

Struck By – Heavy Equipment

Struck-by is the term for the various injuries that occur when workers are hit—or struck—by equipment or vehicles. Strike hazards from heavy equipment are significant risks in NCC T&D's substation construction and transmission line operations. Special attention is required when operating equipment at any NCC T&D workplaces.

NCC T&D Project Leaders Key Responsibilities

Project Leaders must ensure:

- Development of written traffic protection plans, Human Machine Interface Plan (HMI), etc.
- Implementation of reverse operation procedures
- Proper signaller training and assignment
- Clear communication protocols
- Overhead powerline safety procedures
- Equipment inspection programs
- Emergency response planning

Vehicle and Equipment Requirements

All equipment must have:

- Functioning backup alarms
- Proper warning devices
- Visibility aids (mirrors, cameras)
- Clear identification markings
- Proper maintenance records (preventive and periodic maintenance)
- Proximity detection systems where required
- Emergency shutdown capability (if applicable as per vehicle/equipment manufacturer design)

Signaller/Flagmen Requirements

Qualified signallers must:

- Be competent and trained
- Wear high-visibility clothing
- Focus solely on signalling duties
- Maintain clear communication
- Know powerline clearances
- Understand emergency procedures
- Document daily activities

Special Considerations

Additional requirements include:

- Minimum approach distances to powerlines
- Specific procedures for energized areas
- Grounding requirements
- Emergency shutdown protocols
- Coordination with electrical operations
- Weather condition monitoring
- Clear communication systems

Safe Work Procedures

Mandatory practices:

- Minimize reverse operations
- Use designated travel paths
- Maintain proper clearances
- Follow communication protocols
- Respect warning signs/barriers
- Report hazardous conditions
- Monitor weather impacts



Training Requirements

Workers must know:

- Hand signals and communication protocols
- Minimum approach distances
- Emergency procedures
- Equipment blind spots
- Traffic protection plans
- Warning system operations
- Reporting procedures

Documentation Requirements

Maintain records of:

- Traffic protection plans
- Signaller training
- Equipment inspections
- Near-miss reports
- Incident investigations
- Daily pre-use checks
- Operator qualifications

Key Takeaways

- Reverse operations must be minimized
- Signallers/Flagmen are mandatory when required
- Clear communication is essential
- Powerline safety is critical
- Training must be documented
- Regular inspections required
- Emergency procedures must be known

For more information, refer to NCC T&D's relevant IMS procedures or consult our HSE Department for expert guidance and training resources.

