

INDUSTRY SKILLS 360 SERIES – ELECTROTECHNOLOGY WEBINAR

Webinar held: 26 March 2021

Panellists:

Larry Moore, Chair, Electrotechnology Industry Reference Committee

Noel Munkman, Member, Electrotechnology Industry Reference Committee

Paul Humphreys, Industry Skills Specialist, AIS

Paul Walsh, CEO (facilitator), AIS

Q & A with the panel

- 1. In regard to the EL units, in the assessment conditions where the evidence of the Performance Evidence requirements of the unit must be gathered in an authentic workplace operational conditions (not simulated) before final determination of competence in the unit can be made, will be removed from the assessment conditions. This statement places the RTOs in a non-compliant position to the RTO Standards to sign off competence in the units and eventually the qualification*

Paul Humphreys: Look certainly that was quite deliberate. The inserting of that in some of the units that were considered to be key to licensing of electricians. It was entirely based on ensuring that anybody who achieved an electrical licence had been required to perform those tasks within a workplace and that those units were never delivered in an entirely institutional setting in terms of trained and assessed only within an RTO facility. Certainly, there has been some feedback coming back about that requirement and the IRC are certainly listening to that feedback and at some point, we'll look at that broad base of feedback and determine whether or not any remedial action is required to address that perceived problem with some RTOs at the moment. Certainly, that requirement doesn't stop the use of logbooks, profiling or any of those types of evidence gathering methodologies to be used to gather that evidence in authentic workplace circumstances.

Larry Moore: Maybe I can contribute a little bit to this because this was certainly a serious and long debate for many months about this. But the underlying principle from us unanimously from the IRC membership was that we do not want institutionalized training for electrical workers in this country and that was the underlying principle. But we did acknowledge that there may be difficulties in relation to on-the-job assessment with the way the assessment process is structured and that certainly, we would be more than willing to look at that and make changes if necessary. But not changing the underlying principle of what we were trying to achieve with these as we want true competency-based training.

Noel Munkman: I just might add to that, I think there's a lot of discussion about where that line would be. Which particular unit should we collect workplace evidence, which one's not, whether we've got that exactly the right point. Time will tell us, and we can make adjustments with that.

2. Why is there a refrigeration unit in the Electrotechnology Cert II?

Noel Munkman: I might take that one. I assume that's the Electro Cert II (career start) which is a pre-voc course if you wanted a bit of a term. So, it's there as a refrigeration elective unit, not a core unit in that qualification, so that people doing career start if you like, a pre-vocational course can get a taste of what refrigeration is about. I know it's widely used in TAFE SA as an introduction to the electrotechnology industry and from that people can pick up an apprenticeship. It helps them pick up an apprenticeship in refrigeration air conditioning or electrical or other electrotechnology trades, so it's simply an elective.

3. In regard to the pre-requisite chains in the units, when will they be revised to make sure that the pre-requisite units are in the actual qualification, particularly the core units. As there are many qualifications where the pre-requisite units do not appear in the qualification.

Paul Humphreys: I can take that one. We would need to receive some feedback on where that's actually apparent because it's certainly not something that I'm aware of, particularly with core units. Certainly, with some of the imported units there's some issues with prerequisites not being packaged because those prerequisites no longer exist. But we're not aware of anywhere where there's prerequisites of core units not packaged. So, I suppose I'd welcome some direct contact about that, and we'll endeavour to fix it.

Larry Moore: Well just to comment on that I think it's this is also a very, very long and serious debate amongst the IRC particularly between the refrigeration air conditioning members and the electrical members. And you'll find that in the in the qualifications for refrigeration air conditioning, much of those prerequisites have now disappeared and it was because of delivery issues with the RTOs, but that's not the way it is in the electrical.

Noel Munkman: If there's a problem they need to be fixed. It certainly shouldn't be happening anywhere; all the core prerequisites should be there.

4. The Refrigeration industry is now part of the electrotechnology industry group, however there is no requirement or training of electrical units and any installers require a licence if they need to install new or do any alteration additions or repairs. They also require as a minimum a disconnect/reconnect restricted electrical licence to disconnect existing systems or replace a like for like system and connect up to existing cabling if compliant. Is there scope for the refrigeration trade to undertake an additional licence to allow Cert 3 refrigeration techs, or even make it part of a Cert 4 to be able to install a new circuit and gain an additional licence? Basically, make it legal and provide training and framework to allow them to do what so many A/C techs are already doing.

Noel Munkman: Okay I might start with that one. The current Certificate III and Certificate III for the last 20 years has contained disconnect reconnect and electrical fault-finding units so

they can get the state-based restricted electrical license so they can carry out that work when it comes to installation. Though that is work of a qualified electrician so there's no restricted national restricted electrical license for the installation of cabling and electrical equipment. That is simply the role of a licensed electrician, so the current licensing arrangements are that to do that work you need a Certificate III in Electrical trades. So, the only way to get that license is to go and do some gap training from the refrigeration air conditioning Cert III to the Cert III in Electrical. it's a licensing issue not a training issue, I think.

Larry Moore: Yeah, I might just add to that. There are some obviously varying conditions in each jurisdiction. You'll find that the South Australian restricted license for refrigeration mechanics is a fair bit broader than what it is in other jurisdictions but again, and I'm talking about split systems now, but yes, I would agree with the concept of looking at that. The simple matter of fact is refrigeration mechanics are doing that work right across the country.

5. *Most UEE post trade courses, such as UEE40420, UEE40920, UEE50420, UEE62220 require FULL completion of UEE30820 (or an Electrician's Licence) to enrol. I don't believe this meets the needs of industry by not allowing apprentices to enrol. Apprentices in their 4th year as a specific example have typically always used this time to start their post trade courses. All employers I have spoken to, would like their apprentices to be able to enrol in post trade courses. (as long as they follow and meet unit pre-requisite requirements). What specific industry consultation was made when adding this course entry requirement?*

Paul Humphreys: You want me to start on that one? So essentially the driver, largely, for introducing the entry requirement (and look I think I'm answering the following question here at the same time, the one from Tony Palladino that follows it because they're both on the same theme), the driver was to remove the nesting which nesting just simply isn't supported by the standards for Training Packages and there's no ambiguity in that in terms of the policy makers. However, in saying that, as I've mentioned before, we're just about to start to look at with the Cert IV Rail Signalling. It appears in some instances people would like to be able to start to complete a certificate before they have completed, well certainly before they've obtained a license or before they've completed the Certificate III qualification. So, we can certainly look at how that entry requirement can be better articulated to facilitate that pathway, given that essentially those people, by the time they are in as suggested their fourth year, will have completed the core that was previously nested within that qualification. And so, I think we just need to look at a more sophisticated way to articulate that entry requirement. The feedback we received throughout, and look these qualifications were certainly circulated for public consultation and no concerns along those lines were raised at that time. Obviously, as happens with lots of the instances of public consultation, it's not until something's published that the realities of what's happened become apparent. But certainly, the clear direction or the clear advice that we received throughout that process was that any of those qualifications that had the Certificate III core nested in them were intended as post-trade qualifications and hence establishing the trade qualification as an entry requirement. So, it was done on that basis.

Noel Munkman: I might just add that certainly there is an issue about people in their fourth year wanting to do post-trade. It should be encouraged so they continue their learning, finish they're on their off the job training in the third year and then start some post trade training at fourth year which is a great idea and keeps them in the training system. But the problem with

the nesting was that a Cert IV had something like 1200 hours of training and they're trying to get funding for that. And people to realize that they've already done 900 hours of the 1000 hours of it in their Cert III. This creates confusion in the industry about, well what am I actually doing, I'm going back to square one again. So, there's good reasons for removing the nesting. It's just the implementation of it so as Paul said we need to change the wording to somehow permit those in their final year in the apprenticeship to start that Cert IV training, even if they can't complete it until they finish their Cert III, but least start it.

Larry Moore: Yeah entirely.

6. *Nesting is needed for Certificate IV qualifications if we want higher level qualification apprenticeships in the industry. Is anyone aware of this issue? How can we have a Cert IV apprenticeship if the content is not nested (that is the CIII nested within the IV)? You cannot write the apprenticeship training order for Cert IV if the entry is Cert III.*

Answered above.

7. *Will the recording of this session be shared with the participants?*

Paul: the session will be available on the AIS website.

Over the last 20 years I have continually heard how units will be revised, modernised or created YET it's still the same rubbish copied and pasted with a new number but less knowledge, skill and delivery information.

Larry Moore: Maybe I can make a comment on that Paul, because I had to appear before the AISC on a number of occasions to explain why we hadn't completed the (particularly cert III qualifications) in the time that they demanded by, given that we were held back by about 12 months to try and get an IRC in place. What actually happened in the end was we made a firm decision that our target was to transition to the new training standards, new templates and that's what our focus was on. If we could if we could change a few things here and there easily that we did that but in general, we actually transitioned the 11 packages to the 20. And that was what our focus was, because of the time constraints and the need to get it done in the time demanded by the AISC and the department.

Noel Munkman: But I might add too that there is now a separate document for the assessment requirements which is a lot clearer than the old template was so there was an improvement. And the knowledge and skills were split into knowledge evidence and performance evidence so that is a big improvement to the units. Maybe we didn't get it all right in particular units and we need to know about that. But I know the refrigeration air conditioning units were looked at very closely and the electrical ones to do with licensing were very detailed as far as making sure they're aligned to the license requirements. So, depending on the units some were looked at in a lot of detail, but others obviously were not.

8. *What will be done about the UEE62120 - Advanced Diploma of Engineering Technology - Electrical where 3 units require authentic workplace evidence and drawn from the Cert III electrician's qualifications. UEEEL0008- Evaluate and modify low voltage heating equipment and controls; UEEEL0009- Evaluate and modify low voltage lighting circuits, equipment and controls; and UEEEL0010- Evaluate and modify low voltage socket outlets*

circuits. Learners in this qualification will never get authentic workplace evidence as it was designed as a primarily institutional qualification. Need to change the units - make new units as the knowledge and skills is required. What will be done about this qualification as TAFE can no longer enrol anyone in this qualification.

Paul Humphreys: Look I can have a shot at that and then Larry and Noel can jump in if they if they feel it appropriate. Yes, the three units need to be replaced with units that don't achieve an electrical licence. If the person is never going to work as an electrician and is going to do a direct entry advanced diploma in electrotechnology, they really shouldn't be anywhere near units that achieve an electrician's licence. And so those units need to be replaced within that qualification and probably should never have been there.

9. Computer Systems Engineering: The IRC is proposing to review and update the Advanced Diploma of Computer Systems Engineering to reflect current industry work practices, technologies, and regulatory requirements. Could you please elaborate?

Paul Humphreys: that project was identified during transition by the Technical Advisory Committee that was supporting transition of that content, who pretty much said the content of that qualification was just way out of date. And unfortunately, when we were doing the transition of UEE11 to UEE it was simply as a previous comment suggested, in many instances it was a straight cut and paste that was what the project was about it wasn't about reviewing. And so, there was a commitment made to as soon as the transition was completed that we would undertake a review of that qualification, so that will involve forming a Technical Advisory Committee, having a decent look at what's currently in the qualification. Seeing if that aligns to current practice of people who undertake the work covered by that qualification and then updating as required. So, and i suppose that goes back to what I was talking about earlier with the review of some of the other streams, determining if changes need to be made within individual units. Determining if there's any new units need to be developed. Determine if there's any units there that just are no longer required because they cover practices that are now out of date and reviewing the packaging rules of the qualification to make sure that it best reflects the vocation of somebody doing that work.

10. In regard to the performance evidence requirements of the EL units, I agree with the intent of this requirement, but many apprentices are not going to meet all the performance evidence requirements on the job. Several units are well suited to this approach but some of them need to be revisited to enable ALL Apprentices ability to achieve the qualification

Paul Humphreys: I don't know that i could add any more than was said earlier that that we're open to any feedback that describes what barriers those requirements might actually be causing and working out a solution to rectify that, if that is indeed the case.

11. What is the process for electricians to get the Mechanical Services Licence from QBCC? What additional qualifications or units are required?

Noel Munkman: Okay so that's a Queensland licensing issue., Electricians get licensed through another body, but the QBC is about building work and so there's a refrigeration air conditioning license in Queensland. It requires a Certificate III in refrigeration air conditioning, just like the national refrigerant handling license does if you like. So, they need to enrol in the

Certificate III in refrigeration air conditioning and get recognition of prior learning for their electrical background and industry experience and complete the Certificate III It's the only way. Apart from small split systems you don't need a QBC license to install a single head split system under the value of three thousand dollars.

12. Will a copy of this webinar be provided to ASQA so they are aware of the intent of wording especially with regards to the use of e- profiling to be used to cover off non simulated environment within assessment, as they will ask how we as the RTO assessed that when we have not observed it ourselves?

Paul Walsh: I'd suggest that whether ASQA thought that this webinar was enough for them to go on is probably debatable. I think that where necessary we're always open. We've got a great relationship with ASQA around the way these things are interpreted, where they need to be explored further. So, I would suggest that if that's an issue we're happy to make contact with ASQA within our remit. We can't direct ASQA they ultimately make the decisions on how they regulate but equally they also do contact us from time to time to confirm the intent if there's any chance that it could be ambiguous or misunderstood. So, there's certainly that connection. I don't know if any of the panel want to add to that.

Paul Humphreys: The only thing I'd add is if you point them to page 48 of the companion volume implementation guide, it's certainly noted in there, that it's a recommended solution to meeting that assessment requirement.

13. The Renewable Energy industry is rapidly changing - the Aust Standards EL42 committee is now constantly meeting to keep the standards in line with industry needs, but the training package does not have the same flexibility. A voluntary RE TAC used to meet every 6 months but this was changed by the government 4 years ago. How can we prevent the RE units/quals constantly lagging industry requirements with the current processes for development work?

Paul Humphreys: Well, I suppose I'd make two comments about that. We are just about to begin review work on those renewable energy qualifications. Certainly, I'd suggest that once we call for expressions of interest for that Technical Advisory Committee, that you get involved. Hopefully there can be some additional recommendations come out of that technical advisory committee about how we make sure that materials get kept current in future. Certainly, there's moves happening at an IRC level to include a member of the Clean Energy Council on the IRC and hopefully that will be successful at some stage. But as I say I think there's an ample opportunity in the program to work about renewable energy, to at least make a start on making sure that stuff is up to date and then determining how that can be best kept up to date in the future.

Larry Moore: Yeah, Paul maybe I'll just add that as I've said earlier that there's significant future work focusing on renewables. Not only the renewable itself but also the side effects, [such as] the new metering requirements out of EMAC. So, there's a lot of energy going into that. I'd suggest that when we get started on this, the more people who can assist the better.

14. Given the focus on transitioning to the UEE20 was around the standards template, will there be a review in the near future?

Paul said there will be continued renewed work. Please check on the engagement hub

15. Old Cert II Electro (Career Start) uee22011 = 360 units. New uee22020 = 410 units. The extra hours needed makes it very difficult to organize and timetable VET, VCE, VCAL students. Waiting to hear from High Schools and Secondary schools/Colleges to see what hours their students will be made available to complete this new requirement.

Noel Munkman: Well, I'm just thinking it's obviously talking about the weighting points not units. And points some people relate them directly to hours. They're not related directly to hours so it's up to the state funding and how they fund that course. They say it is a 420-hour course or whether they allocate those points to a lower number of hours. So, I know if you directly relate points to hours, it certainly has increased. But that may or may not be the case depending on the funding arrangement in that particular state. But if there's a problem, again provide some details and we'll have a look in detail.

16. We have several 4th year apprentices that are now caught in the middle unable to get any further at present to the point of now doing 'online training' via other states to try and achieve further subject completion for Cert IV + qualifications. These students have either now dropped out altogether or began work towards the degree. There is now becoming quite a degree of separation in the pathways, which is difficult for employers to help support.

Larry Moore: Yeah, it seems to me that may be related to the delivery on offer from various training organisations, which we're experiencing great difficulties in South Australia. I may be related to that, I don't know how you fix that though.

Noel Munkman: Yeah, in other words the RTOs around the country are state government funded and funding is being poured into trade courses and the post trade has been neglected for funding. And that's happening across the electrotechnology sector and particularly the refrigeration area and electrical area.