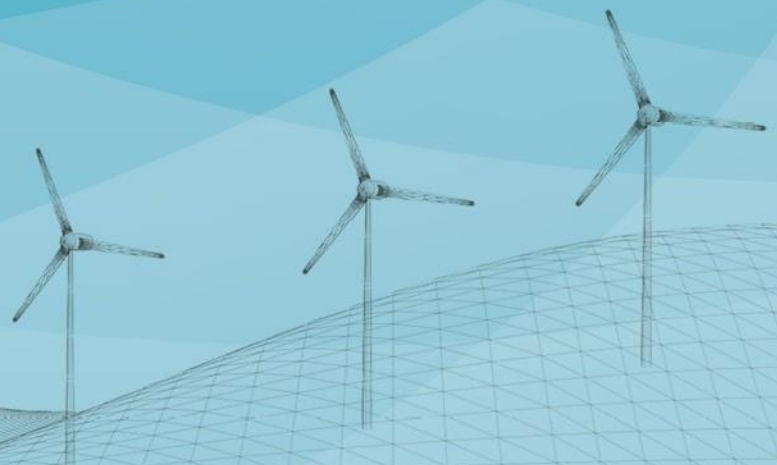




COLLEGIATE
WIND COMPETITION
U.S. DEPARTMENT OF ENERGY

U.S. DEPARTMENT OF ENERGY COLLEGIATE WIND COMPETITION 2024

Rules – Phase 1



May 2023

Preface

This competition will be governed by 15 U.S.C. §3719 and this Official Rules document, which establishes the prize rules and requirements for the competition. This is not a procurement under the Federal Acquisitions Regulations and will not result in a grant or cooperative agreement under 2 CFR 200. The Prize Administrator reserves the right to modify this Official Rules document if necessary and will publicly post any such notifications as well as notify registered prize participants. In case of a discrepancy with other competition materials or communication, this document takes precedence.

The National Renewable Energy Laboratory is supporting the U.S. Department of Energy on the development and administration of this prize.

Date	Modification

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1 Introduction

The U.S. Department of Energy (DOE) Wind Energy Technologies Office's (WETO) Collegiate Wind Competition (CWC, also referred to as the "Competition" in this rules document) invites interdisciplinary teams of undergraduate students from a variety of academic programs to solve complex wind energy challenges. Through the competition, WETO intends to offer students direct industry experience, valuable exposure to wind energy career pathways, and greater knowledge of wind energy's potential to contribute to a clean energy future. The competition will select up to 35 teams to start, making them eligible to compete for a cash prize pool of up to \$280,000.

Each year, the competition identifies a new challenge and set of activities that address real-world research questions, thus demonstrating skills that students will need to work in the wind or wider renewable energy industries. The Collegiate Wind Competition 2024 challenge requires participants to compete simultaneously in four contests:

- **Turbine Prototype Contest:** Design, build, and present a unique, wind-driven power system based on market research.
- **Turbine Testing Contest:** Test the wind turbine in a competition wind tunnel at the final event.
- **Project Development Contest:** Research wind resource data, transmission infrastructure, and environmental factors to create a site plan and financial analysis for a hypothetical wind farm.
- **Connection Creation Contest:** Partner with wind industry professionals, raise awareness of wind energy in your local community, and work with local media to promote your team's accomplishments.

The competition does not prescribe a power system market¹ or wind regime. It is expected that each team will participate in all four contests.

1.1 Background

The U.S. Energy Information Administration projects that the share of renewables in the U.S. electricity generation mix will increase from 21% in 2020 to 42% in 2050, with wind and solar generation playing a significant role.² The U.S. Department of the Interior, DOE, and U.S. Department of Commerce also announced a shared goal to deploy 30 gigawatts (GW) of offshore wind energy in the United States by 2030, which could support more than 44,000 jobs by 2030 and nearly 33,000 additional jobs in communities supported by offshore wind activity.³ As more wind energy is incorporated into the U.S. power generation mix, qualified workers are needed to fill jobs at all levels.

The competition increases renewable energy job preparedness for students. Specifically, the CWC's objective is to prepare students from multiple disciplines to enter the wind energy workforce by providing real-world experience for researchers, scientists, engineers, educators,

¹ For example, <https://www.ferc.gov/electric-power-markets>

² [EIA Annual Energy Outlook, 2021](https://www.eia.gov/outlooks/aeo/) <https://www.eia.gov/outlooks/aeo/>

³ <https://www.whitehouse.gov/briefing-room/statements-releases/2021/03/29/fact-sheet-biden-administration-jumpstarts-offshore-wind-energy-projects-to-create-jobs/>

project managers, and business and sales forces. Wind-energy-specific advanced degrees are not required for many of these jobs, but having wind-related experience is highly valuable.⁴

2 Competition Overview

The Collegiate Wind Competition 2024 challenges teams to compete in four contests: Turbine Prototype, Turbine Testing, Project Development, and Connection Creation. Within each contest, teams' submissions receive points toward winning the contest. The competition is divided into three phases. This document only covers the requirements for Phase 1 – Preliminary Team Selection. The details for Phases 2 and 3 are covered in a subsequent rules document that will be issued during the summer preceding the competition year.

2.1 Phases

All four contests that make up the competition will be held in three phases that determine a team's level of participation. Competitors will have a chance to win prizes at each phase, for a total prize pool of up to \$280,000.

- Phase 1 – Preliminary Team Selection: up to \$2,000/team from a total cash prize pool of up to \$70,000.
 - The submission asks teams to share their motivations for entering the competition and describe their capacity to perform well in the competition.
 - It is recommended and expected that teams leverage this prize to support their participation in Phase 2 of the competition.
 - A maximum of 35 teams will be selected from the pool of submissions.
 - The full set of submission requirements are described in 3.
- Phase 2 – Competitor Selection: up to \$15,000/team from a total cash prize pool of up to \$180,000.
 - The Competitor Selection phase is the chance for students to demonstrate their skill sets in achieving competition objectives. Submissions, structured as written reports, have been designed to evaluate how likely the team is to be successful in competing in the rest of the competition.
 - In this phase, teams will complete submissions during the fall semester for three of the four contests: Turbine Prototype, Project Development, and Connection Creation. CWC organizers will use those submissions to determine the 12 teams that will earn a cash prize and compete in Phase 3, which will take place during the Spring 2024 semester.
 - Details on submission requirements, how the submissions will be evaluated, and when they are due will be included in a separate Phases 2–3 rules document.

⁴ <https://www.nrel.gov/docs/fy19osti/73908.pdf>

- Phase 3 – Grand Prize: up to \$30,000 prize pool for winners in a variety of categories, defined below.
 - This final phase includes multiple submissions for each of the four contests. The final submissions will be evaluated at a final event, which includes the chance to present to industry experts, test the model turbines in the competition wind tunnels, network with industry professionals, and get a preview of what the wind energy industry looks like.
 - Teams will compete throughout the spring semester to win the awards listed below a portion of the prize pool.
 - The final event is expected to run from May 5 to May 9, 2024, at the American Clean Power Association’s CLEANPOWER Conference & Exhibition in Minneapolis, Minnesota, or a similar venue and timeline.⁵
 - All points earned throughout the competition for the four contests will roll up into a final score that will be combined with program policy factors to determine the final winners. Teams may win multiple awards. Awardees will split a \$30,000 prize pool. Awards will include but will not necessarily be limited to the following:
 - First-place winner: The team that earns the highest combined score.
 - Second-place winner: The team that earns the second-highest combined score.
 - Third-place winner: The team that earns the third-highest combined score.
 - Turbine Prototype Contest winner: The team that earns the highest combined score from all Turbine Prototype Contest submissions.
 - Turbine Testing Contest winner: The team that earns the highest combined score in the Turbine Testing Contest.
 - Project Development Contest winner: The team that earns the highest combined score from all Project Development Contest submissions.
 - Connection Creation Contest winner: The team that earns the highest combined score from all industry and community engagement submissions.

3 Phase 1 Submission

The Collegiate Wind Competition brings together students in the fields of science, technology, engineering, and mathematics (STEM) as well as business, marketing, communications, policy, and social sciences for the purpose of engaging the future workforce in wind energy. The Competition is open to undergraduate students from institutions of higher education.

⁵ Should the venue change from CLEANPOWER, a decision will be announced by 12/31/23. Teams are expected to provide their own travel funding to attend this event. Funding can come from prize winnings and other sponsorship.

Teams may comprise undergraduate students from:

- One or more 4-year colleges or universities in the United States.
- A mixture of 4-year colleges or universities in the United States together with students from 2-year institutions, such as community colleges.
- International institutions are welcome to apply but must partner and apply with a domestic U.S. institution as the lead, with both institutions being represented at the final event. International teams will not be eligible to receive cash prizes directly from DOE and the National Renewable Energy Laboratory (NREL) and must provide their own funding to support travel and competition expenses.
- Phase 1 teams are not required to have a faculty advisor by the Phase 1 submission deadline; however, teams will need to engage a faculty advisor to be eligible to compete in Phase 2.

Interested teams must provide a submission package on the [HeroX platform](#) by 4:59 p.m. MT on June 15, 2023. Teams will not be eligible to compete if a submission is not provided by the deadline. Submissions will be reviewed and scored by national laboratory researchers and DOE staff using the evaluation criteria and scoring rubrics listed in the subsections below. Each submission for CWC should be less than 1,500 words and include a response for each of the following subsections.

Ultimately, this collegiate competition is designed to foster educational programs and would benefit from classroom curriculum as well as the creation of remote learning, industry partnerships, informal independent-study projects, industry mentorships, and clubs.

The submission requirements are listed below, with the relevant rubric included in each section. DOE reserves the right to post or link to public portions of the submission, and all submissions are subject to the Freedom of Information Act. Please reference Appendix C, Sections C.3 and C.9 for more information. The submission will be scored out of a possible total of 100 points.

3.1 Team Contact Information

The team contact information will include the:

- Lead institution
- Partner institutions (if applicable)
- Team Faculty Advisor(s) name and department (faculty member or primary representative)
- Faculty Advisor(s) email (if known)
- Faculty Advisor(s) phone number (if known)
- Collegiate Team Student Leader(s) name and declared/intended major (if known)
- Collegiate Team Student Leader(s) email.

3.2 Introduction (10%)

Teams should provide a brief introduction of their team, why they are interested in participating in this competition, and their commitment to engage in the CWC educational opportunities (e.g., educational webinars and networking opportunities). Teams should also describe:

- How the team will gain the faculty and departmental support across the institution (e.g., engineering, finance, economics) if representative faculty are not part of this initial submission.
- How the team will recruit student team leads from both the business and engineering schools if representative students from those departments are not part of this initial submission.

Table 1. Scoring Rubric for Submission Introduction

Description	Maximum Possible Points
Introduction: The submission describes teams interest and commitment as well as an approach to how they will gain faculty and departmental support as well as student participation.	10

3.3 Educational Objectives and Integration (25%)

Teams should answer the following:

- Describe how the competition will be integrated into the team’s academic experiences (e.g., courses integrating competition elements or other programs that support competition, such as related work, scholarships, independent-study projects, or research assistantships designed to support successful student participation in the competition).
- Alternatively, describe the plan to cultivate knowledge through other means (e.g., remote learning, industry partnerships, informal independent-study projects, industry mentorships, clubs).

Table 2. Scoring Rubric for Submission Educational Objectives and Integration

Description	Maximum Possible Points
Educational Objectives and Integration: The submission provides an achievable and detailed description of how the competition would be integrated into their academic experiences and describes a plan to cultivate student knowledge.	25

3.4 Organization and Project Planning (25%)

Teams should describe:

- How the team will execute elements of the competition, including how unique obstacles, such as academic calendars or virtual collaboration challenges, will be overcome (if applicable, noting previous participation in similar competitions).
- How the team will be supported by faculty and staff to ensure that students can be successful in achieving the competition objectives (e.g., list faculty, staff, and other mentors and how they will advise students throughout the competition).
- Which departments across the institution will support the team in the four contests.

Table 3. Scoring Rubric for Submission Organization and Project Planning

Description	Maximum Possible Points
<p>Organization and Project Planning: The submission provides an achievable and detailed description of:</p> <ul style="list-style-type: none"> • How the team will execute elements of the competition, including how unique obstacles, such as academic calendars or virtual collaboration challenges, will be overcome. • How the team will be supported by faculty and staff, and external partners, where applicable, to ensure that students can be successful in achieving the competition objectives (e.g., list faculty, staff, and other mentors and how they will advise students throughout the competition). • Which departments across the institution will participate and actively support the team to meet competition requirements including a description of what this support will look like across each of these departments. 	25

3.5 Team Diversity and Inclusivity (25%)

Teams should describe efforts to ensure that the team makeup will be consistent with DOE’s and NREL’s efforts to cultivate a wind energy workforce comprising diverse backgrounds, skill sets, and educational training. For example, the team should describe how:

- The team has created ambitious yet achievable diversity, equity, and inclusion objectives that will be incorporated in the competition and that are applicable across multiple academic disciplines. These objectives should be specific, measurable, assignable, realistic, and time-related (often called SMART) and supported by metrics to measure the success of the proposed actions.
- The team has a clear plan to measure the success of the proposed diversity, equity, and inclusivity objectives.
- The team is likely to be successful in achieving the objectives they have defined, engaging team members of diverse or unique backgrounds.

Table 4. Scoring Rubric for Team Submissions to Participate

Description	Maximum Possible Points
<p>Team Diversity and Inclusivity: The submission includes:</p> <ul style="list-style-type: none"> • Ambitious yet achievable diversity, equity, and inclusion objectives that will be incorporated in the competition that are applicable across multiple academic disciplines. These objectives must be specific, measurable, assignable, realistic, and time-related (often called SMART). • A clear plan to measure the success of the proposed diversity, equity, and inclusivity objectives. • Justification for why the team will be successful in achieving the objectives they have defined and engaging team members of diverse or unique backgrounds 	25

3.6 Institutional Support and Fundraising (15%)

\$2,000 will be provided to all teams selected through this Phase 1 submission process. Additionally, \$15,000 prizes will be provided by NREL for all teams that are selected during the Phase 2 competitor selection process described in a subsequent Phases 2–3 rules document. Winning teams are expected to attend a final in-person event and may need to raise their own funds to attend. Prize funds may not cover the full expenses of this project or participation for all students.

- Describe the level of funding you expect your team will need and how the team plans to cover any funding deficit to compete in the full competition.
- Describe what the team will do with the initial Phase 1 funding.
- Describe any additional resources (e.g., software, educational materials, project planning tools) the team anticipates needing as part of the competition that the organizers may be able to provide.

Table 5. Scoring Rubric for Team Submissions to Participate

Description	Maximum Possible Points
Institutional Support and Fundraising: The submission includes a detailed and achievable description of how they will seek additional resources (e.g., software, educational materials, project planning tools) they anticipate needing as part of the competition.	15

3.7 Phase 1 Cash Prizes

All teams that are selected for Phase 1 will receive up to \$2,000 in cash prizes.

Appendix A. Roles and Responsibilities

Table A-1 shows the competition roles, who performs each role, and what the role entails.

Table A-1. Roles and Responsibilities

Role	Individual(s) Assigned	Definition
Collegiate Team	Multiple	<p>Collegiate team members are led by the student lead and subteam leads under the mentorship of faculty advisors within the rules and requirements of the competition. Teams comprise undergraduate students only, but graduate students may be involved as mentors or advisors. There is no limit to team size. However, the number of students that teams may bring to the competition will be limited based on space requirements. Interdisciplinary teams are encouraged in the following areas of study: engineering, business, marketing, environmental science, communications, policy, and social sciences.</p> <p>Only undergraduate student team members may take an active role in any competition event.</p>
Student Lead(s)	Minimum of one and maximum of three per team	<p>The student lead should take on the primary leadership and organizing responsibilities for the team under simple mentorship from the faculty advisor. In addition, the student lead attends informational sessions, represents the team when communicating with competition organizers, and disseminates information received from the competition organizers over the course of the entire competition, including monitoring communications during the event. The collegiate team student lead is effectively the leader of their collegiate team in all aspects of the competition.</p>
Faculty Advisor	Minimum of one per team starting in Phase 2	<p>Serves as the lead faculty member of a participating school in the competition. This person provides mentorship to the team throughout the competition and provides a supportive environment for student team leads to thrive in. The faculty advisor teaches, advises, and coaches the students on the skills necessary to compete in the various aspects of the competition. Some teams may specify multiple faculty advisors who are contacts for the team, but in this case, one person should be identified as the lead.</p> <p>Faculty advisors can provide feedback about the team's design so the students can identify mistakes, prove technical rigor, or demonstrate feasibility of their concept. It is not appropriate for faculty advisors to be actively working on a wind turbine or making decisions.</p>
Student Mentors	Multiple	<p>Because of their unique perspective, students who have completed their undergraduate degree or graduate students are encouraged to act as mentors to the collegiate team. Similar to the faculty advisors, mentors should provide a supportive environment and the educational background necessary throughout the contest without making active decisions themselves.</p>
Supporting Faculty	Multiple	<p>Supports the faculty advisor in the previously mentioned duties but typically does not directly engage with U.S. Department of Energy (DOE)/National Renewable Energy Laboratory (NREL) Collegiate Wind Competition staff.</p>

Role	Individual(s) Assigned	Definition
Competition Manager	DOE	Represents DOE and has the final decision-making authority in all aspects of the competition.
Prize Administrator	NREL	The prize administrator leads correspondence with the collegiate teams regarding contracts, challenge questions, and team expectations. During the competition, the prize administrator is the primary point of contact for questions related to engagement with the reviewers, logistics, and protocol. Tasks include developing team schedules, coordinating/collating scores and team feedback from the challenges in time for the awards ceremony, and supporting the collegiate teams and reviewers.
Contest Reviewers	To be announced prior to the competition	Conduct and evaluate each contest at the competition.
Competition Judge	Director, WETO	The director of WETO is the judge of the competition and will make all final determinations.

Appendix B. How the Prize Administrator Will Communicate With Teams

It is each team's responsibility to stay abreast of the latest competition communications from the Prize Administrators. Communication between the teams and the Prize Administrators occurs via one or more of the following:

- **HeroX Forum:** Official communications suitable for viewing by all team members and Prize Administrators will be posted on the competition's HeroX Forum.
- **HeroX Resources:** All CWC resources, templates, and meeting recordings will be uploaded to the HeroX Resources page.
- **Virtual Meetings:** Teams are strongly encouraged to participate in scheduled virtual meetings with the Prize Administrators. Invitations and instructions for participation in these meetings are provided by the Competition Operations Manager(s) via email and on the HeroX Forum.
- **Email:** The official email address for the competition is Collegiate.Wind@nrel.gov; questions should be sent directly to this email address, and answers that may be of interest to all teams will be posted on the competition's HeroX Forum. For expediency and to protect confidentiality, the Prize Administrators may choose to communicate with teams via team members' email addresses as listed in the HeroX database; however, official communications occur via the HeroX Forum.
- **Website:** The Collegiate Wind Competition (CWC) website will showcase the various elements of the competition, ongoing collegiate team engagement, and information about how to participate in future competitions. The website will also feature important documents, such as this manual and submission templates.

B.1 Branding

Teams are expected to set up a professional space in their team booths to highlight the team's branding. This can include the concept design, posters, team logo, and school information. The team booths are the teams' chance to showcase all the work they have put into their project over the course of the year and are the best way to communicate their efforts to the industry, especially at a visible industry networking event.

B.2 Reviewing and Scoring

A panel of Challenge Reviewers is responsible for scoring team performance in each challenge and for each submission. The Reviewers will have expertise related to the content they are responsible for evaluating. The panel will include diverse backgrounds that allow the Reviewers to evaluate performance from a variety of angles.

Prize Administrators will ensure that, to the extent possible, Reviewers will not:

- Have personal or financial interests in, or be an employee, officer, director, or agent of any entity that is a registered participant in the competition.
- Have a familial or financial relationship with an individual who is a registered participant.
- Provide advice to teams, although they can provide clarification on the reviewing process.
- Discuss team performance with other teams or their advisors.

Names of the selected reviewers will be announced prior to the final in-person event. Reviewers for midyear submissions may be different than those providing reviews at the final event. The director of WETO is the Judge of the competition and will make the final determination.

B.3 Team Feedback

In an effort to provide as much feedback as possible, teams will receive their scores following completion of the competition. Teams will also receive a short narrative derived from the challenge reviewers' deliberations after each team's presentation.

B.4 Submissions and Submission Locations

Go to HeroX and follow the instructions for registering and submitting all required materials before the deadline in Table 3 and as displayed on the HeroX website.

The HeroX platform provides a space where parties interested in collaboration can post information about themselves and learn about others who are also interested in competing. Teams can submit early copies and updated revisions until the deadline. If a team wants to submit after a deadline, you must contact the Prize Administrator and points will be deducted according to what is identified in the evaluation criteria in Appendix B.

B.5 Submissions

PDF Requirements

Submitted PDFs must meet the following criteria:

- Have embedded fonts.
- Have all images be a minimum resolution of 300 dpi.

Creating a PDF:

- From scans or by outputting the content into a raster image format (e.g., .jpg, .tiff, .png, or .gif) is not acceptable.
- That is, an all-raster PDF should be avoided because, despite being large files at 300 dpi, they are of unacceptable quality at lower resolutions and are not scalable without degradation.

Audiovisual Presentation Requirements

Audiovisual presentation format requires that:

- Videos, if used, are in a .MOV or H.264 compressed .MP4 (MPEG-4) file type with a resolution of 720×480 .
- Presentations should be in a 16:9 aspect ratio.
- No background music that violates U.S. copyright laws is included; all incorporated music must be an original or royalty-free composition and proof of licensing must be submitted with the final file and transcript.

Electronic File-Naming Instructions

The required file-naming convention for all electronic files is:

[TEAM ABBREVIATION]_[SUBMISSION]_[SUBMISSION DATE (YYYY-MM-DD)].[EXTENSION]

For example, a report submitted by California Maritime Academy on April 23, 2024, would have the following file name: MARITIME_Report_2024-04-23.PDF.

Appendix C. Additional Terms and Conditions

C.1 Verification for Payments

The Prize Administrator will verify the identity and role of all competitors before distributing any prizes. Receiving a prize payment is contingent upon fulfilling all requirements contained herein. The Prize Administrator will notify winning competitors using provided email contact information for the individual, team, or entity that was responsible for the submission. Each competitor will be required to sign and return to the Prize Administrator, within 30 days of the date on the notice, a completed NREL Request for ACH Banking Information form and a completed W-9 form (<https://www.irs.gov/pub/irs-pdf/fw9.pdf>). In the sole discretion of the Prize Administrator, a winning competitor will be disqualified from the competition and receive no prize funds if: (i) the person/team/entity does not respond to notifications; (ii) the person/team/entity fails to sign and return the required documentation within the required time period; (iii) the notification is returned as undeliverable; (iv) the submission or person/team/entity is disqualified for any other reason as specified in eligibility section in the executive summary or universal content section above.

In the event of a dispute as to any registration, the authorized account holder of the email address used to register will be deemed to be the competitor. The "authorized account holder" is the natural person or legal entity assigned an email address by an internet access provider, online service provider, or other organization responsible for assigning email addresses for the domain associated with the submitted address. All competitors may be required to show proof of being the authorized account holder.

C.2 Teams and Single-Entity Awards

The Prize Administrator will award a single U.S. dollar amount to the designated primary submitter, whether consisting of a single or multiple entities. The primary submitter is solely responsible for allocating any prize funds among its member competitors or teammates as they deem appropriate. The Prize Administrator will not arbitrate, intervene, advise on, or resolve any matters or disputes between team members or competitors.

C.3 Submission Rights

By making a submission and consenting to the rules of the challenge, a competitor is granting to DOE, the Prize Administrator, and any other third parties supporting DOE in the challenge, a license to display publicly and use the parts of the submission that are designated as "public" for government purposes. This license includes posting or linking to the public portions of the submission on the challenge website, DOE websites, and partner websites, and the inclusion of the submission in any other media worldwide. The submission may be viewed by the DOE, Prize Administrator, and reviewers for purposes of the challenge, including but not limited to screening and evaluation purposes. The Prize Administrator and any third parties acting on their behalf will also have the right to publicize competitors' names and, as applicable, the names of competitors' team members and organization, which participated in the submission on the challenge website indefinitely.

By entering, the competitor represents and warrants that:

1. Competitor's entire submission is an original work by competitor and competitor has not included third-party content (such as writing, text, graphics, artwork, logos, photographs, likeness of any third party, musical recordings, clips of videos, television programs or motion pictures) in or in connection with the submission, unless (i) otherwise requested by the Prize Administrator and/or disclosed by competitor in the submission, and (ii) competitor has either obtained the rights to use such third-party content or the content of the submission is considered in the public domain without any limitations on use.
2. Unless otherwise disclosed in the submission, the use thereof by Prize Administrator, or the exercise by Prize Administrator of any of the rights granted by competitor under these rules, does not and will not infringe or violate any rights of any third party or entity, including, without limitation, patent, copyright, trademark, trade secret, defamation, privacy, publicity, false light, misappropriation, intentional or negligent infliction of emotional distress, confidentiality, or any contractual or other rights;
3. All persons who were engaged by the competitor to work on the submission or who appear in the submission in any manner have:
 - a) Given the competitor their express written consent to submit the submission for exhibition and other exploitation in any manner and in any and all media, whether now existing or hereafter discovered, throughout the world;
 - b) Provided written permission to include their name, image, or pictures in or with the submission (or, if a minor who is not competitor's child, competitor must have the permission of the minor's parent or legal guardian) and the competitor may be asked by the Prize Administrator to provide permission in writing;
 - c) Not been and are not currently under any union or guild agreement that results in any ongoing obligations resulting from the use, exhibition, or other exploitation of the submission.

C.4 Copyright

Each competitor represents and warrants that the competitor is the sole author and copyright owner of the submission; that the submission is an original work of the competitor or that the competitor has acquired sufficient rights to use and to authorize others, including DOE, to use the submission, as specified throughout the rules; that the submission does not infringe upon any copyright or any other third-party rights of which the competitor is aware; and that the submission is free of malware.

C.5 Challenge Subject to Applicable Law

All challenge are subject to all applicable federal laws and regulations. Participation constitutes each participant's full and unconditional agreement to these Official Challenge Rules and administrative decisions, which are final and binding in all matters related to the challenge. This notice is not an obligation of funds; the final award is contingent upon the availability of appropriations.

C.6 Resolution of Disputes

The U.S. Department of Energy is solely responsible for administrative decisions, which are final and binding in all matters related to the challenge.

Neither the U.S. Department of Energy nor the Prize Administrator will arbitrate, intervene, advise on, or resolve any matters between team members or among competitors.

C.7 Publicity

The winners of these prizes (collectively, “winners”) will be featured on the DOE and NREL websites.

Except where prohibited, participation in the challenge constitutes each winner's consent to DOE's and its agents' use of each winner's name, likeness, photograph, voice, opinions, and/or hometown and state information for promotional purposes through any form of media worldwide, without further permission, payment, or consideration.

C.8 Liability

Upon registration, all participants agree to assume any and all risks of injury or loss in connection with or in any way arising from participation in this challenge. Upon registration, except in the case of willful misconduct, all participants agree to and, thereby, do waive and release any and all claims or causes of action against the federal government and its officers, employees, and agents for any and all injury and damage of any nature whatsoever (whether existing or thereafter arising, whether direct, indirect, or consequential, and whether foreseeable or not), arising from their participation in the challenge, whether the claim or cause of action arises under contract or tort.

In accordance with the delegation of authority to run this challenge delegated to the director of the Wind Energy Technologies Office, the director has determined that no liability insurance naming DOE as an insured will be required of competitors to compete in this competition per 15 USC 3719(i)(2).

Competitors should assess the risks associated with their proposed activities and adequately insure themselves against possible losses.

C.9 Records Retention and Freedom of Information Act

All materials submitted to DOE as part of a submission become DOE records and are subject to the Freedom of Information Act. The following applies only to portions of the submission not designated as public information in the instructions for submission. If a submission includes trade secrets or information that is commercial or financial, or information that is confidential or privileged, it is furnished to the Government in confidence with the understanding that the information shall be used or disclosed only for evaluation of the submission. Such information will be withheld from public disclosure to the extent permitted by law, including the Freedom of Information Act. Without assuming any liability for inadvertent disclosure, DOE will seek to limit disclosure of such information to its employees and to outside reviewers when necessary

for review of the submission or as otherwise authorized by law. This restriction does not limit the Government's right to use the information if it is obtained from another source.

Submissions containing confidential, proprietary, or privileged information must be marked as described below. Failure to comply with these marking requirements may result in the disclosure of the unmarked information under the Freedom of Information Act or otherwise. The U.S. Government is not liable for the disclosure or use of unmarked information and may use or disclose such information for any purpose.

The submission must be marked as follows and identify the specific pages containing trade secrets, confidential, proprietary, or privileged information:

Notice of Restriction on Disclosure and Use of Data:

Pages [list applicable pages] of this document may contain trade secrets, confidential, proprietary, or privileged information that is exempt from public disclosure. Such information shall be used or disclosed only for evaluation purposes. [End of Notice]

The header and footer of every page that contains confidential, proprietary, or privileged information must be marked as follows: "Contains Trade Secrets, Confidential, Proprietary, or Privileged Information Exempt from Public Disclosure." In addition, each line or paragraph containing proprietary, privileged, or trade secret information must be clearly marked with double brackets.

Competitors will be notified of any Freedom of Information Act requests for their submissions in accordance with 29 C.F.R. § 70.26. Competitors may then have the opportunity to review materials and work with a FOIA representative prior to the release of materials.

C.10 General Conditions

DOE reserves the right to cancel, suspend, and/or modify the challenges, or any part of it, at any time. If any fraud, technical failures, or any other factor beyond DOE's reasonable control impairs the integrity or proper functioning of the challenges, as determined by DOE in its sole discretion, DOE may cancel the challenge.

Although DOE may indicate that it will select up to several winners for each challenge, DOE reserves the right to only select competitors that are likely to achieve the goals of the program. If, in DOE's determination, no competitors are likely to achieve the goals of the program, DOE will select no competitors to be winners and will award no prize money.

C.11 Program Policy Factors

While the scores of the expert reviewers will be carefully considered, it is the role of the prize administrator to maximize the impact of challenge funds. Some factors outside the control of competitors and beyond the independent expert reviewer scope of review may need to be considered to accomplish this goal. The following is a list of such factors. In addition to the reviewers' scores, the below program policy factors may be considered in determining winners:

- Geographic diversity and potential economic impact of projects.
- Whether the use of additional DOE funds and provided resources are non-duplicative and compatible with the stated goals of this program and the DOE mission generally.
- The degree to which the submission exhibits technological or programmatic diversity when compared to the existing DOE project portfolio and other competitors.
- The level of industry involvement and demonstrated ability to accelerate commercialization and overcome key market barriers.
- The degree to which the submission is likely to lead to increased employment and manufacturing in the United States or provide other economic benefit to U.S. taxpayers.
- The degree to which the submission will accelerate transformational technological, financial, or workforce advances in areas that industry by itself is not likely to undertake because of technical or financial uncertainty.
- The degree to which the submission supports complementary DOE funded efforts or projects, which, when taken together, will best achieve the goals and objectives of DOE.
- The degree to which the submission expands DOE's funding to new competitors and recipients who have not been supported by DOE in the past.
- The degree to which the submission enables new and expanding market segments.
- Whether the project promotes increased coordination with nongovernmental entities for the demonstration of technologies and research applications to facilitate technology transfer.

C.12 National Environmental Policy Act (NEPA) Compliance

DOE's administration of the Collegiate Wind Competition is subject to NEPA (42 USC 4321, et seq.). NEPA requires federal agencies to integrate environmental values into their decision-making processes by considering the potential environmental impacts of their proposed actions. For additional background on NEPA, please see DOE's NEPA website, at <http://nepa.energy.gov/>.

C.13 Return of Funds

As a condition of receiving a prize, competitors agree that if the prize was made based on fraudulent or inaccurate information provided by the competitor to DOE, DOE has the right to demand that any prize funds or the value of other non-cash prizes be returned to the government.

ALL DECISIONS BY DOE ARE FINAL AND BINDING IN ALL MATTERS RELATED TO THE CHALLENGE.