Bird protection on Medium Voltage Overhead Network Poles

www.BirdProtection.info

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The parties:

• Electrical utility companies
  
  ![RWE](image)
  ![EnBW](image)
  ![e.on](image)
  ![EDF](image)

• Bird protection associations

=> Versus…or rather with?
How to get from Versus to With?

✓ Offering discussions & willingness to listen (both parties)

✓ Importance of PR value (at electrical utilities)

✓ Financial support (to electrical utilities)

✓ Personal interest:
  • Bird protection activist getting knowledge in electrical distribution industry
  • Electrical engineer getting knowledge in bird protection specifics.

✓ Coordination with repair and retrofit projects (at electrical utilities)

✓ Available products offering ADVANTAGE instead of asking for COMPROMISE
Reality: Bird electrocutions on MV networks
The right commitment

More and more players in Hungary (Manufacturers, R&D companies, Electrical companies) believe that there must exist solutions that satisfy both the network owners and the bird protection associations.

Yes, there ARE!
Dilemma: See-through network or bird protection?

It might be difficult to choose:

- Being able to perform visual inspection from the ground

OR

- Increase bird safety by covering the insulators?

Compromise is needed from the network owner!
By covering the crossarms the number of bird electrocution didn’t decrease considerably. Moreover, many of such covers fell off.
The first trial insulator covers

Still many defects.

Uncovered points:

Shortened creepage distance
There ARE good solutions!

The goal is to offer products to network owners that decrease bird-mortality WITHOUT asking to make compromises!
MBR® Insulator covering system
(MBR-1, MBR-1H, MBR-2)

Cover for single insulator

Extension piece

No more uncovered points

Cover for DOUBLE insulator
Wing spacers

Protection on tension poles by using wing spacers
Bird rest

The bird rest offers a safe place for the birds around open pole mounted disconnectors.
Bird-safe connections

Using Live Line Connectors and Covered MV cables the connection between two lines is bird-safe yet disconnectable.
Hybrid arrangement crossarm

- Respects safety distances set by network owners and bird protection associations
- Middle phase on standing insulator, side phases on hanging insulators.
- Maw weight of one element: 6 kgs. No need for crane to install.
- Bird rest installed to avoid bird excrement to deteriorate insulator or connections.
- Mounting using holes in „Y” direction: old crossarm is dismounted only after installation of new crossarm is done.
- Answering an existing need of the utilities for flexible network AND bird-safety… *without compromise*
Full-Hanging arrangement crossarm

- Respects safety distances set by network owners and bird protection associations.
- All phases on hanging insulators.
- Maw weight of one element: 6 kgs. No need for crane to install.
- Bird rest installed to avoid bird excrement to deteriorate insulator or connection.
- Mounting using holes in “Y” direction: old crossarm is dismounted only after installation of new crossarm is done.
- Answering an existing need of the utilities for flexible network AND bird-safety... **without compromise**
Result:

Over 5000 poles are bird-safe by now

Over 30 000 poles are planned to be made bird-safe
SOLUTIONS, TOGETHER!

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