Power Assisted Quadcycle & Generation Optimization Spreadsheet

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Project Goals and Deliverables

**PAQ**

**Goal:** Add effective biometric and collision avoidance systems to enhance the safety and functionality of the Power Assisted Quadcycle

**Deliverables:**
- Ultrasonic sensor system
- LabVIEW program to analyze sensor output
- Mechanical brake system that is controlled by program outputs
- Biometric sensor system
- LabVIEW program to process sensor output
- Displayable biometric information

**Generation Optimization**

**Goal:** Deliver a program to recommend the optimal generation source for the needed location.

**Deliverables:**
- Excel Spreadsheet
- Generation Source Recommendation
- Comparison of all generation sources
Heart Monitor

PAQ

NI MyRIO

Designed Biometric Software

Arrhythmia Detection

Biometric Warning Signal

Ultrasonic Range Finder

Collision Avoidance Program (LabVIEW)

CAS Warning Signal

Buzzer

Mechanical Braking System