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RUS Distributed Generation Policy

RUS has recently published a new rule affecting all distribution system borrowers, which requires them to develop and maintain a written standard policy relating to the Interconnection of Distributed Resources (IDR). The intent of this rule is to clearly explain to distributed resources owners the requirements to connect their facilities to the electric power system of borrower electric cooperatives. The effective date of this legislation was August 7, 2009, and the rule was published in the Federal Register (Volume 74, No. 129) on July 8, 2009.

For the purpose of this legislation, IDR includes both generators and energy storage technologies not directly connected to bulk power transmission systems and having an installed capacity of not more than 10 MVA at the point of common coupling. IDR policies must be approved by the borrower's board of directors and must be readily available to the public. The policies must include a standard application, application process, application fees, and agreement.

All electric borrowers that have an approved loan as of July 8, 2009 must have an IDR policy in place by no later than July 8, 2011. Borrowers that have pending applications or submit an application for financial assistance to RUS on or after July 8, 2009 must provide a letter signed by the General Manager certifying that the borrower meets the IDR policy requirements before RUS will approve the loan.

P&D has extensive experience dealing with IDRs and the relevant industry standards. We have already been working with several of our clients to develop their IDR policies, and we want to make ourselves available to all of our clients in helping to meet this requirement. If you would like to discuss this with us, please give us a call at 770-453-1410. ♦

P&D to Host Additional Staking Schools

Once again, Patterson & Dewar Engineers will be offering more staking schools in 2010, slated for locations including one in South Alabama, one in Kentucky and possibly one out West. If you would be interested in hosting a school at your facility, please contact Robert Penna at 770-453-1410 or rpenna@pd-engineers.com.

What are your Wholesale Rates Telling You?

Times are changing; this has been said many times but it seems these days distribution systems are seeing these changing times show up in their wholesale rate structure. Wholesale power providers are currently under a myriad of costs and regulatory pressures. While the overall level of rates has always been an issue, rate structures are evolving like never before. Issues such as EISA 2007, ISO and RTO pricing, smart grid concepts, and environmental impact worries are pushing wholesale rate designs from flat energy rates, to demand charge rates, to seasonal and hourly pricing, and some say, eventually a near real time price all the way to the ultimate end-use customer – all communicated by and monitored by a National “Smart Grid.”

In light of shifting wholesale power costs, distribution utilities need to look at wholesale pricing as a “signal” to make wise planning and investment decisions and avoid cost to them, the wholesaler and the member ratepayer. Corresponding system planning and retail pricing should be incorporated into gross margin contribution calculations. Distribution systems must insure their marketing efforts and investment capital are appropriately incentivized from wholesale and retail rate design. This is especially true when making decisions concerning relatively large investments in new “smart” technology and potentially negative (or positive) impacts it may have on retail margin contribution.

P&D believes the old adage “you must be able to measure it to be able to manage it” still holds true. Development of the following “measurement” tools and methods are vital to the management of a distribution system’s cost change:

- **Perform a Cost of Service Study (COSS)** – The methodology P&D uses is a simple and easy-to-understand analysis that provides a complete picture of the structure and allocation of costs to the “Wires Company”.
- **Develop a Gross Margin Model** – Retail gross revenue minus wholesale power cost, by rate class. P&D has various techniques to collect the appropriate billing information and apply these data to margin analysis to provide a gross margin contribution.
- **Analyze, Iterate and Manage** – P&D will utilize these management tools to analyze the present margin contribution and to manage future “change.” Iterations to this model allows the Distribution System to analyze the existing or changing wholesale pricing signal and answer questions such as: how do my distribution costs and gross margins change when we implement a direct load program, reduce system losses, control system voltage, implement demand response rates, etc.?

This integrated and iterative method gives P&D and its clients an understanding of existing financial metrics, ability to measure wholesale rate signals, and ultimately manage change for the ratepayer / owner benefit. If you need assistance in developing a Cost Of Service Study, Gross Margin Model, or other tools, please contact either JB Franklin at 770-453-1410 or Dan Fleming at 270-929-2522. ♦

New Deadline for SPCC Plans

As most of you are aware, the deadline for implementation of SPCC Plans (Oil Spill plans) is November 10, 2010. What many do not know is which entities really have to prepare one. The common misconception is that the SPCC ruling will only apply to those who are under RUS Guidelines. This issue couldn't be further from the truth. The Environmental Protection Agency (EPA) is the regulating body that has made the SPCC Plan necessary. The EPA's authority is above that of RUS, which means that everyone-large co-ops, small co-ops, municipalities, investor owned utilities, anyone who deals with oil and oil products- is required to have in place an SPCC Plan.

Another issue with SPCC Plans comes from cooperatives and municipalities who do not own the substations and merely perform maintenance and record keeping. The EPA guidelines do not specify as to whether the owner or the operator specifically is responsible. Instead, an agreement between the two entities should be made as to who is responsible. It may be such that the co-op can specify the type of containment but that they are the one who prepares and carries out the plan. It would seem that the entity that spends the most time inside the facil-

ity's fence would be most likely to carry out and cleanup operations.

A third misconception lies with the ability to self-certify. There are several criteria that must be met in order for the owner/operator to self-certify. First and foremost, there must be zero to near-zero oil spill activity. A maximum of 1,000 gallons for one spill or 42 gallons total for two spills is the cutoff for the past three years. Second, maximum container size cannot exceed 5,000 gallons. This will typically eliminate most substations of 10MVA or greater depending on transformer configuration. The third criterion is total facility oil quantity. A maximum of 10,000 gallons cannot exist at the facility. This does exclude those containers less than 55 gallons. Again most substations with multiple transformers and other equipment do not fall within this category. However, there are some that do.

For those that do wish to self-certify, 40CFR112 Appendix G is a SPCC Plan template prepared by the EPA for the purpose of helping those that wish to certify. All that is required is that the entity that is self-certifying be familiar with the EPA rules and agree to fulfill them in regard to cleanup and any containment construction. ♦

Patterson & Dewar Engineers is pleased to announce that **Daniel G. Fleming** has joined the firm in the Electrical Services Group. With over 20 years of experience working with utilities in a variety of roles, including 10 years with East Kentucky Power Cooperative, Dan was directly involved in load forecasting, Integrated Resource Planning, and Demand-Side & Market Research.

Dan's work with utilities has involved providing assistance with price design, load and market research, and benefit cost evaluations for demand-side management measures, while developing many risk reduction and wholesale power sales opportunities for utilities across the country. Most recently, Dan was with Owensboro Municipal Utilities where he managed the Telecommunications Department, was involved in the power marketing, and served as team leader for Regulatory Compliance. Dan will continue providing economic analysis and regulatory services to the utility industry. Dan can be reached at dfleming@pdengineers.com or 270-929-2522. ♦



QBS—Qualifications Based Selection

A recent article in the *ACEC Engineering Inc.* magazine addressed a very timely and often discussed topic in the construction industry. Two professors from the University of Colorado and Georgia Tech conducted the research in support of the QBS method for contracting design and construction services. The primary findings included:

- A national survey indicates QBS often results in lower construction costs, higher-quality construction and better overall results than other procurement methods.
- The industry average for construction cost growth is about 10 percent. On projects employing QBS for design procurement, construction cost growth averaged just 3 percent, according to the study.
- Study results demonstrated that 94 percent of design firms and 93 percent of project owners had a high or very high perception of the success of QBS-based projects.

The end result was the selection of the most technically qualified firm for a given project at price that fits the Owner's budget. To read the full article, "An Analysis of Issues Pertaining to Qualifications-Based Selection," go to www.acec.org/publications. ♦

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