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IDAHO PUBLIC
UTILITIES COMMISSION

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION)
OF IDAHO POWER COMPANY FOR)
AUTHORITY TO INCREASE ITS RATES) CASE NO. IPC-E-11-08
AND CHARGES FOR ELECTRIC SERVICE)
TO ITS CUSTOMERS IN THE STATE OF)
IDAHO.)
_____)

IDAHO POWER COMPANY

DIRECT TESTIMONY

OF

DARLENE NEMNICH

1 Q. Please state your name and business address.

2 A. My name is Darlene Nemnich. My business
3 address is 1221 West Idaho Street, Boise, Idaho.

4 Q. By whom are you employed and in what capacity?

5 A. I am employed by Idaho Power Company ("Idaho
6 Power" or "Company") as a Senior Regulatory Analyst.

7 Q. Please describe your educational background.

8 A. In May of 1979, I received a Bachelor of Arts
9 degree in Business Administration with emphases in Finance
10 and Economics from the College of Idaho. In addition, I
11 have attended the electric utility ratemaking course
12 offered through New Mexico State University's Center for
13 Public Utilities as well as various other ratemaking
14 courses sponsored by the Edison Electric Institute.

15 Q. Please describe your work experience with
16 Idaho Power.

17 A. In 1982, I was hired as an analyst in the
18 Resource Planning Department. My primary duties were the
19 calculation of avoided costs for cogeneration and small
20 power production contracts and the calculation of costs of
21 future generation resource options. In 1989, I moved to
22 the Energy Services Department where I performed economic,
23 financial, and statistical analyses to determine the cost-
24 effectiveness of demand-side management programs. I stayed
25 in that general area designing, implementing, and

1 evaluating programs until 2000, when I was promoted to
2 Energy Efficiency Coordinator. In that capacity, I
3 coordinated the Company's effort to grow customer programs
4 and education in energy efficiency promotion. I was
5 responsible for complying with regulatory and financial
6 requirements in the area of energy efficiency. In 2003, I
7 was promoted to Energy Efficiency Leader where I managed
8 the Company's demand-side management effort, including
9 strategic planning, design and development of programs,
10 regulatory compliance, and overall management of the
11 department. In 2006, I left the Company to pursue personal
12 opportunities. In April 2008, I returned to the Company as
13 a Senior Regulatory Analyst in the Regulatory Affairs
14 Department. My duties as Senior Regulatory Analyst include
15 the development of alternative pricing structures, analysis
16 of the impact on customers of rate design changes, and the
17 administration of the Company's tariffs.

18 Q. What is the purpose of your testimony in this
19 matter?

20 A. My testimony will address the Company's rate
21 design proposals for residential customers taking service
22 under Schedules 1, 3, 4, and 5.

23 Q. Are you sponsoring any exhibits?

24 A. Yes. I am sponsoring the following exhibits
25 relating to residential rate design:

1	<u>Exhibit</u>	<u>Description</u>
2	Exhibit No. 45	Calculation of Proposed Rates
3	Exhibit No. 46	Typical Monthly Billing
4		Comparison

5 Q. What are your overall objectives in arriving
6 at the proposed rate design?

7 A. As indicated in Mr. Michael J. Youngblood's
8 testimony, the Company's two primary objectives with regard
9 to rate design are to establish prices that primarily
10 reflect the costs of the services provided and to provide
11 customers with cost-based price signals designed to align
12 with and encourage the efficient use of energy.

13 Q. What are the Company's Residential Service
14 schedules?

15 A. The Company has four Residential Service
16 schedules, Schedules 1, 3, 4, and 5. Schedule 1 is
17 available to all customers taking service for general
18 domestic use. Schedule 3 is available only to master-
19 metered mobile home parks included on the Company's list of
20 "grandfathered" mobile home parks.

21 Schedule 4, the Energy Watch Program, is a critical
22 peak pricing rate option, and Schedule 5, the Time-of-Day
23 Program, is a time-of-use rate option. Both Schedules 4
24 and 5 are optional time-variant pricing options and are
25 currently available only to residential customers in the

1 Emmett Valley area who have Advanced Metering
2 Infrastructure equipment installed.

3 Q. What is the annual revenue requirement to be
4 recovered from Residential Service customers?

5 A. The annual revenue requirement to be recovered
6 from all Residential Service customers, which includes
7 Schedules 1, 3, 4, and 5, is \$412,939,501, as shown in Mr.
8 Larkin's Exhibit No. 38. This is an overall increase for
9 the residential class of 8.83 percent.

10 Q. What are the changes that the Company is
11 proposing to the current rate design for Residential
12 Service?

13 A. For all of the residential tariffs, the
14 Company is adjusting each of the billing components to move
15 closer to its cost of service and recover the revenue
16 assigned to each class. This includes a proposal to
17 increase the Service Charge from the existing \$4.00 per
18 customer per month to \$5.00 for all residential schedules.
19 Also, for the Company's critical peak pricing and time-of-
20 day residential schedules, Schedules 4 and 5, respectively,
21 the Company is proposing modifications to the rate design
22 in order to provide continuity with the Company's future
23 plans for residential time variant pricing.

24

25

1 I. SCHEDULE 1

2 Q. Please describe the present rate structure for
3 Residential Service under Schedule 1.

4 A. Residential Service customers taking service
5 under Schedule 1 pay a monthly Service Charge of \$4.00.
6 Schedule 1 currently includes a three-tiered inverted block
7 Energy Charge rate for each of two seasons, summer and non-
8 summer. The summer season includes the months of June,
9 July and August and the non-summer season includes all
10 other months of the year. During the summer season,
11 customers pay a base Energy Charge of 7.1026 cents per
12 kilowatt-hour ("kWh") for the first 800 kWh of energy used,
13 8.6530 cents per kWh for energy used between 801 and 2000
14 kWh, and 10.3836 cents per kWh for all additional kWh over
15 2000 each month. During the non-summer season, they pay an
16 Energy Charge of 6.6259 cents per kWh for the first 800 kWh
17 of energy used, 7.3621 cents per kWh for energy used
18 between 801 and 2000 kWh, and 8.4662 cents per kWh for all
19 additional kWh over 2000 each month.

20 Q. Please describe the Company's proposal to
21 increase the Service Charge.

22 A. The Service Charge is intended to recover
23 costs that do not vary with the amount of energy or
24 capacity used. This includes the investments in the
25 service line and meter as well as billing costs.

1 Historically, the Service Charge has been well below the
2 unit cost, meaning that the Service Charge, from a cost-of-
3 service standpoint, has under-collected the customer-
4 related fixed costs associated with this rate component.
5 Consistent with the Company's rate design objective to move
6 the individual rate components closer to the cost of
7 providing electric service, the Company is proposing to
8 increase the Service Charge to \$5.00 per month.

9 Q. How does the proposed \$5.00 Service Charge
10 compare with the cost-of-service results?

11 A. The \$5.00 per month Service Charge represents
12 approximately 24 percent of the cost-of-service result of
13 \$20.94 shown at line 60 on page one of Mr. Matthew T.
14 Larkin's Exhibit No. 36.

15 Q. How long has this Service Charge been \$4.00
16 per month?

17 A. The \$4.00 Service Charge amount has been
18 unchanged for the Company's Idaho customers for five years,
19 since June 2006. During that time, the Company's cost-of-
20 service studies have always resulted in a service charge
21 unit cost greater than the \$4.00 amount. Because the
22 Service Charge has remained at the same level, the
23 additional fixed costs are being recovered through the
24 volumetric rate, the Energy Charge. This has resulted in
25 overall rate design for residential schedules that is

1 consistently misaligned with cost-of-service values, which
2 in turn sends distorted price signals to customers. This
3 misalignment of costs in rate components increases intra-
4 class subsidies, causing some customers to pay more than
5 the cost to serve them, and some customers to pay less than
6 the cost to serve them.

7 Q How does your proposal to increase the Service
8 Charge to \$5.00 compare with service charges of other
9 utilities in Idaho?

10 A. The other two investor-owned utilities in the
11 state have similar charges currently set at \$5.00 per
12 month. Avista Corporation has a \$5.00 Basic Charge for its
13 residential service customers in Idaho and Rocky Mountain
14 Power has a \$5.00 Customer Service Charge for its
15 residential service customers in Idaho.

16 Q. Is the Company proposing any changes to the
17 design of the Energy Charge rate for Schedule 1?

18 A. No. The Company is proposing to maintain the
19 three-tier inverted block rate Energy Charge structure for
20 both the summer and non-summer seasons and to keep the tier
21 blocks at the current levels. However, when applying the
22 increase needed to reach the revenue requirement, slightly
23 more of the increase was applied to the Energy Charge tiers
24 in the summer season than the non-summer season. In
25 addition, Idaho Power is proposing no increase to the third

1 tier Energy Charge in the non-summer season. The primary
2 reason for applying slightly more of the increase in the
3 summer months is that the cost-of-service is higher in the
4 summer than in the non-summer season. This difference is
5 illustrated on page one of Exhibit No. 36 of Mr. Larkin's
6 testimony, where the average summer unit cost of energy is
7 7.8329 cents per kWh, as compared to the non-summer average
8 unit cost of energy of 5.4571 cents per kWh.

9 Q. What are the reasons for proposing no increase
10 to the third-tier Energy Charge in the non-summer months?

11 A. The Company is proposing no increase to the
12 third-tier Energy Charge during the non-summer months in
13 part because the cost to serve is lower in those months.
14 Further, the proposed design was developed with an eye
15 toward not exacerbating the customer equity and service
16 issues discussed in Mr. Youngblood's direct testimony.

17 Q. Please summarize the Company's rate design
18 proposal for Schedule 1.

19 A. In addition to the Service Charge being set at
20 \$5.00 per month the Company proposes the following Energy
21 Charge rates. During the summer season, the Company
22 proposes customers pay a base Energy Charge of 7.7493 cents
23 per kWh for the first 800 kWh of energy used, 9.4410 cents
24 per kWh for energy used between 801 and 2000 kWh, and
25 11.3297 cents per kWh for all additional kWh over 2000 each

1 month. During the non-summer season, customers would pay
2 an Energy Charge of 7.1983 cents per kWh for the first 800
3 kWh of energy used, 7.9981 cents per kWh for energy used
4 between 801 and 2000 kWh, and 8.4662 cents per kWh for all
5 additional kWh over 2000 each month.

6 The Company's proposed rate design for Schedule 1,
7 Residential Service is shown on page one of Exhibit No. 45.

8 Q. What impact will this rate design proposal
9 have on Residential Service customers taking service under
10 Schedule 1?

11 A. The typical monthly billing comparison for
12 Residential Service customers taking service under Schedule
13 1 appears on page one of Exhibit No. 46. This comparison
14 shows that the proposed increase is slightly higher in the
15 summer months. The highest users during the non-summer
16 months see a smaller increase, which illustrates the
17 results of not increasing the third-tier Energy Charge in
18 the non-summer season. In addition, this comparison shows
19 the impact of realigning the Service Charge closer to the
20 true cost of service for all use levels.

21 This rate design continues to provide an incentive
22 for customers to use their electric energy efficiently,
23 mitigates some of the issues being experienced with the
24 current rate structure discussed in Mr. Youngblood's direct
25 testimony, and moves rates closer to the cost to serve.

1 Q. Are you proposing any other changes to
2 Schedule 1?

3 A. No.

4 **II. SCHEDULE 3**

5 Q. Do you propose any rate design changes for
6 Schedule 3, Master-Metered Mobile Home Park Residential
7 Service?

8 A. No. The only changes to Schedule 3 are an
9 increase in the Service Charge from \$4.00 to \$5.00 per
10 month and a uniform increase in the Energy Charge rate to
11 achieve the required revenue for that schedule. The
12 Company's proposed rate design for Schedule 3 is shown on
13 page two of Exhibit No. 45.

14 **III. SCHEDULES 4 AND 5**

15 Q. Please describe the Company's current time
16 variant pricing schedules.

17 A. Schedule 4, the Energy Watch Program, is a
18 fixed-price critical peak pricing option in which
19 participants pay a flat rate for all kilowatt-hours used
20 during the summer months except for those kilowatt-hours
21 used during an Energy Watch Event. During an Energy Watch
22 Event, the rate is currently nearly three times higher than
23 the flat rate. Energy Watch events may be called on to ten
24 weekdays a year between June 15 and August 15 during the
25 hours of 5:00 p.m. to 9:00 p.m.

1 Schedule 5, the Time-of-Day Program, currently has
2 three time periods during the summer months during which
3 participants pay specific prices for energy consumption:
4 (1) On-Peak; (2) Mid-Peak; and (3) Off-Peak. The Off-Peak
5 rate is the lowest rate and the Mid- and On-Peak rates are
6 36 percent and 81 percent higher, respectively.

7 During the non-summer months, the Energy Charges for
8 both Schedules 4 and 5 are the same three-tiered inverted
9 block rate structure with the same rate levels as Schedule
10 1.

11 Q. Please describe the basic philosophy for the
12 design of these time variant pricing rate options.

13 A. As Mr. Youngblood explains in his testimony,
14 Idaho Power is envisioning that the Schedule 4 and 5
15 pricing options proposed in this filing will be offered to
16 a larger group of residential customers in the near future.
17 The Company's purpose in developing time variant pricing
18 schedules is to give customers the option of paying rates
19 that are more in line with the costs incurred by the
20 Company to provide electric service to customers. These
21 costs vary throughout the day and differ between the summer
22 and non-summer months of the year. Idaho Power anticipates
23 that some customers may respond to the time-of-day rates
24 and modify their behavior and electric consumption in order
25 to reduce their electric bills. However, in these designs

1 the rates were not set at a significantly high level with
2 the exclusive intention of encouraging customers to shift
3 load. Only the critical peak rate set for the Energy Watch
4 hours are specifically designed to reduce or shift load.
5 Rather, for Schedule 5, the time-of-day pricing option,
6 rates are designed to reflect the costs of providing the
7 energy.

8 Alternately, the Company has designed Schedule 4,
9 the critical peak pricing option, to provide customers a
10 strong price signal that encourages customers to reduce
11 load during specific peak hours of the summer months in
12 order to achieve demand reduction. The critical peak hour
13 price is set very high to encourage all customers on this
14 rate to reduce usage during Energy Watch hours.

15 The Company is proposing that both Schedules 4 and 5
16 have new time period definitions for the Energy Charge rate
17 component and that the basic structure be the same for both
18 schedules.

19 Q. What is the Company's proposal for the new
20 time period definitions for Schedules 4 and 5?

21 A. For both the Company's time-of-day and
22 critical peak pricing schedules, the Company is proposing
23 to move to a two time period, time-of-day structure for the
24 Energy Charge during the summer and non-summer months.
25 Schedule 4, Energy Watch, will overlay an additional

1 critical peak pricing time period on top of the On-Peak
2 time period during the summer months.

3 Q. What is the proposal for new time period
4 definitions for both Schedules 4 and 5?

5 A. For the summer season, time periods are
6 defined as On-Peak from 1:00 p.m. to 9:00 p.m. Monday
7 through Friday and Off-Peak from 9:00 p.m. to 1:00 p.m.
8 Monday through Friday and all hours on weekends and
9 holidays. In addition, the critical peak time period is
10 overlaid on top of the summer On-Peak period for the hours
11 5:00 p.m. to 9:00 p.m.

12 For the non-summer seasons, the two time periods are
13 defined as Mid-Peak 7:00 a.m. to 9:00 p.m. Monday through
14 Friday and Off-Peak 9:00 p.m. through 7:00 a.m. Monday
15 through Friday and all hours on weekends and holidays.

16 Q. Why is a two block definition preferable to a
17 three block definition?

18 A. Since the time when time-of-day rates were
19 initially being offered by utilities, a "second generation"
20 of design in these rates has developed that reflects the
21 knowledge gained over the past decade or so. These second
22 generation rates use a two block time-of-day design because
23 they are believed to be easier for customers to understand,
24 simpler to explain, and can reflect sufficient cost
25 differences to which customers can respond. In fact, most

1 other utilities that offer time-of-day rates now have a two
2 time block structure.

3 Q. What did the Company find when researching
4 other existing time-of-day rate schedules offered?

5 A. Of the seventeen rate schedules offered by ten
6 different utilities, all but three schedules had two time
7 blocks during the summer season and two in the non-summer
8 season. In fact, the time-of-day pricing option offered by
9 Rocky Mountain Power in its Idaho service territory follows
10 this pattern.

11 Q. How were the proposed time block definitions
12 determined?

13 A. The proposed summer On-Peak time block is not
14 changed from the current eight hour summer On-Peak time
15 block definition. In the past few years, the Company has
16 examined closely the timing of the highest peak hours
17 during the summer and determined there is a high
18 probability that future peak hours will be contained within
19 the eight hour time period of weekdays from 1:00 p.m. to
20 9:00 p.m. This peak time is largely temperature and
21 precipitation driven when irrigation pumps and air
22 conditioning units are operating. This summer On-Peak time
23 period designation maintains alignment between the
24 residential time-of-day rate options and the time-of-day

25

1 rates offered to commercial and industrial customers. All
2 other hours in the summer season are designated Off-Peak.

3 During the non-summer season, the higher rate will
4 be during the fourteen hours of the Mid-Peak time period
5 from 7:00 am to 9:00 pm. This non-summer peak time period
6 is broader than the summer peak time period and encompasses
7 more hours because in the non-summer season, the peak can
8 occur either in the winter mornings when residential water
9 heating peaks or in the evening when space heating peaks.

10 Moving the Energy Charge from a three-tiered
11 inclining block rate to a two tiered time-of-day rate for
12 both schedules 4 and 5 aligns these schedules closer to an
13 hourly cost-of-service representation and provides
14 uniformity across both seasons for time-of-use rates.

15 Q. Please explain the Energy Watch Event when the
16 critical peak pricing component of Schedule 4 occurs.

17 A. Energy Watch events may be called up to ten
18 weekdays a year between June 15 and August 15 during the
19 hours of 5:00 p.m. to 9:00 p.m. During an Energy Watch
20 Event, the rate is currently nearly three times higher than
21 the On-Peak time period rates. Idaho Power is proposing
22 that the critical peak price time block be overlaid on the
23 time-of-day pricing. Participants in the Energy Watch
24 pricing option will experience the normal time-of-day

25

1 pricing signals and, in addition, could have up to ten
2 events called during a summer season.

3 There is no change proposed for the Energy Watch
4 hour definition.

5 Q. What was the process used for determining the
6 rate levels and differentials for the Energy Charge rates
7 for the new time periods?

8 A. Rate levels and differentials were first
9 determined for Schedule 5 in order to establish rates that
10 reflect, as close as possible, cost-of-service values.
11 Then, this same basic rate structure was used as the
12 foundation for the calculation for Schedule 4 rates.
13 However, for Schedule 4 Energy Charges, in order to allow
14 for the critical peak time period rate, the Energy charge
15 rates set for Schedule 5 were lowered slightly.

16 Because the rate design for Schedule 4 builds on the
17 rate design for Schedule 5, I will address the rate design
18 for Schedule 5 first.

19 **IV. SCHEDULE 5**

20 Q. Please describe the present rate structure for
21 Residential Service under Schedule 5.

22 A. Under Schedule 5, the Time-of-Day Program,
23 customers pay a monthly Service Charge of \$4.00. During
24 the summer months, June through August, the Energy Charge
25 customers pay during the On-Peak Period is 10.6215 cents

1 per kWh, during the Mid-Peak Period customers pay 7.8146
2 cents per kWh, and during the Off-Peak Period customers pay
3 5.8565 cents per kWh. During the non-summer months,
4 September through May, the Energy Charge is a three-tiered
5 inverted block rate similar to Schedule 1. The Energy
6 Charge is 6.6259 cents per kWh for the first 800 kWh of
7 energy used, 7.3621 cents per kWh for energy used between
8 801 and 2000 kWh, and 8.4662 cents per kWh for all
9 additional kWh over 2000 each month.

10 Q. Please review the changes you are proposing
11 for customers taking service on Schedule 5.

12 A. There are three proposed changes that impact
13 customers taking Residential Service under Schedule 5: (1)
14 the increase to the Service Charge, (2) the implementation
15 of new time-of-day time block definitions for the Energy
16 Charge; and (3) moving from tiered rates during non-summer
17 months to time-of-day rates with two time periods for the
18 Energy Charge. These structural changes to the Energy
19 Charge were discussed earlier.

20 Q. Are you proposing to increase the Service
21 Charge to \$5.00 per month like that of Schedule 1?

22 A. Yes.

23 Q. Please describe how the Company determined the
24 Energy Charge rate levels for Residential Service customers
25 under Schedule 5.

1 A. With the overall goal to reflect cost-of-
2 service rates, the Off-Peak Energy Charge for both summer
3 and non-summer seasons was set to 6.6450 cents per kWh.
4 This was calculated by averaging the summer and non-summer
5 unit costs of 7.8329 and 5.4571 cents per kWh,
6 respectively. These unit costs are shown on page one of
7 Exhibit No. 36 of Mr. Larkin's testimony. These Off-Peak
8 rates provide a floor value that is not dramatically
9 different from current Off-Peak and first tier rates,
10 providing stability in the rate structure for customers.

11 A differential of 81.4 percent was applied to the
12 Off-Peak summer rate to calculate the On-Peak summer rate.
13 This is the same differential used in the current Schedule
14 5 summer time-of-day rates. In addition, it is also an
15 approximation of the On-Peak to Off-Peak summer
16 differential that exists in the time differentiated
17 alternate cost calculations used to determine the economic
18 value of demand-side management programs. The non-summer
19 differential is 27 percent between Mid-Peak and Off-Peak
20 rates. The summer differential at 81.4 percent is much
21 higher than the non-summer differential reflecting the
22 higher summer peak costs.

23 Applying the summer differential of 81.4 percent to
24 the Off-Peak Energy Charge rate of 6.6450 cents per kWh,
25 results in the On-Peak rate of 12.0547 cents per kWh. This

1 rate level provides a rate signal to conserve or shift On-
2 Peak usage.

3 This proposed rate design increases the overall
4 differential between the average summer and non-summer
5 seasonal rates from the current 7.2 percent to 14.5 percent
6 and makes some movement towards the seasonal unit cost
7 differential of 43.5 percent.

8 The rate design proposed for Schedule 5 is shown on
9 page four of Exhibit No. 45.

10 Q. What impact does this rate design proposal
11 have on Residential Service customers taking service under
12 Schedule 5?

13 A. The typical monthly billing comparison for
14 Residential Service customers taking service under Schedule
15 5 appears on page three of Exhibit No. 46. As shown in
16 this comparison, the overall increase in rates necessary to
17 achieve the revenue requirement is higher with this rate
18 design in the summer months than the non-summer months.
19 Customers with higher monthly usage may be attracted to
20 this rate option.

21 **V. SCHEDULE 4**

22 Q. Please describe the current rate structure for
23 residential service under Schedule 4.

24 A. Under Schedule 4, the Energy Watch Program,
25 customers pay a monthly Service Charge of \$4.00. During

1 the summer months, June through August, they pay an Energy
2 Charge rate of 7.3366 cents per kWh, except for those kWh
3 used during an Energy Watch Event. During an Energy Watch
4 Event, the rate they pay is 20 cents per kWh. During the
5 non-summer months, September through May, the Energy Charge
6 is a three-tiered inverted block to the same as the non-
7 summer Energy Charge rate of Schedule 1. Customers pay
8 6.6259 cents per kWh for the first 800 kWh of energy used,
9 7.3621 cents per kWh for energy used between 801 and 2000
10 kWh, and 8.4662 cents per kWh for all additional kWh over
11 2000 each month.

12 Q. What changes are you proposing for residential
13 service that impact Schedule 4 customers?

14 A. There are three proposed changes to
15 residential customers taking Residential Service under
16 Schedule 4: (1) the increase to the Service Charge; (2)
17 the implementation of the new time of day time period
18 definitions for the Energy Charge for both seasons; and (3)
19 a significantly higher increase to the critical peak Energy
20 Charge rate.

21 Q. Are you proposing to increase the Service
22 Charge to \$5.00 per month like that of Schedule 1?

23 A. Yes.

24

25

1 Q. For the Energy Charge rate structure are you
2 proposing to implement a time-of-day rate for both seasons
3 for Schedule 4 as described earlier?

4 A. Yes. For Residential Service customers taking
5 service under Schedule 4, the Company is proposing to
6 implement a time-of-day rate structure with two time
7 periods during the summer season and two time periods in
8 the non-summer season. These are described in detail in
9 the previous section. In addition, a critical peak price
10 is overlaid on this basic rate structure for Schedule 4.

11 Q. Please describe your rate design proposal for
12 the Energy Charges for Schedule 4.

13 A. The starting point for the rate design
14 structure for the Energy Charge for Schedule 4 is the rate
15 design structure proposed for Schedule 5. Having the same
16 basic rate structure for both time variant pricing options
17 sends cost-of-service price signals to customers on both
18 schedules and provides rate stability for those customers
19 who may want to change between options.

20 To calculate the Energy Charge time-of-day rates for
21 both summer and non-summer, the Company started with the
22 exact same rates used for Schedule 5 Energy Charge rates.
23 The Company then reduced them uniformly by 5 percent. This
24 reduction provides a lower rate during all non-critical

25

1 peak hours to customers for the option to raise the rates
2 during critical peak hours.

3 The next step for calculating Schedule 4 Energy
4 Charge rates is to determine a rate level for the critical
5 peak price that will encourage customers on this rate to
6 reduce their energy use during Energy Watch events, while
7 at the same time providing lower rate levels during the
8 rest of the year. Traditionally, the critical peak rate
9 has been set at least four times higher than the summer
10 Energy Charge rates during Energy Watch hours.

11 Q. How did you determine the rate for the
12 critical peak Energy Watch hours?

13 A. A critical peak rate should be set high enough
14 to deter customers from using energy during those hours.
15 When Schedule 4 was first implemented in 2005, the critical
16 peak rate was set approximately four times higher than the
17 summer Energy Charge rates. Over the years the summer
18 Energy Charge was slowly increased while the critical peak
19 rate was not. In this filing, Idaho Power is again
20 proposing a critical peak rate that is almost four times
21 higher than the summer Energy Charge rates.

22 The rates proposed in this filing for Schedule 4
23 result in a differential of 249 percent between the
24 critical peak rate and the summer On-Peak rate. Idaho
25 Power set the critical peak rate at 40 cents per kWh

1 because it sends a strong price signal to customers and it
2 aligns these rates with the original structure.

3 Q. Was the previous structure of setting the
4 critical peak four times higher than the summer Energy
5 Charge successful in discouraging customers from using
6 electricity during the Energy Watch events?

7 A. Yes. Although the program currently has a
8 limited number of participants which may not be
9 representative of the whole residential class, these
10 participants have consistently and significantly reduced
11 their energy usage during Energy Watch events.

12 Q. Have you compared Idaho Power's proposed rates
13 to other critical peak pricing offerings from other
14 utilities?

15 A. Yes. Of the eight different utilities we found
16 with critical peak offerings, the critical peak rates
17 ranged from 28.5 cents per kWh to \$1.30 per kWh with an
18 average of 62 cents per kWh. The average differential was
19 340 percent between the critical peak pricing rate and the
20 On-Peak Energy Charge. Idaho Power's proposed rate of 40
21 cents per kWh and the differential of 249 percent are well
22 under this average.

23 Q. Please summarize your rate design proposal for
24 Schedule 4.

25

1 A. The rate design proposal for Schedule 4 is
2 included on page three of Exhibit No. 45. Under the
3 proposed rate design, the Service Charge is \$5.00 per
4 month. The Energy Charge during the Energy Watch Event
5 hours would increase to 40 cents per kWh. In the summer
6 months, June through August, the Energy Charge customers
7 pay during the On-Peak Period is 11.4519 cents per kWh and
8 during the Off-Peak Period customers pay 6.3127 cents per
9 kWh. During the non-summer months, September through May,
10 the Energy Charge customers pay during the On-Peak Period
11 is 8.0175 cents per kWh, and during the Off-Peak Period,
12 customers pay 6.3127 cents per kWh.

13 Q. What impact does this rate design proposal
14 have on Residential Service customers taking service under
15 Schedule 4?

16 A. The typical monthly billing comparison for
17 Residential Service customers taking service under Schedule
18 4 appears on page two of Exhibit No. 46. Similar to the
19 Schedule 5 billing comparison, the increase in rates is
20 higher in the summer season than in the non-summer season.

21 Q. Do you have any changes to the tariff language
22 for any of the Residential Service schedules?

23 A. There is no tariff language changes proposed
24 for Schedules 1 or 3. However, as explained by Mr.
25 Youngblood in his testimony, the Company is proposing

1 tariff language changes to Schedules 4 and 5 in preparation
2 for offering these tariffs to more customers in the future.
3 The Company is proposing to eliminate the service
4 limitation requiring at least 300 kWh per month usage for a
5 customer to be eligible for this tariff. The Company is
6 adding language clarifying the process of getting on and
7 off the Schedules. In addition, the Company is adding
8 language that specifies when a customer who has been on
9 either Schedules 4 or 5 and elects to go off of the
10 schedule, that customer is not eligible to return to that
11 same schedule for one year. This limitation is designed to
12 prevent customers from hopping on and off of these
13 schedules during seasons when their particular usage
14 results in a lower bill, but then opting for another
15 schedule when their bill goes up.

16 Q. Are there any other limitations to
17 participation in Schedules 4 and 5?

18 A. Yes. In order to avoid potential double
19 counting of demand reduction and double paying of an
20 incentive, Idaho Power is proposing language to Schedule 4
21 so that those customers participating in the A/C Cool
22 Credit program are not eligible for Schedule 4. In
23 addition, because Schedule 5 is designed to be cost based,
24 customers can participate in both Schedule 5 and Schedule
25 84, the Company's net metering schedule. However, because

1 it is anticipated that electricity generating facilities
2 could not dramatically increase usage to take advantage of
3 the critical peak pricing, net metering customers are
4 prohibited from taking Schedule 4 service.

5 Q. Does this conclude your testimony?

6 A. Yes, it does.

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IDAHO PUBLIC UTILITIES COMMISSION

IDAHO PUBLIC
UTILITIES COMMISSION

CASE NO. IPC-E-11-08

IDAHO POWER COMPANY

**NEMNICH, DI
TESTIMONY**

EXHIBIT NO. 45

Idaho Power Company
Calculation of Revenue Impact
State of Idaho
2011 General Rate Case Funding
Filed June 1, 2011

Residential Service
Schedule 1

Line No	Description	(1) Use	(2) Current Base Rate	(3) Current Base Revenue	(4) Proposed Base Rate	(5) Proposed Base Revenue	(6) Revenue Difference	(7) Percent Change
1	Service Charge	4,767,186	\$4.00	\$19,068,743	\$5.00	\$23,835,929	\$4,767,186	25.00%
2	Minimum Charge	38,143	\$2.00	\$76,287	\$2.00	\$76,287	\$0	0.00%
3	<u>Energy Blocks</u>							
4	<u>Summer</u>							
5	0-800 kWh	812,216,482	0.071026	\$57,688,488	0.077493	\$62,941,092	\$5,252,604	9.11%
6	801-2000 kWh	345,712,888	0.086530	\$29,914,536	0.094410	\$32,638,754	\$2,724,218	9.11%
7	Over 2000 kWh	57,903,518	0.103836	\$6,012,470	0.113297	\$6,560,295	\$547,825	9.11%
8	<u>Non-Summer</u>							
9	0-800 kWh	2,302,960,245	0.066259	\$152,591,843	0.071983	\$165,773,987	\$13,182,144	8.64%
10	801-2000 kWh	1,100,244,240	0.073621	\$81,001,081	0.079981	\$87,998,635	\$6,997,554	8.64%
11	Over 2000 kWh	384,541,379	0.084662	\$32,556,042	0.084662	\$32,556,042	\$0	0.00%
12	Total Energy	5,003,578,752		\$359,764,460		\$388,468,805	\$28,704,345	7.98%
13	Total Revenue			\$378,909,490		\$412,381,021	\$33,471,531	8.83%
14	Energy Efficiency Rider							
15	FCA Revenue		4.75%	\$17,998,201	4.75%	\$19,588,098	\$1,589,897	8.83%
16	PCA Revenue		0.001801	\$9,011,445	0.001801	\$9,011,445	\$0	0.00%
			0.000289	\$1,446,034	0.000289	\$1,446,034	\$0	0.00%
17	Total Billed Revenue			\$407,365,170		\$442,426,598	\$35,061,428	8.61%

Idaho Power Company
 Calculation of Revenue Impact
 State of Idaho
 2011 General Rate Case Funding
 Filed June 1, 2011

Master Metered Mobile Home Park
 Residential Service
 Schedule 3

Line No.	Description	(1) Use	(2) Current Base Rate	(3) Current Base Revenue	(4) Proposed Base Rate	(5) Proposed Base Revenue	(6) Revenue Difference	(7) Percent Change
1	Service Charge	264.0	\$4.00	\$1,056	\$5.00	\$1,320	\$264	25.00%
2	Minimum Charge	0.0	\$2.00	\$0	\$2.00	\$0	\$0	0.00%
3	<u>Energy Charge</u>							
4	Total Energy	5,175,311	0.071794	\$371,556	0.078100	\$404,192	\$32,636	8.78%
5	Total Revenue			\$372,612		\$405,512	\$32,900	8.83%
6	Energy Efficiency Rider			\$17,699	4.75%	\$19,262	\$1,563	8.83%
7	FCA Revenue		0.001801	\$9,321	0.001801	\$9,321	\$0	0.00%
8	PCA Revenue		0.000289	\$1,496	0.000289	\$1,496	\$0	0.00%
9	Total Billed Revenue			\$401,128		\$435,591	\$34,463	8.59%

Idaho Power Company
 Calculation of Revenue Impact
 State of Idaho
 2011 General Rate Case Funding
 Filed June 1, 2011

Residential Service - Energy Watch Program
 Schedule 4

Line No	Description	(1) Use	(2) Current Base Rate	(3) Current Base Revenue	(4) Proposed Base Rate	(5) Proposed Base Revenue	(6) Revenue Difference	(7) Percent Change
1	Service Charge	510	\$4.00	\$2,038	\$5.00	\$2,548	\$510	25.02%
2	Minimum Charge	1	\$2.00	\$1	\$2.00	\$1	\$0	0.00%
3	<u>Energy Charge</u>							
4	<u>Summer</u>							
5	Energy Watch Hours	606	0.200000	\$121	0.400000	\$242	\$121	100.00%
6	All other hours	148,289	0.073366	\$10,879				
7	<u>Non-Summer</u>							
8	0-800 kWh	303,287	0.066259	\$20,095				
9	801-2000 kWh	214,924	0.073621	\$15,823				
10	Over 2000 kWh	76,833	0.084662	\$6,505				
11	Total Energy	743,939		\$53,423				
12	<u>Proposed Energy Charge</u>							
13	<u>Summer</u>							
14	On-Peak	53,384	0.114519	\$6,113	0.114519	\$6,113	\$2,196	56.08%
15	Off-Peak	94,905	0.063127	\$5,991	0.063127	\$5,991	(\$972)	(13.96)%
16	<u>Non-Summer</u>							
17	Mid-Peak	285,621	0.080175	\$22,900	0.080175	\$22,900	\$2,537	12.46%
18	Off-Peak	309,423	0.063127	\$19,533	0.063127	\$19,533	(\$2,527)	(11.45)%
19	Total Energy	743,939		\$54,779		\$54,779	\$1,356	2.54%
12	Total Revenue			\$55,462		\$57,328	\$1,866	3.36%
14	Energy Efficiency Rider			\$2,634	4.75%	\$2,723	\$89	3.38%
15	FCA Revenue		0.001801	\$1,340	0.001801	\$1,340	\$0	0.00%
16	PCA Revenue		0.000289	\$215	0.000289	\$215	\$0	0.00%
18	Total Billed Revenue			\$59,651		\$61,606	\$1,955	3.28%

Idaho Power Company
 Calculation of Revenue Impact
 State of Idaho
 2011 General Rate Case Funding
 Filed June 1, 2011

Residential Service - Time-Of-Day Program
 Schedule 5

Line No	Description	(1) Use	(2) Current Base Rate	(3) Current Base Revenue	(4) Proposed Base Rate	(5) Proposed Base Revenue	(6) Revenue Difference	(7) Percent Change
1	Service Charge	882	\$4.00	\$3,528	\$5.00	\$4,410	\$882	25.00%
2	Minimum Charge	1	\$2.00	\$2	\$2.00	\$2	\$0	0.00%
3	<u>Current Energy Charge</u>							
4	<u>Summer</u>							
5	On-Peak	72,090	0.106215	\$7,657				
6	Mid-Peak	42,914	0.078146	\$3,354				
7	Off-Peak	136,937	0.058565	\$8,020				
8	<u>Non-Summer</u>							
9	0-800 kWh	522,886	0.066259	\$34,646				
10	801-2000 kWh	319,863	0.073621	\$23,549				
11	Over 2000 kWh	83,918	0.084662	\$7,105				
12	Total Energy	1,178,608		\$84,331				
13	<u>Proposed Energy Charge</u>							
14	<u>Summer</u>							
15	On-Peak	90,699			0.120547	\$10,933	\$1,822	19.99%
16	Off-Peak	161,243			0.066450	\$10,715	\$796	8.02%
17	<u>Non-Summer</u>							
18	Mid-Peak	444,800			0.084395	\$37,539	\$6,195	19.76%
19	Off-Peak	481,866			0.066450	\$32,020	(\$1,936)	(5.70)%
20	Total Energy	1,178,608				\$91,207	\$6,876	8.15%
21	Total Revenue			\$87,861		\$95,619	\$7,758	8.83%
22	Energy Efficiency Rider			\$4,173	4.75%	\$4,542	\$369	8.84%
23	FCA Revenue		0.001801	\$2,123	0.001801	\$2,123	\$0	0.00%
24	PCA Revenue		0.000289	\$341	0.000289	\$341	\$0	0.00%
25	Total Billed Revenue			\$94,498		\$102,625	\$8,127	8.60%

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IDAHO PUBLIC
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BEFORE THE
IDAHO PUBLIC UTILITIES COMMISSION

CASE NO. IPC-E-11-08

IDAHO POWER COMPANY

NEMNICH, DI
TESTIMONY

EXHIBIT NO. 46

Idaho Power Company
Typical Monthly Billing Comparison
State of Idaho
General Rate Case
Filed June 1, 2011

Residential Service
Schedule 1

Line No	Energy kWh	Summer		(3)		(4)		(5)		(6)		(7)		(8)		(9)		
		Current Revenue	Proposed Revenue	Percent Difference	Current Revenue	Proposed Revenue	Percent Difference	Current Revenue	Proposed Revenue	Percent Difference	Current Revenue	Proposed Revenue	Percent Difference	Current Revenue	Proposed Revenue	Percent Difference		
1	0	4.00	5.00	25.00%	4.00	5.00	25.00%	4.00	5.00	25.00%	4.00	5.00	25.00%	4.00	5.00	25.00%	4.00	5.00
2	100	11.10	12.75	14.86%	10.63	12.20	14.77%	10.75	12.34	14.77%	10.75	12.34	14.77%	10.75	12.34	14.77%	10.75	12.34
3	200	18.21	20.50	12.58%	17.25	19.40	12.46%	17.49	19.68	12.52%	17.49	19.68	12.52%	17.49	19.68	12.52%	17.49	19.68
4	300	25.31	28.25	11.62%	23.88	26.59	11.35%	24.24	27.01	11.43%	24.24	27.01	11.43%	24.24	27.01	11.43%	24.24	27.01
5	400	32.41	36.00	11.08%	30.50	33.79	10.79%	30.98	34.34	10.85%	30.98	34.34	10.85%	30.98	34.34	10.85%	30.98	34.34
6	500	39.51	43.75	10.73%	37.13	40.99	10.40%	37.73	41.68	10.47%	37.73	41.68	10.47%	37.73	41.68	10.47%	37.73	41.68
7	600	46.62	51.50	10.47%	43.76	48.19	10.12%	44.48	49.02	10.21%	44.48	49.02	10.21%	44.48	49.02	10.21%	44.48	49.02
8	700	53.72	59.25	10.29%	50.38	55.39	9.94%	51.22	56.36	10.04%	51.22	56.36	10.04%	51.22	56.36	10.04%	51.22	56.36
9	800	60.82	66.99	10.14%	57.01	62.59	9.79%	57.96	63.69	9.89%	57.96	63.69	9.89%	57.96	63.69	9.89%	57.96	63.69
10	900	69.47	76.43	10.02%	64.37	70.59	9.66%	65.65	72.05	9.75%	65.65	72.05	9.75%	65.65	72.05	9.75%	65.65	72.05
11	1,000	78.13	85.87	9.91%	71.73	78.59	9.56%	73.33	80.41	9.65%	73.33	80.41	9.65%	73.33	80.41	9.65%	73.33	80.41
12	1,050	82.45	90.59	9.87%	75.42	82.59	9.51%	77.18	84.59	9.60%	77.18	84.59	9.60%	77.18	84.59	9.60%	77.18	84.59
13	1,100	86.78	95.31	9.83%	79.10	86.58	9.46%	81.02	88.76	9.55%	81.02	88.76	9.55%	81.02	88.76	9.55%	81.02	88.76
14	1,200	95.43	104.75	9.77%	86.46	94.58	9.39%	88.70	97.12	9.49%	88.70	97.12	9.49%	88.70	97.12	9.49%	88.70	97.12
15	1,300	104.09	114.20	9.71%	93.82	102.58	9.34%	96.39	105.49	9.44%	96.39	105.49	9.44%	96.39	105.49	9.44%	96.39	105.49
16	1,400	112.74	123.64	9.67%	101.18	110.58	9.29%	104.07	113.85	9.40%	104.07	113.85	9.40%	104.07	113.85	9.40%	104.07	113.85
17	1,500	121.39	133.08	9.63%	108.54	118.58	9.25%	111.75	122.21	9.36%	111.75	122.21	9.36%	111.75	122.21	9.36%	111.75	122.21
18	2,000	164.66	180.28	9.49%	145.36	158.57	9.09%	150.19	164.00	9.19%	150.19	164.00	9.19%	150.19	164.00	9.19%	150.19	164.00
19	2,500	216.58	236.93	9.40%	187.69	200.90	7.04%	194.91	209.91	7.69%	194.91	209.91	7.69%	194.91	209.91	7.69%	194.91	209.91
20	3,000	268.50	293.58	9.34%	230.02	243.23	5.74%	239.64	255.82	6.75%	239.64	255.82	6.75%	239.64	255.82	6.75%	239.64	255.82
21	4,000	372.33	406.87	9.28%	314.68	327.89	4.20%	329.09	347.64	5.64%	329.09	347.64	5.64%	329.09	347.64	5.64%	329.09	347.64
22	5,000	476.17	520.17	9.24%	399.35	412.56	3.31%	418.56	439.46	4.99%	418.56	439.46	4.99%	418.56	439.46	4.99%	418.56	439.46

Idaho Power Company
Typical Monthly Billing Comparison
State of Idaho
General Rate Case
Filed June 1, 2011

Residential Service - Energy Watch Program
Schedule 4

Line No	Summer Energy Watch	Summer Energy - kWh		Non Summer	(1)		(2)		(3)		(4)		(5)		(6)		(7)		(8)		(9)	
		Summer	Summer		Current Revenue	Proposed Revenue	Current Revenue	Proposed Revenue	Current Revenue	Proposed Revenue	Current Revenue	Proposed Revenue	Current Revenue	Proposed Revenue	Current Revenue	Proposed Revenue	Current Revenue	Proposed Revenue	Current Revenue	Proposed Revenue	Current Revenue	Proposed Revenue
1	0	0	0	0	4.00	5.00	25.00%	4.00	5.00	25.00%	4.00	5.00	25.00%	4.00	5.00	25.00%	4.00	5.00	25.00%	4.00	5.00	25.00%
2	1	299	26.14	300	26.14	29.81	14.04%	23.88	26.39	10.53%	23.88	26.39	10.53%	24.44	27.25	11.50%	24.44	27.25	11.50%	24.44	27.25	11.50%
3	2	398	33.60	400	33.60	38.29	13.95%	30.50	33.52	9.90%	30.50	33.52	9.90%	31.28	34.72	11.00%	31.28	34.72	11.00%	31.28	34.72	11.00%
4	2	498	40.94	500	40.94	46.45	13.47%	37.13	40.66	9.50%	37.13	40.66	9.50%	38.08	42.10	10.56%	38.08	42.10	10.56%	38.08	42.10	10.56%
5	2	598	48.27	600	48.27	54.61	13.14%	43.76	47.79	9.21%	43.76	47.79	9.21%	44.88	49.49	10.27%	44.88	49.49	10.27%	44.88	49.49	10.27%
6	3	697	55.74	700	55.74	63.09	13.20%	50.38	54.92	9.00%	50.38	54.92	9.00%	51.72	56.96	10.13%	51.72	56.96	10.13%	51.72	56.96	10.13%
7	3	797	63.07	800	63.07	71.26	12.98%	57.01	62.05	8.84%	57.01	62.05	8.84%	58.52	64.35	9.96%	58.52	64.35	9.96%	58.52	64.35	9.96%
8	4	896	70.54	900	70.54	79.74	13.05%	64.37	69.18	7.47%	64.37	69.18	7.47%	65.91	71.82	8.97%	65.91	71.82	8.97%	65.91	71.82	8.97%
9	4	996	77.87	1,000	77.87	87.90	12.88%	71.73	76.31	6.38%	71.73	76.31	6.38%	73.27	79.21	8.11%	73.27	79.21	8.11%	73.27	79.21	8.11%
10	4	1,096	85.21	1,100	85.21	96.06	12.74%	79.09	83.44	5.50%	79.09	83.44	5.50%	80.62	86.60	7.42%	80.62	86.60	7.42%	80.62	86.60	7.42%
11	5	1,195	92.67	1,200	92.67	104.55	12.81%	86.46	90.57	4.76%	86.46	90.57	4.76%	88.01	94.07	6.89%	88.01	94.07	6.89%	88.01	94.07	6.89%
12	5	1,295	100.01	1,300	100.01	112.71	12.70%	93.82	97.70	4.14%	93.82	97.70	4.14%	95.37	101.45	6.38%	95.37	101.45	6.38%	95.37	101.45	6.38%
13	6	1,394	107.47	1,400	107.47	121.19	12.76%	101.18	104.83	3.61%	101.18	104.83	3.61%	102.75	108.92	6.00%	102.75	108.92	6.00%	102.75	108.92	6.00%
14	6	1,494	114.81	1,500	114.81	129.35	12.67%	108.54	111.97	3.15%	108.54	111.97	3.15%	110.11	116.31	5.63%	110.11	116.31	5.63%	110.11	116.31	5.63%
15	8	1,992	151.75	2,000	151.75	170.80	12.56%	145.35	147.62	1.56%	145.35	147.62	1.56%	146.95	153.42	4.40%	146.95	153.42	4.40%	146.95	153.42	4.40%
16	10	2,490	188.68	2,500	188.68	212.25	12.49%	187.68	183.28	-2.35%	187.68	183.28	-2.35%	187.93	190.52	1.38%	187.93	190.52	1.38%	187.93	190.52	1.38%
17	12	2,988	225.62	3,000	225.62	253.70	12.45%	230.01	218.93	-4.82%	230.01	218.93	-4.82%	228.92	227.62	-0.57%	228.92	227.62	-0.57%	228.92	227.62	-0.57%
18	16	3,984	299.49	4,000	299.49	336.61	12.39%	314.68	290.24	-7.77%	314.68	290.24	-7.77%	310.88	301.83	-2.91%	310.88	301.83	-2.91%	310.88	301.83	-2.91%
19	20	4,980	373.36	5,000	373.36	419.51	12.36%	399.34	361.55	-9.46%	399.34	361.55	-9.46%	392.84	376.04	-4.28%	392.84	376.04	-4.28%	392.84	376.04	-4.28%

Idaho Power Company
Typical Monthly Billing Comparison
State of Idaho
General Rate Case
Filed June 1, 2011

Residential Service - Time-of-Day Program
Schedule 5

Line No	Monthly Energy kWh	(1)		(2)		(3)		(4)		(5)		(6)		(7)		(8)		(9)	
		Current Revenue	Proposed Revenue	Current Revenue	Proposed Revenue	Current Revenue	Proposed Revenue	Current Revenue	Proposed Revenue	Current Revenue	Proposed Revenue	Current Revenue	Proposed Revenue	Current Revenue	Proposed Revenue	Current Revenue	Proposed Revenue	Current Revenue	Proposed Revenue
1	0	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00
2	300	26.67	30.78	23.88	27.52	23.88	27.52	23.88	27.52	23.88	27.52	23.88	27.52	24.57	28.33	24.57	28.33	24.57	28.33
3	400	34.19	39.37	30.50	35.03	30.50	35.03	30.50	35.03	30.50	35.03	30.50	35.03	31.43	36.11	31.43	36.11	31.43	36.11
4	500	41.76	47.96	37.13	42.53	37.13	42.53	37.13	42.53	37.13	42.53	37.13	42.53	38.29	43.89	38.29	43.89	38.29	43.89
5	600	49.33	56.55	43.76	50.04	43.76	50.04	43.76	50.04	43.76	50.04	43.76	50.04	45.15	51.67	45.15	51.67	45.15	51.67
6	700	56.86	65.15	50.38	57.54	50.38	57.54	50.38	57.54	50.38	57.54	50.38	57.54	52.00	59.45	52.00	59.45	52.00	59.45
7	800	64.43	73.74	57.01	65.05	57.01	65.05	57.01	65.05	57.01	65.05	57.01	65.05	58.86	67.22	58.86	67.22	58.86	67.22
8	900	72.00	82.33	64.37	72.56	64.37	72.56	64.37	72.56	64.37	72.56	64.37	72.56	66.28	75.00	66.28	75.00	66.28	75.00
9	1,000	79.52	90.92	71.73	80.06	71.73	80.06	71.73	80.06	71.73	80.06	71.73	80.06	73.68	82.78	73.68	82.78	73.68	82.78
10	1,100	87.09	99.52	79.09	87.57	79.09	87.57	79.09	87.57	79.09	87.57	79.09	87.57	81.09	90.56	81.09	90.56	81.09	90.56
11	1,200	94.62	108.11	86.46	95.08	86.46	95.08	86.46	95.08	86.46	95.08	86.46	95.08	88.50	98.33	88.50	98.33	88.50	98.33
12	1,300	102.19	116.70	93.82	102.58	93.82	102.58	93.82	102.58	93.82	102.58	93.82	102.58	95.91	106.11	95.91	106.11	95.91	106.11
13	1,400	109.76	125.29	101.18	110.09	101.18	110.09	101.18	110.09	101.18	110.09	101.18	110.09	103.32	113.89	103.32	113.89	103.32	113.89
14	1,500	117.30	133.89	108.54	117.60	108.54	117.60	108.54	117.60	108.54	117.60	108.54	117.60	110.73	121.67	110.73	121.67	110.73	121.67
15	2,000	155.06	176.85	145.35	155.13	145.35	155.13	145.35	155.13	145.35	155.13	145.35	155.13	147.78	160.56	147.78	160.56	147.78	160.56
16	2,500	192.82	219.81	187.68	192.66	187.68	192.66	187.68	192.66	187.68	192.66	187.68	192.66	188.97	199.45	188.97	199.45	188.97	199.45
17	3,000	230.58	262.77	230.01	230.19	230.01	230.19	230.01	230.19	230.01	230.19	230.01	230.19	230.16	238.34	230.16	238.34	230.16	238.34
18	4,000	306.15	348.70	314.68	305.25	314.68	305.25	314.68	305.25	314.68	305.25	314.68	305.25	312.55	316.12	312.55	316.12	312.55	316.12
19	5,000	381.70	434.62	399.34	380.32	399.34	380.32	399.34	380.32	399.34	380.32	399.34	380.32	394.93	393.89	394.93	393.89	394.93	393.89