Team 10: Safe Switch





Problem

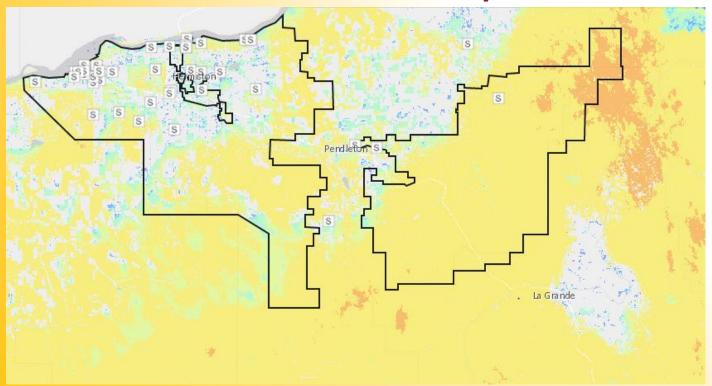
Wildfires are dangerous for society and can be started by electrical power distribution faults. These faults can be caused by tree limbs on power lines, broken poles, or wildlife. In dry weather conditions, the potential for fire with a fault increases.



Solution

We propose a system to reduce the risk of starting a fire. We will be working with Umatilla Electric Cooperative(UEC) to integrate daily fire risk into how they control reclosers on electrical power distribution lines.

UEC Service Area Fire Risk Map



Yellow areas have medium risk for fire, while red areas are high risk.



Recloser

Recloser settings determine how long electrical power distribution try to reactivate power when a fault occurs. The longer the system spends trying to reactivate power, the greater the risk of fire.



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