

**Nevada Renewable Energy Consortium  
Nevada System of Higher Education (NSHE)  
DRAFT**

**Overview**

**Consortium Concept Definition**

The Nevada Renewable Energy Consortium ,is an association among the three Nevada System of Higher Education (NSHE) research institutions (DRI, UNLV, and UNR), along with participating NSHE’s community colleges, that will play a critical role in making Nevada the leader in the utilization of renewable energy sources to promote a cleaner environment and more secure nation. This consortium , in collaboration with business and industry stakeholders, will engage in coordinated and complementary activities related to renewable energy (RE) research, development, demonstration, deployment, commercialization, education, and training.

**Vision**

To enhance the national competitiveness of NSHE research institutions and the impact of outreach, training and workforce development in the area of renewable energy and clean technologies. As a result the NSHE can contribute significantly to the State’s goals in this area, and its institutions can assume a leadership role in addressing the Nation’s energy needs, as detailed in the NSHE Science and Technology Plan.

**Proposed Goals and Processes for the NSHE Federal Assistance Grant  
on Renewable Energy**

**Goals**

To achieve the stated vision, the following major objectives are targeted by using the Federal Assistance Grant:

- 1.\* Increase the national research competitiveness of the NSHE’s research institutions through unique collaborations within the Nevada Renewable Energy Consortium*
- 2.\* Foster research collaboration among NSHE research institutions through an organizational model analogous to the one used for the state-wise NSF-EPSCoR awards.*
- 3.\* Develop a NSHE inventory of research capabilities, facilities and educational and outreach programs, enabling the consortium to develop a clear strategic plan for future growth by avoiding duplication and maximizing collaboration and sharing of existing facilities and expertise within the system.*
- 4.\* Enhance outreach, training and workforce development programs with participating community colleges with the goal of structuring these programs to become self-sustaining in the future.*

5. *Build partnerships with industry to better understand the needs and enhance the opportunities for expanding the economic impact of renewable energy programs in Nevada.*

6. *Increase commercialization, economic analysis, public policy and outreach capabilities in renewable energy in order (i) define business practices to assist with commercialization, technology transfer and economic analysis related to renewable energy products; (ii) define business and economic analysis services and associated costs available for the State and local businesses; (iii) identify public policy issues related to implementation of renewable energy practices and recommend solutions to facilitate implementation; (iii) develop a frame work for outreach to the general public and K-12 and teachers' education on renewable energy issues.*

\* = First year activity

## **Organization and Funding Model for Year 1**

### **Underlying tenets:**

1. DRI will be responsible for the overall management and coordination of the Nevada Renewable Energy Consortium and will work collaboratively with UNLV, UNR and participating community colleges in effectively operating and managing the Consortium. A business plan for longer-term development and sustainability of the Consortium will be developed early in the funding cycle. This activity also will include organization of workshops, seminars, and other coordination events. In addition, the Consortium will provide a point of entry for RE-oriented business groups, technical organizations, and academic associations that are seeking partnerships with NSHE. The daily management of the Consortium for NSHE will be by an individual selected by the DRI president and vetted through the UNR/UNLV presidents.
2. Consortium must function as an integrated entity with strong inter-institutional collaboration and communication.
3. Allocation of funding among institutions will be based on merit of proposed activities. There is no expectation of equal funding to each campus.
4. Funded projects require the active participation of researchers from at least two institutions.
5. Establishment of a NREC Management Advisory Committee consisting of (a) Vice Presidents of Research from the research institutions, (b) Provost from a participating community college, (c) representatives from three renewable energy firms located within Nevada, (d) a liaison from the NSHE Board of Regents (*ex officio*), and (e) a liaison from the Nevada Office of Energy (*ex officio*).
6. Establishment of an internal technical review committee comprised of three representatives from each research institution (directors of each institution's renewable energy center plus two other deans/directors).
7. Each institution will provide required cost share in proportion to funding received from the Federal Assistance Grant.

**First year funding:**

- (1) Twenty percent (20%) of the total award (DOE funding plus matching funds) will be set aside to support:
  - a. DRI's expenses related to the cost of establishing and managing the consortium;
  - b. Establishing and funding an annual consortium workshop as well as conference expenses; and
  - c. Competitive institutional allocations in support of joint graduate student stipends or joint post doctoral positions whereby these students and post-docs serve in residence at two or more institutions during their tenure.
- (2) Ten percent (10%) of the total award will be set aside to cover education and workforce development activities (e.g., internships, externships), which may be conducted in concert with participating community colleges.
- (3) During the first year, and only for this year, the remaining funding will be equally divided among DRI, UNR, and UNLV, because insufficient time exists to establish a merit review body for proposals.
- (4) Funding for research during the first year (70% of total award) will be used to establish and enhance collaborative research in the areas of (a) biofuels, (b) solar, and (c) geothermal energy.
- (5) Any research project receiving funding must include Co-PIs from at least two institutions and a work plan documenting active collaboration among institutions.
- (6) Within three months of the inception of funding, the internal technical review committee will draft and issue an RFP for projects potentially supported by out-year funding.