

2005 Future Energy Challenge

General Information

Steve Pekarek

October 3, 2004

Sponsors

**MPC Products, National Renewable Energy
Laboratory,**

IEEE Industry Applications Society,

**IEEE Power Electronics Society, IEEE Power
Engineering Society, US DOD, European Power
Electronics Association**

Topic A

Teams

- University of Akron (USA)
- University of Belgrade (Serbia)
- University of Illinois (USA)
- University of South Carolina (USA)

Competition Host

- MPC Products (Skokie Illinois, USA)
- Final Testing Aug 15-19, 2005

Topic B

Teams

- Bangladesh University of Engineering and Technology (Bangladesh)
- Federal University of MatoGrosso do Sul (Brazil)
- Federal University of Rio Grande do Norte – UFRN, (Brazil)
- Institute for Power Electronics and Electrical Drives of the RWTH (Aachen) and Institute for Automation of the University of Applied Sciences Cologne (FT Koln), (Germany)
- Krishna Institute of Engineering and Technology (India)
- Memorial University of Newfoundland, (Canada)
- Michigan State University (USA)
- Monash University (Australia)
- Nanjing University of Aeronautics and Astronautics (China)
- Seoul National University of Technology (South Korea)
- State University of Campinas (Brazil)
- Texas A&M University (USA)
- University of Central Florida (USA)
- University of Illinois-Chicago (USA)
- University of Wisconsin-Madison (USA)

Competition Host

- National Renewable Energy Laboratory (Golden Colorado, USA)
- Final Testing Aug 15-19, 2005

Important Dates

- **Progress Reports**
 - **November 1, 2004 (10 pages, double spaced, 1 column)**
 - **February 1, 2005 (10 pages, double spaced, 1 column)**
 - **May 1, 2005 (25 pages, double spaced, 1 column)**
 - » Final report will require completion of cost-analysis spreadsheet that will be provided by organizing committee
- **May 15, 2005 - Finalists selected by judges**
 - **Strong dependence on working hardware**
- **Shipping dates/instructions will be issued on/around May 15, 2005**
- **Packaging to ensure working hardware upon arrival is each team's responsibility**
- **No onsite construction of hardware (minor repair/maintenance requires approval of judges)**

Competition

- **Finalists with working hardware eligible for grand prize(s)**
- **All teams eligible to compete for competition awards in**
 - **Written Technical Report**
 - **Presentation**
 - **Innovation in Design**
 - **Educational Impact**
 - **Others TBD by judges**
- **Undergraduate students (working toward 1st degree) must play the dominant role on teams**
 - **Only students working on 1st degree will be allowed to present and interact with judges**

Travel/Accommodations

- **International Students – Obtain Visas early**
- **NREL requires pre-registration of all visitors (forms sent to teams May 15, 2005)**
- **Airports**
 - **NREL – (Denver International)**
 - **MPC – (O'hare or Midway)**
- **Organizing committee will work to provide access to a block of rooms at 'competition hotels'**

Questions (Logistic or Technical)

- **Topic A – Ali Emadi (emadi@iit.edu)**
- **Topic B – Marcelo Simoes (mgsimoes@ieee.org)**
- **Announcement and answers to all questions posted**
 - <http://www.energychallenge.org>