STAFF POSITION

ON IDAHO POWER’S PROPOSED NEW TARIFF PROVISIONS

RELATING TO NEW SERVICE ATTACHMENTS AND

DISTRIBUTION LINE INSTALLATIONS OR ALTERATIONS

CASE NO.  IPC-E-95-18

On December 8, 1995, Idaho Power Company filed an application for modification of its Tariff No.  101, Rule H, providing for construction of distribution line installations or alterations.  The proposed modifications to the existing line extension tariff, which has been in place since 1988, are extensive. This paper does not detail the proposal of the Company, but instead presents Staff’s position on parts of the Company’s proposal and presents an alternative proposal for consideration by the parties in this case. These comments do not represent an exhaustive list of elements with which the Staff disagrees.  Rather, it is an attempt to articulate the Staff’s position on pivotal issues that have been raised by the Company’s proposal.  The Staff anticipates addressing other issues as  this case proceeds.

Staff’s primary goal is to develop a policy that is equitable and does not put upward pressure on rates.

Average Unit Cost Method

One key element of the existing provisions is the use of average unit costs as a basis for determining the cost of many typical line extensions.  The use of average unit costs is intended to simplify and expedite the process for making cost estimates for new line extensions.

While the use of average unit costs is well-intentioned, a tradeoff must be made that often results in inaccurate estimates in cases of individual line extensions.  The average unit cost method is, by definition, based on average costs for various elements of line extensions.  It follows then, that the actual cost of each individual line extension will be either higher or lower than the estimated cost as determined by the average unit cost method.  On the whole, the Company may be indifferent in using averages.  Customers, on the other hand, cannot be looked at on the whole, since each customer will 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.

Staff agrees with the Company that the average unit cost method is no longer appropriate. Staff believes 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.  Staff supports a change to a work order cost methodology in which cost estimates are prepared individually for each line extension based on specifics in each installation.

Assessment of the Company’s Proposed New Tariff Provisions

Staff’s assessment of the Company’s proposal is that it would, in fact, cause downward pressure on rates because of the significant difference between the embedded costs for existing customers and the Company’s proposed net costs for new customers.  Neither Staff nor the Company have attempted to quantify the effects of the Company’s proposal on net revenue.  However, Staff does not believe exact quantification of the revenue effects of the Company’s proposal is critical in determining what distribution/terminal facilities investment is included in rates and thus should be provided by the Company for each new customer.  Staff’s analysis indicates that the Company’s proposal would over collect distribution/terminal facilities costs from new customers, potentially causing a downward pressure on rates.  As a result, Staff rejects the Company’s proposal  as submitted.

Under the 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 will be discussed in more detail in a later section, Staff calculates that existing residential rates are designed to support a Company investment of approximately $854.  Under the Company’s 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.

Basis of Staff’s Proposed Line Extension Policy

The primary basis of Staff’s position is that any proposals for a new policy or change to the existing policy not cause either greater upward or downward pressure on rates.

Staff accepts the Company’s contention that the existing line extension policy causes upward pressure on rates.  The Company’s investment in distribution plant and terminal facilities, on a per customer basis, has in fact, increased since the existing policy was first implemented in 1988.  Figure 1 illustrates the Company’s investment on a per customer basis from 1970 to 1994.  When adjusted for inflation however, the Company’s average investment per customer has actually decreased over time.  Figure 2 shows the inflation adjusted investment in distribution plant and terminal facilities.  Figure 3 shows the percentage change from year to year.

Although the upward pressure on rates is clear, the causes of that pressure have neither been fully identified nor quantified.  Examination of Figures 1-3 seems to indicate that inflation has been the primary cause of upward pressure, but Staff speculates that changes in construction standards and a trend toward more underground installations has also been a factor.  Figure 4 shows, on an inflation adjusted basis, how the investment per customer has changed for various distribution plant and terminal facilities components.  Except for underground conduit and conductors, all other distribution plant and terminal facilities costs have decreased on a real basis.

Staff acknowledges that customer growth, exclusive of other factors, is also a possible cause of the upward pressure on rates.  However, Staff believes  customer growth has a very minor long term effect  relative to inflation.

Today’s rates, as set in Idaho Power’s recently completed general rate case, were established based upon the average embedded investment per customer.  Staff believes that today’s rates, while inadequate to cover all of today’s average investment per new customer, will support a significant portion of the required distribution/terminal facilities investment common to each new customer.  However, upward pressure on rates will continue as new, higher cost customers are added to the lower average rate base used to calculate rates.  As long as the gap between the Company’s average investment per customer and the investment which rates are designed to cover continues to widen, upward pressure on rates will occur.  Eventually a rate case will be necessary.  Rate cases simply close the gap, but do not eliminate the source of the upward pressure on rates.

 Staff’s Proposal

Cost Sharing

Staff believes that the cost of distribution/terminal facilities needed to serve new customers should be shared between the new customers and the utility.  The Company’s investment in facilities for each new customer should, in Staff’s opinion, be equal to the embedded costs of the same facilities for existing customers.  Costs in excess of embedded costs should be paid by the customer.  Staff further believes 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.

Determination of Proposed Company Investment

Staff’s approach to determining a Company provided allowance 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.  Table 1 details the approximate size of that investment for residential, small commercial, large commercial, irrigation and industrial classes.  Staff 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 Appendix A.  A summary of the cost of service figures used in the analysis is included as Appendix B.  The equivalent investment per residential customer is calculated using the cost of service study and capital structure accepted by the Commission.  Figure 5 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 (.04996 x 1.642) = $63.49).  Debt service costs (.03649 x 773.94 = $28.24) and the carrying costs of preferred stock (.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.  Staff 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%.  The composite depreciation rate for distribution and terminal facilities is 3.24%.  The combined total of these two percentages (15.646%) represents the relationship of the current revenue stream to new gross investment.  Dividing the revenue stream of $133.66 by 15.646% produces the revenue neutral investment of $854.28 which Idaho Power Company can make to provide service to new residential customers.

Appendix C summarizes similar calculations for other customer classes.

Application of the Company’s Investment

Even though the Company’s embedded investment is split between investment in distribution plant and terminal facilities, Staff suggests that all of the recommended Company investment be applied to the cost of providing terminal facilities. Staff maintains 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.  Staff’s estimates of the cost of terminal facilities is shown in Figure 6. Staff  recommends including transformers as terminal facilities, rather than as part of a line extension as the Company proposes.

Residential

Since the average investment for existing customers ($854) is quite close to Staff’s estimate of the cost of terminal facilities ($926), Staff believes terminal facilities should be provided at no cost to the residential customer.  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.

Staff further recommends that the free footage allowance for service drops be set at 100 feet.  The value of the Company investment proposed by Staff includes the cost of a 100 foot service drop, rather than a 70 foot drop.  The Company indicates that service drops normally do not exceed 100 feet due to recommended engineering standards, and that greater lengths will rapidly decrease the ground clearance of the service conductor.  If the average service drop length of 70 feet was adopted as a free footage allowance as proposed by the Company, then half of the new customers would be assessed a footage charge which, in most cases, would be $50 or less.  Staff believes that avoiding the need to assess relatively small footage charges  is worth the cost of offering a slightly longer free footage allowance.  Staff recognizes that as the cost of terminal facilities increases each year due to inflation, the investment made by the Company without customer contribution will also increase.

Small Commercial

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.  Staff also estimates that the cost of terminal facilities is the same, on average, as for residential customers.  Consequently, Staff recommends that terminal facilities for small commercial customers be provided at no charge as they are for residential customers.

Large Commercial, Irrigation and Industrial

For the large commercial, irrigation, and industrial classes, the estimated cost of terminal facilities will exceed Staff’s recommended Company investment per customer in all cases.  Consequently, Staff recommends an allowance be offered by the Company toward the cost of terminal facilities, but that no allowance be offered toward line extension costs.

Since 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, Staff recommends 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 eat away at dollar allowances.  Staff suggests annually updating the per kilowatt allowances based on the consumer price index as published by the U.S. Bureau of Labor Statistics.  For a detailed description of the updating methodology, see Appendix D.

For single phase commercial and irrigation customers, Staff recommends 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.

Subdivisions

Staff believes 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 Staff’s proposed 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, Staff proposes 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.

Refunds for transformers should 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 customers in the subdivision.

In the case of line extension costs, Staff recommends 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.  For commercial and industrial subdivisions, Staff recommends that no refunds be offered since no allowance is recommended for line extensions for these customer classes.

Staff’s proposed allowances are summarized in Table 2.

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| Table 2.  Staff’s Proposed Allowances |
|  | Terminal Facilities | Line Extension |
| Residential | Free | None |
| Small Commercial | Free | None |
| Large Commercial and Irrigation, single phase | $926 | None |
| Large Commercial, three phase | $8.32/kW | None |
| Irrigation, three phase | $17.45/kW | None |
| Industrial | $7.95/kW | None |
| Residential Subdivisions | None for subdivider inside subdivision | None |
| Commercial & Industrial Subdivisions | None for subdivider inside subdivision | None |

New Customer Contribution

Staff’s 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 shall 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 shall be required to pay the difference between the cost of providing underground service and the cost of providing overhead service.  The overhead-underground differential shall not be subject to refund.  Line extension costs associated with Company betterments will continue to be the Company’s responsibility and not chargeable to the customer.

Vested Interests and Refund Policies

Staff proposes only minor changes be made in the current policies regarding establishment of vested interests and vested interest refunds.  Staff recommends that only line extension costs be used to establish a vested interest.  The cost of terminal facilities should not be counted toward a vested interest for any customer class.  Consequently, the amount subject to refund for all customer classes consists solely of line extension costs.  Since terminal facilities are not shared by other customers, no refund for terminal facilities costs in excess of allowances are proposed.

The current method for determining vested interest refunds uses a formula that apportions vested interest refunds based on shared footage and load ratio.  Staff realizes that the refund process becomes very tedious and cumbersome as more customers share line extensions.  But despite the method’s difficulties, Idaho Power and many other utilities have successfully managed to employ the process for many years.  Staff believes that the method is very fair, and that widespread use of similar methods is a testament to the time-proven benefits of the method.  Staff does not support any change to the present refund formula.

To its credit, the Company’s proposed method for determining refunds would be simpler to administer.  However, Staff strongly believes it is fraught with many problems.  For example, a customer’s vested interest charge is not based at all on the cost of the line extension, but rather on the customer’s cost of services.  More expensive service (underground service, for example) would trigger a greater vested interest charge.  Another major criticism of the proposed method is that there is no consideration of the amount of shared line, either through a footage ratio or a load ratio.  This can result in blatant inequities between the costs that would be charged to customers who share line extensions.  Finally, while the proposed method may be simpler to administer, Staff does not believe it would be any easier for customers to understand.  In short, Staff feels the drawbacks of the proposed method greatly overshadow the advantages gained by simplifying the process.

Although Staff supports the present method, Staff also supports extending the period over which refunds can be made.  Limiting the refund period to five years has been a source of controversy.  Customers allege that five years fails to give potential additional applicants enough incentive to either share in the original cost of an expensive line extension or connect at some later date and allow the original customer an opportunity to recover their initial investment.  Staff recommends allowing a ten year recovery period in order to provide a stronger incentive for potential applicants to participate rather than wait.  Staff admits that lengthening the refund period may compound the administrative problems that already exist with the current method, but believes the tradeoff is worthwhile.

Since Staff proposes that nearly all elements of the existing refund methodology be retained, while also acknowledging that the method presents administrative problems for the Company, Staff is receptive to suggestions from the Company on other minor changes to the existing policy that may relieve some problems.  Staff is not intimately familiar with the administrative difficulties of the existing method, thus suggestions for improvements should appropriately be made by the Company.

Illustrative Examples

To illustrate Staff’s position more clearly, and to contrast it with the existing Rule H and the Company’s proposal, examples of hypothetical cases have been prepared.  These examples are included as Appendix E.