



Race against local teams and prepare for the statewide Middle School Electric Car Competition

Platte River Power Authority is pleased to host and sponsor the second 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. The event will take place on Saturday, May 2, 2020.

NoCo Time Trial goals

1. Support STEM education by providing a practical opportunity to meet NGSS middle school standards for physical science
2. Introduce students to the same noncarbon energy technologies Platte River is pursuing
3. Spark interest in electrical energy careers
4. Have fun – lots of fun

The NoCo Time Trials use the same cars and rules established by the National Renewable Energy Laboratory (NREL) for the annual state competition and are held prior to the annual statewide electric car competition. For 30 years, NREL has hosted the Junior Solar/Battery Middle School Car Competition in Golden, Colorado.

Platte River's sponsorship includes

- A minimum of two NREL-approved model car kits provided to each participating school, one solar-powered and one battery-powered kit
- A teacher/coach training workshop to show:
 - The NoCo Time Trials to recognize all participating student teams and provide an opportunity for teams to test their model cars before the statewide competition
 - Sponsorship of the statewide competition
 - Participation as judges and logistical support at the statewide competition
- Grant funds provided to participating schools to support STEM programs
- Trophies for the fastest solar- and battery-powered car at the NoCo Time Trials as well as the best engineering design in a given bracket



Requirements to participate

- All participating teams must follow the car competition rules on NREL's event website
- Solar car bracket: each participating team of 6th, 7th and 8th grade students must build a solar car using one of the JSS-approved standard solar car kits
- Battery car bracket: each participating team must build a lithium-ion-powered car based on the specifications established by NREL under the car competition rules
- Schools can field multiple teams at NoCo Time Trials (NREL may only allow 2 teams per bracket at state championships, however)
- Teams must be sponsored by their school – public, private or charter (likely a science or STEM class or program)
- Students must build the model race car within specific guidelines, but modifications are highly encouraged to foster engineering creativity and innovation



How to participate

Interested middle school teachers/coaches must contact Platte River Power Authority with their commitment of team(s). Teachers will then be added to the list of participating schools and will receive information about car kits, teacher workshops, invitations to activities and race details.

For more information and to let us know about your team(s) participation, please email:

communications@prpa.org

Provide the following information:

- Teacher/coach name and contact information
- School name and address
- Team name(s) and number of team members
- Bracket(s) in which the team(s) will compete
- Total number of solar and battery car kits desired

Once your registration is received, a member of the Platte River team will contact you to confirm participation. Platte River will regularly communicate with teams and teachers to keep everyone informed regarding activities and events.

Note: Teachers, teams and parents will be responsible for any transportation and lodging expenses associated with the teacher/coach workshops and participation in the NoCo Time Trials and/or the statewide car competition.

www.prpa.org/noco-time-trials