



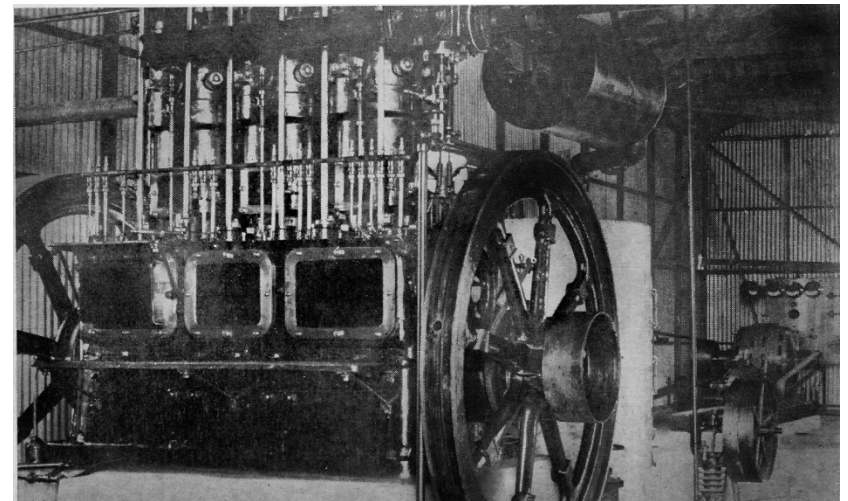
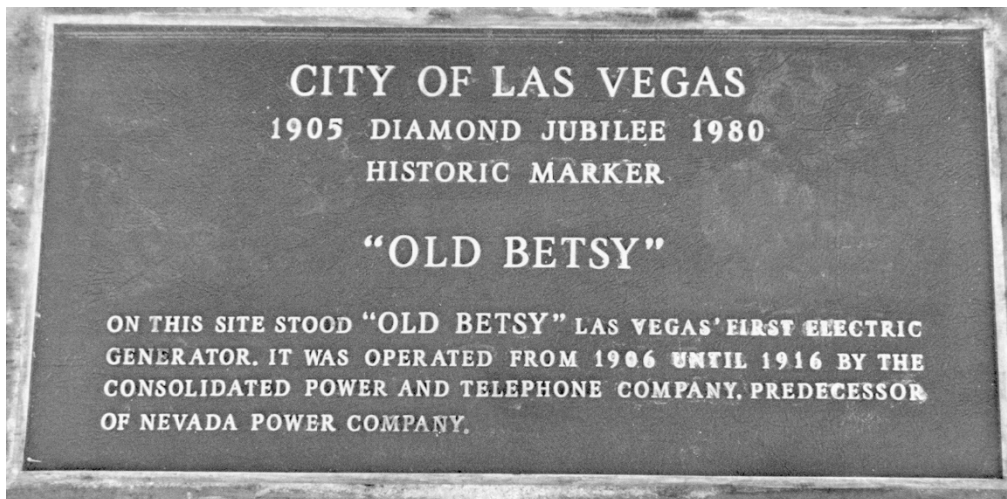
City of Las Vegas City Council Presentation

July 20, 2022

Company Overview



NV Energy has served the citizens of southern Nevada since 1905



Company Overview



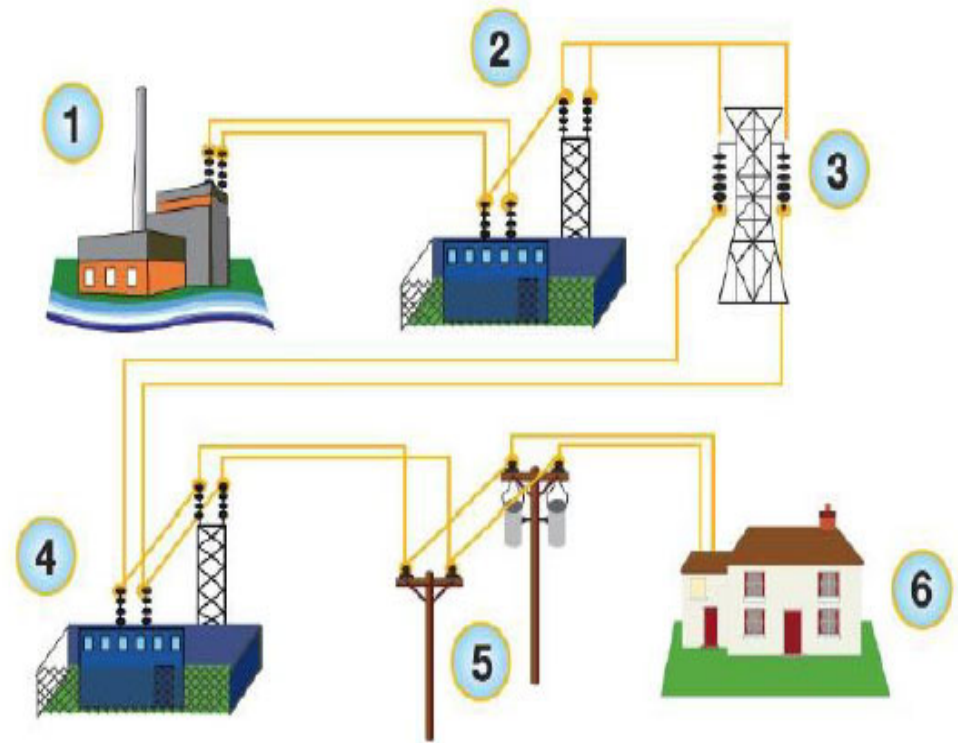
- Service area covers nearly 46,000 square miles throughout Nevada and about 90 percent of the state's population
- We serve more than 1.5 million customers and a typical state tourist population of more than 56 million annually
- 2,319 employees statewide
 - Average tenure is 14 years
 - International Brotherhood of Electrical Workers
 - Local 396 in southern Nevada
 - Local 1245 in northern Nevada
 - Total Payroll in 2021: \$308 million
- Total Paid in Taxes in 2021: \$228 million
 - Includes **\$23 million in City of Las Vegas franchise fees**



The Power Grid



1. Electricity is generated and leaves the power plant
2. Generated voltage is increased at a “step-up” substation
3. The energy travels along a transmission line to the area where power is needed
4. Once there, the voltage is decreased, or “stepped down,” at another substation
5. A distribution line carries the electricity
6. Electricity is delivered to the home or business



Undergrounding Management Plan



- The Undergrounding Management Plan (UMP) was created to address requests by local governments for NV Energy to underground certain existing overhead distribution facilities
- NV Energy and local governments share the incremental costs associated with undergrounding the overhead line
 - To date, NV Energy has allocated almost \$1.6 million towards UMP projects on Shadow Lane and Pinto Lane
- NV Energy meets with each local government entity to discuss and select undergrounding projects for the UMP three-year funding period
- NV Energy is working to extend the current plan for another three years 2023 – 2025.

Integrated Resource Planning



- NV Energy works far in advance to anticipate and plan for the changing energy needs of our customers
- An integrated resource plan (IRP) is the roadmap that details how we will serve our customers over the next 10, 20 and 30 years in a reliable and cost-effective manner
- NV Energy updates and files the IRP with the Public Utilities Commission of Nevada (PUCN) every three years



Summer Readiness



NV Energy is prepared to meet the energy needs of its customers, even on the hottest summer day with safe, reliable power

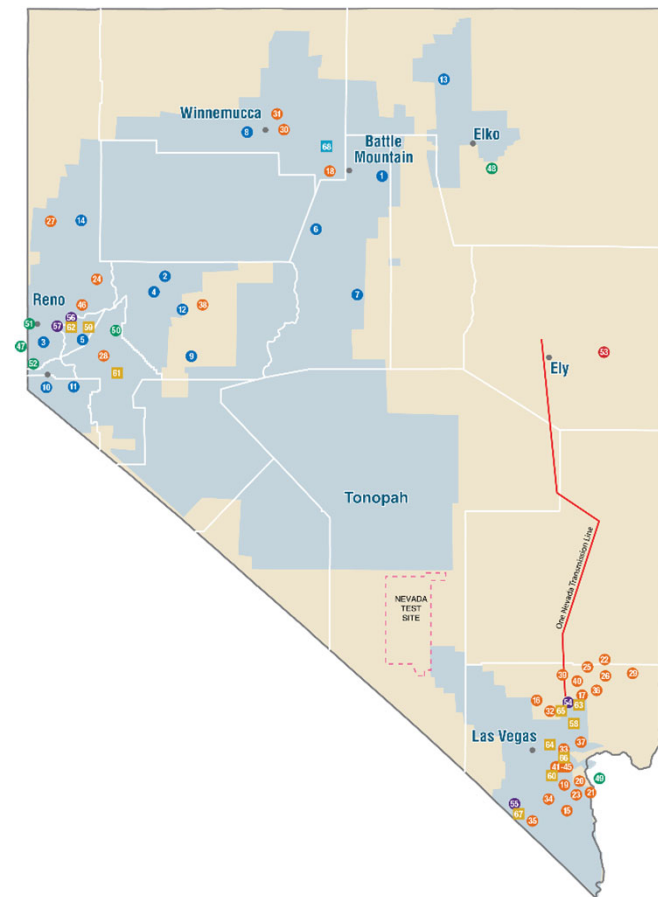
- Maintain our generating stations, power lines, substations and other equipment year-round
- NV Energy crews are available to respond to outages 24/7
- Execute on a multi-part energy strategy all under a plan approved by the PUCN



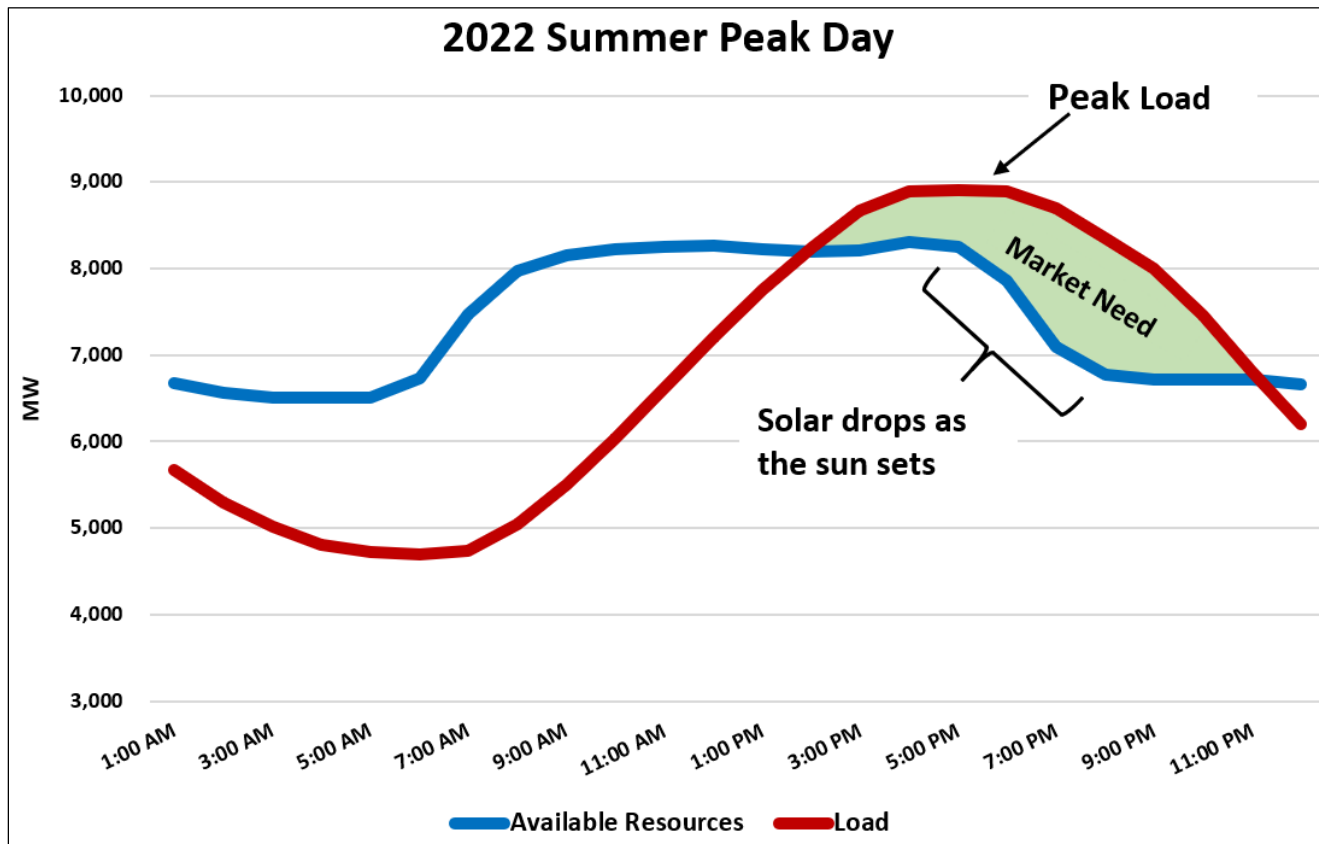
Summer Readiness



- Supply clean, safe, reliable energy from our owned and contracted generation
 - 5,978 megawatts of owned generation (primarily natural gas)
 - 57 large-scale geothermal, solar, solar plus storage, hydro, wind, biomass and supported rooftop solar projects both in service and under development.
- Procure power from the open energy market to meet summer peak
- Continue to build more generation to reduce market reliance



Summer Energy Use vs. Generation



Risks to Resource Availability



Market purchases face risks that are beyond NV Energy's control

- Impacts of Climate Change
 - Wildfires and other extreme weather events can force out of state transmission lines to be taken out of service
 - Record energy loads across the western United States competing for limited resources
 - Reduced hydroelectric output west wide
- Power plants sourcing the energy can trip offline and the counterparty may be unable to supply the power or replace it from the market
- California rule changes impacting transmission



NV Energy Actions



- Diversified our out-of-state market purchases to make them less susceptible to regional heat and wildfire impacts
- Have acquired additional power to have on hand should a planned resource become unavailable
- Added generation capacity to our system.
 - Natural gas power plant upgrades, which allow them to provide more energy
 - New solar and battery storage projects that recently have become operational
 - Enough energy to serve 174,000 Nevada homes all at once



Energy Imbalance Market^{CD(E3)}



- Participate in the Western Energy Imbalance Market (EIM)
- EIM footprint continues to grow
- Having access to this supply brings financial and reliability benefits and we continue to develop and evolve strategies to maximize our participation
- NV Energy customers have received \$165.82 million in energy cost savings since 2014 through EIM participation



Slide 12

CD(E3

Include a bullet point on the financial benefits Nevada had received since joining

Cannon, Doug (NV Energy), 7/1/2022

Grid Modernization



- We recently received PUCN approval to add 25 megawatts of Nevada-based geothermal energy and build a new 220-megawatt battery system on the site of the retired coal-fired Reid Gardner Generating Station
- Investing in new energy management technologies
- Developing the Greenlink Nevada transmission initiative
 - Unlock more renewable energy
 - Improve reliability
 - Increase access to energy markets



Sustainable Customer Programs



- **NV GreenEnergy Rider**
- **Expanded Solar Access Program (ESAP)**
 - Community Based Solar Resource
- **Demand Side Management**
 - Education
 - Energy Efficiency
 - Demand Response
- **Renewable Energy Programs**
 - Low-Income Solar Energy Program (LISEP)
 - Energy Storage
 - Rooftop Solar
- **Transportation Electrification**
 - Economic Recovery Transportation Electrification Plan (ERTEP)
 - Electric Vehicle Infrastructure Demonstration Program
 - Electric Vehicle Time of Use Rate

Economic Recovery Transportation Electrification Plan

Prioritizing low-income and historically underserved communities

Senate Bill 448 defined historically underserved communities in statute



Workforce Development



Economic Recovery Transportation Electrification Plan

- Partnering with Southern Nevada and Northern Nevada Joint Apprenticeship Training Centers to ensure reliable and safe installation and maintenance of new electric vehicle (EV) infrastructure
- Nevada electrical training centers **offer paid on-the-job apprenticeship programs** to help youth successfully transition into a well-paying career
- NV Energy's investment will **remove barriers for historically underserved communities** to participate in training programs
- Planned EV infrastructure construction is projected to **require 300,000+ labor hours**



ELECTRICAL JATC
OF SOUTHERN NEVADA



Customer Actions



- NV Energy offers a variety of options for customers to control their energy use and budget.
- Not only do these actions help save energy and money, but they also reduce the overall energy load and amount of power NV Energy needs to supply.
- These include participating in **PowerShift by NV Energy** products and services:

Smart Thermostat - receive a free programmable thermostat that can be adjusted from any mobile device



Customer Actions



- **Home Energy Assessment**
professional review of home to provide customized ways to reduce energy use
- **Air Conditioner Replacement**
instant discounts off an energy efficient AC unit
- **Pool Pump Discounts**
instant discounts off an energy efficient variable speed pool pump



nvenergy.com/powershift

Customer Actions



PowerShift by NV Energy options for Income-Qualified Customers

- **Qualified Appliance Replacement**
Replaces an old refrigerator and electric dryer with new energy efficient models
- **Air Conditioner Replacement**
Greater instant discounts off an energy efficient AC unit
- **Free AC Tune Up**
Improves AC efficiency



nvenergy.com/powershift

Customer Actions



- Keep your thermostat set at 78 degrees when you are home, and several degrees higher at night or when you are not home
- Close blinds and drapes during the day to keep the heat out
- Use your dishwasher, clothes washer and dryer before 5 pm or after 9 pm. These appliances add heat to your home and make your AC work harder



Customer Actions



- Only run your pool pump eight to 12 hours a day and schedule it to run at night
- If your AC unit is on the ground, keep the area around it clean and free of obstructions to maintain air flow to help it work more efficiently
- Electric vehicle owners can take part in the EV Time-of-Use Rate, which provides a discounted rate to charge their vehicle during the utility's off-peak hours between 10 p.m. and 8 a.m.

Outage Preparation



- Build or restock an emergency kit with flashlights, fresh batteries, first-aid supplies, food and bottled water – enough for everyone in your household
- Learn how to manually open your garage door
- Keep hard copies of emergency numbers and other important contacts
- Identify backup charging methods for phones, including a cell phone charger that can be used in the car



Outage Preparation



- Update your cell phone number and sign up for outage alerts via text at nvenergy.com/myaccount to ensure you receive updated outage information
- During an outage event, keep your refrigerator and freezer closed to ensure food stays as fresh as possible
- Customers who have questions can call NV Energy at 702-402-5555. Information is also available on nvenergy.com/outage



 **NV**Energy