

PUBLIC UTILITIES COMMISSION OF NEVADA

Nevada Power Company,

:

Docket No. 04-5003

DIRECT TESTIMONY AND EXHIBITS OF
JOHN HOWAT
CONCERNING PREPAYMENT METERING

SUBMITTED ON BEHALF OF THE
BUREAU OF CONSUMER PROTECTION
STATE OF NEVADA
OFFICE OF THE ATTORNEY GENERAL

Carson City, Nevada
June 2004

1 **Q. PLEASE STATE YOUR NAME AND ADDRESS.**

2 A. My name is John Howat. My business address is 77 Summer Street, 10th Floor, Boston
3 Massachusetts.

4 **Q. FOR WHOM ARE YOU TESTIFYING IN THIS PROCEEDING?**

5 A. I am testifying on behalf of the Bureau of Consumer Protection, Office of the Attorney
6 General in the State of Nevada.

7 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

8 A. The purpose of my testimony is to comment on the implementation of prepayment meter
9 technology, and on Nevada Power Company's ("NPC") Prepaid Power Optional Tariff.

10 **Q. PLEASE DESCRIBE YOUR QUALIFICATIONS.**

11 A. I am Senior Energy Policy Analyst at National Consumer Law Center in Boston,
12 Massachusetts. I have been professionally involved with energy program and policy
13 issues since 1981. At National Consumer Law Center over the past five years, I have
14 managed a range of regulatory, legislative and advocacy projects across the country in
15 support of low-income consumers' access to affordable utility and energy related
16 services. I have been involved with the design and implementation of low-income energy
17 affordability and efficiency programs and outreach efforts, rate design, issues related to
18 metering and billing, development of load profiles, energy burden analysis and related
19 demographic analysis, and low-income regulatory consumer protection. In addition to
20 current work with the Bureau of Consumer Protection, I work or have worked on behalf
21 of community-based organizations or their associations in Massachusetts, Arkansas,
22 Arizona, Louisiana, Mississippi, New Jersey, Pennsylvania, Rhode Island, Texas, Utah
23 and Washington State. I also work or have worked on low-income energy matters on

1 behalf of the National AARP and state AARP chapters in Louisiana and Kansas. I have
2 worked under contract with the U.S. Department of Health and Human Services and Oak
3 Ridge National Laboratories. I recently completed work under a contract with the
4 National Energy Assistance Directors' Association. I am currently working under
5 contract with the Commission on Economic Opportunity in Pennsylvania as an expert
6 witness in a rate case filed by PPL Electric Corporation. Recently, I have presented
7 testimony before utility regulatory agencies in Massachusetts, New Jersey, Rhode Island,
8 Vermont, and Louisiana. For the past five years, I have sat on the Board of Directors of
9 the National Low Income Energy Consortium, and am a regular presenter at national
10 conferences on low-income energy matters. I have made presentations regarding
11 prepayment meters at conferences of Metering Americas, National Community Action
12 Foundation, National Low Income Energy Consortium, National Association of
13 Regulatory Utility Commissions and National Association of State Utility Consumer
14 Advocates.

15 Previously, I served as Research Director of The Massachusetts Joint Legislative
16 Committee on Energy, responsible for the development of new energy efficiency
17 programs and low-income energy assistance budgetary matters; Economist with the
18 Electric Power Division of the Massachusetts Department of Telecommunications and
19 Energy, responsible for analysis of electric industry restructuring proposals; and Director
20 of the Association of Massachusetts Local Energy Officials. I have a Master's Degree
21 from Tufts University's Graduate Department of Urban and Environmental Policy and a
22 Bachelor of Arts Degree from The Evergreen State College.

23 **Q. PLEASE DESCRIBE PREPAYMENT METER TECHNOLOGY.**

1 A. Prepayment utility meter technology varies widely. However, most systems include
2 display units that are installed in the customers' residences or businesses, distribution of
3 plastic magnetic strip cards that are used to "load" the home meter after deposit of funds
4 at "pay center" units or other locations that are placed in various locations around the
5 utility's service area, and a central processor generally located at the utility company's
6 billing facility. The customer display units show the dollar amount of credit remaining,
7 and often times other information regarding customer energy usage. Some units include
8 warning alert systems that activate when credit is running low. Pay centers generally
9 accept cash or debit transfers using an ATM card. Customers pay in advance for service,
10 with payment balances decreasing as service is delivered. Service is automatically
11 terminated if the payment balance is depleted. Service is restored only when additional
12 payment is rendered and the customer returns to load the meter.

13 **Q. PLEASE DESCRIBE PREPAYMENT EXPERIENCE IN GREAT BRITAIN.**

14 A. Prepayment meters have become commonplace in Great Britain, which began
15 deregulation of its utility industries earlier than such experiments in the U.S. began. As
16 of the late 1990s, about 3.7 million electricity customers and 1.1 million natural gas
17 customers used prepayment meters to pay for utility service in Great Britain. The
18 number of customers using the systems nearly doubled between 1990 and 1997.¹

19 A majority of prepayment meter users in Great Britain are low-income
20 customers.² Utility companies target marketing of prepayment meters to low-income
21 households in arrears, even though the cost of service delivered under a prepayment

¹ Counting the Hidden Disconnected, Centre for Sustainable Energy and National Right to Fuel Campaign, pp. 8-9, (1998).

² Id.

1 meter is substantially higher than service paid for by traditional billing means or through
2 direct debit.³ Not surprisingly, many utility companies have reported a significant
3 decline in the rate of traditional, utility-initiated disconnections since the proliferation of
4 prepayment meters in low-income households. However, there has been a steep increase
5 in the number of “self-disconnections,” which occur when a customer’s credit balance is
6 depleted. A recent study showed that 34% prepayment meter customers disconnected at
7 least one time during the last year, usually because of a lack of cash.⁴

8 In short, utility deregulation in Great Britain has coincided with the proliferation
9 of prepayment meters in low-income households. Utility companies have turned to the
10 technology as a means of managing arrearages in a competitive environment.

11 Prepayment meter customers pay the highest rates for service. Thus, the highest rates in
12 Great Britain are paid by those least able to afford them and a high proportion of
13 customers using prepayment meters and paying higher costs are disconnected from
14 essential service at least once per year.

15 **Q. PLEASE DESCRIBE PREPAYMENT EXPERIENCE IN THE UNITED STATES.**

16 A. Salt River Project (SRP), Arizona's second largest electric utility and the third largest
17 municipally-owned utility in the U.S., operates the SRP M-Power prepayment meter
18 program. SRP operates the largest prepayment program in the United States. The
19 program initially included about 9,000 customers, but grew to 20,000 'budget challenged'
20 participants by April 2002. Other experiments have been conducted by Florida Power
21 and Light, Brunswick Member Electric Cooperative in North Carolina, and Louisville
22 Gas and Electric. Unfortunately, little is known about durations and rates of termination,

³ Fuel Poverty Fact File: Progress and Shortfall, National Right to Fuel Campaign, pp. 23-26, (2000).

⁴ Competitive Energy Markets and Low-Income Consumers, National Right to Fuel Campaign, pp. 56, 57, (2001).

1 and reasons for “self-disconnections” in the U.S. prepayment experiments. More
2 research is required to obtain such information.

3 **Q. PLEASE DESCRIBE YOUR GENERAL CONCERNS REGARDING**
4 **IMPLEMENTATION OF PREPAYMENT TECHNOLOGY.**

5 A. Proponents argue that prepayment meters provide customers with an added measure of
6 control. However, in reality they are intended to provide utility companies with a means
7 of reducing new arrearages while bypassing the existing state utility consumer protection
8 framework. Further, proliferation of prepayment meters results in an increase in rates of
9 disconnection of low-income households, and therefore represents an attack on the ideal
10 of universal access to affordable, reliable utility service. Termination under use of
11 prepayment meters is often "hidden" in that is not accompanied by notification and
12 adherence to regulated termination procedures. Finally, the technology is expensive. In a
13 competitive utility environment, it is reasonable to expect that the high cost of
14 prepayment meters will be passed along to ratepayers, and that those high costs will be
15 borne by those least able to absorb them.

16 **Q. DO PREPAYMENT METERS PROVIDE CUSTOMERS WITH ANY**
17 **ADVANTAGES OVER TRADITIONL METERING?**

18 A. There are no customer benefits associated with prepayment meters that may not be
19 obtained through practices and technologies that do not entail prepayment and automated
20 disconnection. For example, smart meters are capable of providing customers with the
21 same consumption and load information provided by a prepayment readout. Customers
22 who wish to prepay for utility service are certainly not prohibited from doing so.
23 Customers who wish to temporarily shut down electric service may do so on “either side

1 of the meter.” In short, customers who wish to obtain the informational and control
2 benefits touted by prepayment proponents may do so without forfeiting their access to
3 regulatory consumer protections.

4 **Q. PLEASE COMMENT ON THE USE OF PREPAYMENT METERS IN LOW-**
5 **INCOME HOUSEHOLDS.**

6 A. Low-income households income households are already more likely to experience loss of
7 utility service than their non-low-income customer counterparts. Low-income customers
8 are also more likely to accrue arrears than non-low-income customers. (See Exh. BCP-
9 JH-1.). Use of prepayment meters in low-income households will certainly do away with
10 new arrears in those households, but rates of termination likely will increase dramatically,
11 perhaps to the point where health and safety will be threatened.

12 A new national study of low-income households released by the National Energy
13 Assistance Directors Association finds that a high proportion of LIHEAP recipients
14 already take drastic actions to pay their energy bills, including reduction of expenditures
15 for other household necessities or use of their kitchen stove for heat. In addition, the
16 survey of LIHEAP recipients found that 38 percent went without medical or dental care
17 and 30 percent went without filling a prescription or reduced a prescribed dosage of
18 medicine in attempting to pay their energy bills. (National Energy Assistance Directors’
19 Association, “National Energy Assistance Survey Report,” April 2004, pp. ES-1, ES-2.)
20 (The Executive Summary of the study is attached as Exhibit BCP-JH-2. The complete
21 study is available at www.neada.org/comm/surveys/NEADA_Survey_2004.pdf.) Use
22 of prepayment meters heightens the threat of loss of access to service, and thus will likely
23 result in an increase in the hardships documented in the NEADA report.

1 **Q. PLEASE DESCRIBE TRENDS IN NEVADA POVERTY RATES.**

2 A. Poverty is growing in Nevada. While the general state population grew considerably
3 during the decade of the 1990s, the fastest rates of growth occurred among the very poor
4 and the working poor. For example, while the state population grew at a rate of 66.6
5 percent between 1989 and 1999, growth of the growth of those under 50 percent of the
6 federally determined poverty level grew at a rate of 70 percent. Growth of those in the 50
7 percent to 75 percent bracket grew by 81 percent. “Working poor” population between
8 175 percent and 185 percent of the poverty level grew by nearly 88 percent. (See Exh.
9 BCP-JH-3.)

10 According to the Annual Demographic Survey of the Current Population Survey
11 (a joint project of the U.S. Census Bureau and the U.S. Bureau of Labor Statistics) there
12 was not a statistically significant change in the poverty rate (those living below 100
13 percent of the poverty level) in Nevada between 1999 and 2002. However, there was a
14 statistically significant increase in the population living below 200 percent of poverty
15 during this period. In 1999, the Census Bureau reported that 27.7 percent of the state’s
16 population lived below 200 percent of the poverty level. The March 2003 Annual
17 Demographic Survey referenced above indicated that this population had grown to 31.1
18 percent (standard error 1.4) of the total population.

19 **Q. WHAT DOES GROWTH IN POVERTY HAVE TO DO WITH PREPAYMENT**
20 **METERS?**

21 A. Prepayment meters place low-income households at particular risk of losing access to
22 utility service. Growth in poverty tends to coincide with growth in arrears, placing
23 pressure on utility companies and regulators to consider the prepayment option.

1 However, this option, while perhaps “solving” the arrearage problem, poses new dangers
2 and problems for in increasing proportion of the total population.

3 **Q. WHAT ARE YOUR RECOMMENDATIONS REGARDING NEVADA POWER**
4 **COMPANY’S PREPAYMENT PILOT PROGRAM?**

5 A. The limited pilot proposed by the Company appears to signal its intent to deploy
6 prepayment meters far more broadly than the participation contemplated in the pilot. For
7 reasons stated above, I recommend that any such broader deployment be rejected.
8 Alternatively, I recommend that any approval of a prepayment meter proposal be
9 conditioned on the following:

- 10 ◇ prepayment meters should only be used in cases where the ratepayer is nonlow-
11 income (defined here as gross household income of greater than 150% of federal
12 poverty income guidelines), has outstanding arrears and is requesting a payment
13 plan that is unacceptable to the utility, and service is being delivered to an
14 individually-metered residential dwelling.
- 15 ◇ Use of prepayment meters should be prohibited unless the ratepayer voluntarily
16 agrees to the installation of the meter, the ratepayer agrees to purchase
17 prepayment cards to maintain service until the outstanding balance is retired, and
18 the utility agrees to furnish the ratepayer with an emergency backup card for
19 usage of at least five days.
- 20 ◇ The Company should conduct an evaluation over the first two years of the degree
21 to which the prepayment program operates efficiently, and the degree to which
22 the program results in the continuation of utility service at a reasonable cost.

24 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

25 A. Yes.