Challenge promotes careers in the green, renewable energy professions

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WASHINGTON – Assistant Secretary-Indian Affairs Larry Echo Hawk today announced that the Southwestern Indian Polytechnic Institute (SIPI) has submitted the featured entry in the 2011 Indian Education Renewable Energy Challenge targeting college age students and the Oneida Nation High School has submitted the featured entry in the high school-age challenge category.

The Challenge is sponsored by the Bureau of Indian Education (BIE) in partnership with the Indian Affairs Office of Indian Energy and Economic Development and the U.S. Department of Energy's Argonne National Laboratory. SIPI is a BIE post secondary school in Albuquerque, NM., and the Oneida Nation High School is a BIE funded school in Oneida, Wis.

"I am very pleased that this contest allowed the creativity of our BIE students to shine," Echo Hawk said. "Both SIPI and the Oneida Nation High School student's bio-diesel fuel teams were able to meet the challenge of designing an innovative process for converting biomass into diesel fuel. Projects like this demonstrate that our students can take on real world challenges with successes they can someday use to help promote tribal self-sufficiency."

This is the second year in a row that both the SIPI team and the Oneida Nation High School team have been the featured entries in the national competition. The SIPI wind turbine team was one of the top two national winners at the 2010 college level competition. Last year's competition ended in a tie with both SIPI and the College of the Menominee Nation from Keshena, Wis., sharing first place. In the high school level category, this is the second year in a row that the Oneida Nation High School has received an award in the renewable energy challenge.

This year the SIPI bio-diesel fuel team took first place for their process design to convert raw biomass material to diesel fuel. The team members are students Monique Mousseaux (Oglala Sioux), Felipa DeLeon (Oglala Sioux), John David (Laguna Pueblo), Josh Begay (Navajo), and Vernetta Long (Navajo), SIPI faculty members Dr. Nader Vadiee and Dr. Massoud Ahghar, and the teams' mentor from the University of New Mexico, Ralph Kelly.

"We had an excellent team of students working on this challenge," said Dr. Vadiee. "I am very pleased with their efforts and creativity in this endeavor. All of the students worked very hard and are extremely deserving of this recognition."

The Oneida Nation High School team used cooking grease to produce a usable bio-diesel fuel. Their project design, like SIPI's, was chosen as the best for the 2011 Challenge. The students working on the project included Devan Little, Larissa Lucus, Charles Cook, Alexi Silva, Danny McKinney, Bradley Grandquist, Jade Doxtator, and Brandon White. The eight-person group spent about 20 hours over three

weeks building and developing the project before it was submitted for judgment. “It did feel good to get out of the classroom and come here to work on it,” said White, a senior.

The focus of the contest was to promote renewable energy development for Indian Country among students and teachers at the high school and college level. Preparing a proposal, feasibility studies, background research and team work, time management, budget management, communications, and partnering with other research and development entities were some of the activities students practiced and learned.

“This is a great way for students to translate what they are learning in the classroom to real world applications for developing renewable energy sources," said Andrew Skipor, who leads Argonne’s educational programs. “We are thrilled to be a part of such an important program that provides the hands-on training and experience that will help increase the use of clean energy technologies and promote energy independence.”

Both the SIPI and Oneida Nation High School bio-diesel fuel teams attended a BIE-IEED Argonne Award Ceremony at Argonne National Laboratory in Illinois on July 14-15, 2011. They will have their project results prominently displayed at Argonne, which is located near Chicago.

Background:

SIPI is a National Indian Community College established in 1971 at the request of the 19 Pueblos of New Mexico and other federally recognized tribes in the U.S. to help train American Indians and Alaska Natives for employment. It is advised by a national, tribally appointed Board of Regents. SIPI provides career technical training and transfer degree programs to students from the nation’s 565 federally recognized tribes. It offers competitive job training programs; granting of Associate of Applied Science, Associate of Arts and Associate of Science degrees; and opportunities to transfer into four-year degree programs. SIPI’s fall 2009 enrollment was 657 students from over 80 tribes.

The Oneida Nation High School was established in 1995 as an expansion of the pre-existing Oneida Nation Elementary School. Enrollment is non-compulsory, and as a school of choice draws students from five adjacent school districts including Green Bay, West DePere, Pulaski, Seymour, and Freedom. It has a current enrollment of 84 students, most of whom are members of the Oneida Nation, a federally recognized tribe. The school also draws students from approximately four other tribes, however, and has some non-member students as well. Oneida Nation High School adheres to the same standards as Wisconsin public schools, but offers the advantage of training in Oneida language and culture. It is funded through BIE grants and tribal contributions. ,.

Argonne National Laboratory seeks solutions to pressing national problems in science and technology. The nation's first national laboratory, Argonne conducts leading-edge basic and applied scientific research in virtually every scientific discipline. Argonne researchers work closely with researchers from hundreds of companies, universities, and federal, state and municipal agencies to help them solve their specific problems, advance America's scientific leadership and prepare the nation for a better future. With employees from more than 60 nations, Argonne is managed by UChicago Argonne, LLC, for the U.S. Department of Energy's Office of Science.

The Assistant Secretary-Indian Affairs (ASIA) oversees the Office of Indian Energy and Economic Development (IEED), whose mission is to foster stronger American Indian and Alaska Native communities by helping federally recognized tribes with employment and workforce training programs;

helping tribes develop their renewable and non-renewable energy and mineral resources; and increasing access to capital for tribal and individual American Indian and Alaska Native-owned businesses. ASIA also oversees the Bureau of Indian Education which operates the federal school system for American Indian and Alaska Native children from the federally recognized tribes. The BIE is responsible for ensuring the implementation of federal education laws, including the No Child Left Behind Act, in 183 BIE-funded elementary and secondary schools and residential programs located on 64 reservations in 23 states serving approximately 42,000 American Indian and Alaska Native students and employing over 5,000 teachers, administrators and support personnel. The BIE also provides resources and technical assistance to 124 tribally administered BIE-funded schools, 26 tribal colleges and universities and two technical colleges. It directly operates two post-secondary institutions: Haskell Indian Nations University in Lawrence, Kan., and the Southwestern Indian Polytechnic Institute in Albuquerque, N.M. For more information, visit the BIE website at: http://www.bie.edu/.