Q. PLEASE STATE YOUR NAME, OCCUPATION, AND BUSINESS ADDRESS.

A. My name is Kathy Miller. I am employed as a senior utility analyst for the Public Utility Commission. My business address is 550 Capitol Street NE Suite 215, Salem, Oregon 97301-2551.

Q. PLEASE DESCRIBE YOUR BACKGROUND AND WORK EXPERIENCE.

A. I have been with the PUC since 1987 and have participated in regulated water utility dockets involving rate filings, finance applications, property dispositions, exclusive service territory, adequacy of service, water and wastewater rules and regulations, and affiliated interest matters.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to analyze Long Butte Water System, Inc.'s (LBW) tariff filing for approval of the one-time Water System Infrastructure Fee (infrastructure fee). The infrastructure fee is a per property lot payment to Pat Hodge Construction and Excavation Company (PHCC). The fee was established at $4,300 in November 1991 and increased to $6,900 in May 1993.

Q. HOW IS YOUR TESTIMONY ORGANIZED AND WHAT ISSUES WILL YOU DISCUSS?

A. The issues and associated rules cited in the complaint that I will address are:

Issue No. 1. Identify the relationship and regulatory status of LBW and PHCC.

Issue No. 2. Explain the purpose of the infrastructure fee tariff.

Issue No. 3. Explain main line extensions, system development charges (SDC), and how the infrastructure fee is different from main line extension. OAR 860-036-0030.

Issue No. 4. Explain the history of LBW's infrastructure fee of $6,900, and Staff's conclusion on whether the fee is fair and reasonable.

Q. DID YOU PREPARE ANY EXHIBITS?

A. Yes. I have prepared three exhibits. **Exhibit 1** is Staff's direct testimony. Staff/1, Miller/1 through Miller/25 is Staff's review of the infrastructure charge of $6,900 and information relative to the tariff filing. Exhibits in support of Staff's testimony are shown in **Exhibit 2**. Staff/2, Miller/1-8 is a Staff memo and Department of Justice letter explaining the organizational structure and relationship between PHCC and LBW. Staff/2, Miller/9-10 is the original letter of interest sent by PHCC to the lot owners on the butte. Staff/2, Miller/11 is a comparative analysis between a customer paying an up front infrastructure fee versus a customer paying over time through rates. Staff/2 Miller/12 is a summary of the revenues and costs associated with the water infrastructure. Staff/2 Miller/13-200 are Staff worksheet summaries and supporting documentation for each cost category. **Exhibit 3** is LBW's filed tariff, PUC No. 1, Original Sheet No. 3A, Schedule No. 3, Water System Infrastructure Fee.

<u>ISSUE NO. 1: THE RELATIONSHIP AND REGULATORY STATUS OF LBW AND PHCC</u>

Q. WHAT IS THE RELATIONSHIP BETWEEN LBW AND PHCC?

A. LBW is a privately owned public water system providing service to or for the public in the Bend area. PHCC is a construction company contracted by LBW to build the water infrastructure (water system or utility plant) necessary for LBW to provide water service. LBW and PHCC are affiliated interests (AI) in that the same people own both companies. The construction and services provided by PHCC to LBW are subject to Commission approval under ORS 757.490 and ORS 757.495, which govern AI transactions.

Q. WHAT IS THE REGULATORY STATUS OF LBW AND PHCC?

A. LBW is a public water utility as defined in ORS 757.005. It is regulated for rates and service by the PUC. PHCC is an affiliate of LBW, it is not regulated by the PUC.

ISSUE NO. 2: THE PURPOSE OF LBW'S INFRASTRUCTURE FEE TARIFF

Q. WHAT IS THE PURPOSE OF LBW'S INFRASTRUCTURE FEE?

A. The Administrative Law Judge, in formal complaint dockets UCR 37 and UCR 38, directed LBW to file an infrastructure fee tariff. Although it is a LBW tariff, a potential customer wanting LBW water service pays PHCC directly for the proportionate share of the cost to construct the infrastructure necessary to provide water service. The infrastructure fee is cost based in that it includes the direct and indirect costs associated with the development of the water system, including overhead and profit. Lot owners seeking water service from LBW pay a one-time $6,900 infrastructure fee to PHCC. After each proportional share is paid, PHCC gifts or contributes that portion of the water system infrastructure to LBW.

Q. PLEASE EXPLAIN HOW MOST WATER UTILITIES OBTAIN THE UTILITY PLANT NECESSARY TO PROVIDE WATER SERVICE AND HOW THE COSTS ARE TYPICALLY RECOVERED BY WATER UTILITIES.

Most water utilities obtain utility plant by one of the three following options:

1. The water company purchases or constructs the water system at its own expense (paying through loans or personal funds). The risk of recovering its investment and earning a reasonable return on that investment over time lies with the water utility. The utility plant and depreciation expense are included in the utility's rate base and is recovered through rates.
2. A developer constructs the water system then gifts or contributes the utility plant to the water utility that is to serve the subdivision. The developer is made whole through the sale of the property lots.
3. The water utility purchases the water system from the developer. The cost of the purchased infrastructure is included in the utility's rate base and is recovered in rates, including an opportunity to earn a fair and reasonable return. If LBW had purchased the infrastructure from PHCC, the cost of the infrastructure would be added to the rate base and the depreciation expense and the return o, and on, the capital investment would be recovered from the customers over time through rates.

In this case, LBW's infrastructure tariff is a $6,900 up front payment for utility plant paid directly to PHCC. PHCC bears the risk that of recovery of the costs it incurred to build the infrastructure and make a profit. Absent the

infrastructure contributed from PHCC, LBW would not have the facilities to provide service.

Because the customers prepay for the infrastructure, it does not get added to the utility's rate base. The customer is paying an upfront fee in lieu of paying the depreciation expense and a return of, and on, the capital investment over time. This is further explained in Staff's memo dated September 2, 2003, attached as Exhibit 2, Staff/2 Miller/1-8.

Q. EXPLAIN HOW LBW UTILITY PLANT IS ACCOUNTED FOR.

A. In the ratemaking process, contributed infrastructure is considered Contributions In Aid of Construction (CIAC). As customers pay PHCC for their portion of the infrastructure, the ownership of that portion is donated by PHCC to LBW in the form of CIAC. The Commission's general policy is to not include CIAC as a component of ratemaking for water utilities. As such, no depreciation expense or return of, or on, the contributed capital is included in determining water service rates.

ISSUE NO. 3: EXPLAIN MAIN LINE EXTENSIONS (EXTENSION) AND SYSTEM DEVELOPMENT CHARGES (SDC)

Q. WHAT IS A MAIN LINE?

A. A water utility's main line(s) is the transmission pipe(s) from the water source to the distribution lines that serve the customers. Generally, all service connections tap into a main line. When a new customer requests service and the customer has no access to an existing main line, the main line can be

extended to provide service to the customer. This is called a main line extension.

OAR 860-036-0060 states:

> Any connection longer than the width of the street, or public highway, or the width of a privately granted easement, located adjacent to the customer property will not be considered a service connection but will be treated as a main line extension.

Q. WHO PAYS FOR A MAIN LINE EXTENSION?

A. There are three possibilities for recovering the cost of an extension:

1. The real estate developer pays for any extension(s) to connect his subdivision distribution system to the water system. The developer can recover the cost incurred and earn a return through the sale of the lots. The developer then donates the subdivision water system and any main line extensions it constructed to the water utility as CIAC.
2. The water utility can incur the cost of the extension and include the costs in rate base as capital. The water utility bears the risk of recovery of its investment and earning a reasonable return on that investment.
3. The water utility can require the customer requesting service to pay for the entire extension necessary to supply the customer's property with water service. As more customers are added, each pays its proportional share of the extension and the money is refunded back to the previous customers until all customers have paid their equal share of the extension or until a date certain. Thus, the customers using the extension pay for the extension,

and the water utility retains ownership. The water utility treats the extension as CIAC.

Q. WHAT IS A MAIN LINE EXTENSION POLICY?

A. Main line extensions generally occur after the water system infrastructure has been constructed and is providing service. The extensions are a means of expanding the utility's customer base by serving previously unserved territory. A main line extension policy, or rule, is a written explanation of the terms and conditions under which the company will provide service to an applicant where main line construction is required to provide access to the utility's facilities. It should include a schedule of cost-based charges (generally, a per linear foot charge), as well as provisions for advances and refunds. For rate-regulated utilities, the policy is included in the water utility's tariffs. For all others, it should be included in the water utility's rate schedules or rules. (See OAR 860-036-0065.)

Q. PLEASE EXPLAIN THE ADVANCE AND REFUND PROVISIONS.

A. Traditionally, the advance and refund provisions mean that the first customer requesting service requiring a main line extension pays the total cost (the advance) of the extension to the customer's property. As other customers request service off the same extension, they pay their proportional share to the water utility. The water utility then refunds the money to all customers who previously paid for the extension. Each time a new customer is added, the individual proportional cost of the extension for all customers is less, thus, the refunds. This way customers share in the cost of the extension that is used

jointly by the customers. Generally, the refund provision is in effect for a limited time period, for example, 10 years. (This is alternative #3 presented above.)

Q. WHAT IS A SDC?

A. A SDC is an initial infrastructure charge to each customer. The SDC requires an up front, one-time payment for the customer's share of the whole water system including, but not limited to, the cost of the water supply (groundwater or surface water), structures, facilities, treatment, monitoring equipment, storage, transmission, distribution, service-connections, pumping equipment, etc. It differs from a main line extension in that with a main line extension the initial infrastructure is already complete and buildout.

Q. IS THE INFRASTRUCTURE FEE SIMILAR TO A SDC?

A. Yes. The SDC and the infrastructure fee are charges to the customers for the total cost of the water system up front. Traditionally, rate regulated utilities do not charge SDCs because utility ratemaking provides for the recovery of the utility plant to be collected over time through rates, which allows the utility an opportunity to earn a return of and on its investment.

Q. HOW ARE SDCS CALCULATED?

A. Typically, a SDC is calculated by dividing the total cost of the water system by the number of potential customers. Each customer pays the same amount regardless of the length of pipe necessary to provide water service to the individual customer's property line.

Q. IS A MAINLINE EXTENSION THE SAME AS A SDC?

A. No. A main line extension is limited to the transmission mains. A SDC includes all costs necessary to develop a water system.

ISSUE NO. 4: EXPLAIN THE HISTORY OF LBW'S $6,900 INFRASTRUCTURE FEE AND WHETHER STAFF CONCLUDES THAT THE FEE IS FAIR AND REASONABLE.

Q. EXPLAIN THE HISTORY OF LBW'S INFRASTRUCTURE FEE.

A. The history of the LBW infrastructure fee is outlined below:

YEAR	DESCRIPTION	AMOUNT
11/91 – 5/92	Developmental	$4,300
5/92 – 8/92	Early Construction	$5,500
8/92 – 5/93	Construction	$6,000
May 15, 1993 to date	Final Construction	$6,900

Q. DESCRIBE THE ORIGINAL PLAN FOR THE WATER SYSTEM AND THE INFRASTRUCTURE FEE?

A. In 1991, the Long Butte area had approximately 468 lots with water rights; however, some lots were unbuildable and other lots had wells. PHCC's original plan to bring water service to the butte predicted that, of the 236 buildable lots, 20 lots would request water service in the first year. PHCC estimated an additional 35 hookups during the 2nd year, and 15 additional hookups each year after that. PHCC estimated LBW would eventually have 300 to 350 customers. Each lot owner requesting water service to LBW would pay $4,300. PHCC would receive $1,397,500 if 325 lot owners chose to receive their water service from LBW.

Q. HOW WAS THE INFRASTRUCTURE FEE DEVELOPED?

A. The infrastructure fee was developed like a SDC. PHCC estimated the cost of the system and the potential customer participation level. PHCC originally set the fee at $4,300. Staff/2, Miller/9-10 is a copy of the original proposal sent to the lot owners. The utility over estimated the initial participation level. The fee was increased from $4,300 to $5,500, then to $6,000, and finally to $6,900 in the first year and a half (11/91 to 5/15/93). Since May 1993, the fee remained at $6,900. The majority of LBW customers paid $6,900 to receive water service. (See table below.)

Date	Fee	No. of Customers	Revenue Received
11/91 to 5/92	$ 4,300	26	$115,800
5/8/92 to 8/15/92	$ 5,500	3	16,500
8/15/92 to 5/14/93	$ 6,000	9	42,000
5/15/93 to date	$ 6,900	202	1,407,485
Current Customers & Revenue		**240**	**$1,581,785.00**

Q. HOW MUCH REVENUE HAS BEEN COLLECTED TO DATE FROM THE INFRASTRUCTURE FEES?

A. Staff concludes that the total revenue from the infrastructure fee received by PHCC since its origination in 1991 to present is approximately $1,581,785, shown in the table above. Staff calculated the approximate amount based on

a review of the documents and evidence in LBW's previous rate case (UW 48) and documents supplied by the utility in response to Staff data requests.

Q. HOW MUCH REVENUE WILL PHCC COLLECT WHEN THE PROJECT HAS REACHED COMPLETE BUILDOUT, ASSUMING THE INFRASTRUCTURE FEE REMAINS AT $6,900?

A. PHCC believes LBW will eventually serve between 300 and 350 customers. Staff estimates the project will reach buildout at 325 customers. The above table shows that 240 lot owners have paid PHCC the infrastructure fee. That leaves 85 additional lot owners paying an infrastructure fee of $6,900. Total revenues at buildout (including revenues already received for 240 lot owners) equal $2,168,285.

Q. WHAT IS THE TOTAL COST OF THE LBW WATER SYSTEM?

A. As demonstrated in the table below, the cost of the water system is shown in Option A as $3,534,447 and Option B as $3,026,625. The cost of the water system is difficult to determine since initial development and construction began 12 years ago and some documentation is no longer available. The supporting documents Staff used to make its determination includes, but is not limited to, estimated bids at today's prices valued back to 1992 prices, estimated bids at actual 1992 prices, invoices, cancelled checks, and comparative and market analyses. Documents came from the utility, intervenors, Staff's own research, and the utility's original rate case UW 48. When rates were set in UW 48, the utility did not request the cost of the system

in rate base. Therefore, during the case, the cost of the water system infrastructure was not an issue and, therefore, was not determined at that time.

Category	Option A	Option B
Wells	$ 58,105	$ 49,867
Reservoir	$ 81,094	$ 23,357
Engineer/Plan	$ 24,076	$ 22,070
Pumping/Electrical	$ 21,111	$ 13,039
Pump House	$ 14,976	$ 14,976
Trenching	$ 1,636,609	$ 1,378,816
Fill	$ 145,710	$ 124,509
Rock Removal	$ 82,244	$ 70,495
Labor	$ 120,000	$ 120,000
Income Taxes	$ 563,118	$ 563,118
Land	$ 13,000	$ 13,000
Heavy Equip	0	$ 0
Legal	$ 11,676	$ 5,302
Materials	$ 90,673	$ 53,216
Pipe	$ 156,335	$ 132,750
Misc Startup Costs	$ 3,397	$ 3,397
Subtotal	$ 3,022,125	$ 2,587,913
Return @ 15%	$ 512,321	$ 438,712
Total Cost	**$ 3,534,447**	**$ 3,026,625**

Staff understands that LBW will be providing documentation with its June 7, 2004 opening testimony. Some documentation may be new evidence. Staff reserves the right to comment on additional evidence.

Q. EXPLAIN EACH CATEGORY AND HOW YOU DETERMINED EACH AMOUNT.

A. Below I will discuss each category in detail. Each category is accompanied by a summary worksheet and supporting documentation, see Exhibit 2 (Staff/2 Miller 12-200). In the above table, also shown in Staff/2 Miller/12, Staff has provided two options, A and B. Option A incorporates all information and documentation Staff has received that appears to be part of the cost of the water system. Staff has also provided Option B, due to the uncertainty of supporting documentation. Option B uses the same information; however, what appear as less documented costs have been removed.

WELLS

PHCC asserts that Well No. 1 cost $20,000 to construct (Staff/2 Miller/14-15). Well No. 1 was constructed in 1992. It is 885 feet deep. Staff is able to verify $11,762 for Well No. 1 (Staff/2 Miller/16-18). The additional $8,238 is the undocumented balance from the utility's estimate of $20,000. Well No. 2 cost $36,146. It was constructed in 2001 and is 965 feet deep. Well No. 2 cost is well documented at $36,146 (Staff/2 Miller/19-23). An additional pump was installed in 1994 at a cost of $1,959 (Staff/2 Miller/24-27). The total cost of the well facilities is $58,105 (including the

undocumented balance of Well No. 1). Option A includes the $8,238; Option B excludes the $8,238 balance and totals $49,867.

Staff's summary worksheet is Staff/2 Miller/13 and supporting documentation, including invoices and actual well logs, is shown in Staff/2, Miller/14-27.

RESERVOIR

The utility's original plan included two 100,000-gallon reservoirs. The first reservoir was constructed in 1992 at a cost of $23,357 (Staff/2 Miller/29-30). The second reservoir has not been constructed to date. The estimated cost for the second reservoir (see bid dated September 9, 2000 from Cascade Concrete for the exact same engineered reservoir) is $57,737 (Staff/2 Miller/31).

Staff believes that it is reasonable to include the cost of second reservoir in the cost of the system because the infrastructure fee, like a SDC, includes the cost of the entire water system. PHCC included the cost of both reservoirs when calculating how much infrastructure fee would be required per lot owner. This allows PHCC to recover its costs and provide it an opportunity to earn a return. Option A includes the cost of both reservoirs at $81,094. Option B includes the cost of the first reservoir at $23,357.

Staff's summary worksheet is Staff/2 Miller/28 and supporting documentation is shown in Staff/2, Miller/29-31.

ENGINEERING

Engineering costs, supported by invoices, show billable costs of $24,076. Option A includes all billable cost, $24,076 (Staff/2 Miller/35-upper right hand corner). Staff was able to verify only $7,017 of the $9,023 billable costs for 1991 leaving a balance of $2,006 (Staff/2 Miller/33 and 36). The purpose of the $2,006 balance is unknown. Option B deducts the $2,006 balance resulting in total cost of $22,070.

Staff's summary worksheet is Staff/2 Miller/32 and supporting documentation is shown in Staff/2, Miller/33-36.

ELECTRICAL/PLUMBING

Every water system requires electrical and plumbing work. The invoices, checks, and work orders Staff has put together for this category may be related to the pump house, wells, or transmission lines. While Staff does not know each category, each item appears to be related to the water system. The documentation indicates that the cost for this type of work is $21,111 and is shown in Option A and summarized in Staff's worksheet summary Staff/2 Miller/37. The number includes all billable work with Staff's attempt to remove any duplication. However, due to the chance of other unidentifiable duplication, Option B reflects only the documented payments of $13,039.

Staff's summary worksheet is Staff/2 Miller/37 and supporting documentation is shown in Staff/2, Miller/38-45.

PUMP HOUSE

A United Pipe materials bid dated February 25, 1992, estimates the pump house to cost $14,976. Staff's worksheet summary shows the items and prices in detail (Staff/2 Miller/46). The summary is accompanied by the original bid (Staff/2 Miller/47). Since the documentation is for materials only, Staff believes the cost of the pump house exceeds $14,976. However, because there is no other documentation available, Staff uses only the cost of the materials. Therefore, both Option A and Option B are $14,976.

EXCAVATING (TRENCHING)

Staff found the documentation for excavation costs in developing the system to be insufficient. Thus, Staff did its own research. As background, there are certain phases in laying water pipe. First the excavator must drill and blast or hammer the rock into manageable pieces. The area must be sub grated and made smooth. Then the trench may be excavated. Prior to laying pipe, bedding fill is placed in the trench. Then the pipe is laid. Fill (3/4"-) covers the pipe to at least one foot above the pipe. Then it is back filled with 3"- fill material.

To determine the cost of excavation, Staff obtained an excavation bid for the Bend area using the exact pipe dimension for 12", 8", 6", 4", and 2" pipe as provided by PHCC (Staff/2 Miller/49). Today's excavation prices were quoted to Staff as "reasonable, competitive prices." Staff then converted today's prices into 1992 dollars using the Consumer Price Index to determine a total excavation cost (including the cost of pipe). Option A cost

includes CL 160 PVC pipe purchased in 1992, supported by invoices. Option B does not include the cost of trenching the additional CL 160 PVC pipe, as it may be duplicative. Staff then deducted the cost of the pipe from the excavation cost to achieve a cost for trenching and laying pipe. Option A is a total of $1,636,609. Option B is a total of $1,378,816.

Staff's summary worksheet is Staff/2, Miller/48 and the supporting documentation is shown in Staff/2 Miller/49-50.

FILL

To determine the cost of the fill material, Staff calculated the volume of the trench using the trench size and pipe diameters and lengths as provided by PHCC for 12", 8", 6", 4", and 2" pipe (See Staff/2 Miller/49). Staff then subtracted the total volume of the pipes, leaving the volume requiring fill material. The average cost of fill material in 1992 was $5 per cubic ft. as provided by PHCC. This calculates to a total of $145,710 (Option A).

For comparison purposes, Staff calculated the 2003 fill material price of (1) $6.50 per ton as quoted in page one of Mike Brorby's data response (Brorby's excavation summary) to Staff dated November 26, 2003, (Staff/2 Miller/53); (2) the 3"- backfill price of $8.00 per ton, page 2 of Brorby's data response, invoice # 8968 to Mike Brorby from Shevlin Sand and Gravel, LLC. (Staff/2 Miller/54); and (3) the fill material price of $9.50 per cubic yd. (Reinwald's excavation cost summary) per page 5 of Brorby's data response (Staff/2 Miller/55). Staff calculated the prices per ton to cubic yard prices and converted the three 2003 prices to 1992 dollars using the

Consumer Price Index (Staff/2 Miller/191). Staff then averaged the cost. The average cost in 1992 dollars is $5.36 per cubic yd. (Staff/2 Miller 51). This supports PHCC's average rate of $5 per cubic yd. of fill material (including backfill) as a reasonable purchase price in 1992.

An allegation has been made that using a rock screen provided some fill material. To consider that, Staff calculated the volume with the same pipe dimensions, but used a 3' deep trench instead of 3.5' trench. This option eliminates 6" of fill material, resulting in total fill cost of $124,509, shown in Option B.

Staff's summary worksheet is Staff/2, Miller/51 and supporting documentation is shown in Staff/2 Miller/52-55.

ROCK REMOVAL

Using the same pipe dimensions to calculate the fill material, Staff calculated the rock removal. Staff used a .33 expansion factor to compensate for the fact that compacted rock in the ground is not the same size when it is dug up and broken into manageable pieces. Staff used a 1992 price of $50 per dump truck round trip hauling 12 cubic yards per dump (provided by PHCC). Staff's calculation determined it would take 3,290 dump truck loads to remove all rock. This calculates to a cost of $82,244 (Option A).

An allegation was made that not all the rock was removed from the site. To consider that, Staff also calculated the cost of rock removal by using a 3'

deep trench instead of a 3.5' deep trench. This cost is reflected in Option B of $70,495 with 2,820 dump truck trips.

Staff's summary worksheet is Staff/2, Miller/56 and supporting documentation is Staff/2 Miller/57.

LABOR

Staff's trenching and laying pipe cost includes labor costs. However, Pat Hodge's labor as project manager, company president, and administrator should be included in the cost of the infrastructure. Staff calculated the labor cost for Pat Hodge for 1992 through 1996. Staff assumed that during 1992 to 1994, when the majority of work was being done, Pat Hodge performed these duties on a part-time basis of 20 hours per week. During the years 1995 through 1996, Staff assumed a lighter workload for Pat Hodge of 10 hours per week. Over the four-year period, Staff calculated 3,000 hours at $40 per hour resulting in a total labor cost of $120,000. Based on Staff's experience and knowledge, Staff believes $40 per hour is a reasonable wage for these duties at that time.

Project manager, company president, and administrative work includes, but is not limited to, planning, scheduling, filling out forms and applications, obtaining permits and licenses, budgeting, hiring sub contractors, and inspections.

Staff's summary worksheet is shown in Staff/2, Miller/58.

INCOME TAX

Staff calculated the income tax obligation on the entire project's total revenue (not individually for each year) using the tax rates for water utility income used in water rate cases during 1992-1996, which are 6.60 percent and 15 percent for state and federal income tax, respectively (Staff/2 Miller/60).

Staff calculated that PHCC received $1,581,785 from the first 240 lot owners. PHCC is estimated to receive revenue of $586,500 from the additional 85 lot owners ($6,900 X 85) necessary to reach the project's estimated buildout. See Staff/2 Miller/12.

The state and federal income tax on total revenues of $2,168,285 is $446,884. Applying the net to gross factor for taxes of 1.26 used in 1992-1996 water utility rate cases (Staff/2 Miller/60) results in an additional $116,234 tax true-up, totaling a $563,118[1] tax obligation. Option A and Option B reflect the same tax obligation because, for purposes of Staff's case, the revenue received and tax rates are fixed numbers.

Staff's summary worksheet is Staff/2 Miller/59 and supporting documentation is Staff/2, Miller/60.

[1] This represents income tax and tax true-up on the estimated revenue to be received from the infrastructure fee at buildout. Income tax and tax true-up calculated on the estimated return to PHCC is calculated in the Return worksheets.

LAND

PHCC claims the cost of the land upon which the wells and reservoir is located is $13,000 (Staff/2 Miller/62-63). Staff has used $13,000 in both Option A and Option B. Regardless of who currently owns the land or easements to the land, the land purchase appears necessary for the construction of the water system facilities. Staff's summary worksheet is Staff/2 Miller/61 and supporting documentation is shown in Staff/2, Miller/62-64.

HEAVY EQUIPMENT

The majority of cost of heavy equipment use is embedded in the cost of excavation and trenching. Staff chose not to attempt to include any further cost for heavy equipment due to the inability to document such costs.

LEGAL

Legal fees are taken from billable costs and payments summarized in Staff/2 Miller/65. Billable costs equal $11,676 (Option A) and are supported by invoices. Staff has removed identifiable duplications. However, to be conservative and avoid the chance of other unidentifiable duplications, Option B reflects only legal service payments of $5,302, including a deduction of $204 for the unused balance of the trust (deposit) with Karnopp, Peterson, Noteboom, Hubel, Hansen & Arnett.

Staff's summary worksheet is Staff/2 Miller/65 and supporting documentation is shown in Staff/2 Miller/66-104.

MATERIALS

Due to the lack of actual receipts, Staff used two material bids for different materials issued by United Pipe to PHCC in 1992 for project materials. One bid totaled $53,216 and the other totaled $67,589 for a total of $120,805 (Staff/2 Miller/105). Staff then removed $30,132 for gate valves that appeared to be duplicative, resulting in total materials of $90,673, shown as Option A. To be conservative, Staff used the lower of the two bids in Option B or $53,216. Supporting material invoices of approximately $20,000 are summarized in Staff/2 Miller/115 and shown in Staff/2 Miller/116-189. This supports some of the material costs, but not all. Staff's summary worksheet is Staff/2 Miller/105 and supporting documentation is shown in Staff/2, Miller/106-189.

PIPE

To determine the cost of the pipe, Staff used the length, diameter size, and 1992 price per pipe provided by PHCC (Staff/2 Miller/49). The total cost of the pipe is $1,323,750. In addition, Staff has invoices for CL 160 gasketed PVC pipe brought from United Pipe during 1992, 1993, and 1994 at a cost of $23,585. Copies of the CL 160 pipe invoices are shown with the materials invoices in Staff/2 Miller/106-189. Staff separated the pipe costs from the materials cost, but provided only one copy per invoice. Total pipe cost, Option A, is $156,335. Option B pipe cost is $132,750 and does not include the cost of the CL 160 pipe as there is a chance it may be duplicative.

In addition, for comparative purposes, Staff obtained 2003 actual cost from United Pipe for the same CL 160 pipe and then used the consumer Price Index to convert the price per linear ft. to 1992 dollars. The analysis was not particularly helpful in that supply and demand and bulk buying affect the industry cost for pipe on a day-to-day basis and may account for the differences in price.

Staff's summary worksheet is Staff/2 Miller/190 and supporting documentation is shown in Staff/2, Miller/191-192.

MISCELLANEOUS STARTUP COSTS

Staff has documented reasonable, initial start up cost at $3,397.48. These costs include computer software, permits and licenses, and payments to the Oregon Corporation Division and the Secretary of State. Other start up costs such as the cost of water rights, initial well testing, and initial reservoir testing remain unknown and are not included in Staff's analysis.

Staff's summary worksheet is Staff/2 Miller/193 and supporting documentation is shown in Staff/2, Miller/194-197.

RETURN

OAR 860-036-0030(d) states that the maximum system development fee, facilities charge, or other like charge shall be cost based.

The definition of cost based according to OAR 860-036-0010(10):

> "Cost based" means the direct and indirect costs of a specific item or project, including overhead and a reasonable expected return on investment.

Therefore, it is reasonable to include a return on the investment made by PHCC to construct the water system infrastructure. Based on Staff's experience and knowledge, Staff believes that the industry profit margin for this type of work is approximately 15 percent.

The cost of the system in Option A prior to adding a return is $3,022,125, calculating profit and taxes result in a return of $512,321. The calculations are shown in Staff/2 Miller/198.

The cost of the system in Option B prior to adding a return is $2,587,913, calculating profit and taxes result in a return of $438,712. The calculations are shown in Staff/2 Miller/199.

A third alternative is to not include any return. Staff/2 Miller/200 shows the total costs for Option A and Option B without any return.

OVERHEAD/ADMINISTRATION

Some overhead and administrative costs are embedded in the cost of excavation and trenching. Staff is not including any additional overhead or administrative costs for any further work on the project. The lack of documentation does not mean that these cost were not incurred. Staff has chosen to leave any estimate of these costs out of its calculation.

Q. ARE THE CUSTOMERS HARMED BY PAYING AN UPFRONT INFRASTRUCTURE FEE RATHER THAN PAYING OVER TIME THROUGH RATES FOR INFRASTRUCTURE (DEPRECIATION AND A REASONABLE RETURN OF AND ON UTILITY PLANT)?

A. No, customers benefit from paying an upfront infrastructure fee. If the infrastructure were included in the water utility's rates, it could collect depreciation expense and have an opportunity to earn a reasonable return of, and on, its investment. Customer would pay for the infrastructure, depreciation, and return over time. Staff did a simple five-year comparative analysis between a customer who pays an upfront infrastructure fee and a customer who pays over time through rates. Staff/2 Miller/11 shows the five-year analysis. The customer paying an upfront infrastructure fee after five years paid $6,900. The customer paying over time through rates (for the same infrastructure) paid a total of $8,280, all else being equal. The analysis is conservative, in that it does not incorporate the tax effect. By comparison, if the customer were to deposit $6,900 into a 2.08 percent interest (current CD rate) account, after five years the account balance would be $7,648.08

Q. WHAT IS STAFF'S CONCLUSIONS REGARDING THE INFRASTRUCTURE FEE OF $6,900?

A. Staff concludes that regardless of which option is considered, Option A or Option B (with or without an additional return), the documents and analyses show that the cost of the system exceeds the revenue received at full buildout and supports the $6,900 infrastructure fee as fair and reasonable.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes