

R2 Energy Management Team Update

Alicen Kandt (NREL)

Randy Parker (USFS)

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R2 Energy Team

- From the Charter, the Energy Team has committed to:
 - Developing a strategy that will support the Region meeting energy related policies, laws and guidance such as the Energy Policy Action of 2005. This includes creating a clear process and or measurement from which to establish the baseline energy use of the region.
 - Identifying, integrating and orchestrating necessary changes in our energy management practices that will increase the environmental stewardship of our operations.
- Consists of 10+ people
 - USFS staff
 - NREL staff
 - Anyone who is interested!
- Monthly conference calls

R2 Energy Team

- Busy and productive year for R2 Energy Team.
- Our focus is on:
 - Education,
 - Encouragement, and
 - Engagement.

Overview of the Year's Activities

- Examined FS corporate database (INFRA) for extractable information
 - Attempting to collect relevant energy use data for other efforts such as RE screening
 - Worked to identify data gaps that are needed to define baseline
- Created top ten list of best energy conserving practices
 - Became a list of Energy “notes” now included in Chief’s monthly messages and Regional Forester’s general distribution notes.
- NREL agreement for consulting and analysis
 - Assisted with wind analysis and screening work for ESPC
 - Helped edit and contribute to metering plan
 - Developed flow chart for screening locations for renewable opportunities
 - Helped develop initial carbon footprint data for USFS

Overview (continued)

- Letter to forest leadership with background data and comparisons
- Energy mass purchase for conservation items
- EPSC contracting (see Todd Michael's presentation)
- Planning for Sustainability Summit
- Micro Grant Program

Micro Grant Overview

- Background: Anna Jones-Crabtree was able to secure about \$12 K last April to fund demonstration projects in reducing energy usage.
- Concept was similar to the “show me the money” program from last year’s summit.
- Team decided to put together “micro-grant” program to solicit ideas and solutions from the forests.

Micro Grant Process

- Developed selection criteria
 - Documented cost savings and energy/water reductions
 - Ease of Implementation
 - Ability to be shared and/or replicated at other units
 - Overall benefits to Region and Agency
 - Match funding or other supporting resources (internal or external)
 - Involvement of partners and/or local community

Micro Grant Process (continued)

- \$2000 per project available
- Developed and sent out application form and letter to forests
- Formed a judging and evaluation panel from Energy Team members
- Rated and ranked projects
- Announced awards
- Grant recipients began to implement awards.

Micro Grant Projects Awarded

- Ten out of 13 projects submitted were funded:
 - Reudi Campground Host Site PV system
 - Pagosa Ranger District Office xeriscaping
 - South Park District Office lighting retrofit
 - Divide District Office evaporative cooling
 - Paintrock Guard Station PV system
 - Burgess Ranger Station dual-flush toilet replacements
 - West Muddy GS tankless water heater installation
 - Maroon Bells solar upgrade
 - SO forest mobile recycling trailer

Host Site PV



Pagosa Xeriscape



Pagosa Xeriscape



Pagosa Partnership Team



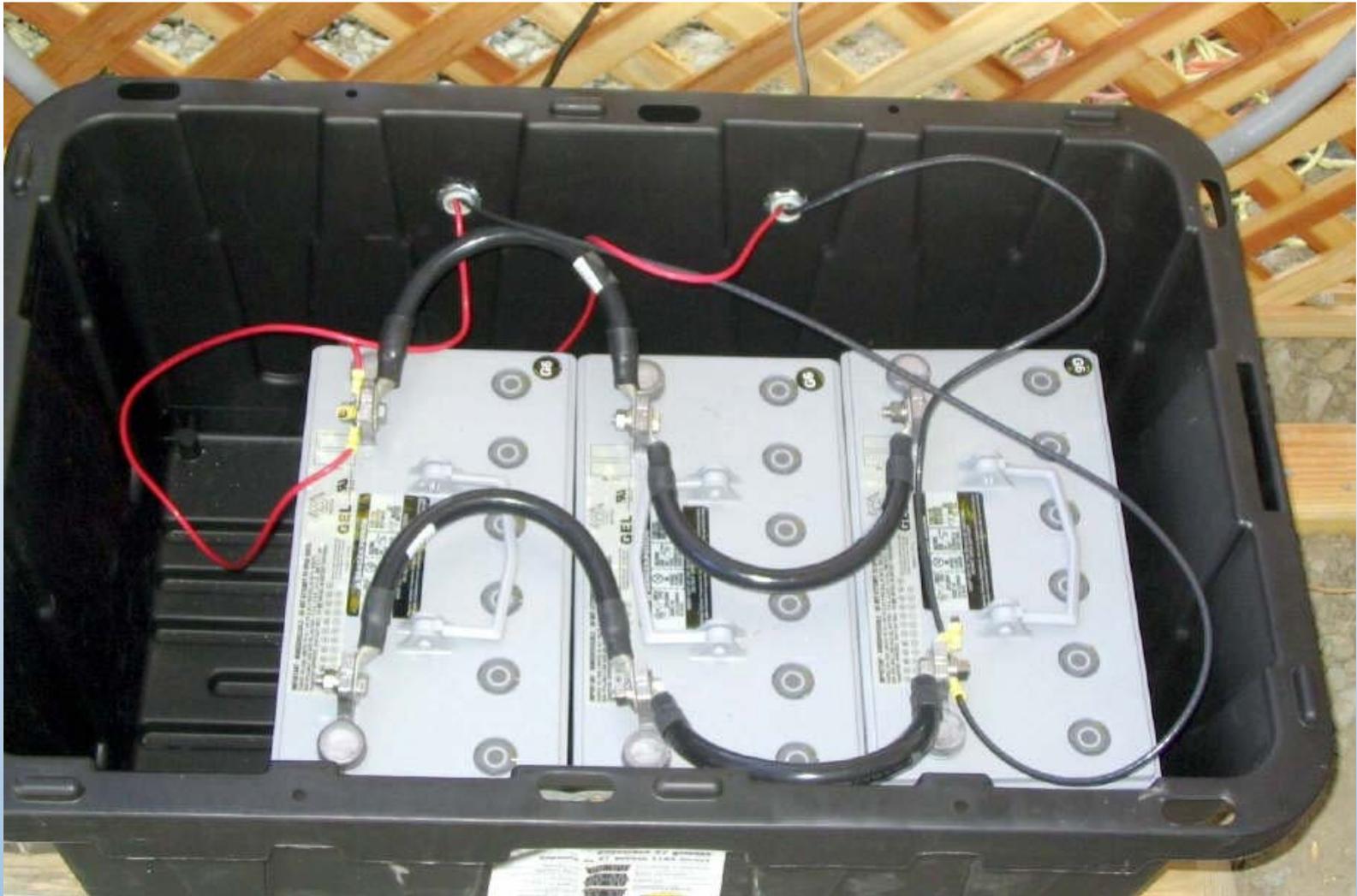
Divide District Evaporative Cooler



Divide District Evaporative Cooler

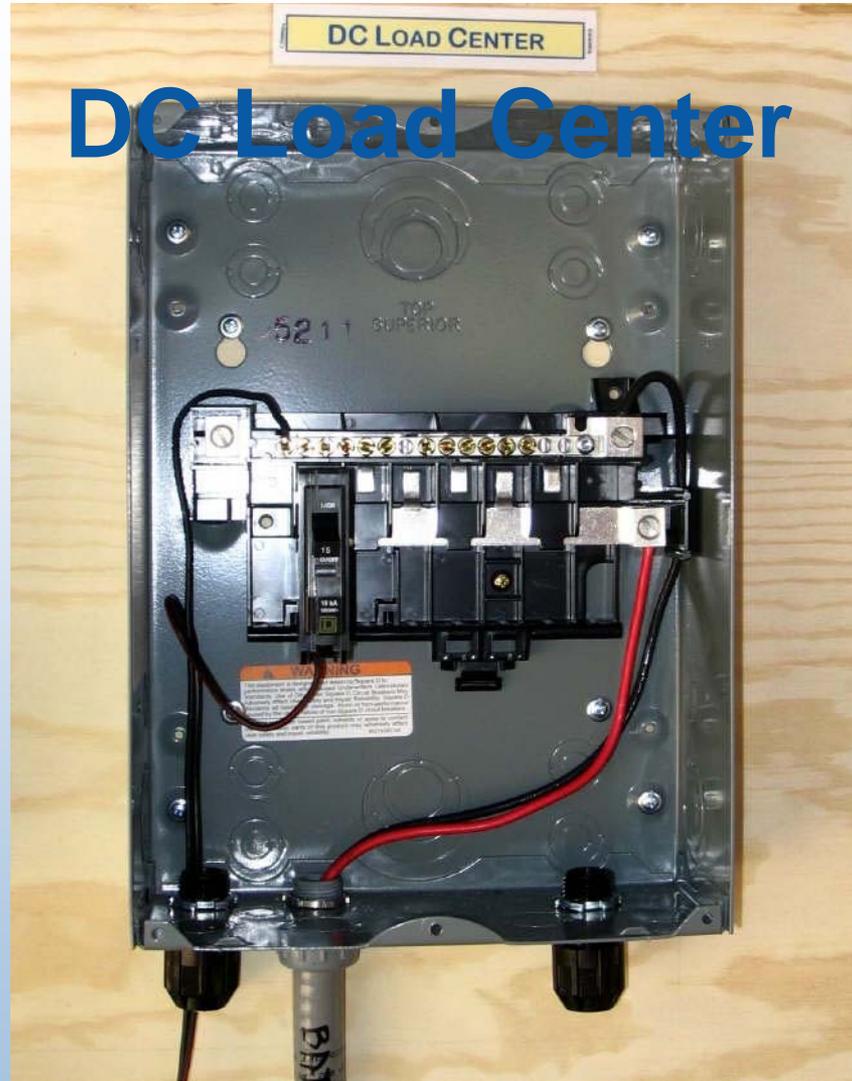


Battery for PV System

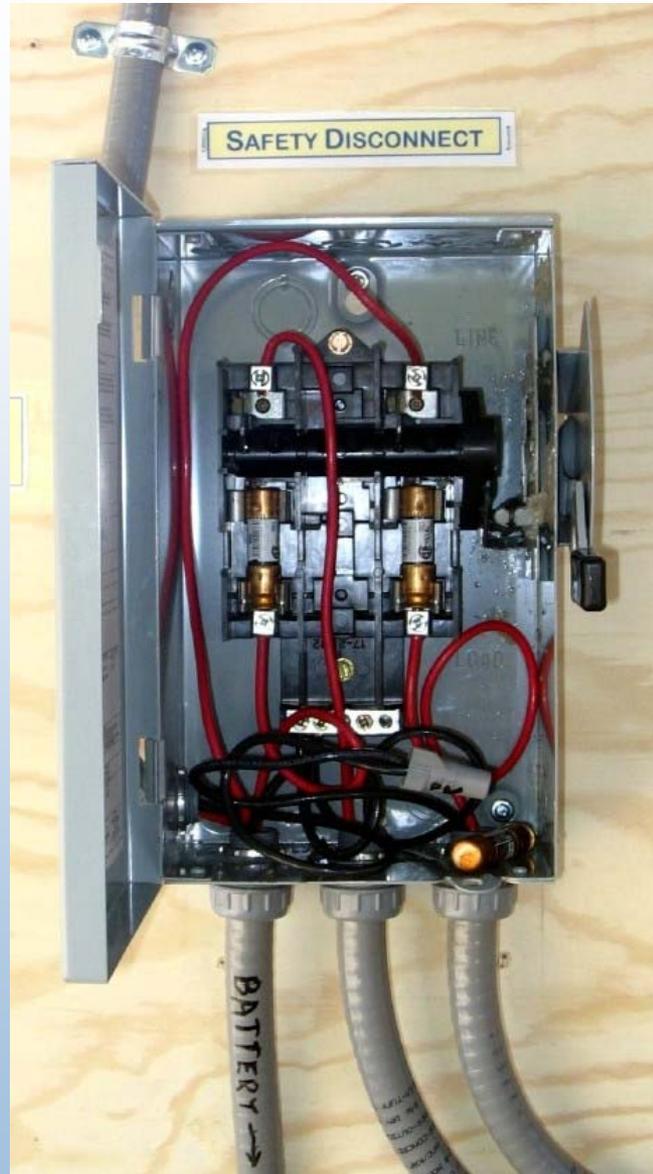




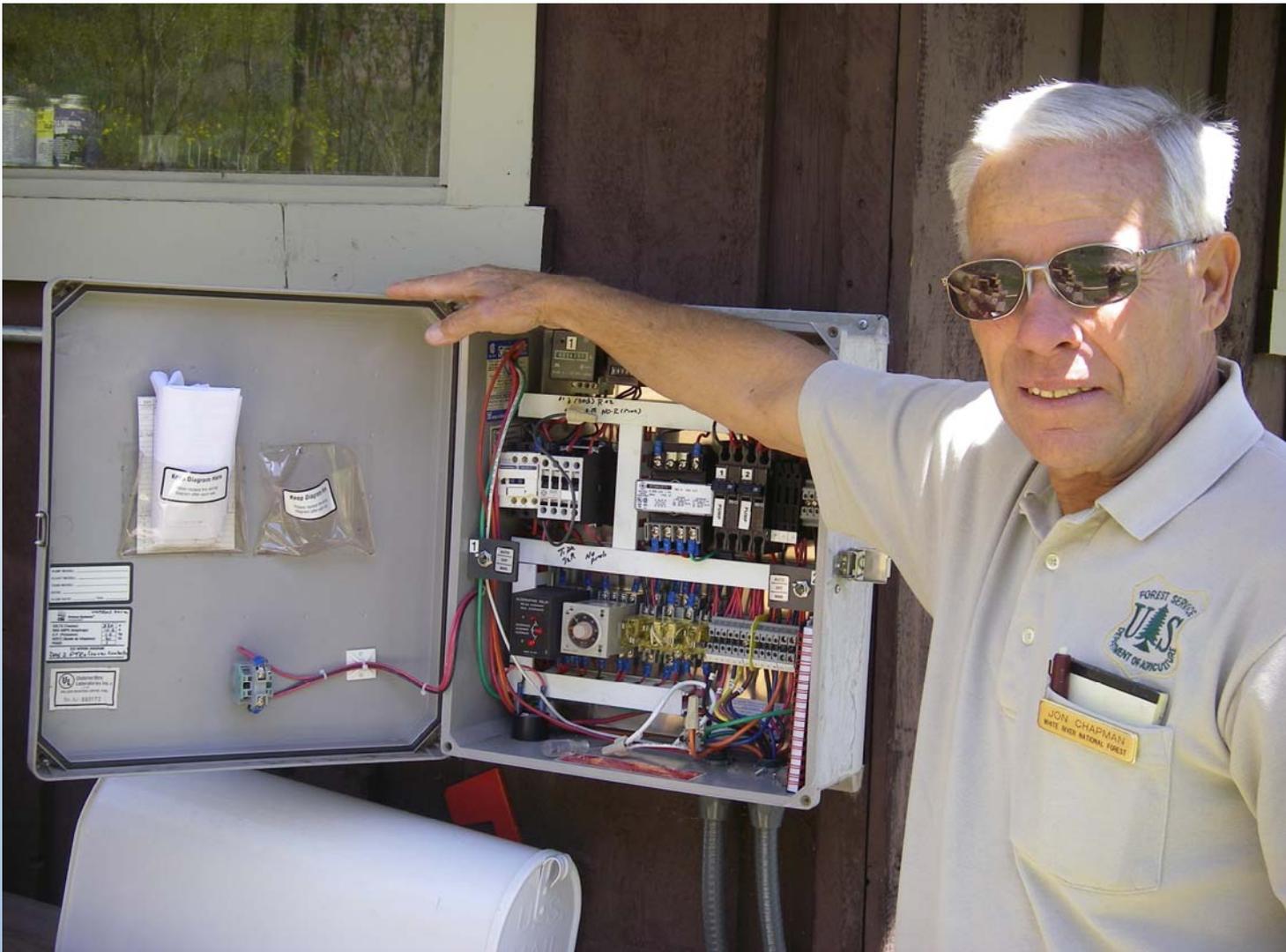
DC Load Center







PV Controller



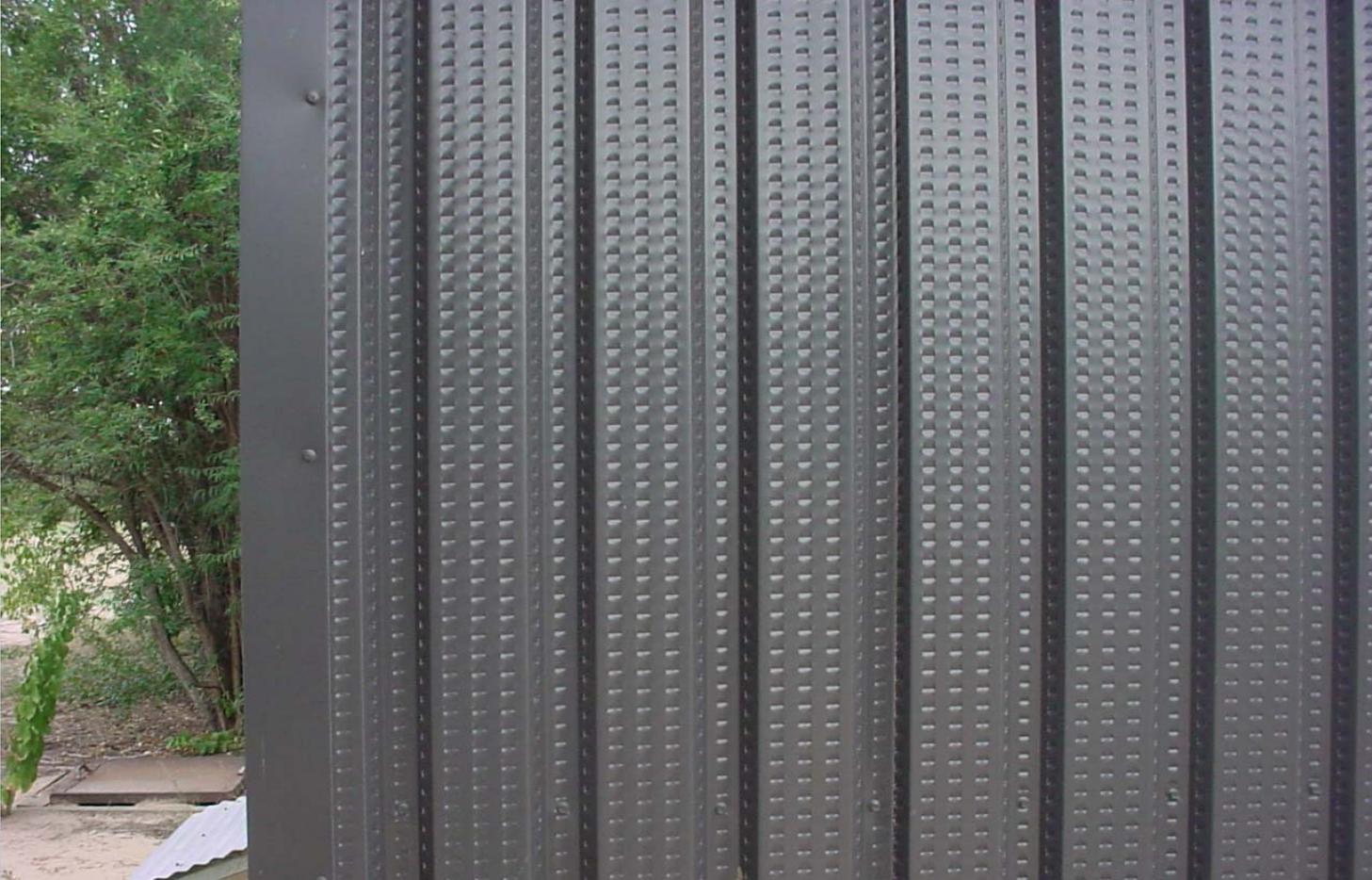
Recycle Trailer



Transpired Wall PSICC



Transpired Wall PSICC



Transpired Wall PSICC



Questions?

- For more information or to participate in the R2 Energy Team:
 - Randy Parker
 - rjparker@fs.fed.us
 - (970) 945-3202
 - Alicen Kandt
 - Alicen_Kandt@nrel.gov
 - (303) 384-7518