

Market Trends Digest



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NEW REPORTS AND SUMMARIES AVAILABLE THIS SUMMER

Most of our reports can now be purchased and downloaded online. We are currently offering a 30% discount on any report ordered online through August 15th. To redeem, simply enter the discount code "CIRED" at the bottom of the billing information page when checking out. Visit us at www.newton-evans.com

During the second quarter of this year, Newton-Evans Research Company, Inc. completed a number of Global and U.S. studies. Below is a list of the new reports that are now available for purchase. Be sure to take advantage of our current on-line ordering promotion.

GLOBAL STUDIES:

World Outlook for T&D Control Systems in Electric Utilities: 2007-2011 (\$1,750.00)

Undertaken during the first quarter of 2007, this study looks at various communications technologies in use in today's global electric power industry. Scores of utilities from more than 35 countries provided some indications of plans for EMS, SCADA and DMS control systems projects planned or possible during the 2007-2011 time period.

World Outlook for Communications Solutions 2007-2011: Opportunities in the Electric Power and Energy Pipeline Business, Supplier Profiles, Market Analysis (\$1,750.00)

This report is a combination of a global research study for utility and energy pipeline communications solutions, and a Wi-Fi use study for substations communications (Wi-Fi Protected Access for Protection and Automation)

Broadband over Power Line and Power Line Carrier Communications Technologies (\$295.00)

A study of topics related to the use of, and plans for, broadband over power lines (BPL) and power line carrier communications technologies (PLC). The study was conducted during the first quarter of 2007. Look for more information on this study in the below industry publications:

Energy Central's T&D Automation. – June 28, 2007 edition
Energy Pulse – July 7, 2007 edition

US STUDIES:

AMR and AMI Programs: Electric Utility Market Assessment of Activities and Planned Implementations in North America (\$395.00)

This report is based on a six-month collection of data during the second-half of 2006. The research survey gathered data on Automatic Meter Reading and Advanced Metering Infrastructures from 62 utilities that represent approximately 20% of the U.S. market, and about 16-18% of all North American electric utilities. Offered in the report is in-depth information about the 40% of respondents' plans for implementing AMR or AMI programs, or both, for the four-year span covered by this effort.

Performance Based Rates for U.S. Electric Utilities: A 2007 Status Report (\$425.00)

This report is an adaptation of an earlier study on Performance Based Rates (PBRs) that was undertaken in the first quarter of 2002. While the objective of that earlier report was to identify the states currently using, or planning to use, PBR's and to determine the impact on utility capital and O&M spending as a result of PBR implementation, a more detailed questionnaire was developed for this rendition to capture a better understanding of the overall impact PBR's might have on the utilities. This report has been receiving a lot of industry press. For more information, see the articles featured in the following industry publications:
Electric Light & Power – June 26, 2007 edition
Electric Energy Online – June 21, 2007 edition

Demand Response/Load Management Programs Outlook: Mid-2007 Survey Findings (\$495.00)

Undertaken during the first part of 2007, this study measures the usage of Demand Response (DR) programs. In electricity grids, demand response (DR) refers to mechanisms to manage the demand from customers in response to supply conditions; for example, having electricity customers reduce consumption at critical times or in response to market prices.

Mergers and Acquisitions among Electric Power Companies: A Mixed Bag of Successes and Failed Opportunities (\$195.00)

For the past 15 years or so, the American community of investor-owned utilities has seen more than its share of mergers and acquisition activities. While some of the attempts at merger or acquisition have been brought to a successful conclusion and increased operating efficiencies and rising profitability, others have resulted in less satisfactory outcomes, including several instances where the partners have been left at the altar. In these instances, the public utilities commissions have most often viewed their state's ratepayers as the jilted party.

For financial executives within the industry, as well as for financial advisors and the investment community addressing the energy industry, a review of developments post-merger is in order.

SUMMARY REPORTS:

Additionally, Newton-Evans has the ability to develop "snapshot" summary reports, which vary in length from 9-12 pages and are priced at \$295 apiece for the following 40 topics :

Summary Subject	Expected Availability Date
<i>High Voltage Equipment</i>	<i>July/August 2007</i>

- Disconnect Switches
- FACTS /Reactive Power Compensation
- HVDC
- AIS Substations (69-800kV)
- GIS Substations (69-800kV)
- AIS Switchgear (> 38kV)
- GIS Switchgear (> 38kV)
- Circuit Breakers (72-765kV)
- Surge Arresters (up to 800kV)
- Capacitors
- HV Cables
- Others/Consolidation

Summary Subject	Expected Availability Date
<i>Medium Voltage Equipment</i>	<i>August - September, 2007</i>

- Metal-Clad MVS (5-38kV) - Arc Resistant
- Metal-Clad MVS (5-38kV) - Non-Arc Resistant
- MV Controllers (5-15kV) - Contactor
- MV Controllers (5-15kV) - Solid State
- GIS (5-38kV)
- Reclosers (15-38kV) - Oil
- Reclosers (15-38kV) - Solid Dielectric
- Outdoor Vacuum Circuit Breakers (15-38kV) - Vacuum
- Outdoor Vacuum Circuit Breakers (15-38kV) - SF6
- OEM Components (5-38kV)
- Load Interrupting Switches (5-38kV) - Air
- Load Interrupting Switches (5-38kV) - SF6
- OH MV Switches
- Sectionalizers
- Fused Cutouts
- Padmount Switches
- Others/Consolidation

Summary Subject	Expected Availability Date
<i>Energy Management</i>	<i>October 2007</i>

- Protective Relays - Digital
- Protective Relays - Electro-Mechanical
- Power Quality Monitoring
- Substation Automation
- SCADA
- EMS - Competitive bids/upgrades
- EMS - Non-competitive upgrades/add-ons/etc
- EMS - Visualization
- EMS - Intelligent Alarm Processing
- Remote Terminal Units & Data Concentrators
- DMS, OMS, GIS, CIS
- Asset Management Solutions
- Maintenance
- Asset Performance Monitoring
- Energy Market Management
- Market Participant Applications
- Others/Consolidation (PLCs for SS use)

Summary Subject	Expected Availability Date
<i>Transformers & Voltage Regulators</i>	<i>November 2007</i>

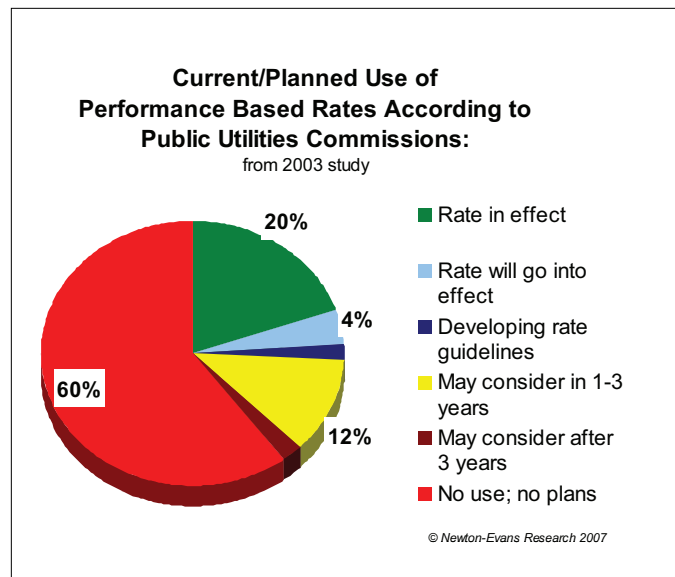
- Power Transformers (up to 40 MVA)
- Power Transformers (41- 200 MVA)
- Power Transformers (201-400 MVA)
- Power Transformers (greater than 400 MVA)
- Reactors (Shunt Reactors)
- Phase Shifters
- Special Transformers (furnace, arc etc)
- Distribution Transformers (up to 15MVA)
- Voltage Regulators (3 Phase Substation)
- Voltage Regulators
- Others/Consolidation (mobile transformers)

PERFORMANCE-BASED AND PENALTY-BASED RATES

In the first quarter of 2002, Newton-Evans Research Company produced its initial report on the status of performance-based rates (PBR's) in the United States. The objective of that report was to identify the states currently using, or planning to use, PBR's and to determine the impact on utility capital and O&M spending as a result of PBR implementation. Interviews with all of the public utility commissions (PUC) and affected utilities provided the basis for the 2002 report.

The mid 2003 PBR report contained an update from all of the PUC's on the status of PBR's in their states as well as information on electric deregulation activity. Because Newton-Evans wanted to gain a better understanding of the overall impact PBR's might have on the utilities, a more detailed questionnaire was developed to capture that information in this new report. Interviews were conducted with many of the utilities having some experience with PBR's, as well as leading utilities currently not participating in PBR's, to see if they were considering PBR's in their future plans.

This 2007 PBR report includes updates to these same questions as well as other issues such as criteria for PBRs, reliability performance standards, and effects on utility capital budgets and O&M spending. Together, the information received from the PUC's and utilities provides a thorough nationwide perspective on the status of PBR's at the current time and for the foreseeable future.

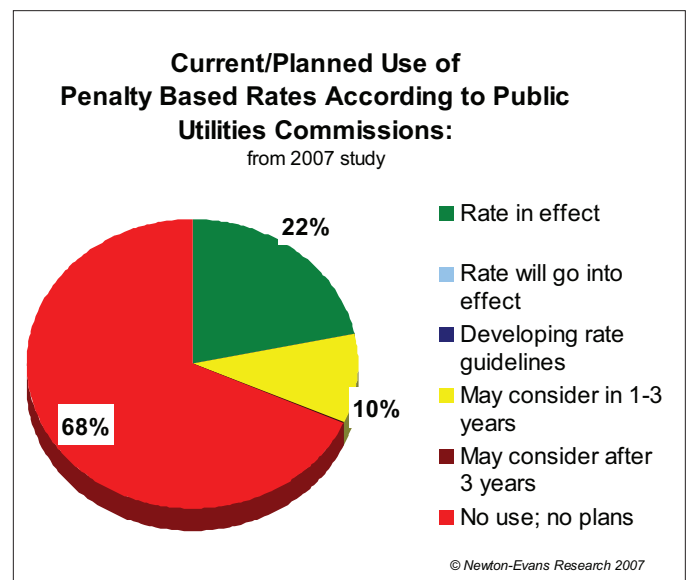
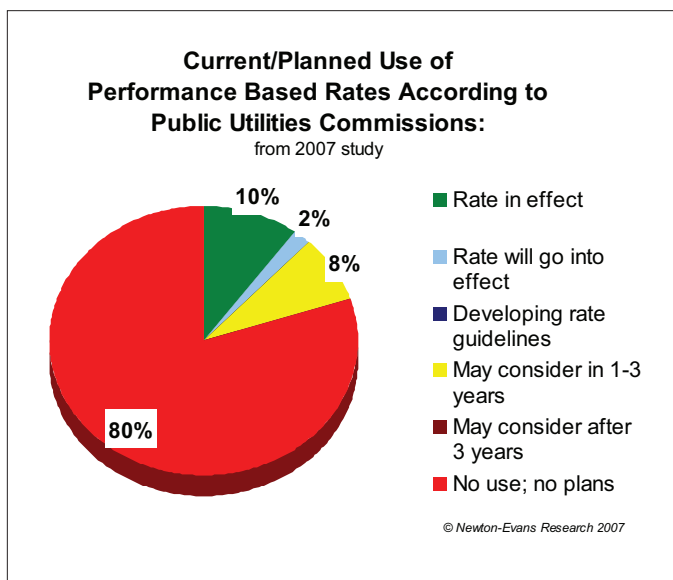
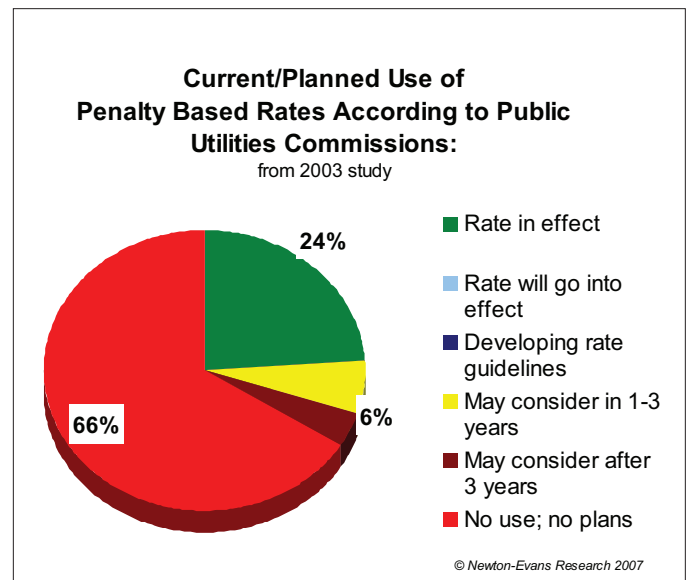


The 2007 Report on Performance-Based Rates in U.S. Electric Utilities is primarily concerned with performance associated with the quality of electric power delivery and customer service. The report is based on surveys and interviews conducted with public utility commissions (PUC) of 49 states and the District of Columbia. Only the state of New Jersey was unable to participate.

The regulatory/pricing management at 27 investor-owned utilities also participated. These 27 utilities represent more than 15% of all US electricity consumers. Six of the responding utilities have some form of performance-based or penalty-based rate structure based on customer service and/or the performance of their electric distribution system. The issue of performance-based and penalty-based rates (PBR's) can affect more than electric power distribution activities. In fact, PBR's can be applied to electric power generating facilities as well as to power transmission entities such as RTOs. (See FERC's "Remarks on Order 2000-A: Rehearing of RTO Rule February 23, 2000).

The report also correlates the information with the results of the earlier study of commissions and utilities conducted in 2003. While this report contains information on PBRs in the United States, readers may be interested to learn that electric power PBRs are in place or being discussed in more than 40 other countries throughout the world. There are discussions of using PBRs for electric power generation, transmission service providers and with electric power delivery utilities.

An executive summary of findings, prepared in matrix spreadsheet format, comprises Section 2. This section provides an overview of responses for the 50 reporting commissions and for the 27 investor-owned utilities participating in this study. Section 3 consists of survey results from the 50 public utility commissions. Section 4 includes survey results from the responding 27 investor-owned utilities. Section 5 provides a color-coded guide to the status of PBR activity in each of the states and the District of Columbia. This guide was developed by Newton-Evans Research as of May, 2007.





MERGERS AND ACQUISITIONS AMONG ELECTRIC POWER COMPANIES

Early in the second quarter, Newton-Evans Research Company issued a new brief of the status of mergers and acquisitions in the nation's electric power industry. The concise report is based on attempted and completed merger and acquisition activities occurring in the industry over the past 15 years. Entitled "Mergers and Acquisitions among Electric Power Companies: A Mixed Bag of Successes and Failed Opportunities" the study was conducted during the April-May time frame of 2007.

Among the highlights in the 11-page report are these:

- There was little noticeable improvement in the financial performance of merged companies as of the end of the first quarter of 2007.
- Financial measures including price-earnings ratio and return-on-equity were better for the industry as a whole, than it was for the selected merged companies.
- A total of 7 financial measures were used in the comparative performance review.
- A summary compilation of chronological events related to the merger and acquisition activities among 19 major electric utility holding companies is presented in the report.
- A review of state-level disapprovals of proposed mergers found that the key reasons for turning down the merger proposal centered on lack of perceived benefits to rate payers within the state(s) affected.

State regulators seem to be more in favor of mergers that would bring substantive benefits to ratepayers within their state in the form of (1) rate reductions or, at the least, rate freezes in moderate electricity-cost states through changes in

tariffs; (2) demonstrable increases in proposed customer service responsiveness; (3) increased service delivery reliability; (4) job retention within the state.

Basically, as public service commissioners, state regulators want to obtain benefits for rate payers (voters) in their jurisdictions. If these are not apparent, and if opposition voices become loud, the merger or acquisition will not be approved. Note that in most proposed merger cases over the last few years, FERC regulators have themselves approved the proposed mergers or acquisitions. It is the state level public service commissions that have subsequently turned down many of the proposed mergers and acquisitions.

In reviewing the benefits promised by recently approved mergers, geographically-neighboring utilities seem to have a better chance at successfully arguing their case before state commissions and in successfully completing the merger. We believe this is due to the ability of the merged companies to provide "back-up" or "contingency" power in emergencies. Also, neighboring utilities have an ability to unify grid operations and service fleets at both the transmission and distribution levels. This is not an easy option for companies that are separated by hundreds or thousands of miles.

Additional information on the white paper "Mergers and Acquisitions among Electric Power Companies: A Mixed Bag of Successes and Failed Opportunities" is available from Newton-Evans Research Company, 10176 Baltimore National Pike, Suite 204, Ellicott City, Maryland 21042. Phone 1-410-465-7316 or visit www.newton-evans.com for additional information. Eric Leivo can be reached at eleivo@newton-evans.com and Liz Forrest can be reached at eforrest@newton-evans.com.

BROADBAND OVER POWER LINES (BPL) & POWER LINE CARRIER COMMUNICATIONS (PLC) TECHNOLOGIES: JULY 2007

In July, The Newton-Evans Research Company published a study of topics related to the use of, and plans for, broadband over power lines (BPL) and power line carrier communications technologies (PLC). The study was conducted during the first quarter of 2007. Some of the significant findings from this study are found below:

- Many observers see BPL as eventually able to replace other forms of remote asset management that include SCADA, Teleprotection, and the use of narrow bandwidth forms of Power Line Carrier Communications (PLC).
- Several of the utilities researched do not want to be involved in the telecommunications services business, but do want to gain the benefits of BPL for their internal use in remote asset management, monitoring and network control.
- It appears that certain Western nations have now gained significant experience with sizable pilot implementations or beyond—These BPL rollouts, whether tests or full-scale deployments, now encompass the ability to serve perhaps 10 million customers.

While still in its infancy, Broadband over Power Line (BPL) will one day soon be a key enabler for advanced metering infrastructure, a necessary communications-centered-utility-side platform that will promote true automated meter reading, and allow demand response and demand side management programs to develop.

The promise of BPL is perhaps greatest in its potential to extend the broadband network capabilities to approximately two billion rural inhabitants around the globe who remain without access to modern, high-speed telecommunications services.

While this report discusses all the favorable reasons for the development of BPL, it also examines in depth all of the factors inhibiting BPL growth. One major question still unanswered is: “Who will bear the costs of imple-

mentation once all other hurdles are surmounted? Utilities? Communications Services Providers? Customers?”

This new 19 page BPL study, priced at \$295.00, is available from the Newton-Evans Research Company website (www.newton-evans.com), by e-mail (eleivo@newton-evans.com or eforrest@newton-evans.com), or by telephone at 1-800-222-2856. The report can also be ordered and downloaded from this webpage <http://www.newton-evans.com/servicesreports.asp>.





STUDY OF EMS, SCADA, AND DMS IN ELECTRIC UTILITIES



Newton-Evans Research Company's eighth major, in-depth international research program studying supervisory control and data acquisition (SCADA) systems, energy management systems (EMS), and distribution management systems (DMS) is scheduled for later this summer. The findings of the study will be presented in a four-volume report series that will measure current market sizes and offer projections, on a world region basis, through year-end 2009.

The World Market Study of SCADA, Energy Management Systems and Distribution Management Systems in Electric Utilities: 2007-2009 will provide an appraisal of central and remote site hardware and applications software requirements that electric utilities will be requesting during their next round of procurements. In addition to profiling utility requirements individually, the research program will focus on defining the broader product and market requirements that suppliers must meet in order to successfully participate in the SCADA/EMS/DMS programs within the electric utility community worldwide. The world regions in this research program will include the North American, European, Latin American, Middle East, Mediterranean, African and Asia Pacific markets. The series will provide a comprehensive and informative report on the control systems usage patterns and plans of electric utilities around the world.

The group of North American utilities represented in our last study provided electricity services to approximately 50% of the served North American electricity market. Internationally, Newton-Evans Research Company was able to capture about 22% of the rest of the world's served electric consumer market.

Survey topics will include:

- Extent of use of SCADA, EMS and DMS systems by the world's electric power utilities
- New applications of interest to electric power operations management teams
- SCADA/EMS/DMS procurements. New, replacement and upgrade plans for SCADA/EMS/DMS
- Operating systems, Database management systems, GUIs viewed as acceptable to utility operations teams
- Approaches for reducing vulnerability on operational networks within the utility and participation with various ongoing cyber security initiatives
- External assistance and third party services requirements in control center operations

Early subscribers to this study get 25% off our regular price, and may also have the opportunity to submit a limited number of questions to be included on our survey.

CIREN 2007 - 19TH INTERNATIONAL CONFERENCE AND EXHIBITION ON ELECTRICITY DISTRIBUTION

VIENNA, MAY 21ST – 25TH

Gerry George

CIREN is now considered as the world's leading forum for all the professions associated with the distribution of electrical energy. CIREN an International Association since 2005 hold a Conference and Exhibition accessible from all over the world and the delegates represented all sectors of the industry, namely, utility managers and engineers, manufacturers, service providers, research and academic institutions. Interest in the Technical Programme also continues to increase and a record number of abstracts (900 +) were received from authors in 56 countries, so for the three-day Conference period more than 600 papers were selected for presentation or discussion.

The Opening Ceremony on Monday 21st May conducted by Adolf Schweer (Chairman of CIREN's Directing Committee) and Jean-Pierre Connerotte (Chairman –CIREN Organising Committee) concluded with an informative Keynote Address by Dr. Leo Windtner (Chairman of the Austrian Electricity Companies and CEO of Energie AB Oberosterreich). This Address gave the large delegate attendance a thorough overview of the electricity industry in Austria. This year's Technical Programme included all the features used successfully previously offering delegates a packed daily timetable of major Sessions, Round Table discussions, Research and Innovation forums supported by Poster presentations of almost every Paper selected for the Conference. As the Technical Committee selects the Papers in advance for the various Programme features, delegates armed with this information are able to effectively utilise their attendance.

The main Sessions extend for a full-day, hence the six topics presented for discussion during the two-track programme were as follows:

22nd May – Network Components: System Development

23rd May – Operations, Control & Protection: Distributed Generation

24th May - Power Quality & EMC: Regulation Management Organisation & IT Systems

The Technical Exhibition attracted some 70 exhibitors of major and specialist companies with business interests ranging from the manufacturers of the industry's key system components, developers and suppliers of distribution management systems and diagnostic testing equipment and services

providers. Delegate interest in the Exhibition was intensive as the exhibits and demonstrations represented the technical interests currently attracting industry investment e.g system reliability, asset and system management.

This quality and management of the Technical Programme coupled with the organisation and facilities available during the record breaking CIREN 2007 held in Vienna, continues to enhance the reputation of the organisation as the world's leading forum for the electricity distribution industry.

Please note, a detailed Report on CIREN 2007 will include summaries of the main Sessions in the Technical Programme and will either be released separately or included in the next issue of Market Trends Digest.



Newton-Evans' next keynote speaking occasion will occur this fall at the Remote Monitoring and Networking 2007/ Onsite Power Conference. This event runs from November 6-November 7, 2007 at the Radisson - Ft. McDowell Resort & Casino, in Scottsdale, Arizona. At this conference, our president, Charles Newton, will speak on trends in the global electric power & energy pipeline market for SCADA technology. For more information or to register to attend this event, please refer to www.remotemagazine.com/rem07_index.htm.