



## JOINT USE ATTACHMENTS: GETTING MORE COMPLEX & CHALLENGING.

Don't get stuck with repair costs due to joint use attachers providing incomplete engineering for make-ready costs.

More and more these days, utilities are becoming increasingly aware of the potential issues, challenges and problems that can occur related to joint use activities (third-party pole attachments) that are not done properly. Many attachers would prefer to complete the engineering however this is not in the best interest of the owner.

On the "paper" side, there are specific requirements, regulations and codes in place from the Federal Communications Commission (FCC), the National Electrical Safety Code (NESC), as well as state public utility commissions (PUCs) and public service commissions (PSCs).

On the "operations" side, there can be significant costs associated with direct damage to poles and wires, as well as indirect damage caused by damaged poles and power lines from excessive winds, ice storms, or other events. These costs can include direct repair costs, claims from third parties resulting from damage to critical utility infrastructure, as well as legal costs related to who did not provide accurate data to complete accurate engineering.

### REGULATOR AND CODE ORGANIZATIONS

Historically, according to Phil Carroll, P.E., vice president of the Power Group for Finley Engineering, the FCC has been involved in setting pricing models for joint use attachments, such as the annual rental fees. "In more recent years, though, as a result of the Telecommunications Act of 2006, which opened up more opportunities for third-party attachers to attach to poles, the FCC has taken steps to create boundaries of conduct between the attachers and the incumbents/owners, since there is now so much competition for the space," said Carroll.

In addition, historically, almost all FCC decisions tend to favor companies that want to attach to existing utility poles.

More recently, the FCC released new regulations in April 2011, the result of a 2009 directive by Congress to the FCC to develop a National Broadband Plan to encourage the nationwide deployment of broadband services and remove barriers to infrastructure investments. As part of the regulations, the FCC decided that existing pole access rules and regulations were obstacles to the widespread deployment of broadband services. As such, the new FCC regs may be construed as good news for telecoms and cable providers, but not necessarily for electric utilities.

What these new FCC regulations resulted in is amended rates, terms and conditions which regulated utilities (IOUs) may impose in their agreements with those attaching to their poles. The regulations also addressed wireless attachments. In general, they requires IOUs to charge lower, uniform rates for various types of attachments, and to respond to attachment requests within a set timeline.

Co-ops and muni's are exempted from the new FCC regulation. As such, attachers cannot insist that co-ops or muni's comply with the new rules. In other words, co-ops and muni's are not compelled to modify their existing agreements to come into FCC compliance. However, co-ops and muni's may want to look at the new regulation for guidance and other information.

The NESC, which has been adopted in most states, sets detailed codes for how lines and equipment are to be attached, such as how many inches of separation must exist between wires, equipment, etc.

PSCs and PUCs are also involved on the “paper” side of things. “Different states have different regulations,” said Carroll. “However, in most states, the commissions have a role in making sure that everyone is ‘playing fair’ under the laws.”

## PROBLEMS CAN ARISE

In some cases, according to Carroll, utilities have poles that are already very “busy” and heavily-attached, so it can be a challenge for third-party attachers to find places to attach and still remain in compliance with the NESC. “The ‘fixes’ that are necessary to allow this to happen can be extremely expensive,” he said.

An even more insidious problem is that, in the past, as they got more comfortable with making attachments, joint attachers often just attached at will, without even seeking permission from the utilities, according to Mike Socha, P.E., manager, Transmission and Distribution Services, for Finley Engineering. “They figured there was a good chance that no one would ever catch them,” he said. “As a result, they figured they could save a lot of money, because they could attach to poles without paying the thousands of dollars that would be required to replace the poles to meet code.”

The problem? “If an electric utility has assets in the field that it owns, such as poles and wires, and if there are damage problems to these assets in the future, it can cost the utility and its customers large sums of money, and the joint attachers will have been getting a free ride,” said Socha. “Just as some people try to get free service from the cable company, the cable company can try to get free service from the utility.” In a sense it’s ironic?

Carroll agreed. “There have been situations in the past where third-party attachers would attach without even notifying the utility,” he said. This would often happen when the attacher had a new contract that required them to provide service in a very short period of time. “So, they ‘rolled the dice,’ attached without notification, and hoped they slipped under the radar of utilities already focused on their core business providing electric service to customers. They figured it was easier to ask for forgiveness than to ask for permission, sometimes claiming that an engineer at the utility stated they could attach.” However, according

to Carroll, as the PSCs and PUCs have been made aware of these illegal attachments and the subsequent problems that they can cause, they have stiffened up some of the language. “As a result, this practice is not as widespread today as it once was,” said Carroll.

How do problems arise as a result of out-of-code attachments, and/or attachments that haven’t been approved? One problem is that there may be so much attached to a pole that, during an ice storm or wind storm, it is more likely that the pole will suffer damage because of the excess loading. “Another possibility is that lines might sag so low over a road that a semi or snowplow snags it and pulls the poles down,” said Carroll.

Another problem is that, if there is damage beyond property owned by the utility, the utility might be held liable if it can be proven that the utility didn’t do an effective job of monitoring who else had been attaching to the poles and making sure that such attachments met NESC code.

## A CASE IN POINT

One electric co-op had a joint-use (pole attachment) agreement with a cable company. As part of the agreement, the utility was required to run a pole loading analysis, based on potential weather conditions, such as ice or wind. A strength analysis would look at light, medium or heavy, for ice or wind, to make sure that, after the loading with the new attachments, the poles would remain within the loading parameters, so as not to break during storms or for other reasons due to excess loading.

“In the agreement with the cable company, the utility assumed that all of the information the cable company had provided to the utility was correct and accurate - that the cable company would attach at certain heights, and within certain clearances, and that the cable company had performed a span analysis test,” said Socha.

However, subsequently, an ice storm broke a lot of poles. When the utility investigated, and began looking at how the cable company had handled its make-ready attachment procedure, it found that no one had run a strength analysis and that the cable company hadn’t done a good job of measuring clearances. “As a result, the utility was looking at about \$20 million in

infrastructure replacement costs because of these attachments, based on an audit they did," said Socha. This led to a legal battle between the utility and the cable company.

## PROTECTING YOUR ASSETS

According to Carroll, the FCC stipulates that engineering must be performed at the cost of the requesting party (the company wanting to do the attaching) to determine compliance with the NESC. "Sometimes, the utility sets this up, by providing the attachers with the names of approved vendors, as long as the attachers provide proof that due diligence has been done and that proper engineering has been performed to ensure compliance with the NESC," said Carroll.

A utility that needs this work done has some options. One is to do the engineering itself. Another is to hire a third-party engineering firm to do the work. A third is to provide a list of qualified third-party engineering firms to the proposed attacher, which then contracts with the engineering firm.

In all cases, it is the responsibility of the attacher to ultimately pay the engineering costs. If the utility does its own engineering, or hires its own third-party engineering firm, it bills the attacher. If the attacher hires the third-party engineering firm, the attacher pays the engineering firm directly. "If the utility does the engineering itself and doesn't determine the time spent doing so, they may not pass their costs on to the joint attacher. The joint attacher may therefore receive free engineering services, and of course if something is free the utility ends up fielding many more requests to see if attaching to pole line makes economic sense." said Socha.

If the utility selects a third-party engineering firm such as Finley Engineering to do the engineering analysis, Finley will tell the joint attacher where to attach, how to attach, etc. "We use technology and instrumentation to assess the proper clearances," said Socha. "We then bill the utility, which can then bill back to the joint attacher."

Finley's focus is to ensure that values are accurate. "We don't show favoritism," said Socha. "We just make sure we comply with the NESC.

We also make sure that the agreements are written for the benefit of the utility, not the joint attacher. This can save the utility a lot of money."

## SELECTING YOUR PARTNER

Finley Engineering offers a number of services related to asset management permitting, including: collecting field data required for analysis, providing structural evaluation for ground clearance, performing structural analysis utilizing PLS-POLE software, calculating vertical separation of cables and conductors, providing engineering remedies, providing prints, populating work management systems, coordinating construction, performing post inspections, and closing out projects. Finley offers a complete turn-key solution so the utility can focus on running their core business and keep costs truly separated from other parties increasing their expenses.

Finley also offers National Electric Safety Code (NESC) compliance audits, including: identifying NESC violations, designing recommendations, facilitating all utilities, providing construction drawings, project management, construction management, and conducting post-project inspections.

"Finley has a rich history of distribution design work," said Carroll. "Our engineers and technicians are well-versed in the NESC. We know what does and doesn't meet code. For example, we can come in, identify what isn't meeting code, provide information and solutions on what it would take to meet code, and then help the party do so in as economical a fashion as possible, rather than having to rebuild the entire block."

In addition, added Carroll, Finley comes into all projects with "no agenda." "We are there to do the best job we can for the party we are contracted to, whether it is the utility or a third-party attacher," he said.