



National Equipment Defect Reporting Scheme (NEDeRS)

J Clendon, AM Forum 2017



NEDeRS

NEDeRS - National Equipment Defect Reporting System

ENA UK runs the NEDeRS® which gives its subscribers access to an international database of some 47,000 reports from service providers and industrial users on electrical equipment defects from manufacturers worldwide.

The EEA administer the system and provide support and advice for its users in NZ.



Purpose

combine experience of users regarding Defects to enable appropriate action be taken to:

1. Prevent further dangerous conditions arising
2. Prevent further failures from the Defect
3. Identify the most cost-effective remedial measures
4. Identify necessary amendments to existing preventative measures or maintenance procedures
5. Keep standardisation bodies and manufacturers informed about features of existing designs which have caused problems



Dangerous Incident (DIN)

A dangerous incident is one where the incident resulted in or could have resulted in a fatality or serious injury with an item of plant.

Suspension of Operational Practice (SOP)

A notification of a company-specific suspension/change in some operational practice or procedure with an item of plant, for example, circuit breakers to be operated from a remote location or access restrictions around plant items.

National Equipment Defect Report (NEDeR)

A notification of a design defect or in service problems/faults with plant items.

Defect

A potential DIN or NEDeR which is recorded for reference purposes. These are not circulated.



What NEDeRS useful for?

- **Safety:** Keep up to date with DIN and SOP reports to be aware of hazards that may arise from existing equipment for workers and the public
- **Asset Management:** understanding problem areas, failure modes and possible preventative measures
- **End of life:** Find out when equipment of a certain era is beginning to fail
- **Procurement:** get independent information on how well new equipment is performing



Advanced search criteria including:

- Reporting company
- Manufacturer group
- Manufacturer
- Cause
- Equipment
- Equipment Type
- Voltage group
- system voltage
- Insulation/interruption medium
- Failure component
- Operating Environment



Further Developments...

- Many organisations have signed up, but some are not using the service as much as they could. How can the EEA help?
- **Vincent Hay**, who runs NEDeRS for ENA UK, will be coming to NZ later in the year. There may be an opportunity to set up a **user group meeting**
- Develop **reporting** on failure trends for certain equipment types. NZ industry could petition for further analysis of NEDeRS data for members.



Questions, comments or feedback?



Entry Page

The screenshot shows the NEDeRS website interface. At the top, there is a navigation bar with the NEDeRS logo and menu items: Home, Submit Incident Data, Browse Incidents, Knowledge Base, Post a message, and Help. A user login option 'Mr T Test Log In' is visible on the right. The main content area is divided into two sections. On the left is the 'Bulletin Board' featuring a message from 'Mr B Pentecost (ENA)' dated 12/07/2016. On the right is the 'Latest incidents' section, which contains a table of incident reports. A blue callout box points to the 'Post a message' menu item, another points to the 'Bulletin Board' message, and a third points to the 'Latest incidents' table.

Messages from NEDeRS admin or other Users

Drop down menu bar

Details of the last incidents posted

Reference	Equipment	Details	Date
NEDER 2016/0830/00	Circuit Breaker - Hawkgas HG36 - Hawker Siddeley	During routine outage electrical switching activities, evidence of partial discharge activity was identified on the circuit and busbar bushings on the Hawker Siddeley HG36 33kV SF6 Gas Circuit Breaker truck. There were also signs of overheating and carbon deposits on the same truck. Following this observation, the corresponding busbar and circuit spouts on the fixed portion of the switchgear were inspected. This inspection revealed signs of significant arcing between the corona rings and the ins	01/11/2016
NEDER 2016/0830/01	Circuit Breaker - DV Compact Form C - Whipp & Bourne	During planned outage maintenance on the Whipp and Bourne DVC 11kV Circuit Breaker, it was identified that the drive linkage for the on/off indicator was not operating when the switchgear was operated. Upon closer inspection it was identified that the pin connecting the drive link to the drive arm (mounted on the drive shaft), had sheared, rendering the on/off indicator inoperable.	01/11/2016

Interest Profile

NEDeRS[®] v.5
The National Equipment
Defect Reporting Scheme

Home

ena
energy networks
association

View/Modify Interest Profile Create/Add to Interest Profile Interest Profile Matches

Individual items of equipment/plant	
Circuit Breaker - CMP-V - Ormazabal	REMOVE
Circuit Breaker - CPG.0-C - Ormazabal	REMOVE
Circuit Breaker - CPG.0-L - Ormazabal	REMOVE

Voltage Group(s)

>36 KV	REMOVE
--------	--------

⌘ Delete Profile

🗉 Help!

☰ Menu

Select what you want the scheme to notify you about

Profile choices displayed for future reference

Remove criteria if your needs change

Advanced Search menu

NEDeRS[®] v 6 Home **ena**
energy networks
association

Basic Search **Advanced Search** Search Results

Return Incident Type(s) DIN SOP NEDER Defect Return latest update only

General search

Serial Number

Issue date

Reporting company group

Reporting company
24seven Utility Services Ltd
ABB Utility Services
Actemium

Manufacturer group

Manufacturer
** All Manufacturers **
** unspecified **

Use as many of these fields as you need

Search Results

NEDeRS[®] v.6 The National Equipment Defect Reporting Scheme Home **ena** energy networks association

Basic Search Advanced Search Search Results

Showing 1 - 14 of 14 incidents Results Per Page ▾

Help Menu Download (CSV) Download (Excel)

Type	Reference	Date Issued	Reporting Company	Equipment	Manufacturer	Description	View	Soft Copy
DIN	2016/0008/01	7 Jul 2016	Electricity North West	RMU - RN6c - Schneider Electric	Schneider Electric	During pre-commissioning, Switch 1 appeared to be stuck in the open position on 7/12/2015. It was not reset until 17/12/2015. It was then closed and it was noted that the top of the switch was not reset. It was noted that the top of the switch was not reset.	VIEW	ZIP
DIN	2014/0003/00	27 Jan 2014	SP PowerSystems Ltd	RMU - RN6c - Schneider Electric	Schneider Electric	Disruptive failure reported to be within RMU. The cause of the failure is still to be confirmed but it is suspected that the closing of the RMU failed. The cause of the failure is still to be confirmed but it is suspected that the closing of the RMU failed.	VIEW	ZIP
DIN	2012/0051/01	27 Sep 2013	SP PowerSystems Ltd	RMU - RN6c - Schneider Electric	Schneider Electric	Disruptive failure reported to be within RMU. The cause of the failure is still to be confirmed but it is suspected that the closing of the RMU failed. The cause of the failure is still to be confirmed but it is suspected that the closing of the RMU failed.	VIEW	ZIP
DIN	2013/0035/00	24 Jul 2013	Scottish & Southern Energy	RMU - RN6c - Schneider Electric	Schneider Electric	Disruptive failure reported to be within RMU. The cause of the failure is still to be confirmed but it is suspected that the closing of the RMU failed. The cause of the failure is still to be confirmed but it is suspected that the closing of the RMU failed.	VIEW	ZIP
DIN	2008/0020/01	17 Jul 2008	Scottish & Southern Energy	RMU - RN6c - Schneider Electric	Schneider Electric	Disruptive failure reported to be within RMU. The cause of the failure is still to be confirmed but it is suspected that the closing of the RMU failed. The cause of the failure is still to be confirmed but it is suspected that the closing of the RMU failed.	VIEW	ZIP

Sort results

View or download a copy

Sign Ups

Electronet/Westpower

Horizon Energy

WEL Networks

Wellington Electricity

Powerco

Orion

Northpower

Unison

PowerNet

PowerNet

Delta Networks

Mainpower

Marlborough Lines

EA Networks

Counties Power

TOP Energy

The Lines Company

Network Tasman

Alpine Energy

Electra

Eastland Network

Waipa

Network Waitaki

Centralines

Scanpower

Nelson Electricity

Buller Electricity

Vector

Transpower

Meridian Energy

Mighty River Power

Contact Energy

Genesis Energy

Trustpower

