



Announcer:

It is time for the *IHSA Safety Podcast*.

Ken Rayner:

Welcome to the *IHSA Safety Podcast*. I'm your host, Ken Rayner. On today's podcast, we're discussing the *Electrical Utility Safety Rules*, otherwise known as the EUSR. Since 1914, 110 years ago, the *Electrical Utility Safety Rules* or EUSR has been the foundation of health and safety education in the electrical utilities industry. It was first created through the Electrical Employers Association of Ontario, and then maintained by the Electrical and Utility Safety Association of Ontario, also known as EUSA, one of IHSA's legacy organizations.

Since its first publication in 1914, the EUSR has laid down a set of rules that are the governing principles of safe work for electrical workers who work on or near electrical distribution or transmission systems in Ontario. These workers include power line technicians, utility arborists, and high voltage electrical workers.

On today's episode of the *IHSA Safety Podcast*, we're very pleased to welcome Jeff Ellery. Jeff is part of IHSA's Power Line Apprenticeship and Training team, and also was a member of the working group that oversaw these latest revisions to the EUSR. And Jeff's here today to help us better understand why the EUSR was developed, why it's embedded in Ontario legislation, and seen as a best practice within the electrical utilities, who's involved in its evolution, what changes have been implemented starting January 1, 2024, following an extensive stakeholder consultation. So Jeff's going to cover all that with us today. So Jeff, welcome to the *IHSA Safety Podcast*. It's great to have you here.

Jeff Ellery:

Hey, Ken. Thanks for having me.

Ken Rayner:

Hey, Jeff, I would believe that many of our listeners are not aware of the historical significance of the the EUSR and their influence on today's occupational health and safety legislation in Ontario. Why was the need for a documented set of safety rules so important to the electrical utility industry back in 1914?

Jeff Ellery:

Yeah, it's a great question, Ken. 1914, obviously the early days of electricity and relatively new technology. We didn't enjoy a lot of the things that we have in place today in the sense of apprenticeship training, health and safety training, different programs like that. So 1914, we saw a high number of incidents, also a high number of workplace fatalities in the electrical utility sector.

And the book is entitled *Accident Prevention Rules*, and that's really what it was put in place to do was try and lower or eliminate as many of those accidents as possible.

Ken Rayner:

Right on. We think about that time, 1914. A stat that I've heard was, again, 1914, what's going on in the world? It's the start of the First World War in Europe. And the mortality rate in Ontario for those going out to build the network, Ontario's electrical network for power line technicians at that time was, as I understood, 50 per cent. So if you were a parent of a young 18-year-old at the time and you were thinking that, "Geez, it was like almost a coin flip," you could send your child out to help build the Ontario electrical infrastructure, and if they're a lineman that could look at a mortality rate of 50 per cent, or send your child to the First World War, I mean, it sounds like at that time it was sort of equal in terms of whether they were going to come home. And that's amazing to think about that, isn't it, Jeff?

Jeff Ellery:

Yeah, that's correct, Ken. It was about 50 per cent of the people that signed up to work into the industry were able to progress and carry on through their working career without having a serious incident or accident. But yeah, pretty difficult decision to make when you pose those two choices and looking at potential for fatality for sure.

Ken Rayner:

Wow. And the industry has come such a long way. So let's get into some of that. And interestingly enough, when this foundational document was written back in 1914, we find if you go back, there's foundational pieces that are found in our current Ontario's *Occupational Health and Safety Act* that can be attributed to arguably the very first occupational health and safety prevention document created and distributed widely in Ontario. And I think we could say that that was the EUSR. So Jeff, what were some of those foundational pieces that they decided to put him back in 1914 and we can still find them today in legislation?

Jeff Ellery:

Yeah, it's actually impressive, Ken, to see the number of things that are similar between not just the initial original accident prevention rules and today's user, but also to your point, the *Occupational Health and Safety Act*. So things like workers' rights, the right to know, the right to refuse, unsafe work, competent supervision, competent workers, requirements for PPE, and what types of personal protective equipment should be in place for this type of work. Some legislation around use of ladders and what types of ladders would be acceptable, and as well as rigging, equipment that would be used in the trade. Also interesting behind the initial rules in the accident prevention rules, they also discuss worker resuscitation and first aid, so ties into Regulation 1101 first aid as well.

Ken Rayner:

Wow. So some incredible visionaries that helped to put this document together back 110 years ago, right? Just amazing. Now we're talking about current legislation, Jeff. Where can the EUSR be found in Ontario's current occupational health and safety legislation?

Jeff Ellery:

It's referenced in two places. It's found in the Construction Projects regulation (O. Reg. 213/91), Section 81, and the Industrial Projects regulation, Section 42(2).

Ken Rayner:

All right. Let's go to the 2024 edition of the EUSR. On page 6, under "Application", it states, "The following safety rules have been designed primarily for work in the electrical utility industry. However, the rules apply equally well to any work performed on or in proximity to electrical transmission or distribution systems or apparatus." So that being said, Jeff, what are the type of companies, industries, or activities that should review the EUSR as a best practice to ensure their work is conducted as safely as possible in dealing with high voltage electricity?

Jeff Ellery:

Yeah. Well, I mean the obvious one is utility workers. It applies directly to them and is spelled out in legislation, but there are many other groups that would benefit from following these rules and the safety that these rules provide. So arborists or utility arborists is another one that comes to mind. Telecommunication workers that would find themselves working on some of the same infrastructure, same areas. We also deal with some of the manufacturing automotive industries, anyone that has some of their own distribution plant on site. Also generation. We have a number of wind solar generation facilities out there that would benefit from this legislation as well.

Ken Rayner:

Okay. Jeff, what about as of today, 2024. Who's responsible for the maintenance and revisions to the EUSR and then how often is it reviewed and revised?

Jeff Ellery:

Yeah, the user, as we know it today, is actually an amalgamation of legacy user groups. So the Electrical Utility Safety Association, and Hydro One's legislation. So at one point we had two sets of safety rules that was determined back in 2001, we would work to unify that legislation to one set of rules. So we've been working at that over the last 20 years. And at that time, it was determined to stick with a five-year revision. So how that process works is every five years, January 1, 2024, obviously this latest edition come out. 2023 involved meeting with representatives from Hydro One as well as IHSA representing industry to discuss the changes and make any required revisions.

Ken Rayner:

And what about that stakeholder engagement? As I understand, 2023 involved as well a fairly extensive stakeholder engagement across the province of Ontario. What was the process for gathering that input and feedback on any changes?

Jeff Ellery:

Yeah, there's a number of ways we try and engage industry in the revision year. So beginning early in 2023, spring of 2023, again, traveling around the province, hosting different in-person user review sessions where anyone and everyone who is responsible for following the legislation was able to come and attend and discuss any changes or potential changes or potential issues that they were having. We also, through our website, members were able to submit any questions, comments, concerns around the user. And also with our training staff out engaging firms through various training programs, an employer may wish to send an email to one of our group and pass it along that way as well.

Ken Rayner:

Okay. So lots of different avenues for changes. So I take it there were probably a significant amount of revision, so I want to get into that as well. But first, just letting people know that the 2024 edition of the EUSR is now available both in print and online from IHSA. So you can find out more if you go to the IHSA website, go to the News and Events page at the very top on the banner, click on that, and you'll find a recent news release on the EUSR and its changes. And then if you're following us on social media, on LinkedIn, on Instagram on X or Twitter or Facebook, we've been obviously notifying our membership of the changes as well and that this document is available.

So Jeff, maybe we could just talk a little bit about what were the most significant changes to this revision that's now come out of the EUSR?

Jeff Ellery:

Yeah, there's a number of changes. Some are more exciting than others, some are big, some are small. And under rule 107, we've created an addition for job planning and basically making sure that workers on site that are involved with job planning are putting their individual signatures on those documents. So one of the things we like to reinforce through our training programs is those job plans are legal documents. And just like any other legal document, it's an agreement that is binding. So making sure that workers are making their mark initial signature, which would identify that they are an understanding of what that information is and what the requirements would be. Also, one of the bigger changes under 110, which is first aid, we also now have a requirement for AEDs [automated external defibrillator] to be available for workers working in that energized electrical environment. So a requirement now for AED, so getting a lot of feedback on that one and pretty well received by industry as well.

Ken Rayner:

Any other significant changes, Jeff, that come to mind?

Jeff Ellery:

Yeah, so I mentioned it was a jointly-constructed rule book. So we do have a couple of remaining supplemental rules, which are rules that IHSA and Hydro One haven't been able to come to complete agreement on yet. So we did make some headway in rule 135, which is rubber glove work and moving the rest of the rubber glove rule requirement into the body of the rules. So now everyone across the province will follow that.

Ken Rayner:

Okay. Right on. And Jeff talking about consistency across the province, I mean, we have another system that IHSA is jointly responsible for, which is the *Utility Work Protection Code*. So that's another one where across the province we're looking at consistency, the way that's performed. How does the EUSR and the *Utility Work Protection Code*, otherwise known as the UWPC, how do those two align Jeff? Yeah,

Jeff Ellery:

So the *Utility Work Protection Code* referenced throughout the Electrical Utility Safety Rules, similar to the timeline of unifying the safety rule legislation, but also come to place that provincially we should go to one work protection code document. And that process has taken about 20 years as well. So identified throughout the EUSR, you'll find some of the same definitions, some of the same verbiage, but also training requirements, timelines referenced in there as well.

Ken Rayner:

Okay. And Jeff, so what about a listener who's now seeking a little bit of further information on the EUSR, what would you recommend for them to do?

Jeff Ellery:

Yeah, absolutely. I mean, you can hop onto IHSA's website, you can find requests for training programs. You could reach out to IHSA through that format. You could also reach out to any of the trainers that you may have coming in to deliver various training programs, and request information that way.

Ken Rayner:

Okay. So Jeff Ellery, we thank you very much for being with us to help us better understand what the EUSR is all about. As we talked about, this is arguably the first prevention document that was ever published and publicized and distributed in Ontario going back 110 years. So it's amazing to see it continuing to live and breathe and expand and evolve to be able to meet the needs of the work that we do in 2024. So Jeff, thank you very much for being a part of this today and helping us better understand the EUSR.

Jeff Ellery:

Yeah, thank you, Ken. Appreciate the opportunity.

Ken Rayner:

And thank you to the listeners for listening to the *IHSA Safety Podcast* and our podcast on the *Electrical Utility Safety Rules*. 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.

Announcer:

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