### **DECISION MEMORANDUM**

TO:

**COMMISSIONER KJELLANDER** 

COMMISSIONER SMITH COMMISSIONER HANSEN COMMISSION SECRETARY

**COMMISSION STAFF** 

**LEGAL** 

FROM:

**SCOTT WOODBURY** 

DATE:

**JULY 28, 2005** 

**SUBJECT:** 

CASE NO. BCS-W-05-1 (Bar Circle "S")

**COMMERCIAL FIRE PROTECTION TARIFF** 

On April 22, 2005, Robert Turnipseed, president of Bar Circle "S" Water Co. (Bar Circle; Company) filed an Application with the Idaho Public Utilities Commission (Commission) requesting authority to establish commercial fire protection tariff rates. Bar Circle is located in Hayden, Idaho and provides water service to approximately 141 customers.

# **Application**

Bar Circle does not currently have an approved commercial fire protection tariff. As reflected in its Application, at the request of Waterford Park LLC, a boat and RV condominium storage facility, the Company entered into an agreement with Waterford to provide fire protection service required for the facility. Attached to the Application is a copy of the Waterford agreement and a copy of the engineer's master plan for the storage facility that shows the location of water lines, fire hydrants and sprinkler service lines that are being installed to meet the fire protection requirements. Waterford is paying the cost to move existing lines and install new lines and hydrants.

Bar Circle states that it must dedicate a large portion of its existing storage reservoir to the fire suppression leads of the Waterford facility. The Company reports that nearly a third of Bar Circle's existing reservoir will be dedicated to meeting the required 53,400-gallon storage requirement.

Bar Circle anticipates that additional growth will occur in the area in the near future and that the Company will expand to serve new customers. Because of the large portion of the

existing reservoir that will be dedicated to fire protection for the Waterford facility, the Company states that it will need to construct additional storage to meet its growth requirement sooner than anticipated. Attached to the Company's Application is an engineering estimate for the construction of a new 20,000-gallon reservoir. The total estimated cost of a new reservoir is expected to be \$90,000.

Bar Circle requests approval of commercial fire protection rates as follows:

Monthly rate for commercial private hydrants

\$146.05

Monthly rate for commercial sprinklers per connection

\$ 97.65

The rates were developed by the Company using the cost of a new reservoir as a surrogate for the cost of dedicating a portion of the Company's existing facilities to the new fire protection service. Because the new reservoir is much smaller than the dedicated portion of the Company's existing reservoir, the Company believes its calculations are conservative. The fire protection rates proposed by the Company will, when applied to the entire Waterford facility, generate monthly revenue of \$1,121.68.

As reflected in attachments to the Company's Application, the dedicated portion of the existing reservoir is the equivalent of 23 residential customers' average daily requirements during the peak season of the year. The fire flow requirement for the Waterford facility, the Company contends, is nearly twice the average demand of the existing residential customers connected to the system.

On May 11, 2005, the Commission issued Notices of Application and Modified Procedure in Case No. BCS-W-05-1. The deadline for filing written comments was extended pursuant to Commission Notice and for an additional period pursuant to agreement of the parties. Commission Staff was the only party to file comments. Staff filed comments on July 8, 2005. Reply Comments were filed by Bar Circle S on July 18, 2005.

#### **Staff Comments**

Staff investigated data available regarding the size and capability of the Bar Circle system to determine whether that system is appropriate for the recommended service. The current water system is adequate to provide a flow of 640 gallons per minute (gpm) of water at 60 psig for the Waterford fire protection system, a flow that has been tested and approved by the local fire marshal. The existing fire protection requirement is that 1,000 gpm of flow be available for residential fire protection. The two fire protection requirements combined (existing

residential and new commercial) are 1,640 gpm, leaving 442 gpm of the 2,082-gpm total theoretically available for drinking water supply.

After review of documents and discussions with the fire marshal of the Northern Lakes Fire District, the DEQ in Coeur d'Alene and the owner of Bar Circle, it was determined by Staff that the water system is well maintained and has the ability to provide the requested type of service. The Company has obtained necessary approvals and has complied with the requirements of the Northern Lakes Fire Protection District and the Idaho Department of Environmental Quality.

The Company in its Application proposes monthly rates of \$146.05 per fire hydrant and \$97.65 per connection for a commercial sprinkler service. Under these rates Waterford would pay a monthly bill of \$1,121.68 (\$13,460.16 annually). The Company developed these rates using an engineer's estimate for adding a new 20,500-gallon reservoir to the current system. Staff contends that the methodology used by the Company to compute the rate is inappropriate. The Company has stated that it is not going to construct a new storage facility; instead, the Company is going to use its existing storage capacity to provide the capacity required for service. Therefore, Staff contends that the appropriate tariff should consider only the Company's existing system for servicing the water requirement. In this case the service being provided by Bar Circle to Waterford does not involve any incremental capital costs and very little additional operating costs. On an annual basis the Waterford fire protection system will use very little water. Staff believes that an alternative method based upon the storage demand the fire protection service places upon the existing system stated in terms of equivalency to the demand for the same service placed on the system by the current customers is a more appropriate method to calculate the rate. A fixed monthly rate for the fire protection was calculated by Staff based on the fixed monthly cost to meet average demand of an equivalent number of water service customers.

The two key requirements for fire protection system, Staff contends, are pumping capacity and water storage. The approved Waterford fire protection system requires that 54,300 gallons of storage be available and that 640 gallons per minute of pumping capacity be available. To allocate costs based on storage, the new fire protection storage demand was established by Staff based on the average storage for an equivalent number of residential water customers. There are 141 Bar Circle customers at present and there are a total of 165,000 gallons of available storage in two different reservoirs. This results in an average storage of 1,170 gallons

per customer. The 54,300 gallons of storage to be dedicated to the Waterford fire protection system is equivalent to the average amount of storage for 46.40 customers. The remaining storage of 110,700 gallons provides 785 gallons of storage per customer above the new fire protection storage requirements.

While fixed costs of storage are not necessarily recovered in the customer charge, Staff used the current minimum customer charge adjusted for the monthly volume allowance as a proxy for the fixed costs associated with water storage.

The Bar Circle minimum tariff charge of \$15.00 per month includes 7,500 gallons of water usage. Subtracting the cost of this commodity from the minimum charge at the published tariff of \$0.95 per 1,000 gallons, Staff calculates, results in a remaining fixed charge of \$7.88 per customer per month. The resulting "fixed" storage costs allocated to fire protection is then calculated by multiplying the fixed cost per customer of \$7.88 by 46.40 equivalent customers. The resulting tariff for Waterford is \$365.63 per month or \$4,384.97 per year.

As a check for reasonableness, Staff compared rates for similar services offered by United Water and Eagle Water Company to those derived in this case using the fixed cost methodology. United Water has a tariff for fire hydrants and a separate tariff for sprinkler systems (September 2000). Eagle Water Company has a single tariff sheet for both sprinkler systems and hose connections (July 1982). There are ten service points in the Waterford fire protection system. They consist of three fire hydrants and seven sprinkler systems, one each in seven different buildings. Applying the Waterford service points to the United Water tariffs results in a monthly tariff of \$333.19 and applying the Eagle Water tariff to the Waterford service results in a tariff of \$257.40 per month, rates within the same range as those derived by Staff in this case.

Based on its analysis Staff recommends that the Commission approve an interim tariff of \$365.41 per month for commercial fire protection service. To provide consistency between the Bar Circle fire protection tariff and similar existing tariffs, Staff recommends that that tariff be structured to assess separate fees for hydrants and for sprinkler systems. The rates recommended by Staff are:

For each fire hydrant

\$9.50 per month

For each building sprinkler system

\$48.13 per month

# Bar Circle "S" Reply

On July 18, 2005, Bar Circle "S" filed a reply to Staff comments. The Company disputes Staff's contention that the Company is not going to construct a new storage facility. The Company states that it will at some point in the not too distant future construct a new storage facility. Indeed, the Company states it has already performed preliminary excavation work to level and compact a pad for the construction of a new reservoir. The Company has not yet determined the size of the new reservoir but it has used the engineer's estimate as a surrogate for the cost of a new reservoir that has not yet been engineered and designed. Within the next year the Company will file an application for a line extension tariff to accommodate growing demand adjacent to the Company's existing service territory.

Noting that Staff in its analysis reviewed fire protection tariffs of United Water and Eagle Water, the Company states that it does not believe that Bar Circle "S" Water Company can be compared equitably with those two much larger water systems that enjoy a greater diversity of customer mix. Staff acknowledges, the Company states, that the Company's fire protection reserve is dedicated and cannot be used to meet other water demand needs. The larger companies with greater customer diversity, the Company contends, need not construct and set aside storage capacity equal to the sum total of all customer fire suppression requirements. The odds of all the Company's customers demanding fire protection simultaneously, Bar Circle contends, are astronomical.

Regarding Staff's rate calculation methodology, the Company notes that no cost of service study has ever been performed for Bar Circle to allocate fixed and variable costs. Rather, a simple bill frequency analysis has been used to establish a rate design that is fair and equitable among a homogenous group of residential customers. Staff calculates \$7.88 as a proxy fixed charge for determining a fire protection tariff rate. The Company contends that Staff's proxy simply has no basis. Both the minimum charge and the commodity in excess of the minimum consumption include fixed and variable costs that have not been segregated in any manner. Staff recommends that the calculated \$365.63 monthly fire suppression rate be collected through rates for fire hydrants at \$9.50 per month and building sprinkler systems at \$48.13 per month. The Company contends that Staff provides no rationale for the allocation of its proposed total monthly revenue requirement between the two services.

In summation, Bar Circle S believes that the Company's proposal as included in its Application is conservative, based on sound regulatory methodology, timely and responsive to the needs of both the Company and its customers.

## **COMMISSION DECISION**

Bar Circle "S" in its Application requests approval of commercial fire protection rates as follows:

Monthly rate for commercial private hydrants \$146.05

Monthly rate for commercial sprinkler service

per connection \$ 97.65

These rates when applied to Waterford Park LLC, a boat and RV condominium storage facility, will generate a monthly revenue of \$1,121.68.

Staff recommends a monthly tariff of \$365.41 per month for commercial fire protection service. Staff recommends that the tariff be structured to assess separate fees for hydrants and sprinkler systems. Staff's recommended rates are:

For each fire hydrant

\$ 9.50 per month

For each building sprinkler system

\$48.13 per month

There are ten service points in the Waterford fire protection system, three fire hydrants and seven sprinkler systems. Based on Staff's proposal, the monthly charge to Waterford would be \$28.50 for hydrants plus \$336.91 for sprinklers for a total of \$365.41 per month.

Two rate proposals are before the Commission. Bar Circle represents that it will acquiesce to the Commission's decision.

Scott D. Woodbury	

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