



Progress Report to the Carson City Board of Supervisors

February 19, 2004

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Summary

- New Energy Nevada Partners
- Pursuing Additional Energy Nevada Partners
- Power Feasibility Analyses
- Manufacturer Recruitment
- Sierra Pacific and Southwest Gas Relations
- Press and Community Outreach
- Web Site

Status of Various Entities Joining or Considering Joining the Energy Nevada Partners' Group.

The Energy Nevada Project model involves a multitude of public and private entities in northern Nevada banding together to create new economic vitality:

“Economic growth through renewable energy”

Many Ongoing Conversations

- Carson City Development Services Department also sent letters
- Energy Nevada is making 100's of calls
- Many meetings with potential partners
- Regular Energy Nevada Partners meetings
- Including NPUC, NSOE, SPPC.

- Other jurisdictions are expected to join soon.

- Notably, none have said "no."

Ongoing Conversations Include:

- | | |
|--------------------------------------|-----------------------------------|
| –Carson City School District | –North Lake Tahoe PUD |
| –Carson-Tahoe Hospital | –Nye County |
| –Churchill County | –Pahrump, Town of |
| –Clark County | –Reno, City of |
| –Department of Corrections | –Round Hill GID |
| –Douglas County | –South Lake Tahoe, City of |
| –Douglas County SID | –South Tahoe PUD |
| –Fallon, City of | –Southwest Gas Corporation |
| –Gardnerville Water Co. | –Sparks, City of |
| –Heavenly Valley | –Storey County |
| –Incline Village GID | –Sun Valley GID |
| –Indian Hills GID | –Truckee Meadows RPA |
| –Interplex | –Truckee Meadows WRF |
| –Lyon County | –Truckee, Town of |
| –Lyon County School District | –Wade Development Company, Inc. |
| –Minden Gardnerville Sanitation | –Washoe County |
| –Minden, Town of | –Washoe County School District |
| –Nevada Department of Transportation | –Washoe RTC |
| –Nevada State Office of Energy | –Western Nevada Community College |

Regulatory Groundwork – District Attorney Opinions

- *Carson City staff and Energy Nevada lawyers helped develop a draft Joinder agreement for review by other Partners.*
- *Offers template Joinder Agreement to facilitate other local public jurisdictions joining.*

- *Carson City and Washoe RTC district attorneys provided legal opinions.*
- *Helping to show that Nevada law allows the Energy Nevada joinder process.*

- *These analyses help other potential Energy Nevada Partners evaluate the procedural side of joining Energy Nevada.*

Press Conference February 26, 10 am

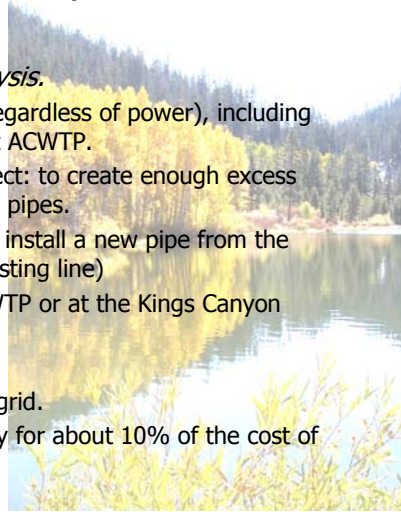
Energy Nevada and the Carson City staff are Preparing a Press conference to:

- Announce Energy Nevada
- Educate the community
- Credit Carson City, the Economic Vitality Coalition, and the regional Alternative Energy Working Group for inception
- Preview the first projects
- Announce the first regional organizations to join.
- Involving:
 - Carson City
 - Officials from other Cities, Counties and State levels
 - Manufacturers

Energy Projects – Hydro:

Hydro Project Preliminary Feasibility Analysis.

- Water system needs to be upgraded (regardless of power), including upgrading of the pipe from the tanks at ACWTP.
- The goal of the alternative energy project: to create enough excess cash-flow to help pay for upgrading the pipes.
- Most promising option appears to be to install a new pipe from the Tanks to the ACWTP (parallel to the existing line)
 - capture hydroelectric power at ACWTP or at the Kings Canyon plant
 - serve the load at the plant
 - perhaps sell excess power into the grid.
 - Renewable energy project could pay for about 10% of the cost of the pipe.



Energy Projects – Street Lighting:

Street Lighting Project Preliminary Feasibility Analysis.

- Energy Nevada is studying technical and economic potential for an energy efficient street lighting/traffic signal program.
- Also evaluating baseball field lighting improvements.

Key Points of Street Lighting Study:

- Energy cost reductions.
- Maintenance cost reductions.
- Improved City appearance changing yellow lights for white.
- Improved public safety under white lighting.
- Reduced traffic hazard.
- Strong jobs component
- Improved "Dark Skies" illumination

Comparing HPS Yellow and White Lighting



Other Energy Projects:

Compressed Air Energy Storage

- We have preliminary study results and financial studies in hand for Compressed Air Energy Storage (CAES) projects in Nevada.

Energy Software – Fenway Systems

- Fenway Systems may be able to help some of the Energy Nevada projects provide advanced controls for their installations.

Solar – PowerLight

- Analysis results to date do not show a clear path, but further options are being explored.

Many other projects being investigated

Economic Development Target– Wind – Cygnus

- Has developed a 30 kW wind turbine.
- Especially attractive payback in a wide range of wind regimes.
- Fits well into Nevada's 30 kW net metering law
- Cygnus may also be able to open manufacturing in the region if we can demonstrate enough of a market.
- The Cygnus "secret sauce": engineering to reduce the turbine weight per kW of power – and therefore cost.
- Cygnus is included in our NSOE distributed generation proposals.
- Also negotiating with two other developers of small wind technologies.



Economic Development – Heavy Manufacturing – Large Foundry

- A major investment group and a foundry were referred to Energy Nevada by Joe McCarthy
- Manufactures hubs for wind turbines
- Interested in building or acquiring a foundry in the region to serve the entire western US and Pacific Rim markets.
- Energy Nevada, Carson City, and Sierra Pacific are working together.
- Will provide industrial infrastructure to support more renewable energy manufacturers.

Working Relationship with SPPC and Southwest Gas

Carson City, Energy Nevada, and SPPC share many goals:

- SPPC has historically been an industry leader in RE; the Energy Nevada program advances this position of leadership and innovation
- SPPC has been a regional leader in job creation; the Energy Nevada program will be a powerful driver for economic development
- SPPC can benefit from having new RE and EE companies in the region, as customers, suppliers, technology partners
- The Energy Nevada program is a win-win-win program benefiting everybody in the region; the only losers are power generators out of state
- Because of the "white hat" quality of the program, it creates great opportunities for public communications

Working Relationship with SPPC and Southwest Gas

The Energy Nevada program is good for SPPC's bottom line:

- The Energy Nevada program will help stabilize generation costs, displacing volatile out-of-state resources
- The program can throw off RECs without SPPC having to take power
- The program can include some dispatchable RE resources
- If desired, the program can create profitable business opportunities for SPPC as a regulated utility, esp. in firming, also in T&D, ancillary, etc.
- If desired, the program can create profitable business opportunities for SPPC unregulated affiliates, in project ownership, energy efficiency, etc.
- The program places all the risk on the Energy Nevada team, while presenting substantial upside opportunities for SPPC

Working Relationship with SPPC and Southwest Gas

We have met at many levels in the companies, including:

Sierra Pacific:

- Jeff Ceccarelli, President
- Jeff Hill, Gary Porter, Colin Duncan, Nancy Zunino, Resource Procurement
- Grant Sims and Stan Thomas, Economic Development
- Bob Balzar, John Hargrove, Teresa Gardner, Energy Efficiency
- John Owens, Charlene Booth, Johnny Hargrove, Jeannie Baker, Account Executives
- Kay Grosulak, Strategic Planning

Southwest Gas:

- Mark Stuebe, Large Customer Sales Industrial Gas Engineer
- J.R. Cruz, Manager/Sales Northern Nevada

Grant Funded Work – Affordable Housing in Carson City.

- Research project for energy efficiency and renewable energy for Affordable Housing in Carson City.
- HUD grant secured by Carson City Development Services.
- Directed toward a larger HUD grant for energy efficiency.
- To determine what energy efficiency and renewable energy measures are cost effective for a sample group of homeowners in Carson City.
- We will apply for the next stage HUD grant to implement.
- Paired with NSOE monies.

Grant Funded Work – NSOE renewable energy distributed generation projects

- Submitted proposals to Nevada State Office of Energy (NSOE)
- Team includes local businesses, wind developers and solar companies.
- Potential award in February, 2004 of up to \$100,000.
- Solar PV: Independent Power Corporation, Reno for a solar PV project for the Carson City Affordable Housing Energy Efficiency.
- Wind – small scale: Cygnus turbines be sited and studied at InterPlex industrial site and High Desert Hay and Livestock



The www.energynevada.com Site Is Now Active

- Educate the public and community
- Coordinate projects
- Update the press
- Information source for manufacturers
- Information source for potential Energy Nevada Partners

