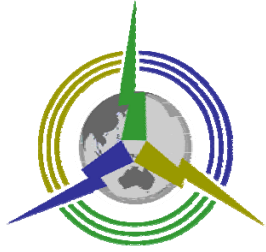


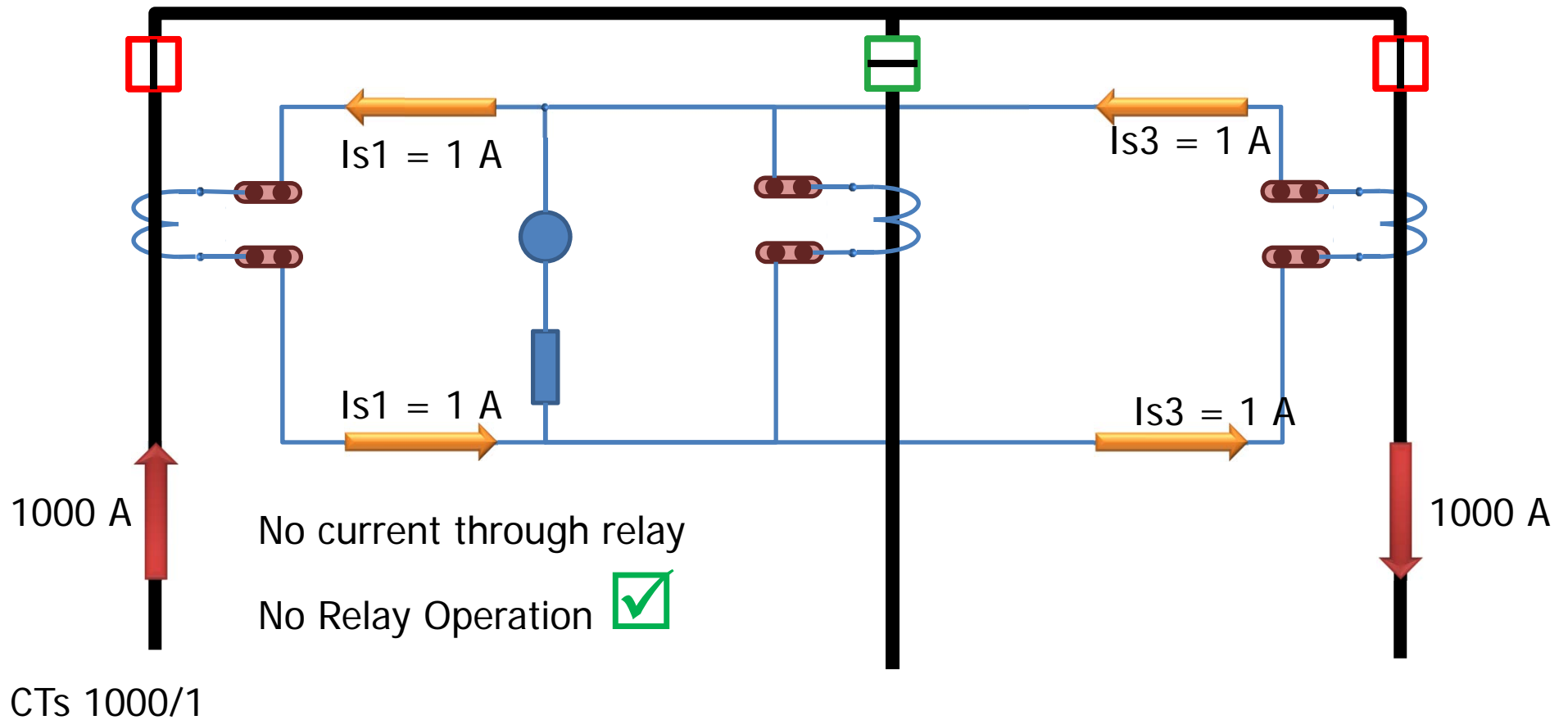
# High Impedance Bus Bar protection Correct **SAFE** CT Isolation Sequence Short-then-Open

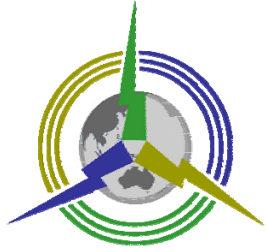
E-mail: [rgh@rodhughesconsulting.com](mailto:rgh@rodhughesconsulting.com)  
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# Circulating Current Merz-Price High Impedance Differential

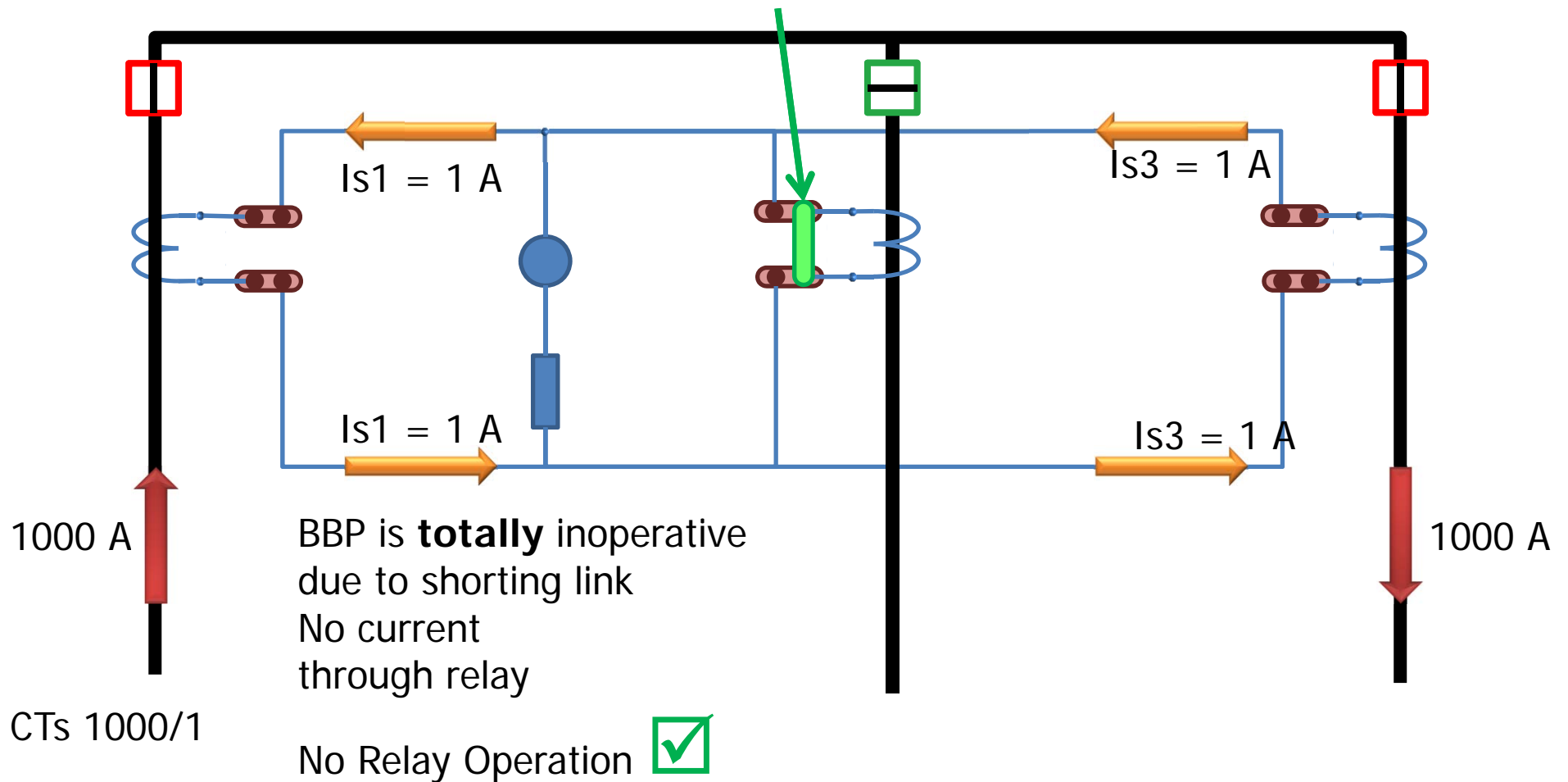


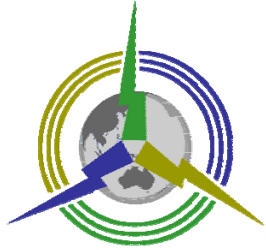


# Work on Bay 2

## Step 1

### Short CT side of links

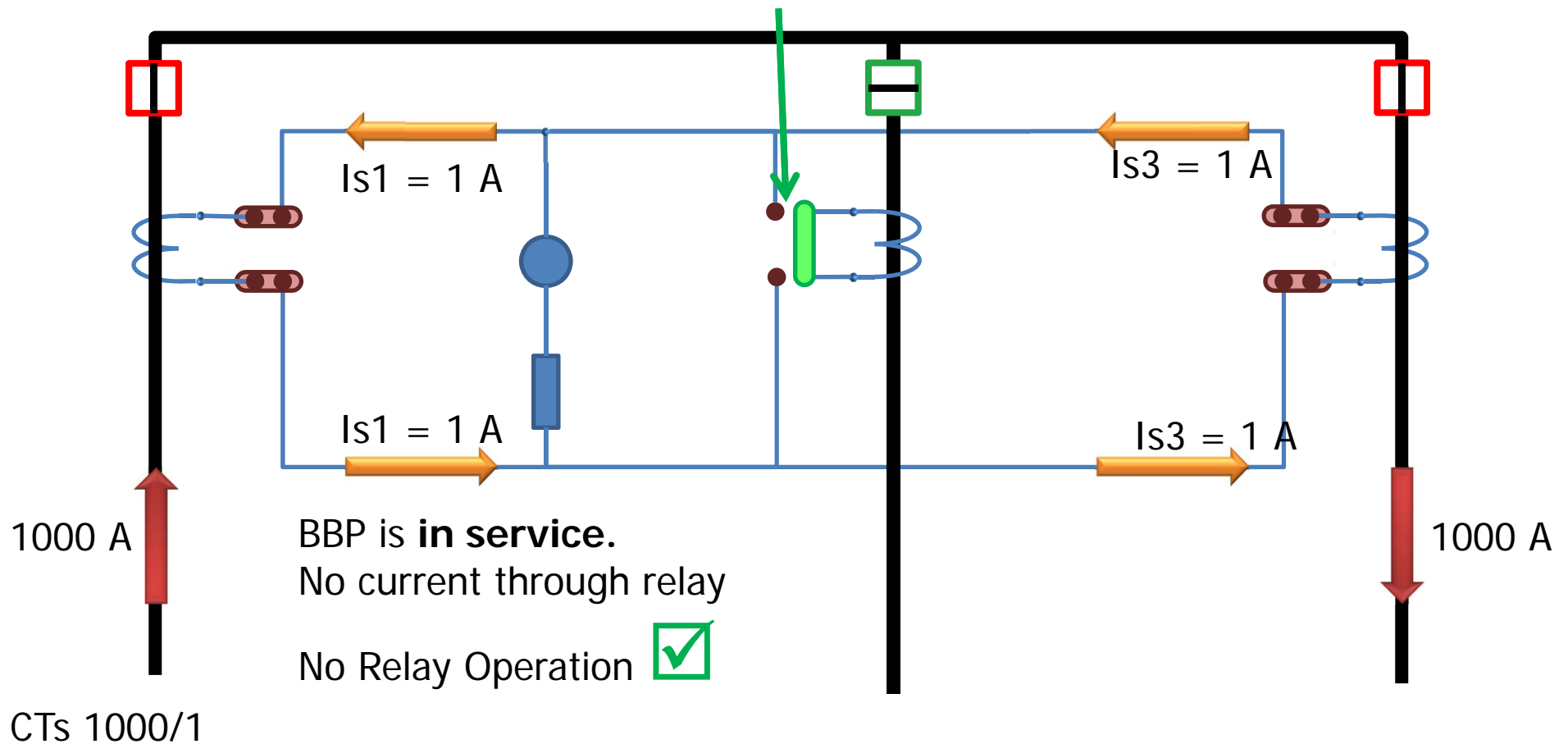


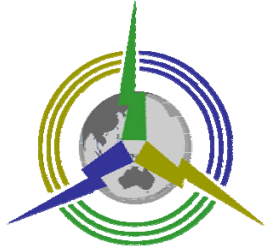


# Work on Bay 2

## Step 2

### Open relay-side of links

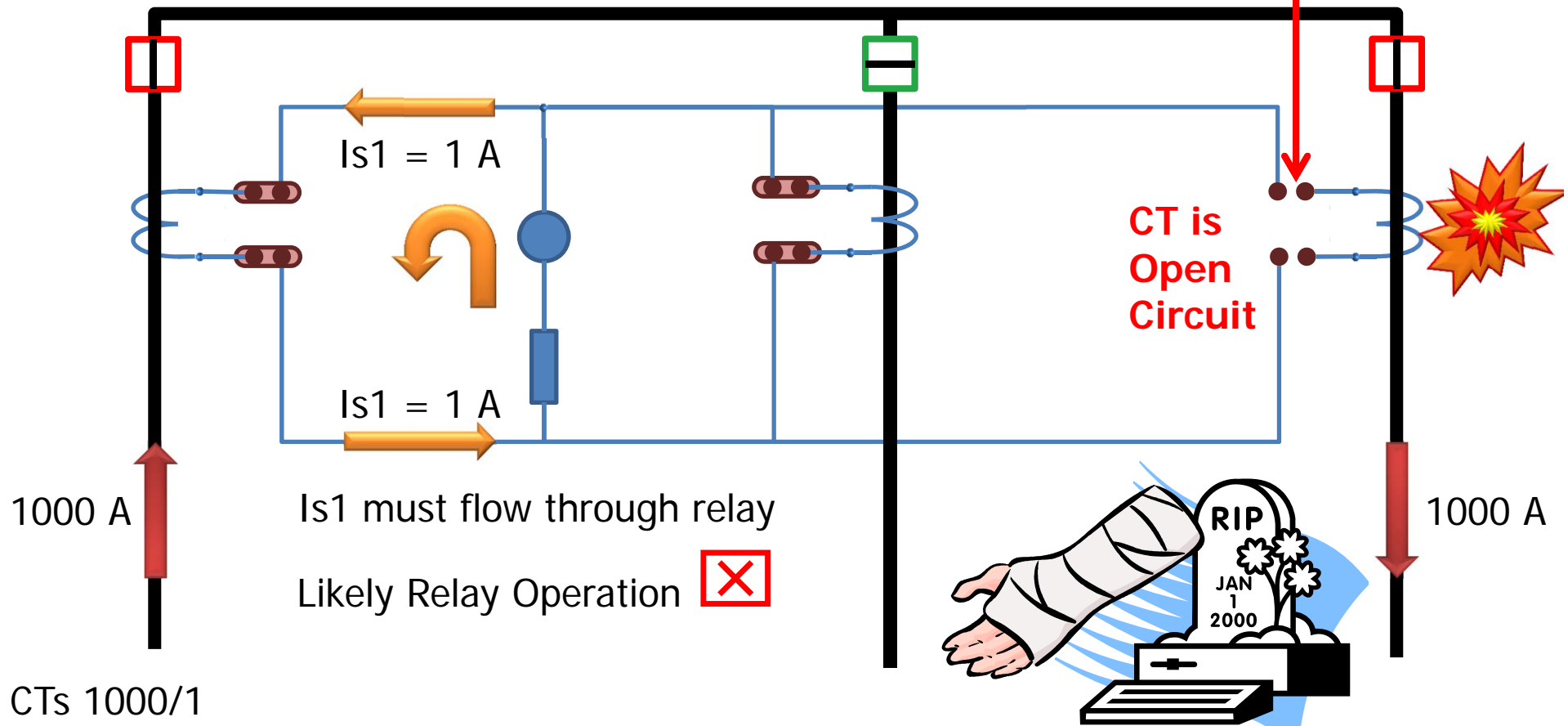




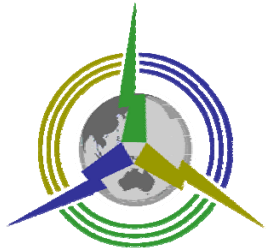
# Mistake: Wrong Feeder

## Wrong Step 1

### Open relay-side of links



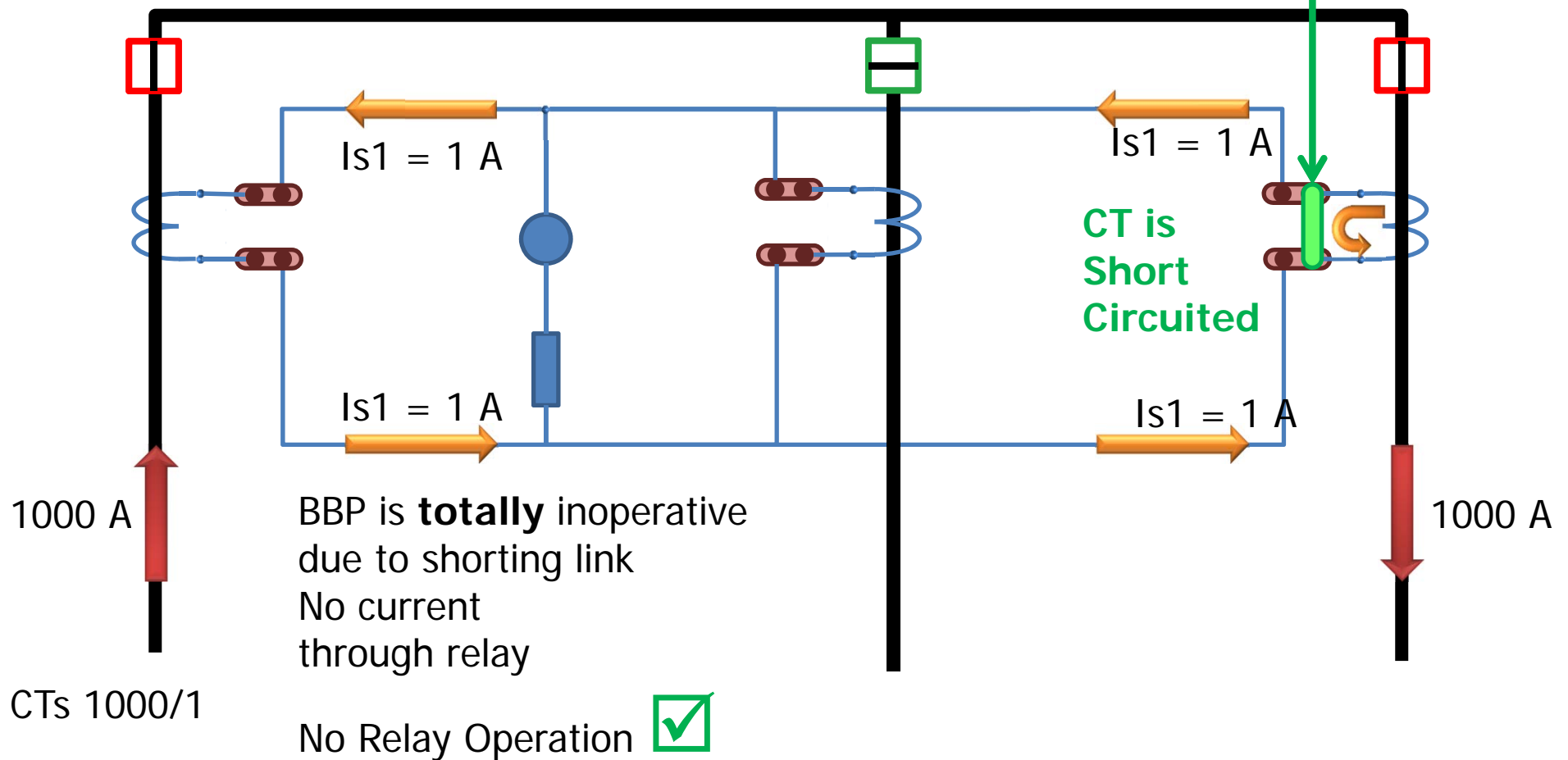
**CT Flashover / Explosion: Potential Injury or Death ❌❌❌**

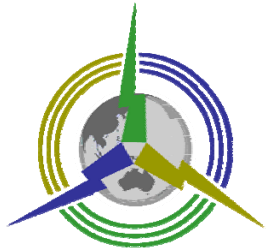


# Mistake: Wrong Feeder

## Right Step 1

### Short CT side of links

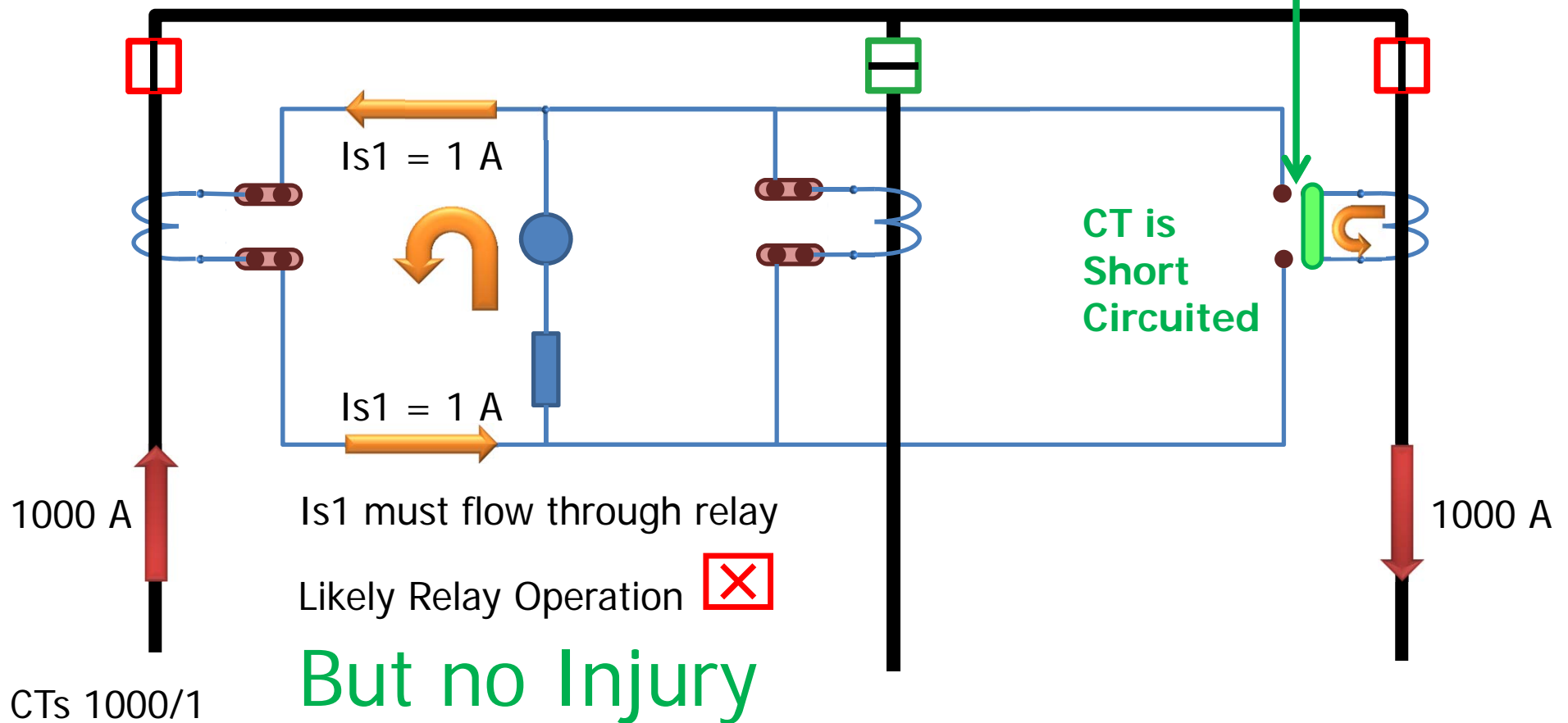




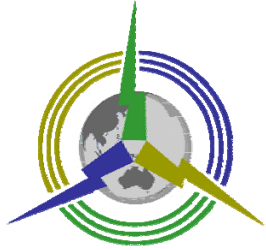
# Mistake: Wrong Feeder

## Right Step 2

### Open Relay-side of links



But no Injury  
or Death ✅✅✅



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- IEC 61850 and associated standards
- Automation & Control
- Protection design 11kV to 500kV
- Training
- Cyber Security
- Smart Grid and Smart Metering
- Telecommunications
- Substation LAN

