



Announcer:

It's time for *the IHSA Safety Podcast*.

Ken Rayner:

Welcome to the *IHSA Safety Podcast*. I'm your host, Ken Rayner. On today's episode of the podcast, we're going to discuss the *Utility Work Protection Code* with IHSA's Utility Work Protection Code coordinator Sandy Morrison, who's joining us on the podcast for the first time. Welcome, Sandy. Great to have you here to discuss a topic that I think may be new to many of our listeners.

Sandy Morrison:

Oh, thanks Ken. I'm happy to be here.

Ken Rayner:

Awesome. Great to have you. Okay Sandy, in Ontario, as I understand, we have a strict set of rules that governs the work that takes place in and around high voltage electrical plants. And, the *Electrical Utility Safety Rules*, or the EUSR, which we covered on episode 77 with IHSA's, Jeff Ellery, tells workers how to act when they are near potentially hazardous conditions. While the *Utility Work Protection Code*, the UWPC, helps create an environment where those hazards are reduced or eliminated. So Sandy, for our listeners who are not familiar with the UWPC, can you please provide an overview of the protection code?

Sandy Morrison:

Yeah, sure. Ken, I think everybody should know right off the bat that it is regulations and rules. It's owned by Hydro One. They're the ones who are the makers of this code. And every five years they re-look at the book to see what needs to be added into it or changed. Basically, it's a rule book that's set out for anybody working at or above 750 volts for the work that they're going to be doing. It's a book that has a bunch of rules that can be used in combination with different tags and forms, and it gives you clarification on how to create a safe work environment. It gives you different options that you can use, and what you want to do to create that safe work environment.

It also spells out a bunch of different responsibilities for workers while they're working. You can have your work-group members, they have some responsibilities, but then also there's going to be somebody that's going to be in charge of all those workers. So, we call them the holder, and they have another list of responsibilities that they have to do. So it is set out for everybody to use. And the good thing about the *Utility Work Protection Code*, it's used all across Ontario, from Hydro One down to every utility in Ontario. The good thing about this—it's a set of standards that creates consistency for everybody. This is a nice thing because we have different utilities that may go and help each other out, especially in storm situations. You might have electrical contractors that come in and help your utility.

And by having this consistency, it allows everybody to use the same rules, the same tags and forms, and the same communication with everyone.

Ken Rayner:

All right. That's excellent. So, when I started in that first question, we talked about the UWPC being able to reduce or eliminate hazards. I mean, that's the key to anything that we want to do. So how does the UWPC create that environment where hazards are essentially reduced or hopefully eliminated completely?

Sandy Morrison:

Yeah. So, you said it before. You talked to Jeff Ellery, and he definitely talks about different hazards that are in the *Electrical Utility Safety Rules*. There are different hazards that—when the crews go out to work, there's lots of hazards out there, right? There's traffic, there's people, there's working at heights, there could be animals, it might be weather. So you've got slips, trips, falls. Those are all hazards that we recognize as *Electrical Utility Safety Rules* that we would always put on a job plan. But when it comes to the UWPC, we have to identify a hazard as a source of energy that's going to affect the safe area that we're going to be working in. So when we identify that, it narrows down what hazards we need to apply for work protection. So those could be overhead lines that might be still alive, they might be auxiliaries, or if I was working inside a station, it might be a bus that'd still be alive. Those we identify as hazards.

Once we identify the hazards, now we have to decide, "Okay, how are we going to eliminate them?" That's our next step is, "What do we want to do?" The way that we do that is now we look at, "Okay, do we want to take out a work protection as part of the *Utility Work Protection Code*?" So what that does is that isolates an entire area where I'm going to be working to get rid of those sources of energy to create that safe work environment that I'm going to be working in. And then, we put grounds on just to make sure it stays de-energized while we're working on that equipment.

When we do that, the next step that we take a look at is, "Okay, if I have another hazard that's in that side of where we're working or around where I'm working, how are we going to control that hazard?" So we also look at that and we go, "Okay, what are those surrounding hazards that are going to be around us? How do we control them?" That's something else we take a look at, and there are work methods and work procedures, we call them approved practices. And we look at those and we go, "Okay, we need to identify them. We need to put them on our work protection forms, so that everybody is aware what those hazards are, and we need to create a way to guard against those hazards."

Ken Rayner:

As I understand, training is somewhat of a critical component of the *Utility Work Protection Code*. Why is training important for the code, Sandy?

Sandy Morrison:

Well, it's definitely always changing. I can say, for the training, anybody working around high voltage, definitely a very important component when it comes to worker safety, right? Training for anything is very, very important. It's something that we like to do. When you're talking about the *Utility Work*

Protection Code, and we do have different training courses that we teach, we give you the knowledge and the training on when to use the code and how you use the code. So we teach you all of that. We teach you how to use the forms. We teach you what the tagging requirements are while you're working with the *Utility Work Protection Code*. And, I do believe, I think when I listened to Jeff's last week when he was talking about the *Electrical Utility Safety Rules*, a new rule did go in there, because our training is only good for 27 months.

So when you take the *Utility Work Protection Code*, you have that qualification, but somewhere around that two-year mark, you're going to have to retake that training again. It's an ongoing training process. The good thing about that and that I like about training is when you come to a new course, you're always going to learn something new. There's always something new that comes up. There's a new question that comes up or a new scenario. So, training is an ongoing process for this work.

Ken Rayner:

Okay. So Sandy, it sounds like you're mentioning different types of training for the UWPC. So, does IHSA offer different types of training on the *Utility Work Protection Code*, and then, I guess, if there are different types of training, then who should be taking those different types of training?

Sandy Morrison:

Yeah, absolutely. IHSA offers four different courses for the *Utility Work Protection Code*. The first one is an overview. That course is an eLearning. We offer it. It's an online course that you can take. And it's basically something for somebody that just wants a basic knowledge of the *Utility Work Protection Code*. They understand why we're using it, what permits that we use, and what the responsibilities and authorities are that come in play when we're talking about the UWPC. It doesn't give you a qualification in this course. It gives you a certificate of... Basically we call it a certificate of knowledge. And it's more for people like civil workers, arborist, or maybe supervisors that just want to have a knowledge of the *Utility Work Protection Code*. These type of trades can relate to this material more, because it's just a basic understanding of it, so they definitely can relate to that material.

The second course that we offer, it's called core. It's a two-day course. There's no prerequisite to this course. You can come in and take the training. And what it is is a more in-depth training of the overview. So instead of just giving you basics of it, it will give you more knowledge on how to fill out all the forms, how to fill out all the tags, and it goes through all the rules about working around high-voltage equipment. It's for anybody that's going to be working on or near high voltages, and anybody that's going to be preparing, issuing, holding work permits, that's who this course is used for. Okay?

So line [workers] use it, supervisors have to take it, anybody working inside a high-voltage station that would have to take it, contractors that work in high-voltage stations, these are the people that are going to be using this course. The third one that we offer is called a re-certification. And, like I mentioned before, your certification is only good for 27 months. So, for this one, the prerequisite is you must have the core training first. Then, after that 27 months is up, you can come in and to take this recertification. It's just a one-day refresher course where we go through all the rules, responsibilities, all the forms, all the tags. Just a quick reminder of everything that's used with the *Utility Work Protection Code*.

The last one that we offer, and this is called train the trainer, it's for utilities that are interested in teaching their own organization. So they want to use the code, but instead of having IHSA come in, they want to have somebody in their own organization do the training for them. We do allow that. There is definitely a higher criteria and requirement if you do want to be a trainer that you have to go through IHSA with. This course is only offered four times a year in different parts of the province. It's a two-day course that has to be taken every year by the trainers. And, when you take this course, you have to be able to show that you can teach it, you have to do a practical to pass it, and you also need to do a written test to do it. So, currently, we have 10 utilities that use the "train the trainer", which is nice. I meet with them every year. And, it's nice to know where they stand and how these utilities are doing.

Ken Rayner:

Absolutely. So that's great. We have an overview. We've got the initial course. We've got the re-certification. We've got the "train the trainer". Sandy, on some training courses, if you're going to get re-certified, you can't allow your initial certification to lapse, otherwise you have to do it again. How does that work within the UWPC?

Sandy Morrison:

So, yeah, if you, for whatever reason, let that certification lapse past that 27 months, even if you're over by one day, what that means is you have to retake that core, that two-day course, all over again. So, that's why I always say "somewhere around the two-year mark", that's where everybody contacts us and wants that training all over again so they don't run out of that certification.

Ken Rayner:

Okay. Good stuff. Hey, let's get into those permits and tags you talked about, because I'm interested to better understand how those are used as controls within the *Utility Work Protection Code*.

Sandy Morrison:

Yeah. So, that's what the *Utility Work Protection Code* is based around. The safest way to work is we're going to isolate that area and work around it. When we do that, we use different permits and tags. They're used in conjunction together to accomplish that safe work environment that you're working on. The permits that we use are written guarantees that you've actually isolated an area, it's been established, you're going to put grounds on to create that safe work environment to work on.

But in conjunction with the permits, you also have to tag equipment. So when I create that isolation area, I need to guarantee that that device won't be moved out of its position. The way that we do that is we apply, they're called, Do Not Operate tags. We have three of them that we use in the province. They're all used for something a little bit different. And we put that on the device so that no one moves the position of that guaranteed device. The tags are really honestly a key component to a work permit, because in our field, not everything is lockable. So if I can't lock it, I have to find a way to prevent somebody from actually operating it. And that's what those tags do.

Ken Rayner:

Is it possible to get those tags from IHSA?

Sandy Morrison:

Yeah, absolutely. Anybody who's looking for any tags or forms, they can definitely get a hold of IHSA and we sell all of them, all the different types that we have, we sell all of them.

Ken Rayner:

Okay. Good to know. Sandy, if anybody, I think, listeners who have been following IHSA's social media or been on our website, they know that there's been some changes to the *Utility Work Protection Code* in 2024, in terms of updates to its rules, its forms and tags. Sandy, can you provide maybe a bit of a high-level summary on some of these changes?

Sandy Morrison:

Yeah, I think what everybody's going to find—I know this is a big change for everybody with the new code change. It has not been changed since 2012, so there are definitely some new code changes. But I think what everybody's going to see when they look at this new book, it is definitely more streamlined. It leaves less room for interpretation, so it really helps people that are trying to read this book, whether it's the first time or we used it for years, it definitely lays it out a little bit better. The code changes, the significant ones, is we did change some of the vocabulary and the definitions in the code. We wanted to make sure that we matched what the *Electrical Utility Safety Rules* said. So, it's word for word what we use for that. And we definitely added more definitions in for that clarification so there's no room for interpretation.

One of the other big ones that we had was a signature rule. That one's going to play a big part in the code change, because now with the code, these are legal documents, so every time we do a legal document, we have to put our signatures on those forms. The new code has now added a rule in there that says, "Now, not only do you have to sign your name, but you must print your name with it." So, when we made the new code, all the forms and tags got changed to accommodate that rule change. So it made it more an easier space to write and print your name for everything that you're going to be doing. So it opened it up a little bit more, which is nice.

Another one, we created a new PC3 tag. So, it's a yellow tag. It's a Do Not Operate tag that we use in the field. And currently, there's one that has a series number. There's a number on that tag. There's a new tag that was created with a non-series number, which means, it doesn't have a number to apply to your work permit. You get to create that unique serial number all on your own. You get to decide what that number is going to be. That was never in the code before. It is in there now. There are rules around it about using it. But it's in there. It's just more of a progression to allow different various tags that we can use for our equipment, for our isolation.

We have to keep all our rules, all our prepared forms and tags for two years. That was a rule change. It was one year, before. Now, we've updated that to two years, which really, honestly Ken, it's not a big rule change, I don't think for a lot of utilities, because most utilities keep their things anywhere from three to five years anyway. But now it's just in there with that format to keep it for two years.

Ken Rayner:

Nice. Just making sure again, you talked about consistency, ensuring that every utility is doing it the same way.

Sandy Morrison:

Yeah, absolutely. And with that consistency, what we've done now, there's a new rule Hydro One put in there that says every organization now has to do an annual review of their *Utility Work Protection Code*. So they're going to look at everything they've done over the last year and they're going to review it. Is it good? Is it bad? What needs more work? What are we doing really well? When they do that review, they have to send that review to their health and safety representative or their organization for it to be looked at and kept on file, so that we can take a look at it. Maybe even as trainers when we come in, we want to take a look at it to say, "Okay, what do I need to focus on more when I'm doing my training with this organization? Is there something that you want me to look at a little bit more in-depth?" So, it's a really nice rule. It's not set out for any other reason, but to maybe help the actual organization and to help the trainer.

Ken Rayner:

That's a great one, Sandy. I mean, well, when you take a look at any management system, not just an occupational health and safety management system, but any management system, a key component of that is that annual management review. So, that sounds like a terrific add.

Sandy Morrison:

Yeah, I'm really happy about this one. And again, if you don't do that review, honestly, how do you know what you're doing right and what you're not doing correctly? So, we just want to make sure. And again, if somebody doesn't know they're not doing it correctly, they're going to keep just doing it that way. So that review definitely helps to get everybody back on the same track again.

Ken Rayner:

Absolutely.

Sandy Morrison:

There's another new rule that was created in this code book. And again, I really like this one. It's a good one. And that's for any utility or organization that wants to depart from the code. So, all these rules and regulations are set up to create that safety for you. But if a utility or an organization finds that they can't meet the rule standards and they want to depart from the code, first thing they have to ask themselves is, "Does it meet the standard of the *Utility Work Protection Code*? Is it equal to or greater than safety wise of what the code already says?" If it is, the new rule says if you want to make a departure, you have to write up what you want to do for that departure, and you have to submit it to IHSA. IHSA will then take it, give it to Hydro One, because they are the owners of the code. They will take a look at it to see if it meets all the qualifications. If they accept that departure, they will send it back to you and let you know, "Yes, you can go ahead with it."

This is a good rule, because in five years from now, when we look at the rule book again, any departures that are made in the province now has to be put into the code book. So, this is a good way of Hydro One making sure they understand what is going on in the province. Has anybody departed from the code? And if they have, "Okay, let's make it a rule now. We won't call it a departure anymore. Let's just make it a rule." So it's a really good one that they created.

Ken Rayner:

Yeah, so can we talk on that for a second? Just what would be a circumstance that would cause utility to depart from the code?

Sandy Morrison:

Well, I can give you a really good example. Actually, one of them that we just created in the new code book is we had... Toronto Hydro actually, when they joined the code, probably about three and a half years ago now, three years ago now, we have rules that are set out around our PC3 tag. It's a yellow tag that we use to guarantee a device. And, one of the rules on that was if you use a certain serial number for your work permit, nobody else in that same geographical area or substation can use that same number that you are using. It's a way of protecting to make sure somebody doesn't remove your tag by accident.

When we were going through this, Toronto Hydro said, "Ooh, we could issue a lot of permits in the same area at the same time, and we're not sure that we can actually make sure that everybody is using different tag numbers for their permits." So Hydro One said, "Okay. We're going to create a new tag, a non-series tag number. Now, you can create your own unique serial number that you want to put on the tag, and then that way nobody will repeat that number in any other permit." So that was a departure that was made for Toronto. It equals the safety of what's already in the code. We just need something new so that it fits what their needs were.

Ken Rayner:

Nice. It sounds like if someone wants to depart and then it goes through the proper channels through IHSA and Hydro One, it can be a source of continual improvement for their code overall.

Sandy Morrison:

Yes. For everybody in the province, and that's kind of the main goal of the *Utility Work Protection Code*.

Ken Rayner:

Excellent. I'm learning a lot here, Sandy. I appreciate it. Sandy, a great overview. How about if somebody is seeking more information on the *Utility Work Protection Code*? What would you recommend?

Sandy Morrison:

Oh, well, I mean, if somebody's there at your organization and they're doing some training from IHSA, you can definitely talk with them about it, and they can let you know more about it, or they can direct you actually right to IHSA. If you go to our website, you can definitely contact us and get in touch with

us. The other thing that we have is we created a *Utility Work Protection Code* question forum. So if you have directly a question about Utility Work Protection Code, you can go onto our website and where our list of training courses are, you can go right down to the *Utility Work Protection Code*. When you go in there, there's a link at the bottom of the page, and the link is called "UWPC Questions". We also have a link for the *Electrical Utility Safety Rules*, any questions. If you go into that link, you can put your question in and that will directly go to myself and it also goes to my manager so we can answer that question for you.

Ken Rayner:

Perfect. That sounds fantastic. Sandy, thank you so much for joining us today and giving our listeners a much better understanding, not just the listeners, but me as well, a much better understanding of the *Utility Work Protection Code*. Really appreciate you being with us.

Sandy Morrison:

Oh, thanks so much, Ken. I was happy to be here. Thank you.

Ken Rayner:

Excellent. And thank you to the listeners for listening to the *IHSA Safety Podcast* and our episode on the *Utility Work Protection Code*. Be sure to subscribe and "like" us on your podcast channel and visit us at ihsa.ca for a wealth of health and safety resources and information.

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