Q.Please state your name and business address for the record.

A.My name is Rick Sterling.  My business address is 472 West Washington Street, Boise, Idaho.

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

A.I am employed by the Idaho Public Utilities Commission as a Staff engineer.

Q.What is your educational and professional background?

A.I received a Bachelor of Science degree in Civil Engineering from the University of Idaho in 1981 and a Master of Science degree in Civil Engineering from the University of Idaho in 1983.  I worked for the Idaho Department of Water Resources from July of 1983 to April of 1994.  I received my Idaho license as a registered professional Civil Engineer in 1988.  I began working at the Idaho Public Utilities Commission in April of 1994.  I have since attended the annual regulatory studies program sponsored by the National Association of Regulatory Commissioners (NARUC) at Michigan State University, the 1995 Lawrence Berkeley Laboratory Advanced IRP Seminar, and an advanced IRP course sponsored by EPRI entitled “Resource Planning in a Competitive Environment.”  My duties at the Commission include analysis of utility rate applications, rate design, tariff analysis and customer petitions.

Q.What is the purpose of your testimony in this case?

A.The purpose of my testimony is to summarize the process leading up to the filing of testimony in this case, to present supporting testimony for Staff’s position, including those issues in the Company’s revised application with which Staff agrees and to present alternative positions on certain issues in the revised application with which Staff does not agree.

Q.Before continuing your testimony, would you please define some of the terminology which you intend to use and which is critical to your testimony?

A.I will make frequent reference to the terms listed below and wish to define them as follows:

Distribution system, or distribution refers to that portion of the delivery system closest to the customer with voltages under 44 kV.  The distribution system includes line extensions and terminal facilities.

Lineextension is any installation of new distribution facilities (excluding relocations) or alteration of existing distribution facilities owned by the Company other than terminal facilities.

Terminalfacilities include transformer, meter and service cable.

Service, services, or service cable refers to the conductor providing usable voltage to the customer from, typically, the Company’s last pole, junction box or transformer.  The service cable may be overhead or underground.

Q.Please summarize your testimony.

A.I am recommending that the cost of new terminal facilities and line extensions needed to serve new customers should be paid by the customers who cause those costs to be incurred.  I propose that the Company reduce its share of the investment in new distribution and terminal facilities to recover actual customer connection costs not currently recovered through rates, thereby relieving the upward pressure on rates that is caused by the current line extension policy.  I recommend that the Company’s investment in facilities for each new customer be equal to the embedded costs of the same facilities used to calculate rates, and that costs in excess of embedded costs be borne by the customers requesting service through a one-time capital contribution.  I calculate that an investment of $854 would be revenue neutral, and that this is nearly equal to the cost of terminal facilities for residential customers.  Thus, I recommend free terminal facilities be provided by the Company for residential customers, and that no allowance be offered toward line extension costs.  I also recommend that free terminal facilities be provided for small commercial customers.  For other customer classes, I recommend allowances be offered towards the cost of terminal facilities and line extensions.  My recommended allowances are $8.32/kW for the large commercial class, $17.45/kW for the irrigation class, and $7.95/kW for the industrial class.  For subdivisions, I recommend that refunds be made to subdividers as new customers are connected, in an amount equal to each lot’s share of the transformer costs for the subdivision.  Each residence in the subdivision would receive a free service cable and meter.

I concur with the Company’s desire to eliminate the average unit cost method as the basis for determining costs for residential customers.  While I recognize that moving from outdated average unit costs to current work order costs will increase overall costs per lot, I believe that a work order cost method for all customers will be more equitable than the current method.

I disagree with the Company’s proposed first-in, first-out vested interest refund proposal.  I contend that the current method is superior because it is fair to all customers in all situations.  I believe that the administrative difficulties of the current refund method are not as severe as the Company claims, and that there may be alternative solutions to easing administrative difficulties.  I recommend that the refund period be extended to ten years for platted, undeveloped subdivisions, and remain at five years for all other situations.

I agree with the Company’s request to charge engineering fees separately on work orders, but I maintain that the general overhead rate which is currently charged be reduced accordingly to 1.5 percent.

Q.Please describe the process leading up to the filing of testimony in this case.

A.Idaho Power filed an application in this case on December 8, 1995.  In its application, Idaho Power suggested that the Commission schedule a workshop where interested parties, including Staff, could confer with the Company concerning the proposed Rule H tariff.  The Company was hopeful that after consultation, the new Rule H could be presented to the Commission in a “settlement proceeding.”  As a result of the Company’s request, four workshops were ultimately held — three in Boise, on 1/23/96, 2/15/96, and 3/19/96; and one in Pocatello on 3/26/96.  At each of the workshops, Idaho Power representatives explained the proposal and participants asked general questions of the Company and Staff.  The Company also showed examples of how the proposed modifications would affect specific types of customers.  At the second workshop, Staff explained its position on policy issues related to the Company’s original application and agreed to prepare a written proposal outlining its position for use at the next workshop.  Staff’s proposal eventually became the model for further discussion during the last workshop and served as the primary basis for the revised application which Idaho Power filed with testimony on May 24, 1996.  The revised application has been changed extensively from the original which was filed by the Company in December, 1995.  The Company accepted most of Staff’s proposal as indicated in the Company’s prefiled direct testimony, choosing to differ slightly on a few issues and choosing to reject Staff’s proposal regarding vested interest refunds.

Q.What was your role during the workshop process?

A.I participated in all of the workshops, and was primarily responsible for drafting Staff’s proposal.

Q.Did you make an assessment of the Company’s original filing in this case?

A.Yes, I made a thorough assessment.

Q.What did you conclude from that assessment?

A.My assessment of the Company’s original proposal was that it collected more from new customers through hookup fees and capital contributions than was necessary given the level of similar embedded costs included in rates.  Neither Staff nor the Company attempted to quantify the effects of the Company’s proposal on net revenue.  However, I did not believe exact quantification of the revenue effects of the Company’s proposal was critical in determining what distribution/terminal facilities investment is included in rates and thus should be provided by the Company for each new customer.  My analysis indicated that the Company’s original proposal would over collect distribution/terminal facilities costs from new customers, potentially causing a downward pressure on rates.  As a result, Staff rejected the Company’s original proposal as submitted.

Under the original proposed tariff, new customers would pay for the full cost of a service attachment and a line extension.  For example, a new residential customer would pay a service attachment charge of $120 and a base installation charge of at least $1500 for a transformer and line extension if required.  Existing rates, however, are already designed to cover a portion of those same costs.  As I will discuss in more detail later in my testimony, Staff calculated that existing residential rates are designed to support a Company investment of approximately $854.  Under the Company’s original proposal, new customers would not just be paying the increment above what rates are already covering, but would be paying for the full investment.  In effect, they would be paying twice for a portion of the same investment.

Q.What was the Staff response as a result of your analysis?

A.Staff offered to prepare an alternate proposal outlining a position that could be used as the basis for further negotiations at future workshops.  I prepared the Staff proposal which was mailed to all parties of record and interested persons on March 12, 1996 to be used to facilitate discussion during the next scheduled workshops.

Q.What was the primary basis of the proposal?

A.The primary basis of Staff’s proposal was that modified line extension rules should not cause either greater upward or downward pressure on rates.

Q.Do you accept the Company’s contention that the existing line extension rules cause upward pressure on rates?

A.Yes, I do.  The Company’s investment in distribution plant and terminal facilities, on a per customer basis, has in fact, increased since the existing rules were implemented in 1988.  Exhibit No. 101 illustrates the Company’s investment on a per customer basis from 1970 to 1994.  It is important to note that these figures donot reflect the actual cost of distribution facilities, but rather the Company’s investment in those facilities.  The level of Company investment in distribution facilities has been heavily influenced by changes in line extension policies over the years, as will be further discussed in more detail later in my testimony.

Q.What do you believe is the cause of the upward pressure on rates?

A.The primary cause is adding new customers at higher levels of investment per customer than current rates can support.  The combined effects of inflation on facilities costs, the rate of new customer growth and changes in line extension policies over time have all been factors.  I also believe that changes in construction standards and a trend toward more underground installations have also contributed.

Q.How do these factors affecting the investment required to connect new customers cause rates to increase?

A.Each new customer that is added requires an investment in distribution plant and terminal facilities.  The new investment is undepreciated, while the investment upon which the Company’s revenue requirement (and rates) is calculated was both lower on a per customer basis when originally made and is now partially depreciated.  Therefore, when the new plant investment is booked by the Company, the resulting revenue requirement is higher per customer than it was before the new customers were connected.  The Company then has two alternatives: increase rates to all customers to cover the increased revenue requirement, or decrease the revenue requirement by shifting more of the investment in new distribution/terminal facilities to the customer for whose benefit those facilities are built.  Staff believes it is more appropriate to shift more of the costs to new customers.

Q.If the investment required to connect new customers has always caused revenue requirement per customer to increase more or less over the years, why do you propose to change the policy now?

A.Over the past 20 years the line extension policy for Idaho Power has changed many times, and there does not appear to have been any consistent basis for these policies.  In fact, I believe that the level of Company investment in the past has been set depending upon how promotional the Company wanted to be in attracting new customers, depending upon economic conditions at the time or upon other factors.  For example, in 1937 for residential customers, the Company limited its investment to three times the customer’s guaranteed annual minimum billing.  Between 1939 and 1945, the Company increased its investment limit to four and one-half times annual revenue.  In 1945, the Company financed the entire cost of serving new customers.  In 1948, the investment limit was 10 times annual revenue for residential and farm customers and five times revenue for commercial and industrial customers.  Since 1955, the investment limit has continued to decline, until presently when the investment limit is approximately three times annual revenue for residential customers.  With these facts in mind, it is apparent that the level of embedded Company investment per customer has been influenced as much or more by the line extension policy in effect at the time, as by inflation, rate of customer growth, construction standards or other factors.

Staff’s line extension proposal in this case is different than previous Idaho Power line extension policies because it is based on the calculated embedded costs for existing customers which are used to calculate rates.  Staff believes this is a more appropriate method than previous policies.

Q.Do you believe that the Company’s current rates are sufficient to cover all of the current average investment per new customer for required distribution plant and terminal facilities common to each new customer?

A.No, as I have previously stated, current rates as set in Idaho Power’s recently completed general rate case were established based upon the average embedded investment per existing customer and are not sufficient to cover all of the current average investment per new customer.  However, rates will support a significant portion of the required distribution/terminal facilities investment common to each new customer.  If the Company continues to add new customers at costs higher than the average rate base used to calculate rates, upward pressure on rates will continue.  Eventually a rate increase will be necessary.  A rate increase may temporarily relieve the revenue deficiency problem caused by new customer investment, but it will not eliminate the upward pressure on rates.

Q.Who do you believe should pay the cost of new distribution/terminal facilities needed to serve new customers?

A.I believe that the Company’s investment in facilities for each new customer should be equal to the embedded costs of the same facilities used to calculate rates.  Costs in excess of embedded costs should be paid through one-time capital contributions by the new customers.  I further believe that those costs over and above the costs for standard overhead service with pole-mounted transformers and overhead distribution lines should be paid entirely by the customer requesting the new facilities.

Q.Why did you only consider distribution and terminal facility costs in proposing a new Rule H?  Why didn’t you also consider generation and transmission costs?

A.Rule H is the line extension tariff; therefore, distribution and terminal facility costs alone were considered because they are the line extension costs that must be specifically incurred to serve new customers.  Distribution and terminal facilities costs, in essence, are those costs associated with physically connecting a new customer to Idaho Power’s system.  Furthermore, the distribution facilities are solely used by the new customers who pay for them, and not by other existing customers.

Q.The Company’s investment has traditionally been provided as an allowance towards the cost of new facilities.  Please summarize your approach to determining a Company provided allowance.

A.My approach to determining a Company provided allowance for service connections and line extensions was to determine what equivalent investment the Company can make that will be supported by the revenue stream embedded in the Company’s current rates.  Exhibit No. 102 details the approximate size of that investment for residential, small commercial, large commercial, irrigation and industrial classes.  I used the Commission’s last rate order in Case No. IPC-E-94-5 as the basis of the calculations.  Assumptions used in making the calculations are provided in Exhibit No. 103.  I also used the Company’s 1993 cost of service study as a basis for calculations.  A summary of the cost of service figures used in the analysis is included as Exhibit No. 104.

The equivalent investment per residential customer is calculated using the cost of service study and capital structure accepted by the Commission.  Exhibit No. 105 summarizes the calculation of the investment for the residential class.  The net distribution plant and terminal facility value of $773.94 per customer (plant in service less accumulated depreciation and amortization) is used to calculate the revenue requirement associated with the return on common equity grossed up to recognize the income taxes associated with the return (773.94 x (0.04996 x 1.642) = $63.49).  Debt service costs (0.03649 x 773.94 = $28.24) and the carrying costs of preferred stock (0.00554 x 773.94 = $4.29) are added to the equity return and tax calculation to produce the total revenue requirement associated with the cost of capital and associated income taxes of $96.02.  Depreciation expense of $37.64 (actual distribution plant and terminal facilities depreciation expense per customer) is added to the capital and tax cost to produce a total revenue requirement related to distribution plant and terminal facilities of $133.66.

This revenue stream is embedded in the Company’s current sales rate structure.  I used this revenue stream to calculate the new Company investment that can be supported by current rates without applying either upward or downward pressure on the Company’s rate structure.  The revenue stream represents the total cost of capital, with associated taxes, plus depreciation expenses associated with the Company’s distribution plant and terminal facilities.  Because the actual depreciation expense is based upon a gross investment greater than the net plant investment built into rates, it follows that the new investment can be an amount larger than the current embedded net investment.  The composite of the total cost of capital and associated taxes expressed as a percentage of rate base is 12.406 percent.  The composite depreciation rate for distribution and terminal facilities is 3.24 percent.  The combined total of these two percentages (15.646 percent) represents the relationship of the current revenue stream to new gross investment.  Dividing the revenue stream of $133.66 by 15.646 percent produces the revenue neutral investment of $854.28 which Idaho Power Company can make to provide service to new residential customers.

Exhibit No. 106 summarizes similar calculations for other customer classes.

Q.How do you believe the Company’s embedded investment should be applied in terms of an allowance to new customers?

A.Even though the Company’s embedded investment is split between investment in distribution plant and terminal facilities, I suggest that all of the recommended Company investment be applied to the cost of providing terminal facilities.  I maintain that it is only important that the total value of the Company’s investment be equal to the total embedded cost — not that the Company’s investment be applied to both terminal facilities and distribution facilities in the exact proportion as are their embedded costs.  Terminal facilities are defined as a transformer, meter, and service drop.  My estimates of the cost of terminal facilities are shown in Exhibit No. 107.

Q.What allowance do you recommend for the residential customer class?

A.Because the average investment for existing customers ($854) is quite close to my estimate of the cost of terminal facilities ($926), I believe terminal facilities should be provided at no cost to the residential customer.  Even though the allowance cost of terminal facilities is slightly larger than the average investment, I believe that simplicity, both to the Company and the customer, is important.  Under the present tariff, terminal facilities are already provided at no charge for residential customers, so in this respect there would be no change.  Since the amount of the recommended Company investment is approximately equal to the cost of terminal facilities, there is nothing that could be applied as an allowance toward line extension costs if a line extension is required.

Q.What allowance do you recommend for the small commercial class?

A.The small commercial class (Schedule 7) is very similar to the residential class in terms of required distribution and terminal facilities.  Small commercial customers’ energy usage is comparable to many residential customers, and small commercial customers’ service is not demand metered.  The Company’s embedded investment per customer is nearly the same as for the residential class.  I also estimate that the cost of terminal facilities is the same, on average, as for residential customers. Consequently, I recommend that terminal facilities for small commercial customers be provided at no charge, as they are for residential customers.

Q.What allowances do you recommend for the large commercial, irrigation, and industrial customer classes?

A.For the large commercial, irrigation, and industrial classes, the estimated cost of terminal facilities will exceed my recommendations for Company investment per customer in all cases.  Consequently, I recommend an allowance be offered by the Company toward the cost of terminal facilities, but that no allowance be offered toward line extension costs.

Because the proposed allowances for the large commercial, irrigation, and industrial customer classes are in terms of dollars per kilowatt, rather than in terms of facilities as in the residential class, I recommend that these allowances be periodically reviewed to insure that the value of the investment keeps pace with inflation.  Equipment and facilities allowances, such as are proposed for the residential class, will maintain value despite inflationary increases in cost; however, inflation will gradually erode the value of dollar allowances.  Dollar allowances should be inflated at the same rate as total distribution/terminal facilities costs in order to preserve the same balance between the Company’s and the customer’s investment.  Periodic adjustments to the amount of the allowances will very slowly change the average investment per existing customer over time; consequently, I also recommend that allowances be reviewed regularly to insure that the Company continues to make the same investment for new customers as they made, on average, for existing customers.

For single phase commercial and irrigation customers, I recommend the same allowance in terms of dollars as for the residential class, since, except for meter costs, the cost of single phase service is not dependent on the class of customer.  The size of the customer load is a factor, but larger commercial and irrigation customers will typically require three phase service if their load is much larger than for a typical residential customer.

For large commercial three phase service my recommended allowance is $8.32/kW.  For three phase irrigation service my recommended allowance is $17.45/kW.

Q.The Company’s proposed tariff does not include an allowance for industrial (Schedule 19) customers.  Do you recommend an allowance for this customer class?

A.Yes, I recommend an allowance toward the cost of terminal facilities of $7.95/kW.

Q.What is your proposed treatment for subdivisions?

A.I believe homeowners, individual builders or business owners who request new service within subdivisions are entitled to the same allowances for terminal facilities as are other customers not located in subdivisions.  However, transformers, one component of what I propose as terminal facilities, are generally installed prior to building within the subdivision, at the same time as line extensions are completed.  On the other hand, installation of the other components of terminal facilities, a service attachment and a meter, is generally requested by the homeowner, builder or business owner at the time of building construction, not by the subdivider at the time the subdivision is developed.  Consequently, in order to be consistent and provide all residential customers comparable allowances, I am proposing that subdividers pay all line extension costs including transformer costs, but that transformer costs be subject to refund to the subdivider as new homes are built.  Homeowners, builders and business owners would receive standard service attachments and meters at no cost.

Q.Why are you proposing a refund be made to developers for transformers?

A.I am proposing a refund for transformers so that both individual residential customers and residential customers not located in subdivisions receive the same allowance.  Since I have recommended that all residential customers be provided terminal facilities at no cost, this is one way that transformers can be provided at no cost to the customer, while relieving the Company of the risk of bearing the cost should lots not be developed.  I am assuming the developer will indirectly pass on the transformer refund to the homeowner in the form of lower home prices.

Q.How and when would refunds be made for transformers installed in subdivisions?

A.Refunds for transformers would be made to subdividers as each new customer is connected.  The amount of the refund should represent the installed cost of the transformer needed to serve the new customer.  Where single transformers serve multiple customers, the amount of the refund should be equal to the total cost of the transformers installed in the subdivision divided by the total number of lots in the subdivision.

Q.In effect, wouldn’t transformer refunds under the proposed new policy replace the $1200 residential subdivision refund which is currently offered under the present policy?

A.Yes, but only administratively.  Transformer refunds are not intended to be a substitute for the current refund amount, nor are they intended to have equivalent value.  In fact, in most cases transformer refunds would be less than $1200.

Q.Please summarize your recommended allowances.

A.My proposed allowances are summarized in Exhibit No. 108.

Q.Do you propose any adjustments to these allowances for customers who request or require underground service?

A.My proposed allowances are based on the cost to provide an overhead service attachment.  For residential (Schedule 1) and small commercial (Schedule 7) customers, the Company should provide underground service at no additional charge if the customer supplies the trench, backfill, conduit and compaction per Company specifications.  Otherwise, customers requesting underground service should be required to pay the difference between the cost of providing underground service and the cost of providing overhead service.  The overhead-underground differential should not be subject to refund.  Line extension costs associated with Company betterments should continue to be the Company’s responsibility and not chargeable to the customer.

Q.What is your position on payment of line extension costs by subdividers?

A.In the case of line extension costs, I recommend that subdividers be responsible for the full cost of the line extension.  Subdividers would not be eligible for refunds for line extension work inside the subdivision; however, they would be eligible for vested interest refunds for line extension work outside the subdivision.

Q.What is your position on the Company’s proposal to discontinue the use of average unit costs as a basis for determining the cost of many typical line extensions?

A.The use of average unit costs was intended to simplify and expedite the process for making cost estimates for new line extensions.  In that respect it is successful.  However, in exchange for simplicity and expeditiousness, the method often results in inaccurate estimates in cases of individual line extensions.  The average unit cost method is, by definition, based on average installed costs (adjusted work order costs) for various elements of line extensions.  It follows then, that the actual installed cost of each individual line extension will be either higher or lower than the estimated cost as determined by the average unit cost method.  From the Company’s perspective, this works well as long as the average unit costs are kept up to date and are reflective of actual installed costs.  However from the customers’ perspective, each customer would either overpay or underpay for their line extension.  The amount individual customers overpay or underpay is of critical concern, and weighs heavily in a balance against the perceived benefits of a simplified policy.

Q.Under the revised application, the Company proposes to charge costs to the customer based on the work order cost estimate.  Do you agree with this proposal?

A.No, I do not.  Work order cost estimates are prepared by the Company before construction; adjusted work order costs are computed by the Company after construction has been completed and reflect actual installation costs.  Based on a Staff audit completed in 1994, work order cost estimates significantly exceed adjusted work order costs.  In other words, estimated costs significantly exceed actual costs.  If the Company billed customers for estimated costs rather than actual costs, customers would be over billed substantially, to the benefit of the Company.  I recommend that customers be billed based on the adjusted work order cost, not the work order estimate.  Theoretically, a customer could be billed for an amount that exceeds the work order estimate, but this appears to happen rarely based on information gathered in the 1994 Staff audit.

I agree with the Company, however, that the average unit cost method is no longer appropriate.  I think that the advantages offered by the average unit cost method are not as great as initially believed at the time it was first implemented, and that any remaining advantages are outweighed by unfairness inherent in the method.  I support a change to a work order cost methodology, provided however, that customers are charged based on adjusted work order costs, not work order estimates.

Q.Idaho Power states that the primary reason for proposing a different policy for vested interest refunds is to alleviate administrative problems associated with the current refund policy.  Do you agree with the Company’s reasoning?

A.No, I do not.  I agree that the current refund policy becomes difficult to administer as more customers connect to each line extension.  However, I do not believe that the administrative problems are as severe as Idaho Power claims.  An analysis of the refunds made in 1995 reveals that 81.4 percent of the refunds were made to subdividers.  These are one-time $1200 refunds which are made as each new customer in a subdivision is connected.  With these refunds, the Company does not have to make any calculations and does not have to keep track of the refunds for future cost sharing calculations.  Thus, most of the refunds under the current policy are as simple to administer as possible.  Under Staff’s proposal for vested interest refunds, subdividers would still get refunds, but rather than being a fixed amount, the refund amount would be based on a fraction of the cost of the transformers which were installed to serve the subdivision.  Administratively, these refunds would be no different than the refunds subdividers currently receive.

Of the refunds not going to subdividers, 12.0 percent were for amounts less than $1200 and 6.6 percent were for greater amounts.  Only 3.0 percent of the refunds were for amounts less than $150 and only 5 percent were for amounts less than $300.  This seems to indicate, contrary to the Company’s assertion, that there are actually relatively few refunds being made for very small amounts.  The example of a $1 refund cited by Company witness Samuel Turner in his direct testimony is an extreme case as he has admitted in cross examination.  The Company’s data for 1995 show that only 27 refunds were made for amounts less than $50.  For a company with over 300,000 customers, this does not seem like a serious administrative problem.  Furthermore, I do not believe a refund policy should be driven by extreme cases.

If some administrative difficulties do indeed exist, I believe there may be other ways to alleviate this problem while still maintaining fairness to all customers.  Since the current refund methodology is very systematic, I believe that computerizing the methodology is possible and would simplify the process for Company employees.  Idaho Power has indicated that attempts have been made to computerize the refund methodology, but professional programmers have not undertaken the task.  Idaho Power should consider contracting for the needed expertise to computerize the system if expertise is not available within the Company, and should at least make an attempt to determine whether suitable software is available commercially.

Q.What do you see as the primary weaknesses of the Company’s proposed first-in, first-out refund policy?

A.The primary weakness is inequity between customers sharing the costs of the line extension.  The last few customers to connect to an existing line extension prior to the end of its five year refund period will ultimately end up bearing unequal shares of the cost of the line extension.  Furthermore, they will stand no chance of receiving a refund as a result of subsequent customers.  The first one or more customers may receive a full refund for their share of the cost of the line, thus they would ultimately end up contributing nothing toward the cost of the line.

Q.Please describe your alternative vested interest refund policy.

A.My alternative policy is simply a modified version of the current policy.  It differs from the current policy only in the respect that I propose a minimum refund amount below which no refund would be made.  I recommend continuing to make refunds to all customers sharing the line as each new customer is added.  I also recommend continuing to proportion the amounts charged to customers based on load and distance ratios.

Q.What do you see as the primary strengths of your proposed refund policy?

A.The primary strength is fairness to all customers.  No matter when the refund period ends or how many customers are ultimately connected, all customers connecting during the refund period will share the costs equally.  Of course, those customers who wait until the refund period expires before connecting will still be able to interconnect without contributing toward the cost of the line extension.  But in that respect, there is no difference between this policy and the one proposed by the Company.

Q.Please contrast your proposed policy against the Company’s in terms of fairness.

A.Exhibit No. 109 shows graphically how much each customer would ultimately pay at the end of the refund period for various numbers of customers connected.  Under the current policy, all customers will share the cost equally no matter how many customers ultimately connect.  Furthermore, no customer connecting during the refund period will escape paying for at least some share of the cost.

Under the Company’s proposal, fairness is only achieved when either one or two customers ultimately connect.  With three customers or more, the cost sharing will be unequal, with some customers possibly paying nothing, while others could pay as much as 50 percent of the total cost.  For example, if four customers ultimately connected during the refund period, the first customer would eventually be fully refunded, the second would bear 42 percent of the cost, the third 33 percent and the fourth 25 percent.

Q.Idaho Power contends that the first-in, first-out method removes some incentive for customers to “wait out” the five year refund period, since the first customer to connect stands a greater chance of eventually receiving a full refund from subsequent customers who connect.  Do you agree with this reasoning?

A.No, I do not.  The first-in, first-out method provides an incentive to be the first customer to connect, but usually would provide disincentive to be the second or third customer to connect.  I do not believe any greater or lesser incentive is needed for the first customer; incentives, if any, should be for subsequent customers.  Exhibit No. 109 shows that under the proposed method, if two customers ultimately connect to a line extension, the costs will be shared equally.  However, if three or four customers ultimately connect, the second customer will pay a considerably greater share than the other customers.  If more customers ultimately connect, the customers who connected earliest in time, but who are not fully refunded, will end up paying the greatest share.  It is only when a customer gets fully refunded that it is advantageous to be one of the earliest to connect.  I believe that in many cases, if not the majority, customers will never be fully refunded.  Consequently, I believe that the first-in, first-out method actually provides more incentive to wait than to connect early if customers realize that they may ultimately end up paying a disproportionate share of the costs.

Q.Please contrast your proposed policy against the Company’s in terms of simplicity.

In terms of administrative simplicity, the Company’s proposal has a slight edge.  Exhibit No. 110 shows the number of refund checks that would have to be issued over the course of the refund period for various numbers of customers.  As the number of customers increases, the number of refunds increases faster under Staff’s proposal than under the Company’s.  However, if a minimum refund amount was established under Staff’s proposal, then the difference in number of refunds would be slightly reduced.  If only a few customers ultimately connect, the difference in number of refunds is minimal, even without imposing a minimum refund amount.

Q.How long do you believe customers should be eligible for vested interested refunds?

A.In most instances, five years is a reasonable period for the Company to track vested interests and provide refunds where applicable.  However, there are situations that merit a longer eligibility period.

Q.Under what circumstances do you believe a longer refund period is necessary?

A.In platted, undeveloped subdivisions, an individual lot owner, rather than a developer, must bear the cost of constructing a line extension within a subdivision.  This customer may end up paying for the entire backbone plant within the subdivision, depending upon the customer’s location.  Understandably, this customer feels taken advantage of when subsequent customers who wish to connect wait until the five year refund period expires before connecting in order to escape paying a share of the line extension costs.  In some areas of the state, particularly in summer home and recreational areas, it is common for some customers to be willing and able to wait five years.  Lengthening the refund period to ten years would greatly minimize the incentive to wait, since customers are much less willing to wait ten years before connecting.

Because the practice of “waiting out” the refund period is most prevalent where lines are built to serve platted, undeveloped subdivisions, I would support a longer refund period in those situations.  I do not believe it would be administratively burdensome for the Company to extend the eligibility period under this limited circumstance.  A shorter refund period of five years, could be maintained in all other cases.

Q.What recommendations would you have with respect to making refunds easier for the Company to administer?

A.I recommend eliminating refunds less than $100 to help compensate for the increase in administrative difficulty.  In some cases, if a minimum refund amount is established, the length of the refund period may become irrelevant.  If enough customers connect such that refund amounts become less than the minimum, the refund process stops even if the refund period is not yet due to expire.  Computerizing the refund methodology would also help to ease the administrative difficulties.

I wish to reiterate also, that I do not believe the administrative difficulties are as great as claimed.  Idaho Power makes approximately 500 refunds annually under the current policy for amounts less than $1200, the standard subdivision lot refund amount.

Q.The Company proposes to charge engineering fees specific to each work order, rather than including them in the general overhead charge which is currently applied to each work order.  Do you agree with this approach?

A.I agree that charging separately for engineering costs specific to each work order is appropriate.  However, the general overhead rate which is currently being applied to work order costs should be reduced proportionately to exclude engineering expenses.

Current policy requires prepayment of engineering costs for line extension, upgrades and relocations that are unusually large, complex or of a questionable nature.  The prepayment is subtracted from the actual cost if the project goes forward.  Prepayment is also required for any re-engineered projects; this payment is not subject to refund, nor is it covered by the extension allowance.

Under the existing work order cost method, the Company applies a general overhead rate of 17 percent to the subtotal of all direct costs.  Of the 17 percent, 15.5 percent is intended to cover construction engineering and supervision, 1.0 percent covers construction injuries and insurance, and 0.5 percent covers construction accounting.  The Company contends that not all of the 15.5 percent is related to new construction, thus the general overhead rate should not be reduced by the entire 15.5 percent but only by a portion.  I believe that the general overhead rate should be reduced by the full 15.5 percent, even if it is not all associated with new construction.  I contend that the portion not associated with new construction should never have been charged in the first place, since it cannot be attributed to new customers.  Consequently, I recommend a general overhead rate of 1.5 percent be used if engineering charges are billed separately, unless the Company can provide convincing evidence otherwise.  To date, the Company has not stated what they believe the general overhead rate should be if engineering is charged separately, nor have they provided any information to allow it to be accurately calculated.

If a general overhead rate other than 17 percent is used, the service charges listed in the proposed tariff should be recalculated, since they depend on the general overhead rate.  In addition, I recommend that the general overhead rate which will be applied to work orders be identified in the tariff, since it currently is not.  I also recommend that the Company specify its hourly engineering rate in the tariff.  That rate is currently $32.25 according to the Company.

Q.Have you prepared examples to illustrate your position more clearly and to contrast it with the present Rule H?

A.Yes, I prepared several examples of hypothetical cases to compare the existing Rule H to the Company’s proposal.  These examples are included as Exhibit No. 111.  None of the examples are intended to be representative of all cases for an entire customer class.  Their purpose is simply to illustrate how the proposed method would work and to give a general indication of how costs would be shifted.

The first example is for a residential line extension not located in a subdivision.  Under the proposed new Rule H, the net payment by the customer would be greater than under the existing rule, but the entire payment is still subject to refund.  The difference in the net payment is due entirely to the elimination of the allowance offered under the current rule.  The size of the allowance under the current rule is $1500 for residences without electric space or water heating and $2000 for residences with electric space and water heating.

The second example compares costs under both the existing and proposed rules for four actual subdivisions which were completed in recent years.  In each of the four cases, costs are higher under the proposed rule than under the existing rule.  However, much of the increased cost is because of the change from the average unit cost estimating method to the work order cost method.  In addition, some of the difference in cost could be due to the work order costs being based on more updated costs than the average unit costs.  Exhibit No. 111, page 3 shows a second  comparison in which the effects of using different cost estimating methods have been removed.  This example also illustrates how much work order costs can vary from one subdivision to the next, and also how much average unit costs can differ from work order costs.  In each of these four subdivisions, work order costs exceed the average unit costs.  It is possible that in other subdivisions work order costs may be less than the average unit costs, but this is not usually the case with the average unit costs currently in place.  In each of the examples shown, the work order costs are estimated rather than adjusted.  Because adjusted work order costs are usually considerably less than work order estimates, the effect of moving from an average unit cost method to a work order cost method is greatly compounded.  If adjusted work order costs were used instead in these examples, the per lot cost differences would be less.  Nevertheless, the difference in the per lot costs between the two examples shows how much of the increase in cost would be due to switching from the average unit cost method to a work order estimate method, and how much would be due to other policy changes.

The third and fourth examples are for commercial and irrigation line extensions, respectively.  Both examples are very similar.  They show that the net payment would likely be greater under the proposed rule, primarily because the per kilowatt allowance is less under the proposed rule.  In addition, not all of the cost would be subject to refund under the proposed rule, as it is under the existing rule.

Q.Does this conclude your direct testimony in this proceeding?

A.Yes, it does.