

spring 2011

news lines

Current news and views from
Alberta's Joint Utility Safety Team

WHERE'S THE LINE?

A drilling company had been contracted to take core samples. The Operator of the drill truck was driving from one sample site to another with his rig in the upright position, lowering it only when approaching power lines. Although he had two pilot cars traveling with him – one in front and one behind – to flag traffic and ensure safety, they all failed to notice the next 14.4 kV crossing looming ahead. Suddenly, the rig made contact with the line, causing the front driver's side tire to blow out, and large, bright flashes to arc from the front end of the rig... One of the pilot-car drivers phoned for help while the Operator remained stranded inside the energized rig.

ALBERTA'S SECOND ANNUAL POWER LINE SAFETY DAY

This year's Power Line Safety Day will take place on Wednesday, May 25 at the Fire Training Academy in Calgary. The event will feature speakers, displays, and live demonstrations — ranging from downed power line and vehicle demonstrations to arc simulators.

THE SHOCKING TRUTH

Every day, three Albertans needlessly come into contact with an overhead or underground power line, risking serious injury or death because they didn't ask themselves, "WHERE'S THE LINE?"

TRENCHLESS TECHNOLOGY LINKED TO TROUBLING TREND

Trenchless technology is a rapidly growing sector of the construction and civil engineering industries. Horizontal Directional Drilling (HDD) is one such technology being used more frequently for installing infrastructure such as cable, water, gas and telecommunications lines, particularly in heavily-developed and urban areas. In these areas, HDD may offer a number of advantages including cost-reduction, shorter completion times and less disruption to traffic, property and the environment.

The increased popularity of HDD has brought about a worrisome increase in contact incidents with buried power lines. The impact of directional drilling contact incidents is two-fold.

- Firstly, current can travel from the point of contact to the Operator's position.
- Secondly, the equipment itself and the ground around it may become energized, creating "step potential" which endangers not only Operators, but trackers and others standing or working nearby.

Thankfully, no injury incidents have been reported yet, but the potential for serious harm is certainly present as HDD contact incidents could easily result in severe injuries or even death. Of particular concern, is the practice of operating certain directional drilling machinery while standing beside the equipment, rather than while seated on the Operator's seat. If contact with a buried power line does occur – you never want to be in the position of being the easiest path between electricity and the ground.

Standing beside equipment is the absolute worst place an Operator could be in the event of an incident, whereas if they were on the equipment they would likely be safe.

Following basic safety practices is the best way to combat the troubling trend towards increased – and potentially deadly – contact incidents in trenchless technology operations. In addition to following proper operating procedures for the equipment itself, Operators should take the following steps:

STEP 1: Before digging, call Alberta One Call (1-800-242-3447) to identify the location of all buried facilities.

STEP 2: Diligently mark and carefully expose the facilities.

STEP 3: If you will be operating within one metre of buried facilities, contact the local utility company to come to the site, review the work and work alongside you to ensure safe planning and execution.

What if contact does occur? Immediately call both 911 and the local utility company.



“If you’re not conscious of what you’re doing on the jobsite, it’s only a matter of time before you become a statistic.”

Keeping safety top of mind and complacency at bay has allowed Lorne Strachan an incident-free career, spanning more than 20 years. As the Associate Chair, Steel Construction and Hoisting at NAIT, and a crane operator, Strachan works tirelessly to educate his students on the importance of power line safety on the jobsite.

“My students have trouble believing the statistics,” says Strachan “and they certainly don’t think they will become a statistic themselves.” To this end, he shows them the ramifications of complacency on the jobsite – internal burns, disfigurement, loss of limbs and even death. Students take part in exercises, using equipment such as track hoes, to work around dead power lines to simulate real-life

scenarios, so they see firsthand how easily an incident can happen.

Hands-on training and practical demonstrations have proven to be effective teaching tools and catalysts for discussion about the consequences of contact with a power line. However, Strachan is quick to point out that incidents don’t necessarily correlate with lack of training, but with complacency. “If you’re not conscious of what you’re doing on the jobsite, each and every time, it’s only a matter of time before you become a statistic.” It’s a sobering message that encapsulates just how dangerous complacency can be. While Strachan hopes this message will



Lorne Strachan, Associate Chair, Steel Construction and Hoisting, NAIT

resonate with his students and stay with them as they move into the workforce, he stresses that the ultimate responsibility to work safely rests with each and every worker. “Once they step onto the jobsite, it’s all them – they have to use what they’ve learned. Their safety and that of others is in their hands.”

EXPANDING EFFORTS TO REACH OPERATORS THROUGH EMPLOYERS

In addition to the ongoing “WHERE’S THE LINE?” awareness advertising campaign which targets Operators directly, employers play a critical role in influencing power line safety behaviours among Operators.

JUST launched its employer engagement initiative in February 2011, commencing with research. Through discussions with safety leaders and managers in the oil and gas, construction, utilities and forestry industries, JUST has learned about the types of power line safety resources employers would find useful in imparting power line safety practices to Operators.

The first priority of 2011 is revamping the “WHERE’S THE LINE?” website — scheduled to re-launch late May — to include downloadable power line safety training materials, an industry-specific calendar of events and safety training courses, safety news, real life stories and videos, and stickers, posters and other promotional materials which can be ordered. JUST will also be keeping employers up to date on important safety changes and new power line safety resources through e-blast notifications.

3 RULES TO A SAFE WORK ENVIRONMENT

Before you start any job, always remember:

1. Make a work plan to include the location of overhead and underground power lines.
2. Know the height of your equipment.
3. Keep your equipment at least seven metres away from power lines.

Stay “7 Metres Safe”

Keep yourself and your equipment at least seven metres away from overhead power lines. If you must work closer, call your local electric utility company first.

Before excavating, always call **Alberta One Call** (1-800-242-3447) to locate any underground power lines.

JUST’S MANDATE

In 2006, Alberta’s electric utilities and the Alberta Government formed the Joint Utility Safety Team (JUST) to collectively help address the common safety issue of contact with power lines.

JUST’s mandate is to positively affect change in attitudes and behaviours toward power line safety, to help reduce power line incidents. Through ongoing safety awareness and industry education, JUST is committed to helping foster a long-term “culture of power line safety” in Alberta. This involves everyone working around overhead or underground power lines, including electric utilities, oil and gas, construction, forestry and agricultural industries.

For more information, contact Lyndsay Thorlacius, JUST Chair at 403-267-5919 or at lyndsay.thorlacius@altalink.ca

Learn more about staying safe at Wherestheline.ca

The members of the Joint Utility Safety Team:

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WHERE’S THE LINE?
POWER LINE SAFETY