




Net Metering Overview
March 22, 2016

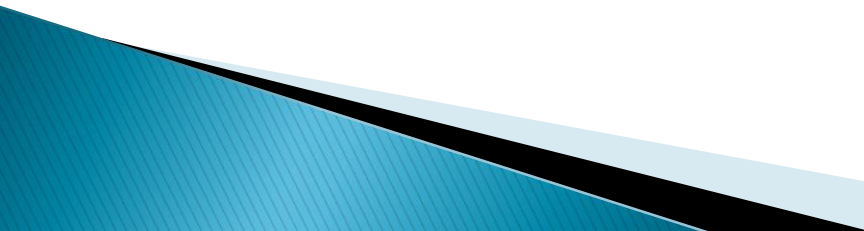
THE PUBLIC UTILITIES COMMISSION OF NEVADA (PUCN)

- ▶ Mission is to supervise and regulate the operation and maintenance of utility service in Nevada.
 - ▶ Vision is to ensure safe and reliable utility service and just and reasonable rates.
 - ▶ The PUCN balances the interests of ratepayers and utilities.
 - ▶ The PUCN began as the Rail Road Commission in 1911.
 - ▶ The PUCN is a regulatory body -not a legislative body. It does not establish laws or policies, but it does follow and implement the laws and policies set by the state legislature.
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Net Metering Policy – Set by the Legislature

- ▶ First enacted in 1997, defined Net metering as “measuring the difference between the electricity supplied by a utility and the electricity generated by a customer-generator which is fed back to the utility over the applicable billing period.”
 - Originally set the cap at 100 customers. (SB 255)
 - Changed to 1% of the utility’s peak capacity in 2005 (AB 236)
 - Changed to 2% of the total peak capacity of all utilities in 2007 (SB 59)
 - Changed to 3% of total peak capacity of all utilities in 2013 (AB 428)

Net Metering

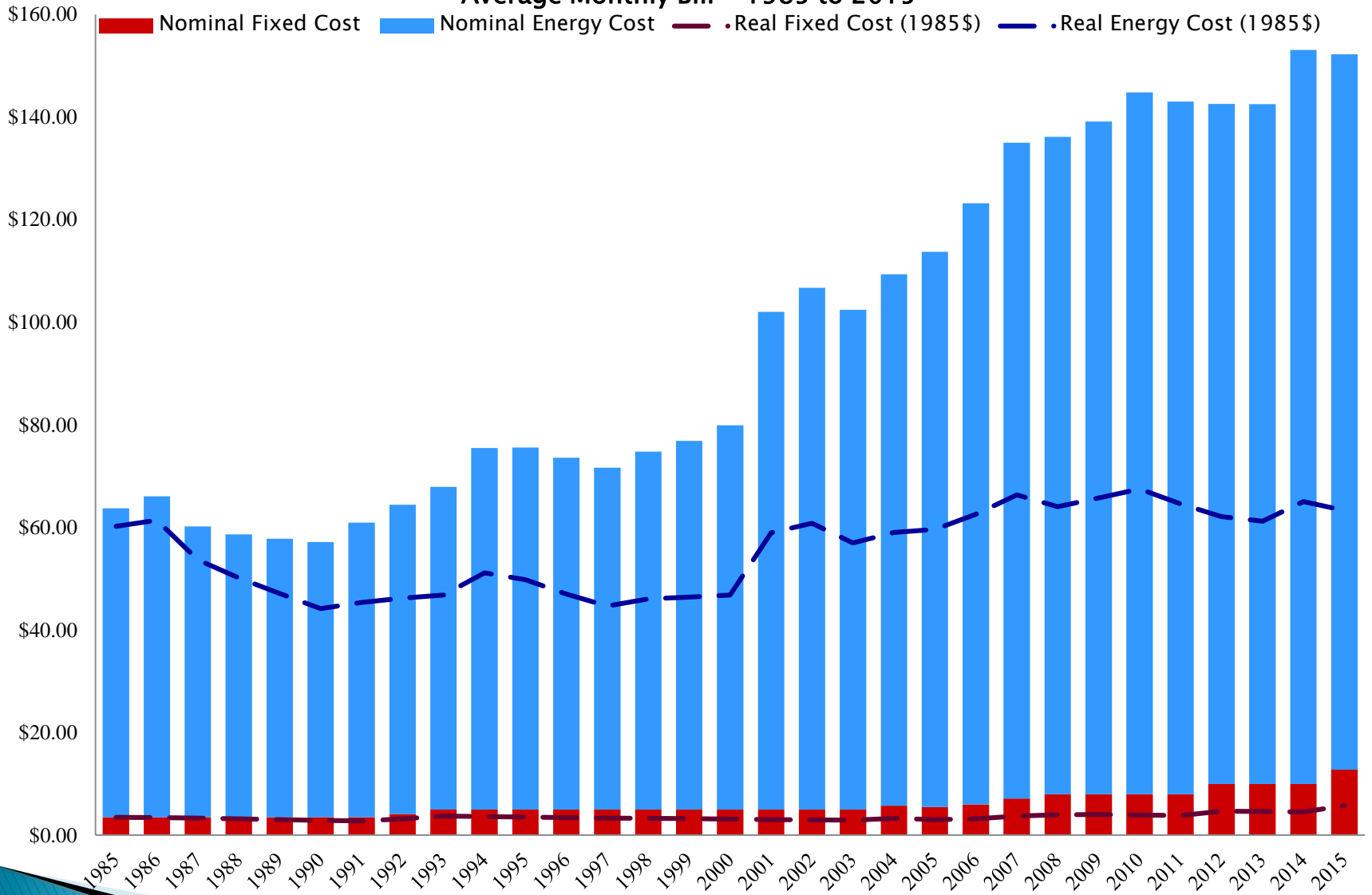
- ▶ In the 2015 session, SB 374 modified once again:
 - ▶ Changed the limitation to 235 MW.
 - Authorized the Commission to establish 1 or more rate classes for customer-generators;
 - Authorized the Commission to establish terms and conditions for participation including limitations on enrollment;
 - Authorized a utility to establish just and reasonable rates and charges to avoid, reduce or eliminate an unreasonable shifting of costs from customer-generators to other customers of the utility.
 - Required that the Commission SHALL NOT approve a tariff that unreasonably shifts costs from customer generators to other customers.
 - Shall determine whether and the extent to which tariffs apply to different generations of customer-generators.
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Electric Rate Components

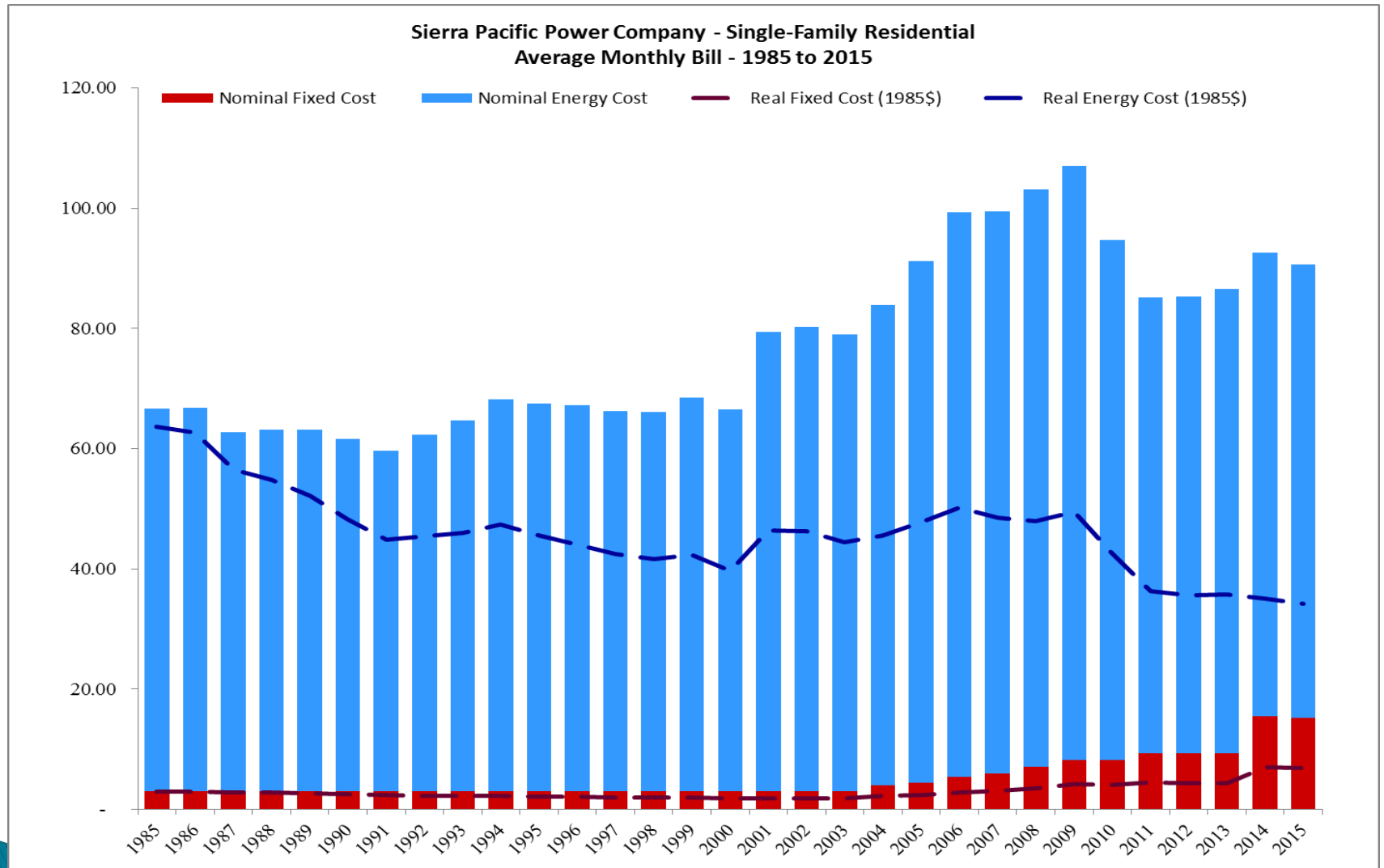
- “Basic Service Charge” – Fixed component (Filed every 3 years)
- “BTGR” – Base Tariff General Rate (Filed every 3 years)
 - Wages, Office expenses, Meters, Wires, Trucks, Generators and other Capital costs (includes operating expenses and a Rate of Return)
- “BTER” – Base Tariff Energy Rate (Filed every quarter)
 - A forecasted rate to recover the expected cost of fuel and market purchases of power only
- “DEAA” – Deferred Energy Accounting Adjustment (Filed annually)
 - Recovers the difference between the forecasted and the actual cost of fuel and purchased power
- “EE” – Energy Efficiency Rates (Filed annually)
 - Recovers the costs associated with Energy Efficiency programs.
- “REPR” – Renewable Energy Program Rate (Filed annually)
 - Recovers the expenditures made to promote renewable energy via NRS 701B. (Legislative)
- “TRED” – Temporary Renewable Energy Development (Filed annually)
 - A trust payment to benefit a solar project in the event of utility financial difficulties (Legislative)
- “UEC” – Universal Energy Charge (Legislatively fixed)
 - A subsidy used to assist low-income customers with their energy bills and weatherization. (Legislative)

Nevada Power Company – Single-Family Residential

Average Monthly Bill – 1985 to 2015



Rate changes over 30 years



Commission Dockets – Evidentiary Hearings

- ▶ **NV Energy filed a Cost of Service Study – Splits out the costs of operating utility facilities by function (Customer, Distribution, Generation, Transmission) and then allocated those costs by class.**
- ▶ **Intervenors participated- proposed alternatives**
 - NVE showed a cost shift from Net Metering customers to non-participants. Estimated the subsidy at the 235 MW cap of approx. \$16 million per year (Both companies, SPPC and NPC combined)
- ▶ **How are costs shifted?**
 - Revenue Requirement for utilities is set every 3 years – allows recovery through fixed and variable recovery.
 - If fixed costs are being recovered in a volumetric rate, when rates are re-set, those decreased sales volumes put upward pressure on rates for non-participating customers.
 - Net Metering customers not contributing to the cost of maintain/using the grid in proportion to their actual usage.
 - Net Metering customers avoid some of the Legislatively determined charges for all self-generation (UEC)
 - Net Metering customers had significantly different usage patterns than other residential customers, but still consumed at the system peak.

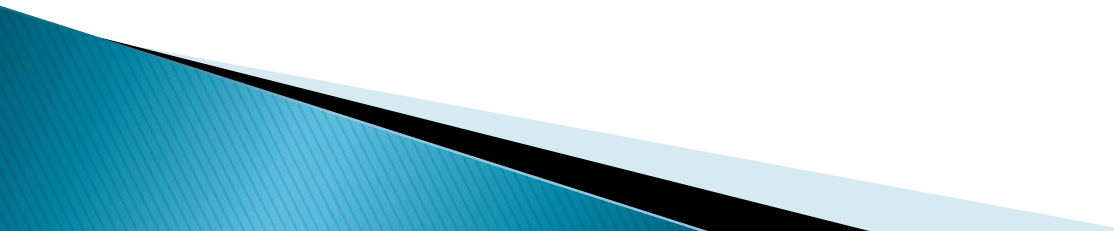
Commission Dockets

- ▶ Some issues in the cases:
 - **Cost of Service Study** – used to determine if NEM customers have unique service and/or cost characteristics. If so, should they be in a separate class?
 - **Rate design** – what combination of demand charges, basic service charges, excess energy rates, hookup fees, TOU, or minimum bills is appropriate?
 - **Benefits** – How and when to capture and quantify benefits of NEM? (Long term/Short term/utility plant lifespan)
 - **Grandfathering** – should the rates apply to all NEM customers or just those after the 235MW cap? Should the rates apply immediately or over time?

“Grandfathering”

- ▶ **From SB 374:** *“In approving any tariff submitted pursuant to subsection 1, the Commission shall determine whether and the extent to which any tariff approved or rates or charges authorized pursuant to this section are applicable to customer-generators who, on or before the date on which the cumulative capacity requirement described in paragraph (a) of subsection 1 of NRS 704.773 is met, submitted a complete application to install a net metering system within the service territory of a utility.”*
- ▶ **Principles of Public Utility Ratemaking:**
 - Utility is not allowed to discriminate between similarly situated customers, but can design classes if costs or usage patterns are sufficiently different.
 - Horizontal equity – treat all NEM customers equally
 - Use the usage date of the participants to set rates.
 - Ease of Administration - Difficult to track “generations” of customers. (Does the rate class go with the premise, the account, the customer or a combination thereof?)

Commission Decision:

- Determined load shape/usage differences sufficient to create a new class.
 - NVE's Marginal Cost study accepted as adequate to set rates.
 - Rate Design – Rejected Demand charges, but accepted increased fixed charges – combined with lower variable charges and payment for excess energy (over 12 years). Also allowed the use of optional TOU rates combined with payment for excess energy. Gives NEM customers 3 years between rate changes and keeps approximately \$100 million in subsidy for the 12 years.
 - Decided to treat all NEM customers equally, no matter when the application or installation has occurred.
 - Marginal Cost of service will be examined each General Rate Case docket and the excess energy rate will be examined (with value of solar) in Integrated Resource Planning dockets.
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Thank You.

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