

Exposed edge tree brings down live overhead power line

What happened?

A one-day powerline shutdown had been arranged to install power line infrastructure to enable a subsequent 3-week shutdown organised to allow timber harvesting adjacent to a section of 11kV powerline running through a timber harvesting coupe. The harvesting team used the one day shutdown to cut through a section of the



red zone to create a access route under the power line to clear the amber zone on the other side. The 3-week shutdown was planned to commence 2 weeks later.

Although the area was relatively sheltered, three days later, during high winds, an exposed edge tree fell and brought down the overhead powerline. No injury occurred and no one was working in the vicinity at the time. The Network Operators response team attended the fault, repaired and re-energised the line.

A site meeting took place with the Harvesting Team and the Network Operator, the remaining standing trees were assessed as low risk.

As an additional control all onsite personnel were briefed on the incident and all work in the immediate area was suspended until the planned shutdown commenced. No further trees fell during this period.

What can we learn?

Ensure you contact your regional Network Operator sufficiently in advance of proposed work, to maximise the time for the safest and most efficient powerline shutdown arrangement to be planned and organised.

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Created by, Scottish Woodlands Compliance Support Team



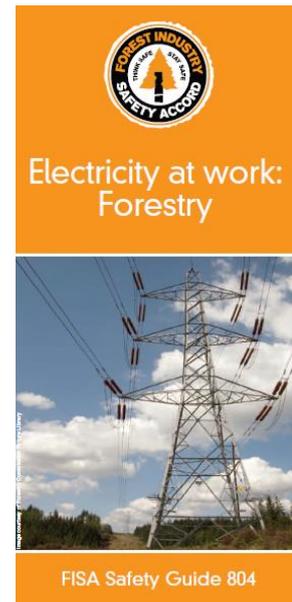
Power line shut down arrangement to enable forestry works, in terms of scheduling, timings and durations, should always look to balance

- electrical supply disruption, which itself carries human health and safety risks,
- and the direct operational risk to human safety, related to work in the proximity of live powerlines

to a level which both parties, the Network Operator and the Harvesting Team, believe and agree to be 'as low as is reasonably practical' for the site-specific circumstances.

Safety should always take precedence over resourcing issues, from both the Network Operator and the Harvesting Team.

The FISA Safety Guide '**804 Electricity at work: Forestry**' sets out the industry standards for planning and undertaking all forestry works within proximity to power lines.



Scottish Woodlands Guidance Note **2.02 Planning overhead power line crossings** gives additional information on the planning and management of power line crossing points.

Where reasonably practical, remove both the red and amber zone trees during the power line shutdown

If you are cutting an access route through standing trees within falling distance of overhead powerline, ensure, where possible; that the ground is well drained, level and firm, ensure it is brashed-up enough during the shutdown to take the expected volume of machinery as there may not be possible you use a timber crane within the vicinity if the power line until the line is shut-down again- as well as providing stability for the machines, the brush mat will also help to protect the retained trees from damage or root compaction.

Undertake an assessment of the trees that you intend to retain, consider removing hung-up and leaning trees, suppressed whips, trees looking diseased or damaged, and trees sitting in poorly drained areas. Bear in mind, removing more trees will not necessarily make it safer, as it may reduce the overall crop wind stability and increase the likelihood of the remaining trees falling during high winds and the power line being struck.

Regularly check the condition of the retained tree edge, particularly after periods of high wind. Monitor weather forecasts and the site conditions daily, if wind speed picks up suspend work in the area. See the Company Guidance Note **3.11 High Wind as an Operational Constraint**.

SSEN are making available forestry specific machine window stickers advising machine operators of what to do if a machine comes into contact with live overhead power lines. Scottish Woodlands have received a supply of these and will be distributing them locally. If you have not received any, contact you local Scottish Woodlands Manager.



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