



# Grid Game – Resilience Demo

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# Introduction

- Grid game is developed by Timothy R McJunkin from Idaho National Laboratory.
- Grid game started as a simple Microgrid Simulator that modeled the frequency variations of a microgrid with some inertia.
- Developed for classroom demonstration and conducted as a game competition at different venues.
- Grid game uses Real power/frequency swing equation based simulation driven by publicly available load/generation information.
- Grid game is developed in LabView platform and currently available with local pc installation.
- Grid game is available for free at [www.gridgame.org](http://www.gridgame.org).



# Grid Game

- The primary goal of the game is to stabilize the frequency of the microgrid.
- Increase your score by maximizing with the amount of power delivered to the customers.
- Make sure to protect your microgrid from any Cyber vulnerabilities.
- Before you join the game
  - Make sure you installed the game on your windows PC.
  - Install LabView Runtime engine (2015 – 32 bit version).
- Follow the Installation instructions provided beforehand.
- Game will start with a trial round followed by an actual 30-minute game event.

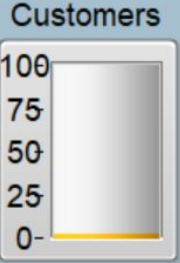
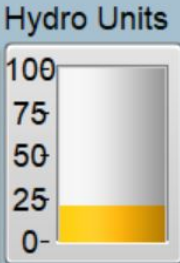
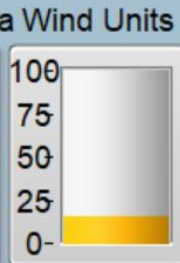
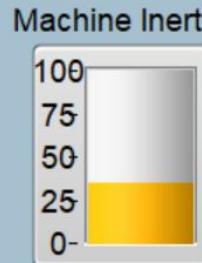
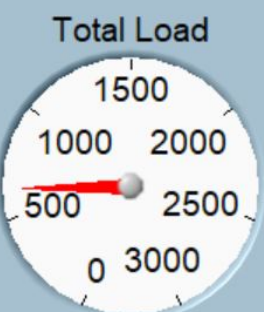
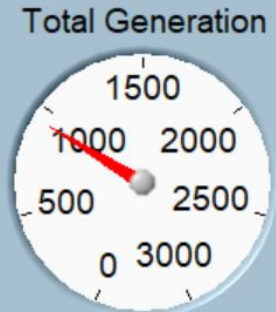
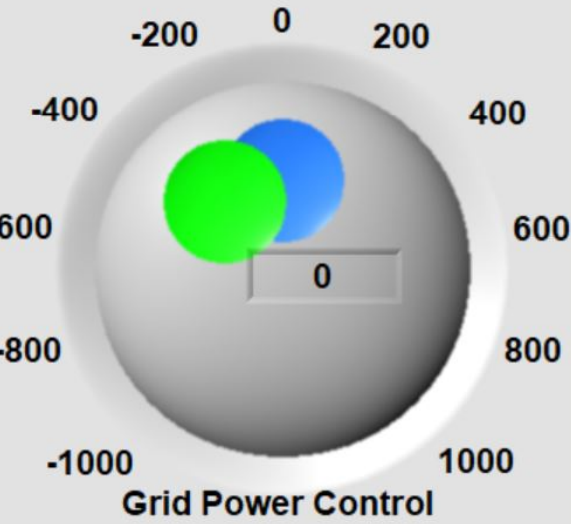
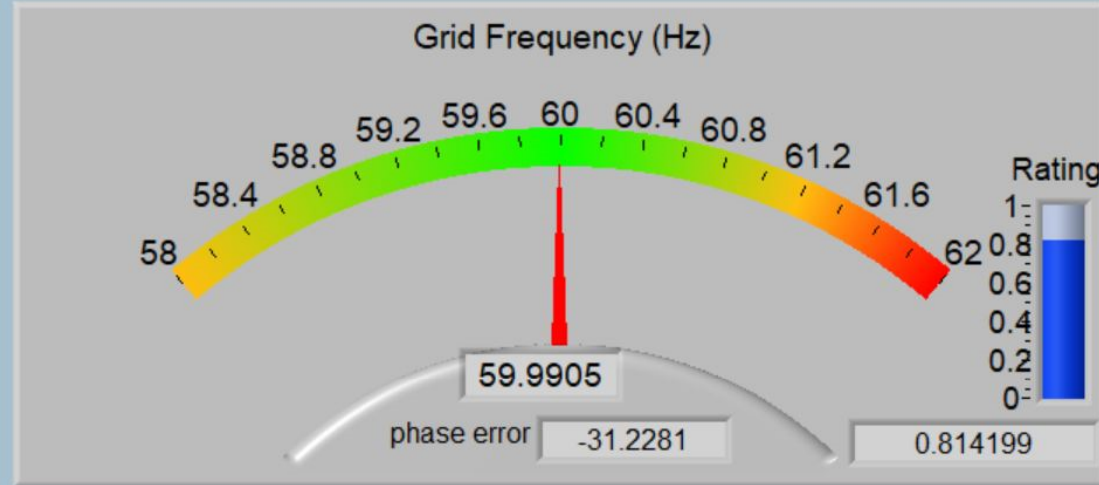
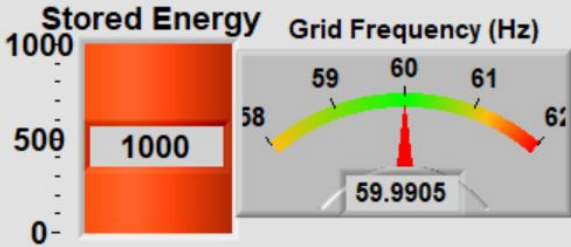


Score(\$) 12705.6

Elapse Time

144

Main Monitor Generation/Load Details Resources Security Monitor Scores



Automatic Control  
Main: 100, Sum: 10, Rat: 1  
ON

Energy Delivered: 28.9434

Net Cost (\$): -10000

Wasted Energy: 4.01287