



**RESILIENCE:
REPARATIVE,
RESTORATIVE**

EQUITABLE
APPROACHES TO
PROJECT DEVELOPMENT

RESILIENCE: THE VISION

MOVE AWAY FROM LONG TRANSMISSION LINES AND
CENTRALIZED POWER PLANTS BURNING EXTRACTED,
POLLUTING FUELS AND TOWARDS AN EQUITABLE,
DISTRIBUTED SYSTEM THAT COMBINES LOCAL ENERGY
STORAGE WITH RENEWABLES. BEAUTIFUL!

SYSTEMS PRODUCE OUTCOMES ACCORDING TO THE VALUES ON WHICH THEY ARE FOUNDED.

The outcomes of our legacy energy system are clear. As the NAACP has [highlighted](#):

- 68 percent of Black and African-American individuals live within 30 miles of a coal plant and are twice as likely to die from asthma than white Americans.
- Only 1.1 percent of those employed in the energy industry are Black, while Black households comprise more than half of those paying 10 percent or more of their entire income to keep the lights on.
- Black and Latino households [pay almost three times as much](#) for energy as higher income and white households.

DO JUSTICE

- Revolutionize our Values
- Connect value with values
 - Organization
 - Economics
 - Process
 - Project
- Transform the System



UTOPIA

DYSTOPIA



CONNECTING VALUE WITH VALUES

- Market Design
- Economic Model
- Project Design
- Supply Chain
- Community Benefits
- Operation
- Transformation

COMMUNITY-DRIVEN DESIGN: BREAKING BARRIERS IN GEORGIA

- Innovative Resilience Hub Serving the Atlanta University Center
- Part of the NREL Solar Energy Innovation Network
- Places Community at the Center of the Vision



BREAKING BARRIERS: PROJECT OBJECTIVES

1. Plan an AUCC-wide **microgrid system** that includes **battery storage and new solar PV generation** – increasing resiliency for HBCUs and surrounding West Atlanta community
 - a. Within microgrid, Identify a Student Resiliency Center supported by solar + battery system
2. Establish a **Community Resiliency Center** to serve emergency power needs for low- and moderate-income households in adjacent West Atlanta community, connected to the AUCC process
3. Build **new curricula** for HBCU students using the microgrid + solar as a living learning lab
4. Collaborate with IOU utility (Georgia Power) to ease interconnection, build technical and regulatory alignment

COMMUNITY RESILIENCE CENTER PROCESS

Critical Needs List

Heating/Cooling	1	Medicine Storage/formula		
Charging	2	Heating/Cooling		
Restrooms	3	Charging		
Wifi Access	4	Flash lights		
News and Info	5		Food Storage	
Fresh Water	6			Deluxe first aid kit/amb/merg ency med
	7			
	8			Rechargeable batt
	9			
	10			



- Community visioning process led by Partnership for Southern Equity
- Evaluation of selected sites by technical group
- Engagement with City of Atlanta for support

**M. Agnes
Jones
Elementary
School**



Georgia Power
evaluating
loads,
interconnection
for site
evaluation of
community
resilience now.

Georgia Power primary meter for Spelman (north)

Supply Morehouse 2.4 grid

Morehouse Parking Garage (900 kW solar with batteries)

Manley College Center (campus resiliency center)

Proposed Center for Innovation & Arts (150 kW solar with batteries)

Wellness Center at Read Hall (168 kW solar with batteries)

Supply Spelman grid

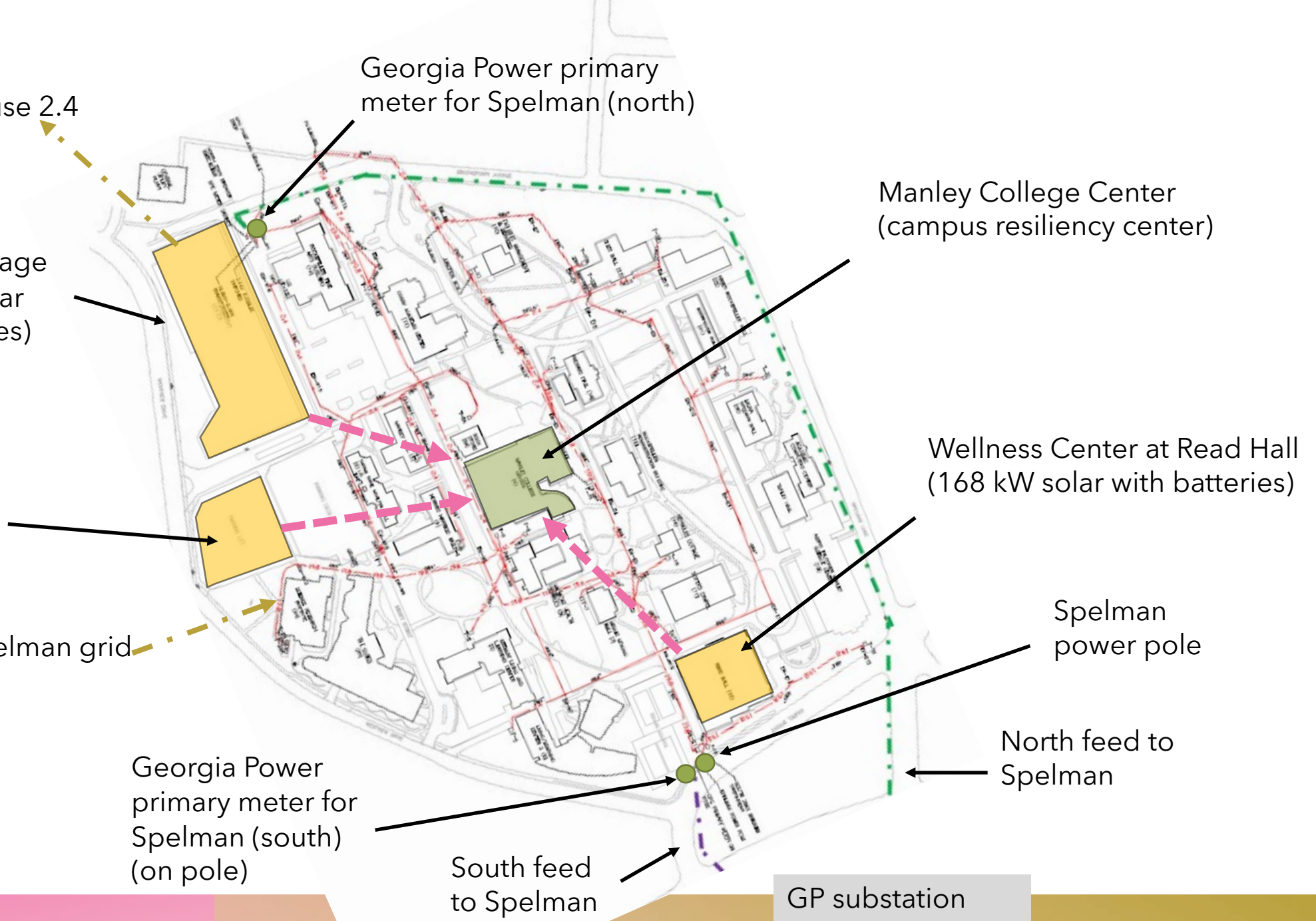
Spelman power pole

Georgia Power primary meter for Spelman (south) (on pole)

North feed to Spelman

South feed to Spelman

GP substation





1st course: Renewable Energy
(General Undergraduate Credit, Full
Semester)
Syllabus complete

Design completed
Spelman, Faculty Instructor:
Dr. A. Davarpanah

2nd course: Dual-Degree
(Electrical Engineering, Grid Module)
Syllabus in development

Design in progress
AUC, Faculty Instructor:
Dr. C. Ellis

Exploring student workforce and fellowship opportunities with Georgia Power, and faculty research

LOCAL LEADERSHIP: BALTIMORE'S RESILIENCY HUBS

- Convened and supported by the City of Baltimore
- Funding through the Maryland Energy Administration
- Community-driven decisions
- Service at the center



BALTIMORE'S COMMUNITY RESILIENCY HUBS

- Demonstrate
- Learn
- Share
- Replicate
- Deploy
- Scale!



A.F.Mensah



QUESTIONS FOR Y'ALL: ALIGNING VALUE WITH VALUES

- How can you express justice in your project?
- How can we value equitable and just outcomes? What shared goals/measures can help keep teams on track?
- What incentives could support community-led innovation?



U.S. Navy Naval Facilities Engineering Command's 19.3-megawatt solar project and 70-megawatt-hours battery energy storage system shares power with the Kauai Island Utility Cooperative

**SHARE POWER:
COMMUNITIES +
CORPORATES**

- Defining Principles, Processes for Sharing
- Working Wisdom: Illuminating Pathways
- Partnership: REBA, The Solutions Project

PEOPLE-POWERED UTILITIES: EQUITY-DRIVEN LEADERSHIP

- Resilience reduces costs, creates new service revenue
- Cost savings and benefits shared with residents
- Solar projects located on Black family farms, building generational wealth
- Rural leadership!

Curtis Wynn, CEO, Roanoke Electric Cooperative, Immediate Past President, NRECA



BIDEN-HARRIS: THE JUSTICE40

- The Justice40 is a Biden-Harris Administration initiative to direct 40% of the benefits of the Administration's investments in clean energy and climate into disadvantaged communities. The Justice40 was first announced in the Build Back Better Plan and was implemented by Executive Order as a part of the Administration's climate plan.
- Build Back Better Justice40 Plan: <https://joebiden.com/racial-economic-equity/>
 - Covered investments: clean energy, energy efficiency, transit and transportation, affordable and sustainable housing, training and workforce development, remediation and reduction of legacy pollution, development of clean water infrastructure.
- Justice40 in the Climate EO: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/>

TOWARDS REGENERATION

IT'S THE PRIVILEGE OF OUR GENERATION TO BE ALIVE
AT A TIME WHEN WE CAN MAKE THINGS RIGHT.