Battery Storage Project Updates

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Sustainability

Completed Projects

HHS Building

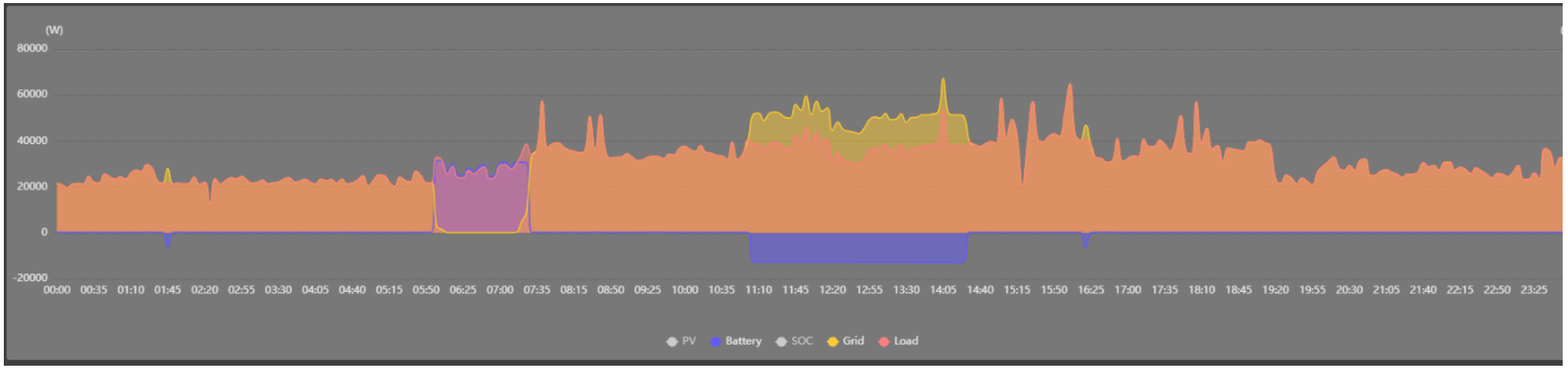
Public Safety Training Center



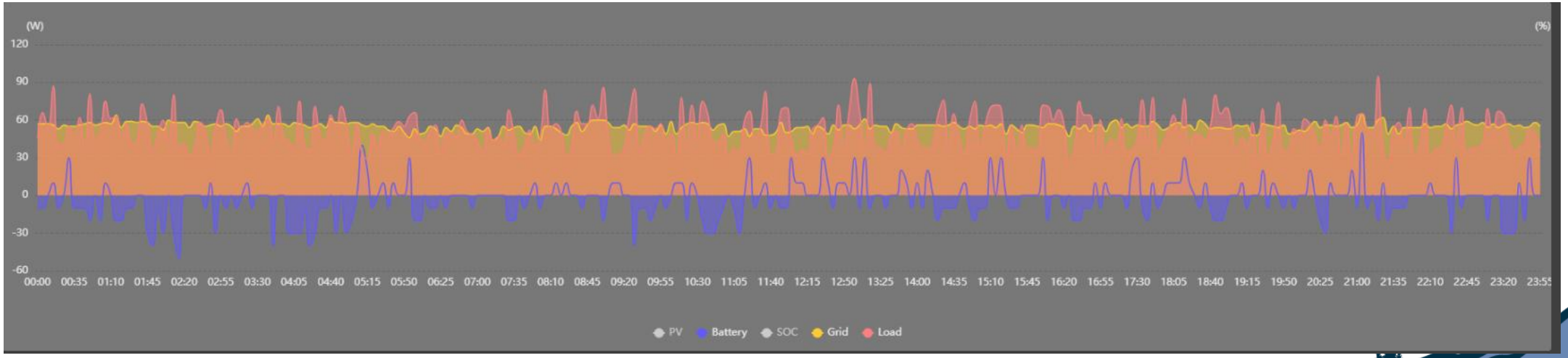


Battery Cycling

Time of Use- 40 Coxe

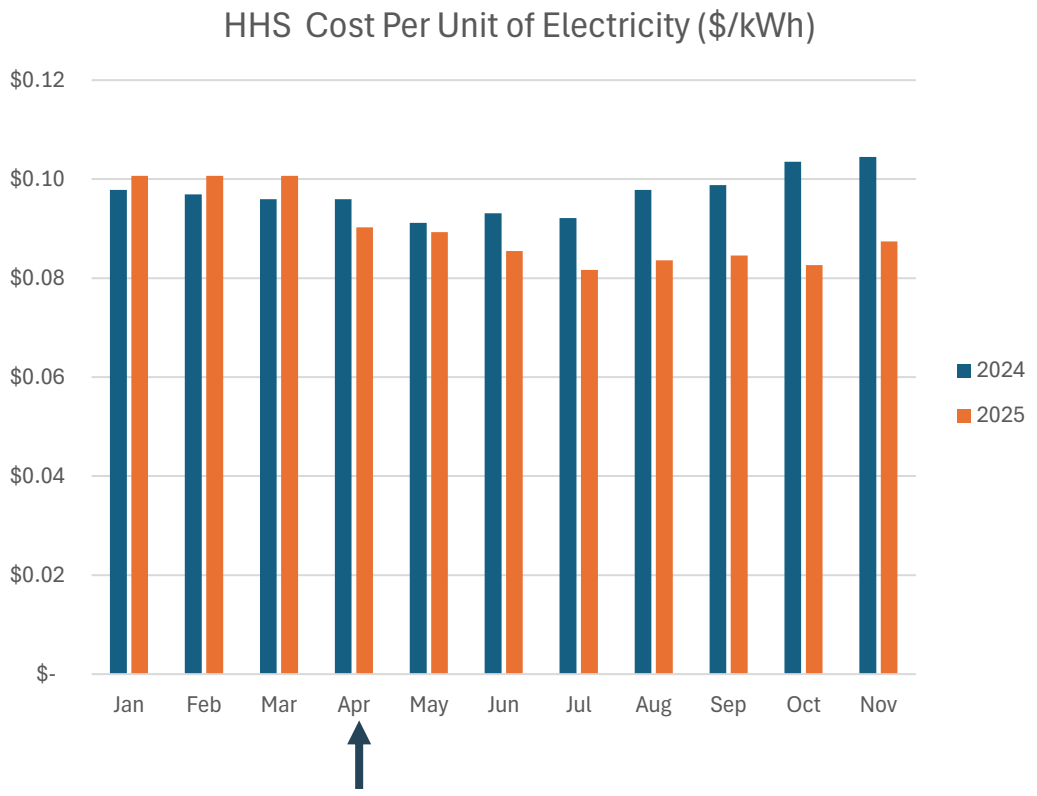


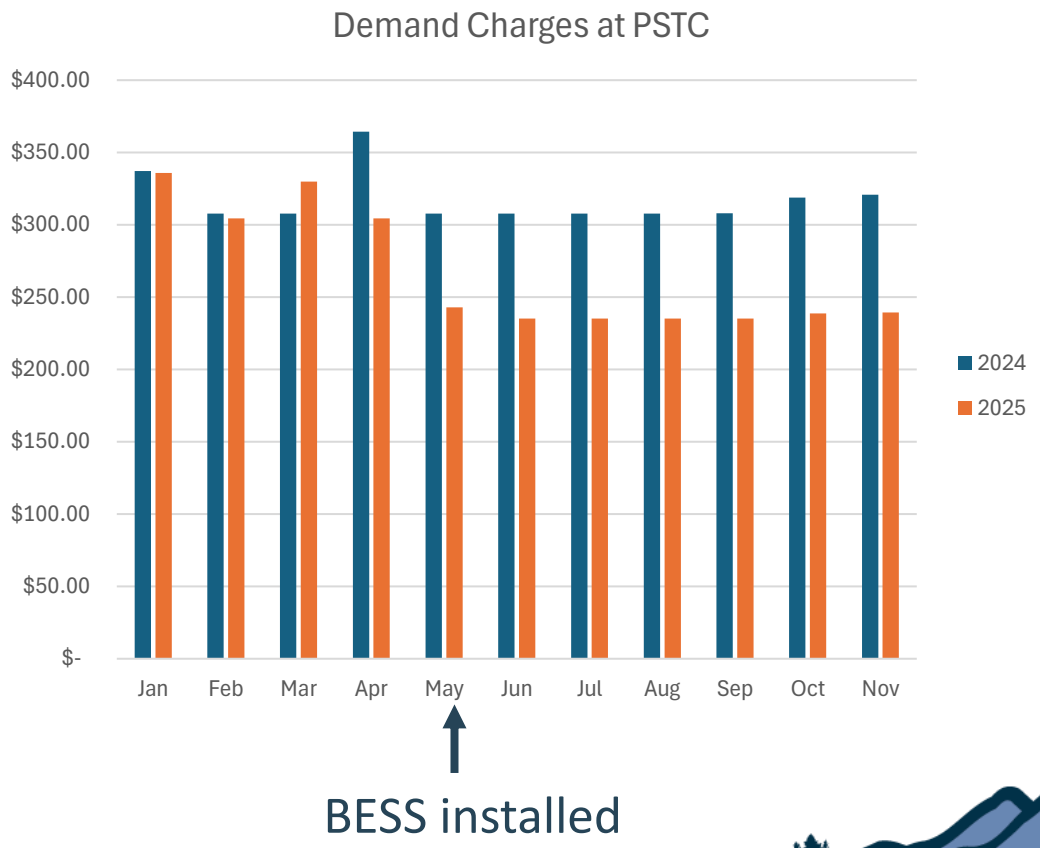
Peak Shaving- PSTC



Cost Avoidance

- Total budget: $150,000
- EECBG funding: $80,700
- Anticipated federal tax credits: $45,000
- Anticipated ROI: 2 years





Project Economics

- Total budget: $150,000
- EECBG funding: $80,700
- Anticipated federal tax credits: $45,000
- Anticipated ROI: 2 years

Upcoming Projects

Big Ivy Community Center
35 Woodfin
East Asheville Library

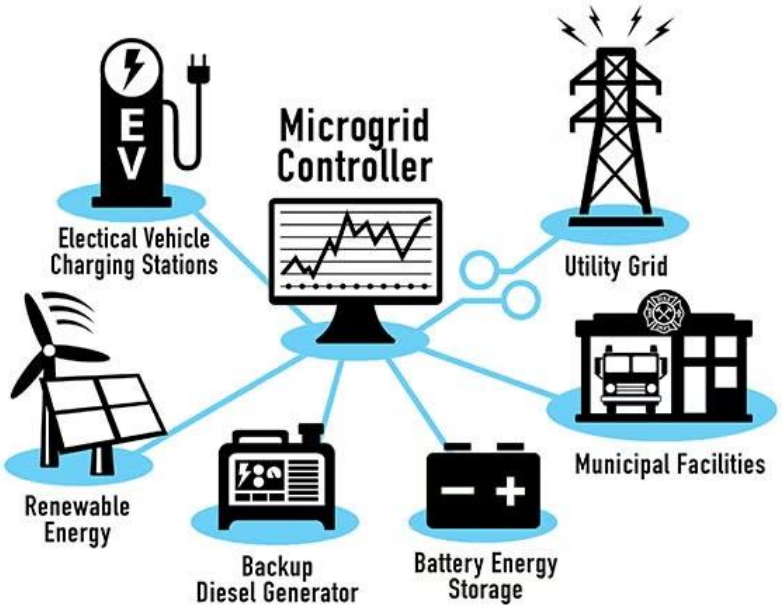






Overall Strategy

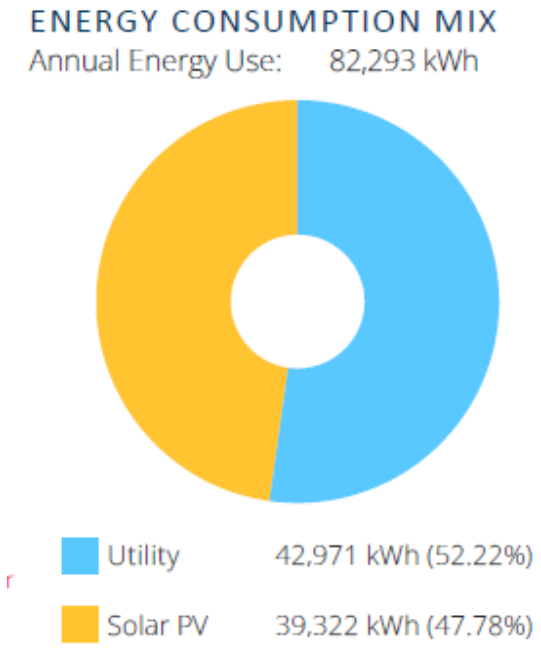
- End goal: Achieve energy resilience and maximize renewables through redundant power sources and customizable controls
- Project scope: Solar PV, battery storage, generators, microgrid controllers, operation/ optimization
- Approach:
  - Conduct initial design/ engineering
  - Divide overall vision into phases
    - Each a functional system with immediate benefit
    - Enhance flexibility for funding



Big Ivy Community Center

- Phase 1:
  - Estimated annual cost savings: $4,294
  - Solar PV size: 38.7 kW-DC
  - Battery capacity: 60 kWh
  - Partners:
    - Sugar Hollow- solar installer
    - McKim and Creed- design engineer
    - Solar Equity- funder
- Future goals (pending funding)
  - Generator
  - Additional battery storage





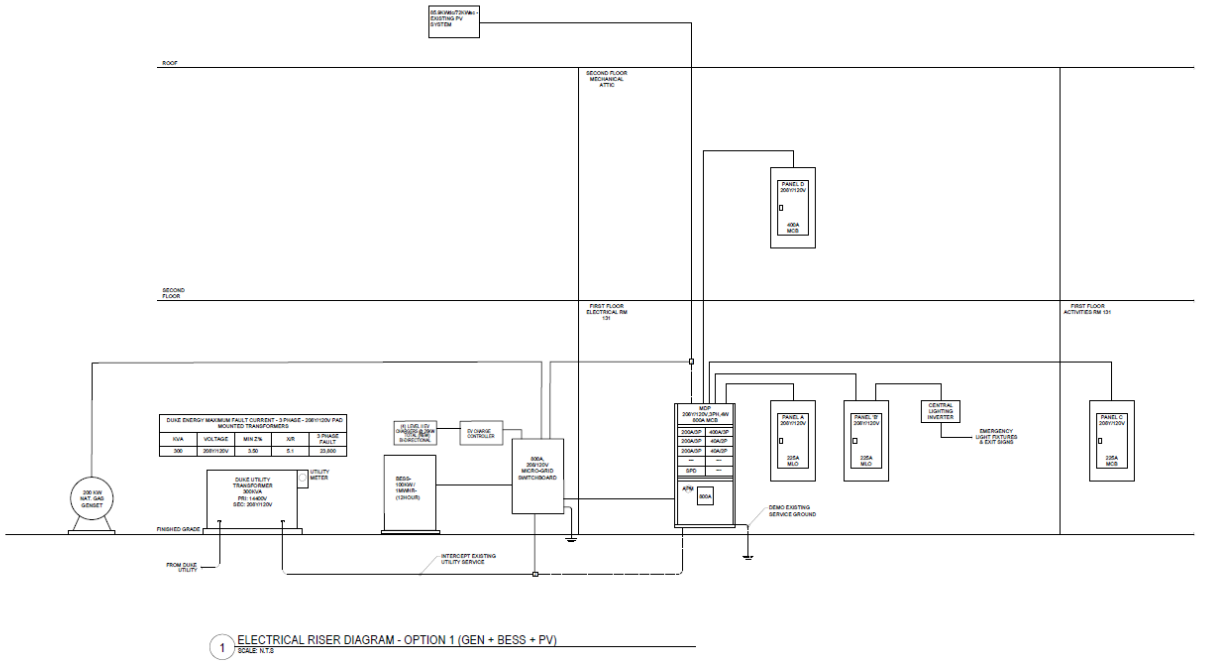
35 Woodfin

- Phase 1:
  - ~180 kWh BESS
  - Partners:
    - McKim and Creed- design engineer
    - NC DEQ- Administrator of NC EECBG funds
  - Next steps: Complete design and issue RFP for installation
- Future goals (pending funding)
  - Natural gas generator
  - 264 kW-AC additional solar
  - Microgrid controller



East Asheville Library

- Phase I:
  - Partners
    - Land of Sky and Footprint Project- funder and program administrator
    - Battery capacity: 120 kWh
  - Next steps: Program administrators review RFP responses and award design contract
- Future goals (pending funding)
  - Generator
  - Additional battery storage
  - Microgrid controller



Discussion