



CURRAGH CASE STUDY



MANAGING STATUTORY ELECTRICAL COMPLIANCE WITH REDEYEDMS

Wesfarmers Curragh is one of Australia's largest independent coal mines, producing export metallurgical and domestic steaming coal, via an extensive network of fixed, mobile, and field infrastructure.

PROBLEM

After decades of brownfield installations, equipment overhauls, and capital projects, the Engineering & Planning team onsite realised there were significant operational risks associated with the accuracy of their engineering drawings, especially within the electrical discipline.

"I have a statutory responsibility to all personnel onsite to ensure engineering drawings are controlled, marked up, and updated," said Electrical Engineering Manager (EEM) Alex Kavanagh.

"We have dozens of electrical sub-stations across site, containing thousands of drawings. Every day our staff, contractors, and consultants rely on the accuracy of these drawings to safely conduct maintenance, and efficiently complete upgrade projects."

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SOLUTION

Wesfarmers Curragh recognised that they needed a solution that was going to offer more than just a one-off audit, or drawing update campaign. They needed to understand and improve their drawing management lifecycle, and look at how they could invest in a solution that would guarantee accuracy both now, and into the future.



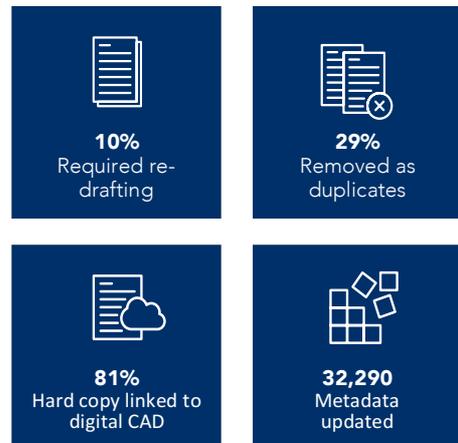
RedEyeDMS has given us the tools we need to take control of our engineering drawings; now, and into the future.

“When you view an engineering drawing as a live document, that is regularly and consistently being updated, you realise the underlying critical tool is your drawing change management process. Without a simple and repeatable process in place, any money you invest in audits or re-drafting is wasted – you’ll be back where you started in eighteen months,” said Senior Electrical Engineer Robert Penm.

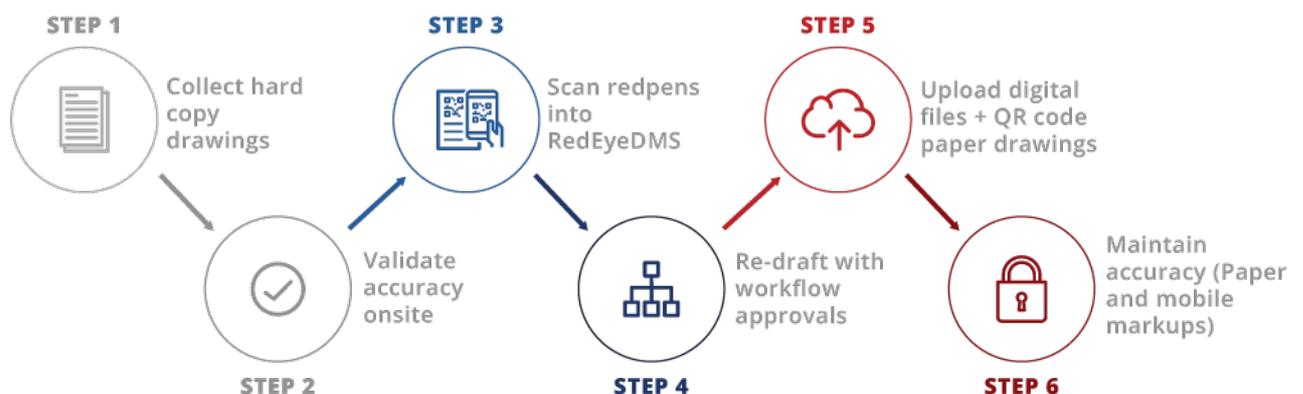


Wesfarmers Curragh identified the following requirements to ensure compliance while making the process simple for everyone involved:

- **Single Source Of Truth:** all existing hard copies required be linking to available digital versions (CAD + PDF) to improve markup efficiency
- **Searchability:** all drawings required to have accurate metadata within RedEyeDMS, ensuring they can be found in the future
- **Re-drafting:** all existing red-line markups required to be black-lined along with a review of drawing accuracy against physical equipment
- **Future-Proof:** Wesfarmers Curragh required confidence that markups would be captured in the future, and staff could seamlessly transition between hard copy collections and it's identical digital twin within RedEyeDMS



A Proof of Concept (POC) was conducted collaboratively between Wesfarmers Curragh, RedEye, and Waterline Projects (a specialist electrical engineering consultancy), across two critical sub-stations onsite.



THE SUCCESS

Using the tools available within RedEyeDMS, Wesfarmers Curragh were able to make the following improvements:

- 81% of hard copy drawings were linked with native files (i.e. AutoCAD) Curragh had available, significantly reducing the ongoing cost of re-drafting
- 10% of drawings now have red-line markups, meaning they were identified as not current to the physical equipment
- Over 32,000 new searchable metadata fields were added improving accuracy and searchability

All 389 drawings were printed (on long-life monsoon paper), with RedEyeDMS watermarks and QR codes. This replaces the previous non-controlled versions. A further 1,200 drawings associated with these areas have been collated, updated, and are readily available digitally within RedEyeDMS.

“This has been a significant win for Wesfarmers Curragh – in my twenty-year career, I’ve never seen a site update as many drawings that quickly, or be in such an ideal position to manage them into the future,” remarked Tom Hare, Engineering Manager at Waterline Projects.

“*As an electrical engineer, I now have the tools to search for relevant drawings, share them with our contractors and electricians, and manage their revision history as changes occur in the field.*”

THE JOURNEY FORWARD

An eighteen-month plan has been put in place to update and improve all hard copy electrical drawings onsite. With both RedEye and Waterline Projects operating on a fixed-cost monthly service fee, Wesfarmers Curragh can confidently prioritise sub-stations to improve, and accurately forecast costs and labour.

“As this project continues, our staff and contractors will gain confidence in our engineering drawings, and recognise that this is a long-term solution for controlling and managing markups. Not only are my statutory obligations being met, we are reducing business risk and improving productivity onsite,” concludes Mr Kavanagh

KEY LESSONS

- 1** Collaboration between consultants, internal staff, and vendors is critical to ensure long-term success. RedEyeDMS enables effective collaboration between parties
- 2** Wesfarmers Curragh now have controls in place to capture and execute red-line markups into the future:
 - A.** All hard copies have been replaced with controlled versions (QR Codes printed on them linking to the digital version)
 - B.** A corresponding digital Group mirrors every hard-copy folder, markups now occur digitally – via mobile apps or web browser

