

# Henderson Underground Science and Engineering Project Advisory Commission



## 3rd Quarter Report

# STATE OF COLORADO

## OFFICE OF THE LIEUTENANT GOVERNOR

130 State Capitol  
Denver, Colorado 80203-1792  
Phone: (303) 866-2087



Jane E. Norton  
Lieutenant Governor

November 17, 2006

The Honorable Bill Owens  
136 State Capitol  
Denver, CO 80203

Dear Governor Owens:

Outlined herein is the 3rd Quarter Report on the activities of the Advisory Commission on the Henderson Underground Science and Engineering Project (HUSEP), demonstrating the commission's efforts to research avenues in which the State of Colorado can assist in promoting HUSEP as the preferred site for the proposed National Deep Underground Science and Engineering Laboratory.

### **Background:**

According to Executive Order B 007 05, the Commission has met on a monthly basis, beginning in December 2005. The charges of the Commission are to:

- a.) independently observe and assist activities related to the HUSEP application to the National Science Foundation requesting award of the DUSEL project at the Henderson Mine site;
- b.) develop a quarterly report that outlines the benefits and impacts the project would have on the State of Colorado;
- c.) provide advice to the Governor, affected state agencies, and the General Assembly on appropriate roles for the state in providing assistance, seeking out opportunities support the application, as well as develop sources of financial and other assistance for the construction and operation of the project once awarded;
- d.) seek out opportunities to collaborate with federal governmental agencies;
- e.) meet monthly, or as needed, at the call of the chair, to conduct a review of qualitative and quantitative information related to the project;
- f.) consider liability and indemnification issues, and make recommendations for the states role.

As outlined in Executive Order B 007 05, the HUSEP Advisory Commission is comprised of members from industry, academic institutions, state government entities, and representatives from Colorado communities.

During the third quarter, the Commission has provided oversight or assisted with the following activities:

**Charge 1: Observed and assisted with the HUSEP application to the National Science Foundation.**

Actions Taken:

- 1) The Commission reviewed the S2 Conceptual Design Report (CDR) due to the National Science Foundation (NSF) on June 23, 2006, providing assistance and feedback to the proposal development team prior to submission.
- 2) As outlined herein, the Commission requested, reviewed and developed supporting data that was utilized within the S2 CDR Report that demonstrated the State of Colorado's commitment to the HUSEP proposal. Data sources included, but were not limited to, an Economic Impact Study conducted by the Colorado Office of Economic Development (Attachment A), the development and passage of Senate Bill 229 (Attachment B) providing state funding for the DUSEL project, comprehensive community & educational outreach initiatives, and a Funding Options Summary that demonstrates the scope and commitment of the partnerships the Commission has developed to support the HUSEP effort in Colorado.
- 3) The Commission reviewed the following Henderson DUSEL Proposal Timeline, as outlined by the National Science Foundation, to ensure application submission compliance, assisting the proposal development team in securing data requested for inclusion in the report(s). To date, the established deadlines have been met and the submission team is in complete compliance.

**DUSEL Proposal Timeline**

Aug. 23-24, 2006	Conceptual Design Report review by a national panel
Sept. 2006	Announcement of Solicitation 3 for proposals to prepare a technical design of DUSEL
Jan. 9, 2007	Expected S3 Proposal Deadline
Feb. 1, 2007	A panel review of the S3 proposals for a down select
Feb. 15, 2007	Internal Panel Recommendation to NSF
Mar. 2007	Final NSF decision on the site
Apr. 2007	S3 award to the winning site
Apr. 2007	Possible S4 announcement (call for experimental LOI's)
Oct. 2007	PDR Deadline
End of 2007	PDR Review, establish a baseline
2008	Approval by NSB (National Science Board)
	FY2010 budget Request to Congress
2010	DUSEL Groundbreaking

- 4) Commission members helped facilitate a site tour of the Henderson Mine for the National Science Foundation selection team.

**Charge 2: The Commission will seek out opportunities to collaborate with state and federal governmental agencies.**

Actions Taken:

- 1) The Commission has invited members of Colorado's Congressional Delegation to participate in the HUSEP Advisory Commission meetings, providing monthly updates on the status of the application process, engaging them at all levels of the project. Representatives from the following offices have actively participated in commission meetings:

Office of Senator Wayne Allard  
Office of Senator Ken Salazar  
Office of Representative Bob Beauprez  
Office of Representative Mark Udall  
Office of Representative Marilyn Musgrave

- 2) At the recommendation of the Commission, the Colorado Congressional Delegation submitted a letter to the Director of the National Science Foundation voicing their unanimous support for the DUSEL project. (See Attachment C)
- 3) Commission Member Senator Joan Fitz-Gerald introduced legislation that provides financial support from the Department of Natural Resources severance tax fund for community facilities ancillary to the HUSEP project. Commission members testified on behalf of the bill, which was approved and signed into law by Lt. Governor Jane Norton on May 31, 2006.



Bill signing ceremony  
on May 31, 2006



HUSEP Community Outreach Display  
Colorado State Fair –DNR Building

- 4) Commission members have established collaborative partnerships in support of the HUSEP project, with an emphasis on community and educational outreach activities. Working with the Colorado Department of Natural Resources, a Community Outreach Display was featured in the Creative Arts Building throughout the Colorado State Fair, providing over 60,000 citizens and students information on the project and the benefits to Colorado. The Commission is also working with state educational institutions to incorporate the HUSEP projects into various outreach and educational programs to strengthen and expand statewide partnerships.

**Charge 3: The Commission will seek out opportunities to develop sources of financial and other assistance for the project, providing advice to the Governor, affected state agencies, and the General Assembly on appropriate roles for the state in providing assistance.**

Actions Taken:

- 1) In addition to the financial assistance provided to the HUSEP project by Senate Bill 229, the Commission has also coordinated with various state agencies to identify funding sources for the HUSEP project. Outlined below are the funding options that were identified by Commission members and their collaborative partners:

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***HUSEP FUNDING OPTIONS OVERVIEW***

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**SENATE BILL 06-229**

As introduced by Senator Joan Fitz-Gerald, SB229 was approved by the General Assembly in May 2006, providing funding from the operational account of the Severance Tax Trust Fund. Funds were requested to pay for the state's share of a facility related to the HUSEP Project in Colorado. The bill requires the general assembly to appropriate **\$20 million** dollars over a 5-year period, beginning with the state fiscal year 2007-08, and contingent upon the successful National Science Foundation Grant Award to the HUSEP Project.

**THE COLORADO DEPARTMENT OF LOCAL AFFAIRS  
ENERGY AND MINERAL IMPACT ASSISTANCE PROGRAM**

The Department administers the Energy and Mineral Impact Assistance program, which assists communities affected by the growth and decline of energy and mineral industries in the state. Funds come from the state severance tax on energy and mineral production and from a portion of the state's share of royalties paid to the federal government for mining and drilling of minerals and mineral fuels on federally owned land. The program was created by the legislature in 1977.

Applications are accepted continuously and are considered in the course of three regular funding cycles each year. While there is no absolute limit to the amount of funding an applicant may request, **\$500,000** is the suggested maximum grant guideline. It is recognized areas of the state with the heaviest energy and mineral productions incur unique impacts. In circumstances in which a project presents a compelling need, is critical to addressing significant impacts, represents a unique opportunity for enhanced quality of life, or is of monumental significance in strengthening a community for the future, the maximum grant guideline may be increased. Water and sewer loans will be considered in amounts up to **\$1,000,000**.

**OFFICE OF ECONOMIC DEVELOPMENT & INTERNATIONAL TRADE  
INFRASTRUCTURE ASSISTANCE/GRANTS**

The state has funds available to assist with constructing public infrastructure needed by a specific business (es), primarily in rural areas of the state. The state provides the funding to an eligible city or county; however, a specific business (es) will need to commit to meet certain job creation requirements (or retention in some cases). The Governor's Financial Review Committee (FRC) reviews and approves all requests for funding. Generally, funding may be provided up to

**\$500,000**; the local community must match any request and the business must stipulate that 51% of the jobs created would be low to moderate-income jobs.

### **COLORADO DEPARTMENT OF HIGHER EDUCATION**

The Department of Higher Education has up to **\$300,000** available from the advanced technology fund for research funding of advanced technology or environmental research projects.

### **OEDIT - ECONOMIC DEVELOPMENT COMMISSION**

Business incentive funds are available for businesses that commit to meet certain job creation requirements (for businesses with significant state or regional impact, retained jobs may be considered). The EDC reviews and approves all requests for funding. Incentives vary based on a number of factors; however, requests generally range **between \$1,000 - \$3,000 per each full-time job created**. The local community must also provide matching funds/incentives to the business.

### **CLEAR CREEK COUNTY ECONOMIC DEVELOPMENT CORPORATION**

The Clear Creek Economic Development Corporation is a community (Clear Creek County) based organization that has contributed funding to the Arapaho Project to enable Arapaho to encourage science and educational awareness in our schools, purchase laboratory equipment, coordinate educational venues, and promote activities locally, including the HUSEP. The Corporation (CCEDC) feels strongly that this project is paramount to the local and state economies. With that in mind the Corporation will seek to fund HUSEP **\$25,000** from local revenues to be phased over two years, and in addition, the Corporation will commit to additional funding should the opportunity present itself. It is important that the Corporation pursues and support projects that will diversify and grow the local economy.

### **FUNDING SUMMARY**

<b>FUNDING SOURCE</b>	<b>AMOUNT</b>
SB06-229	\$20 million
DOLA – Energy & Mineral Impact Assistance	\$600K
Economic Development Commission	\$150K
OEDIT – Infrastructure Grant	\$500K
Department of Higher Education	\$300K
Clear Creek County EDC	\$25K
<b>TOTAL POTENTIAL FUNDING AVAILABLE</b>	<b>\$21,575,000.00</b>

- 2) The Commission is engaged in outreach activities to solicit support for the HUSEP project, promoting awareness and expanding partnerships.
- 3) The Commission has included representatives from the Governor’s Office of Policy and Initiative and Legal Counsel to serve as advisors to the Governor on the HUSEP project, providing status updates to affected state agencies through HUSEP Advisory Commission members participating in the monthly meetings.

**Charge 4: The Commission will meet monthly, or as needed, at the call of the chair, to conduct a review of qualitative and quantitative information related to the project.**

Actions Taken:

- 1) The Commission has met on a monthly basis, beginning December 2005, to review qualitative and quantitative information related to the project, including but not limited to:
  - a) Monthly project status updates
  - b) Review NSF Proposal Reports
  - c) Review Core Drill status updates – **CORE DRILL IS COMPLETE**
  - d) Review the current status of applicable regulatory permits to ensure compliance
  - e) Reviewed the proposed NSF Cooperative Agreement
  - f) Reviewed a comprehensive analysis of the competition
  
- 2) Working with the Office of Economic Development, the Commission secured comprehensive Economic Impact Studies for Clear Creek County and Grand County, reviewing and analyzing the benefit and impact to those communities. As outlined in the attached study, the economic benefit of the HUSEP project, and the return of investment to the State of Colorado will be substantial. In addition, the educational, employment, and tourism impacts will be of great benefit to the state.

**Charge 5: Consider liability and indemnification issues, and make recommendations for the states role.**

Actions Taken:

- 1) Working with the Governor's Legal Counsel and the legal teams from the HUSEP Collaboration, the Commission continues to review the liability and indemnification issues related to the project.

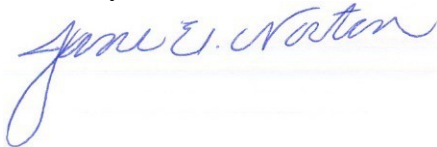
**REPORT SUMMARY: Benefits and Impacts of HUSEP to the State of Colorado**

As evidenced within this quarterly report, construction of the DUSEL project at the Henderson Mine site would provide immediate and long-term benefits to the people of the State of Colorado through direct job creation, investment and indirect economic development and educational multipliers. Greater detail of the far-reaching impacts of the HUSEP project is outline in the attached Economic Impact Study.

In addition to collaborative partnerships at the state and federal levels, the Commission has initiated conversations with several local municipalities to expand the reach of this project. Through the Arapaho Project, the commission is working with Clear Creek County to secure shared and leased space at a local school building that has been vacated for possible use for the HUSEP project. As talks continue with the county, the Commission will move forward in identifying additional resources and partnerships that will strengthen Colorado's role as the top candidate for the nation's first Deep Underground Science and Engineering Laboratory.

On behalf of the Henderson Underground Science and Engineering Project State Advisory Commission, I would like to express our appreciation for the opportunity to review, evaluate and recommend actions necessary to assist in promoting HUSEP as the preferred site for the proposed National Deep Underground Science and Engineering Laboratory. The Commission will continue to support the application process, identify the benefits and impacts to the State of Colorado, and provide recommendations on the role of the state in securing this national laboratory.

Sincerely,



Jane E. Norton  
Lt. Governor/ Commission Chair

Senator Joan Fitz-Gerald  
Senate District 16  
Colorado State Legislature

Representative Al White  
House District 57  
Colorado State Legislature

Russell George  
Executive Director  
Department of Natural Resources

Brian Vogt  
Executive Director  
Office of Economic Development

Jeff Holwell  
Division Director, Business Development  
Office of Economic Development

Clay Brown  
Regional Manager – Central Region  
Office of Field Services  
Department of Local Affairs

Jenna Langer  
Executive Director  
Colorado Commission on Higher Education

Steve Schultz  
Representative  
Clear Creek County

Nancy Stuart  
County Commissioner  
Grand County

Jim Arnold  
General Manager  
Climax Molybdenum Company

Richard Woods  
Director  
Arapaho Project

Dr. Mark Kuchta  
Mining Engineering Professor  
Colorado School of Mines

**Non-voting Member:**

Dr. Chang Kee Jung  
Stony Brook University  
HUSEP Executive Committee

**Non-Voting Staff Members:**

Becky Chandler - OEDIT  
Susan C. Smith – Lt. Governor's Office