

NoCo TIME TRIALS



Event guidelines

Platte River Power Authority is pleased to host and sponsor the fifth annual NoCo Time Trials, a solar and battery model car competition for middle school students from Platte River's owner communities of Estes Park, Fort Collins, Longmont and Loveland, and surrounding areas. The event will take place on Saturday, May 4, 2024.

Qualifying checklist

Each entry should include the following:

1. Completed car design form providing:
 - School, teacher/coach, team name (entry name) and names of team members/students
 - Completed interview questions providing:
 - Documentation on the engineering and design process of the car
 - Details on the collaborative efforts of the team to complete the project
2. Photo(s) of car entry and team

Judging

Speed awards (based on best time):

Each team will be provided with two opportunities (heats) to race their car. The fastest time of the two heats will be recorded for the team and compared against best times of all other teams to determine the winner in both the solar and battery car categories.

Design awards (based on weighted criteria):

Scores will be weighted by design/engineering (D/E) processes and team collaboration efforts. To help judges evaluate the criteria, teams will be asked to respond in writing to questions that address design/engineering and team collaboration. Scoring for each of the criterion will be on a 1-10 scale. Final design scores will be recorded and compared against scores of all other teams to determine the winner in both the solar and battery car categories.

Awards

- Fastest solar car
- Fastest battery car
- Best solar car design
- Best battery car design

Scoring example

Criteria	Questions	Score	Weight	Final
Knowledge (D/E)	What STEM principles were considered when building your car?	6	25%	1.5
Ingenuity (D/E)	What modifications did you make to improve your car's performance? Why?	4	25%	1.0
Testing/adjustment (D/E)	How did you test your car? Adjustments? Outcome?	7	25%	1.75
Teamwork	How did your team collaborate through this project?	9	25%	2.25
Total score				6.5

NOTE: A professional photographer will be taking photographs during this event. By participating in the event, you agree that images taken by the photographer may be used in future Platte River print or online publications, news releases, websites, social media and in other communications related to this event. You agree that you waive all claims for any payments or royalties in connection with the use of these images, and you release Platte River from any liability connected with the use of these images. If you (as a parent, teacher, or guardian) do not wish to have yourself or your child photographed, you must inform Platte River staff upon arrival at the event so appropriate precautions may be taken to avoid inadvertently including you or your child in the photographs Platte River uses.