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Rural Area Microgrid Implementation Repository (RAMIR): A tool for Integrating Economic, Environmental, and Societal Aspects of Microgrid Systems Implementation

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Objective
To improve the process flow of microgrid installation and create an open source web space for those interested in the electrification of rural areas. Ideally, individuals intending to install microgrids use RAMIR as a supplemental tool for researching.

Methods
This tool promotes knowledge sharing and increases the efficiency of efforts to research and implement microgrid systems. A representation of the over-arching flow is presented below.

Supplemental Testing
Additional testing is conducted through a Decision Making Tool (DMT) where extended cases from HOMER are loaded to RAMIR and simulations are utilized by other microgrid designers and implementers.

Results
The intention of RAMIR is to create a space where people can freely collaborate and share knowledge of microgrid projects for rural areas. Website access is to include reading through the works of others and having the ability to upload relevant content for their own projects.

Future Work
In the near future a new capability will be added to allow RAMIR users to fill out fields to submit to the above tables. The tables will be downloaded and viewed using common spreadsheet software.

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