CREDC Education and Engagement

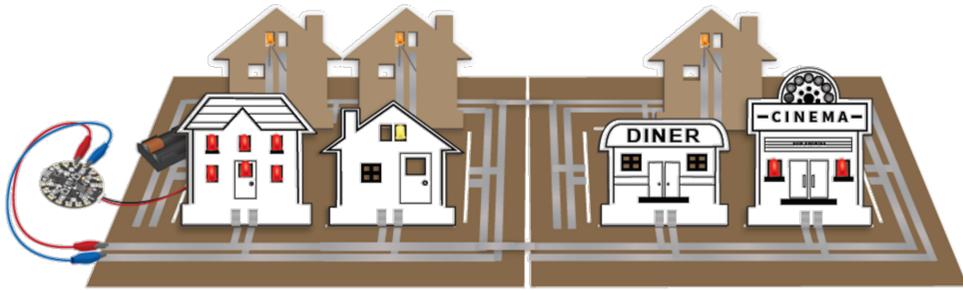Jana Sebestik, Samantha Lindgren, Logan Marlow, Michael McKelvey

Securing the energy delivery system of the future requires an engaged and informed society

MAKING CONNECTIONS

- Creating connections between important new ideas and familiar concepts
- Linking researchers, educators, students, families

CONNECTIONS INCREASE UNDERSTANDING

- Sensors and smart devices connect coding and the physical world

- Encryption helps keep data safe

Color mixing game

- The self-healing grid uses real-time data to detect outages.
- Smart distribution systems minimize the number of customers affected in an outage.

LINKING RESEARCHERS, EDUCATORS, STUDENTS

- Interactive lessons
- Print materials and hands-on kits

- Professional development opportunities for teachers

ENCOURAGING WONDER

- Minecraft:
    - World of Pipelines
    - World of Power
- Energy Science Kits
- Community events
- Saturday learning
- Camps

2019 AFA CYBERCAMP
STANDARD CAMP
STUDENT WORKBOOK

A creative and innovative way for young engineers to explore programming

#2 DESIGN A POWER PARK: SMART CIRCUITS

- What is solar PV and how does it work?
- How do wind turbines generate electricity? How is this energy used?
- What opportunities and challenges are associated with distributed generation?

COLLABORATION OPPORTUNITIES

CREDC Education can help you:

- Communicate the importance, opportunities, and challenges of a secure, modern energy delivery system
- Engage with your community
- Create enthusiasm, opportunity, and interest in STEM disciplines and careers

- Contact: sebestik@Illinois.edu
- Activity websites: https://cred-c.org/education
  https://credc.mste.illinois.edu