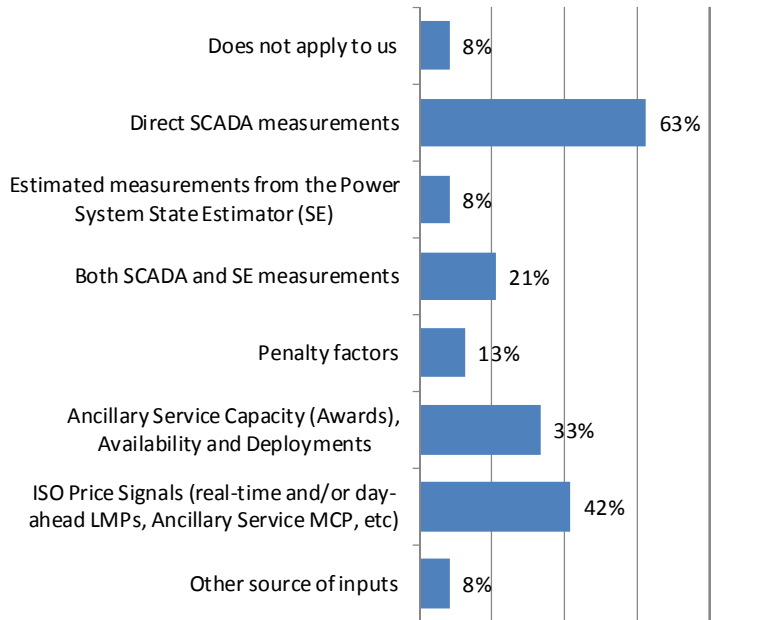
Note the prevalence of three data types among AGC users, including Megawatt interchange over each tie-line to neighboring systems and the use of generator MW outputs for each committed unit (83%). Actual and scheduled system frequency was also widely required among the users (78%). More than half (52%) also required MW dispatch signals from the ISO/RTO organization in their region.



Where do your AGC inputs come from?



What inputs are used for optimizing generation for dispatch purposes?



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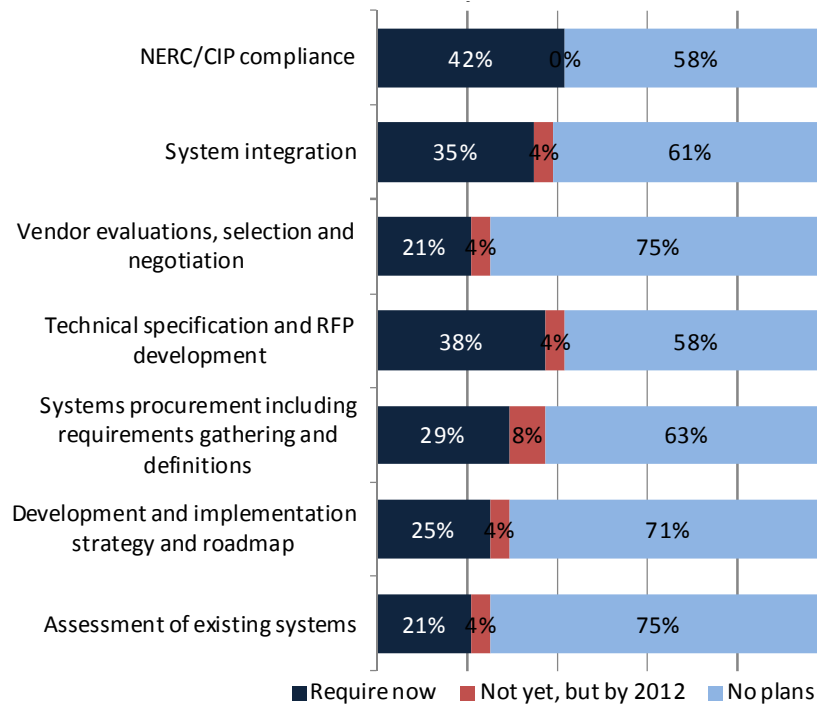


Market for Third Party Services for Control Center Systems

The following has been excerpted from a current Newton-Evans survey on the market for third party control center services in U.S. electric utilities. As of March 05 2012 Newton-Evans received responses from 13 IOUs, 6 Public Power utilities, 1 Cooperative and 4 Canadian utilities. These utilities represent approximately 20.5 million end users in the U.S. and Canada.

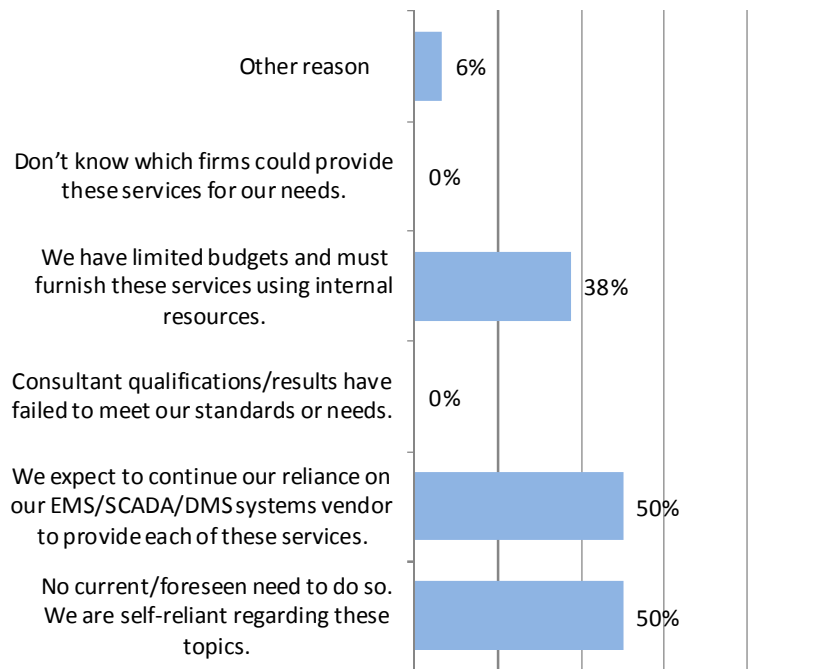
Does your utility currently use/plan to use a third party to provide the listed SCADA/EMS/DMS services to your T&D control center systems?

Of the 24 respondents to the survey as of March 05 2012, it seems that NERC/CIP compliance and Technical spec/ RFP development is outsourced more than the other services listed.



If your utility does not use/plan to use third party services for these activities, please identify the principal reasons.

Of those who indicated they have “no plans” to outsource some control center-based systems support activities, half indicated that it is because they rely on their control system vendor to provide them and/or because they currently have no need to outsource.



First Quarter News

The first quarter of 2012 finds the Newton-Evans staff working on multiple client research studies including research on the following:

CLIENT PROJECTS

- IT and OT applications usage patterns in smaller utilities
- Cyber security practices and NERC Compliance Issues
- Fault current technology and markets
- Third party consulting services for Operational Technology
- Substation design software (Global study)
- World regional market perspectives on OT Applications

IN-HOUSE PROJECTS:

- Protective Relays: The newest round of global protective relay studies is being readied for publication during the first quarter, 2012.

2012-2013 CAPEX Outlook:

Our fifth annual tracking study of CAPEX and OPEX spending plans for the world's electric power community will be underway in the second quarter.

CIGRE WG Study:

Newton-Evans will be conducting an international study for CIGRE on the topic of applicable standards, reports and operational practices that address the viable threats to protection and control systems.

Mini-Report Series: The first grouping of 12 summary reports on individual components of substation automation is now available for online purchase at www.Newton-Evans.com

Automatic Generation Control: A recently completed study of AGC usage and trends is also available for \$295.00 on the web site.

Upcoming Conference Participation

Smart Communications for Energy Management Conference *

iPCGRID 2012 *

2012 IEEE PES Transmission and Distribution Conference and Exposition

ENTELEC 2012 Conference and Exposition

Utilities Telecom Council – UTC 2012 Conference and Expo

(*Speaking at this conference)

Web Site Update: If you haven't visited the Newton-Evans website recently, you will want to check out the new layout and content. Updated and easier to navigate, the site will include periodic updates to the studies underway at Newton-Evans, links to published articles providing content from Newton-Evans studies, a multi-year archive of Market Trends Digest editions, current events commentary from Chuck and other exciting features. Look for MTD to be available soon in a mobile-friendly platform.