

Galena III **Geothermal Plant** Lyon County, Nev.

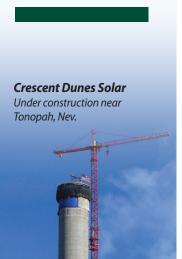
Nevada leads the nation in geothermal energy development. edits

Ŭ

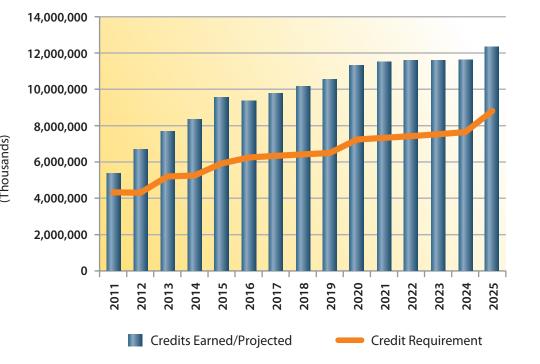
foli

Rel

Geothermal Energy Association's April 2012 Annual U.S. Geothermal Power Production and Development Report



## **Renewable Energy Value for Customers to Meet** State's Renewable Policy Goals



## **Key Projects Under Construction or in Development**

## **CRESCENT DUNES SOLAR THERMAL**

- 110-megawatt concentrated solar power project owned by SolarReserve
- Under construction in Nye County near Tonopah, Nev.
- Utilizing molten salt solar storage technology developed by Pratt & Whitney Rocketdyne to provide NV Energy customers solar power day or night
- Expected to be operational 2014

## **ONE NEVADA TRANSMISSION LINE**

- 235-mile long, 500,000-volt transmission line under construction between Southern Nevada and northeast Nevada
- Joint project with Great Basin Transmission-South
- · Enables development of a number of renewable energy projects and will connect NV Energy's northern service area with southern service area for the first time
- Expected to be operational late 2013

## **FRV SPECTRUM SOLAR PHOTOVOLTAIC**

- 30-megawatt photovoltaic solar project owned by SunEdison
- In development east of the City of North Las Vegas in Clark County
- Expected to be operational in 2013

## **CLAYTON VALLEY GEOTHERMAL**

- 53.5-megawatt geothermal project owned by Ram Power
- In development in Eureka County, Nev.
- Expected to be operational in 2014

## **MOUNTAIN VIEW SOLAR PHOTOVOLTAIC**

- 20-megawatt solar photovoltaic project owned by NextEra
- In development in City of North Las Vegas
- Expected to be operational in 2014

## **DIXIE MEADOWS GEOTHERMAL**

- 51-megawatt geothermal project owned by Ormat Technologies
- In development in Churchill County
- Expected to be operational in 2015



### **SolarGenerations** installation

at Boy Scouts of America, Las Vegas

"Clean energy is a key sector for Nevada. It provides energy from local sources, drives innovation, and most importantly, brings highquality jobs and economic growth to the local communities."

Nevada Governor Brian Sandoval May 2012 Stillwater 2 Solar Dedication

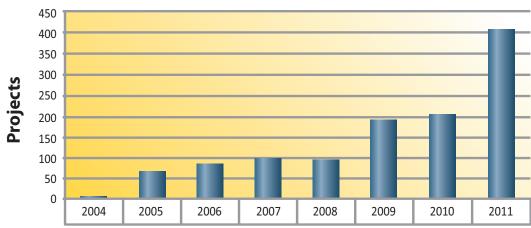


Stillwater II Solar/Geothermal Project hurchill County, Nev.

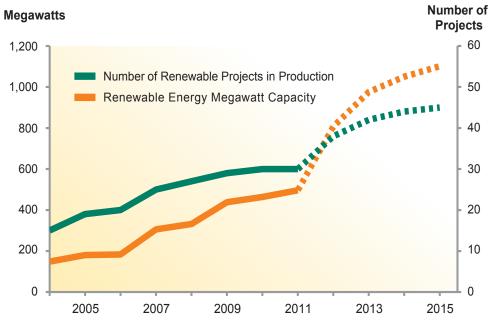
RenewableGenerations is an incentive program that helps customers offset the installation costs of renewable energy systems. Program categories include residential, small business, schools, public buildings and agriculture.

- Total solar hot water projects installed is 41
- Total wind projects installed is **86**
- Total hydro projects installed is 6
- 38 megawatts

## **RenewableGenerations GROWTH**



# NV Energy's Dramatic Renewable Energy Growth

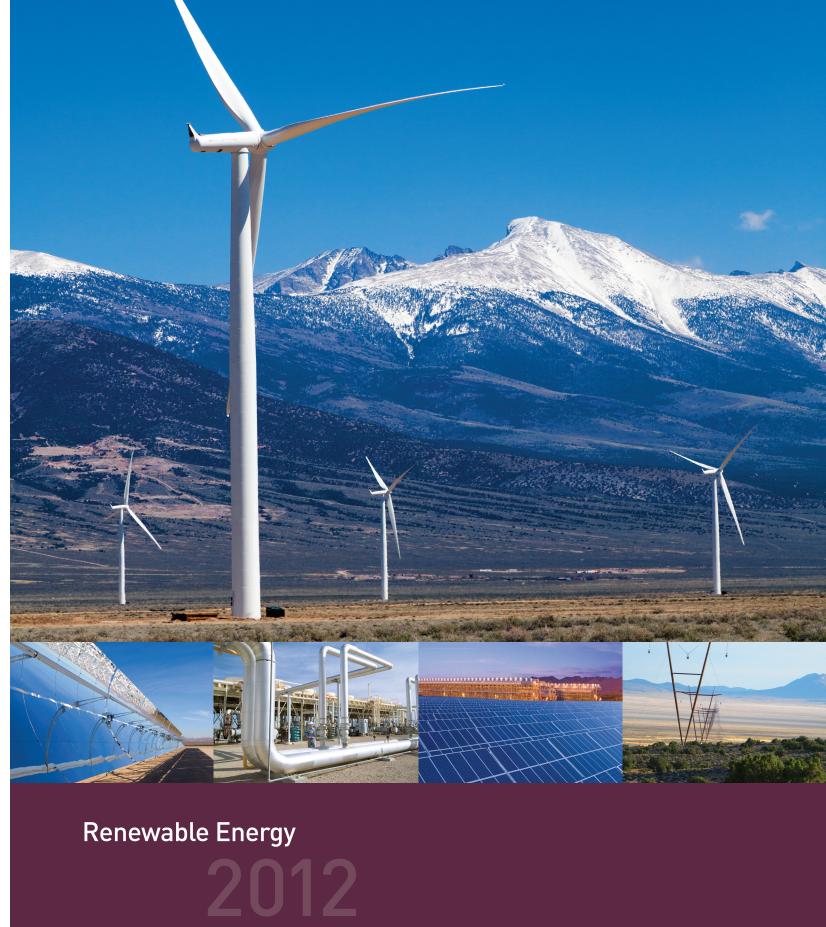


## **NV Energy Invests in Customers**

• Total projects completed/installed is more than **1,400** (includes solar photovoltaic, solar hot water, wind and small hydro projects) • Total solar photovoltaic customer installed is **1,315** • Total renewable energy installed through RenewableGenerations is more than

## • Total rebates awarded are more than \$128 million



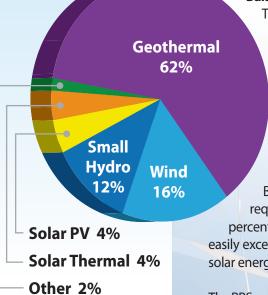






Silver State Solar North near Primm, Nev.

## 2011 Renewable Portfolio Standard Breakdown



*"A diverse* and balanced renewable energy portfolio will benefit our customers and the environment for decades."

NV Energy President and CEO Michael Yackira

## **Executive Summary**

NV Energy has a legacy of embracing and utilizing renewable energy on behalf of its customers since the early 1980s. This longstanding commitment has resulted in dramatic renewable energy growth in recent years and an unprecedented success rate for contracted utility-scale projects.

Just three years ago, NV Energy's committed renewable energy projects topped out at about 300 megawatts of energy. That number is now over 800 megawatts and will see an additional 300 megawatts of clean energy sources added over the next two years. Approximately 1,100 nameplate megawatts of renewable energy – from all corners of Nevada – are currently under contract. (A net megawatt is enough energy to meet the needs of approximately 600 homes during a hot summer day.)

## **Balancing Customer Needs**

These successes were all achieved in alignment with efforts to carefully balance customer energy needs with the legislated requirement, and to ensure that energy sources represented the best value for customers. Much of this recent success can be attributed to the ability of the company and its renewable energy partners to execute on projects that are able to take advantage of federal grants and loan guarantees over a very limited window of opportunity. These additional financial benefits helped increase the success rate of NV Energy's renewable projects from the historic 60 percent to a better than 90 percent completion rate.

## **Renewable Portfolio Standard Success**

Both NV Energy operating companies exceeded the Nevada "Renewable Portfolio Standard" requirement of 15 percent of retail sales for 2011. NV Energy-South achieved an RPS of 16.7 percent, and NV Energy-North accomplished a 24.9 percent RPS for 2011. Both companies also easily exceeded the minimum requirement that at least 5 percent of the RPS credits be derived from solar energy sources.

The RPS outlook remains positive, although NV Energy will be required to balance a number of variables including load growth, changes in law, successful operation of the existing and future renewable energy projects and stable resource availability for projects. In addition to these factors, the RPS will steadily increase from 15 percent of retail sales in 2012, to 18 percent in 2013, to 20 percent in 2020, and finally to 25 percent in 2025.

## **Recent Project Successes**

Some of the notable project milestones that were recently accomplished on behalf of NV Energy customers include the substantial completion or commercial operation of the:

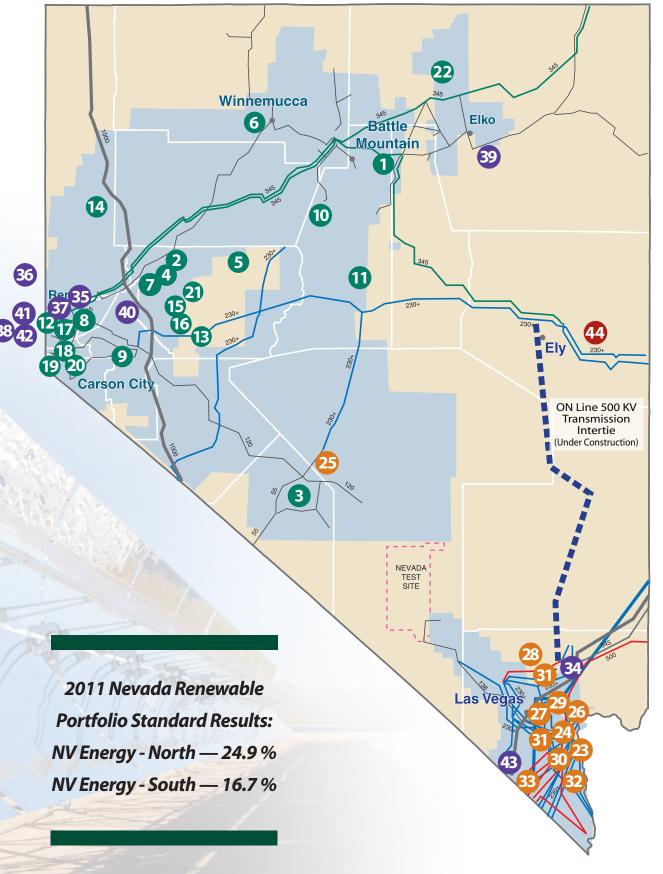
- 48.0-megawatt McGinness Hills geothermal project in Lander County;
- 12-megawatt CC Landfill Energy project north of Las Vegas;
- 32- megawatt Tuscarora geothermal energy project in Elko County;
- 52-megawatt Silver State Solar photovoltaic energy project near Primm;
- 3.2-megawatt Lockwood Landfill Energy project located east of Reno; and the
- 151.8-megawatt Spring Valley Wind project located in eastern Nevada.

## On the horizon

The company continued its renewable energy progress and entered into several new agreements for additional renewable energy resources for its customers. During 2011, the company received regulatory approval to secure more than 100 megawatts of additional renewable resources. Those projects include:

- 30-megawatt solar PV facility in North Las Vegas known as FRV Spectrum Solar;
- 20-megawatt solar PV facility in North Las Vegas known as Mountain View Solar;
- 51-megawatt geothermal plant in Churchill County, Nevada known as Dixie Meadows; and
- 1.5-megawatt renewable credit purchase from two solar PV projects in North Las Vegas.

## **NV Energy's Extensive Renewable Sources**





White Pine County, Nev.

