

The VERDE Analytic Module

Disclosure Number

201102554

Technology Summary

Presented is a methodology for estimating the spatial distribution of electric power outage areas and affected population. The first part is a directional nearest-neighbor approach that acquires grid cells representing spatial customer locations based on the capacity of each substation and cell demand. The second part allocates border cells to two or more substations subject to the distance of the cell-of-interest from each substation, available substation capacity, and cell topology. The quantitative comparisons illustrate a valuable emergency-response resource to better predict impacts from infrastructure disruptions.

Inventor

OMITAOMU, OLUFEMI A

Computational Sciences & Engineering Div

Licensing Contact

SIMS, DAVID L

UT-Battelle, LLC

Oak Ridge National Laboratory

Rm 124C, Bldg 4500N, MS: 6196

1 Bethel Valley Road

Oak Ridge, TN 37831

Office Phone: (865) 241-3808

E-mail: SIMSDL@ORNL.GOV

Note: The technology described above is an early stage opportunity. Licensing rights to this intellectual property may be limited or unavailable. Patent applications directed towards this invention may not have been filed with any patent office.