

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

In the Matter of the Application of Rate Increase)
For Indian Hills Utility Operating Company, Inc.) **Case No. WR-2017-0259**

**PARTIAL DISPOSITION AGREEMENT AND REQUEST
FOR EVIDENTIARY HEARING**

COMES NOW the Staff of the Missouri Public Service Commission (Staff) and Indian Hills Utility Operating, Inc. (Indian Hills), by and through counsel, and for their *Partial Disposition Agreement* in these matters hereby state:

1. On April 4, 2017, Indian Hills filed a letter with the Missouri Public Service Commission (Commission) requesting that the Commission approve increases in its annual water operating revenues. On April 11, 2017, Staff filed its Small Utility Rate Case Timeline, outlying several dates for events, both informal and formally required by regulations.

2. In accordance with Indian Hill’s request for rate increase, Staff has conducted a full investigation of Indian Hills, met with the company and the Office of the Public Counsel (OPC) and provided both parties the results of its Day 90 review. On Day 120, Staff also provided the parties with a proposed settlement of this matter. Staff and Indian Hills have reached a partial agreement or disposition (Disposition) regarding the resolution of some issues in Indian Hill’s water rate increase request, a copy of which is attached hereto as Appendix A. Appendix A also includes various attachments related to the dispositions. Appendix A outlines the details of Staff and Indian Hills partial agreement.

3. The issues left unresolved between Staff and Indian Hills include:
a) Repair expense; b) Salaries; c) Auditing Expense; d) Tax Preparation Expense;
e) Capital Structure and f) Return on Equity.

4. Because Staff and Indian Hills have not reached an agreement on the remaining issues listed in paragraph 3, Staff hereby requests those issues be resolved through an evidentiary hearing, in accordance with standard contested case procedures, pursuant to 4 CSR 240-3.050(21), which states:

If at any time after a case is opened it becomes clear to the utility or the staff that agreements cannot be reached on even a portion of the issues related to the utility's request, even through the use of mediation or arbitration, either may file a motion asking that the utility's request be resolved through contested case procedures conducted in the time remaining in the rate case process. . . .

5. Indian Hills is current on its annual report filings and has no other actions pending before the Commission at this time.

WHEREFORE, Staff prays that the Commission will approve these partial dispositions, grant this request for an evidentiary hearing; and grant such other and further relief as the Commission considers just in the circumstances.

Respectfully submitted,

/s/ Nicole Mers

Nicole Mers
Associate Counsel
Attorney for the Staff of the
Missouri Public Service Commission
Missouri Bar No. 66766
P.O. Box 360
Jefferson City, MO 65012
(573) 751-6651 (Telephone)
(573) 751-9285 (Fax)
Nicole.mers@psc.mo.gov

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing was served by electronic mail, or First Class United States Postal Mail, postage prepaid, on this 31st day of August 2017, to all counsel of record.

/s/ Nicole Mers

PARTIAL DISPOSITION AGREEMENT
OF SMALL WATER COMPANY REVENUE INCREASE REQUEST

INDIAN HILLS UTILITY OPERATING COMPANY, INC.

MO PSC FILE NO. WR-2017-0259

BACKGROUND

Indian Hills Utility Operating Company, Inc. ("Company") initiated this small company revenue increase request ("Request") for water service by submitting a letter to the Secretary of the Commission in accordance with the provisions of Commission Rule 4 CSR 240-3.050, Small Utility Rate Case Procedure ("Small Company Procedure"). In its request letter, received by the Commission on April 4, 2017, the Company set forth its request for an increase of \$750,280 in its total annual water service operating revenues. The Company also acknowledged that the design of its customer rates, service charges, customer service practices, general business practices, and general tariff provisions would be reviewed during the Commission Staff's ("Staff") review of the revenue increase request, and could thus be the subject of Staff's recommendations. The Company provides service to approximately 715 customers. Nearly all are residential customers, with approximately half part-time and half full-time residents.

Pursuant to the provisions of the Small Company Procedure and related internal operating procedures, Staff initiated an audit of the Company's books and records, a review of the Company's customer service and general business practices, a review of the Company's existing tariff, an inspection of the Company's facilities, and a review of the Company's operation of its facilities. (These activities are collectively referred to hereinafter as "Staff's investigation of the Company's Request" or "Staff's investigation.")

Upon completion of Staff's investigation of the Company's Request, Staff provided the Company and the Office of the Public Counsel ("Public Counsel") with information regarding the results of Staff's investigation, including Staff's initial recommendations for the resolution of the Company's Request.

ISSUES RESOLVED

Pursuant to negotiations held subsequent to the Company's and Public Counsel's receipt of the above-referenced information regarding Staff's investigation of the Company's Request, Staff and the Company hereby state the following agreements:

- (1) The Auditing Unit conducted a full and complete audit of the Company's books and records using the 12-month period ended March 31, 2017. The audit findings can be found in Attachments A & B, and, with the exception of the remaining disputed issues listed later in this agreement, are incorporated by reference herein;
- (2) The schedule of depreciation rates is included in Attachment A, incorporated by reference herein, includes the depreciation rates developed by Staff and shall be the prescribed schedule of water plant depreciation rates for the Company;
- (3) For the purpose of calculating the revenue requirement, the parties agree that billing determinants are 715 customers. Since usage data prior to Indian Hills' installation of meters is not available, water sales of 25,740,000 gallons are utilized, assuming 3,000 gallons per month per each customer for 12 months.
- (4) The Company shall implement the recommendation contained in the Auditing Department Report, attached hereto as Attachment A and incorporated by reference herein, and provide proof of implementing the recommendations to the Manager of the Commission's Auditing Department:
 - (a) Within ninety (90) days of the effective date of an order setting new rates for Indian Hills, the Company shall develop improved timesheets for employee hours spent working on each system. This timesheet shall provide a description of the job performed, number of hours spent, and breakout the hours by system.
 - (b) Within one hundred and eighty (180) days of the effective date of an order setting new rates for Indian Hills, the Company shall develop and update Continuing Property Records (CPR) for all assets for its water system. A copy of the CPR shall be sent to the Manager of the Auditing Department as proof of implementation.
 - (c) Within one hundred and eighty (180) days of the effective date of an order setting new rates for Indian Hills, the Company shall maintain a spreadsheet for Plant Additions and Retirement of Property (including book cost of plant retired, cost of removal, or salvage credit) along with supporting documentation (i.e. invoices) to ensure all plant assets are properly reflected in future rate case proceedings. This spreadsheet should reconcile to the invoices provided by vendor.

- (d) Within one hundred and eighty (180) days of the effective date of an order setting new rates for Indian Hills, the Company shall provide documentation that it has consulted with other banks to determine if the current types of bank fees (i.e. account analysis fees) are the most cost effective for Indian Hills.
 - (e) Prior to initiation of the next rate case, the Company shall document on each invoice when each item on the invoice is placed into inventory and then subsequently the date when the item is placed into plant in service.
 - (f) The Company agrees to examine all invoices and book replacement items into the appropriate plant accounts and repair items into the appropriate expense accounts
- (5) The Company shall implement the recommendations contained in the Consumer Management & Analysis Unit (“CMAU”) Report, attached hereto as Attachment C and incorporated by reference herein, and provide proof of implementing the recommendation to the Manager of the Commission’s CMAU:
- (a) Within thirty (30) days of the effective date of an order setting new rates for Indian Hills, the Company shall update and distribute, to all current and future customers, written information specifying the rights and responsibilities of the Company and its customers as required by Commission Rule 4 CSR 240-13.040(3). A dated copy of the materials distributed to customers shall serve as demonstration of implementation.
 - (b) Within ninety (90) of the effective date of an order setting new rates for Indian Hills, the Company shall evaluate the benefits of providing customers the maintenance emergency contact number directly on their bill. The Company will document the results of its evaluation.
- (6) The parties agree to \$143,010 for the operation and maintenance expense portion of the revenue requirement;
- (7) Within ninety (90) days of the effective date of an order setting new rates for Indian Hills, the Company agrees to submit a Distribution System Improvement Plan. This Plan will continue efforts to reduce water loss and the frequency of significant leaks, and provide a predictable construction schedule for customers. This Plan will include a systemic assessment and evaluation of mains and service connections, including leak detection, appropriate sizing, and pipe integrity, to be completed within 12 months of the effective date of an order setting new rates for Indian Hills. The Company will then use this assessment to create a five year schedule for replacement of mains and service connections, where necessary and prudent. The Plan, assessment, and schedule shall be submitted to the Manager of the Water and Sewer Department;
- (8) Staff may conduct follow-up reviews of the Company's operations to ensure that the Company has complied with the provisions of this Partial Disposition Agreement;

(9) Staff may file a formal complaint against the Company if the Company does not comply with the provisions of this Partial Disposition Agreement;

(10) The Company and Staff agree that they have read the foregoing Partial Disposition Agreement, that facts stated therein are true and accurate to the best of the Company's knowledge and belief, that the foregoing conditions accurately reflect the agreement reached between the Company and Staff; and that the Company freely and voluntarily enters into this Partial Disposition Agreement.

REQUEST FOR EVIDENTIARY HEARING

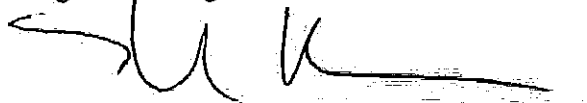
Staff and the Company were unable to reach a final disposition agreement for this case. This partial disposition resolves only the items listed in the section above. The remaining issues of repair expense, salaries, auditing expense, capital structure, return of equity, and tax preparation expense will be further defined and filed separately in EFIS.

The parties acknowledge that Staff will be filing this Partial Disposition Agreement and the attachments hereto. The parties also acknowledge that Staff and the Company may make other filings in this case.

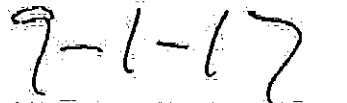
Additionally, the Company agrees that subject to the rules governing practice before the Commission and without waiving the confidentiality of the facts and positions disclosed in the course of settlement, Staff shall have the right to provide an oral explanation to support its entering into this Partial Disposition Agreement, if the Commission requests one at any agenda meeting at which this case is noticed to be considered by the Commission. Subject to the rules governing practice before the Commission and without waiving the confidentiality of the facts and positions disclosed in the course of settlement, Staff will be available to answer Commission questions regarding this Partial Disposition Agreement. To the extent reasonably practicable, Staff shall provide the Company with advance notice of any such agenda meeting so that they may have the opportunity to be present and/or represented at the meeting.

SIGNATURES

Agreement Signed and Dated:



Josiah Cox
President
Indian Hills Utility Operating Company, Inc.



Date

James Busch
Manager
Water & Sewer Department
Missouri Public Service Commission Staff

Date

List of Attachments

Attachment A – Auditing Department Recommendation Memorandum

Attachment B – EMS

Attachment C – CMAU Report

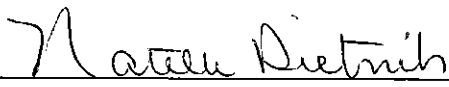
Attachment D – Water & Sewer Department Report

SIGNATURES

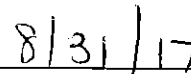
Agreement Signed and Dated:

Josiah Cox
President
Indian Hills Utility Operating Company, Inc.

Date



Natelle Dietrich
Commission Staff Director
Missouri Public Service Commission Staff



Date

List of Attachments

- Attachment A – Auditing Department Recommendation Memorandum
- Attachment B – EMS
- Attachment C – CMAU Report
- Attachment D – Water & Sewer Department Report

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

In The Matter of The Rate Increase Request Of)
Indian Hills Utility Operating Company, Inc.) Case No. WR-2017-0259

AFFIDAVIT OF JONATHAN DALLAS

State of Missouri)
) ss
County of Cole)

COMES NOW Jonathan Dallas, and on his oath declares that he is of sound mind and lawful age; that he contributed to the attached *Partial Disposition Agreement*; and that the same is true and correct according to his best knowledge and belief.


Further the Affiant sayeth not.



Jonathan Dallas

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 29th day of August, 2017.



NOTARY PUBLIC

DIANNA L. VAUGHT
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: June 28, 2019
Commission Number: 15207377

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

In The Matter of The Rate Increase Request Of)
Indian Hills Utility Operating Company, Inc.) Case No. WR-2017-0259

AFFIDAVIT OF CURT B. GATELEY

State of Missouri)
) ss
County of Cole)

COMES NOW Curt B. Gateley, and on his oath declares that he is of sound mind and lawful age; that he contributed to the attached *Partial Disposition Agreement*; and that the same is true and correct according to his best knowledge and belief.

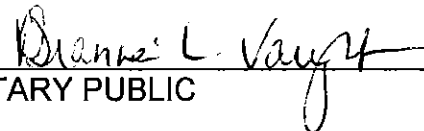
Further the Affiant sayeth not.



Curt B. Gateley

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 29th day of August, 2017.



NOTARY PUBLIC

DIANNA L. VAUGHT
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: June 28, 2019
Commission Number: 15207377

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

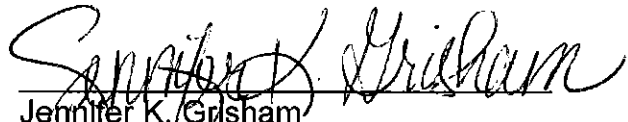
In The Matter of The Rate Increase Request Of)
Indian Hills Utility Operating Company, Inc.) Case No. WR-2017-0259

AFFIDAVIT OF JENNIFER K. GRISHAM

State of Missouri)
) ss
County of Cole)

COMES NOW Jennifer K. Grisham, and on her oath declares that she is of sound mind and lawful age; that she contributed to the attached *Partial Disposition Agreement*; and that the same is true and correct according to her best knowledge and belief.

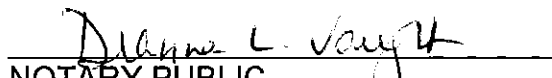
Further the Affiant sayeth not.



Jennifer K. Grisham

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 31st day of August, 2017.



NOTARY PUBLIC

DIANNA L. VAUGHT Notary Public - Notary Seal State of Missouri Commissioned for Cole County My Commission Expires: June 28, 2019 Commission Number: 15207377

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

In The Matter of The Rate Increase Request Of)
Indian Hills Utility Operating Company, Inc.)


Case No. WR-2017-0259

AFFIDAVIT OF ASHLEY SARVER

State of Missouri)
) ss
County of Cole)

COMES NOW Ashley Sarver, and on her oath declares that she is of sound mind and lawful age; that she contributed to the attached *Partial Disposition Agreement*; and that the same is true and correct according to her best knowledge and belief.

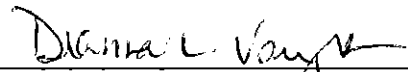
Further the Affiant sayeth not.



Ashley Sarver

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 31st day of August, 2017.



NOTARY PUBLIC

DIANNA L. VAUGHT
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: June 28, 2019
Commission Number: 15207377

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

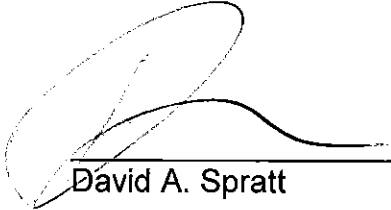
In The Matter of The Rate Increase Request Of)
Indian Hills Utility Operating Company, Inc.) Case No. WR-2017-0259

AFFIDAVIT OF DAVID A. SPRATT

State of Missouri)
) ss
County of Cole)

COMES NOW David A. Spratt, and on his oath declares that he is of sound mind and lawful age; that he contributed to the attached *Partial Disposition Agreement*; and that the same is true and correct according to his best knowledge and belief.

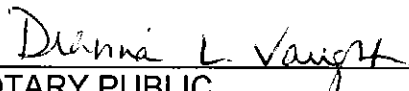
Further the Affiant sayeth not.



David A. Spratt

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 29th day of August, 2017.



NOTARY PUBLIC

DIANNA L. VAUGHT
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: June 28, 2019
Commission Number: 15207377

AUDITING DEPARTMENT RECOMMENDATION MEMORANDUM

TO: Curtis Gateley, Water and Sewer Department, Case Manager
Nicole Mers, Staff Counsel
Kevin Thompson, Chief Staff Counsel

FROM: Ashley Sarver, Utility Regulatory Auditor IV
Jennifer K. Grisham, Utility Regulatory Auditor II
Auditing Department Staff

SUBJECT: Auditing Department's Findings and Recommended Cost of Service
Indian Hills Utility Operating Company, Inc.
Case No. WR-2017-0259

DATE: August 3, 2017

Indian Hills Utility Operating Company, Inc. ("Indian Hills" or "Company") filed a rate increase request with the Missouri Public Service Commission ("Commission") on April 4, 2017. The proposed increase is in the amount of \$750,280 for the water system and, if approved, would result in an increase over current revenues of approximately 779% for the water system. Indian Hills currently serves approximately 715 water customers in and immediately surrounding Indian Hills subdivision, a residential/recreational lake development near Cuba, Missouri in Crawford County. After Indian Hills' filing, the Commission's Staff ("Staff") performed an audit of the Indian Hills water operations to determine whether a rate increase was appropriate, and if so, the amount thereof that was reasonable.

Based upon Staff's examination of Indian Hills' books and records, along with discussions with the Company's employees, Staff's recommended revenue requirement calculation for Indian Hills, using a return on equity ("ROE") of 9.34%, is \$641,435 for the water system. This revenue requirement amount requires an increase in Indian Hills' current water rates of approximately 564%. Attached to this Memorandum are Staff's accounting schedules related to its review and audit of Indian Hills' financial operations.

Test Year

Staff used a test year in this case consisting of the twelve months ending March 31, 2017 in order to develop its revenue requirement recommendation in this case. Staff annualized revenues and expenses based on the twelve months of data available from First Round CSWR, LLC ("FR") the parent company that acquired the Indian Hills assets on March 31, 2016.

Corporate Allocation

FR is a corporation which currently owns three regulated Missouri operating companies (Hillcrest Utility Operating Company, Inc., Raccoon Creek Utility Operating Company, Inc., and Indian Hills), but has currently filed an application to acquire additional small water and sewer properties (Case Nos. SM-2017-0150 and WM-2017-0151, Elm Hills Utility Operating Company, Inc. (“Elm Hills”)) and is considering acquiring a number of other small water and sewer properties. A managing affiliate of FR is Central States Water Resources (“CSWR”) which provides operating services to several other small utilities in Missouri (Smithview H2O Company and Ridge Creek Water Company, LLC). All of the employees who performed work for Indian Hills and FR are CSWR employees who specifically assign costs to each operating system that provides services to. However, FR incurs other costs (i.e.: office supplies, outside services, employee benefits, rent, etc.) that are common to all of FR’s activities and that need to be allocated between the various regulated companies, its service activities to other entities thru CSWR, and FR’s nonregulated operations (i.e., its acquisition activities). Staff’s allocation factor for Indian Hills was calculated as 16.61% of total corporate costs, based upon an analysis of CSWR employee hours in the test year, and this factor was used to allocate corporate costs in Staff’s work papers and accounting schedules for this proceeding.

Rate Base

Through Indian Hills, FR closed on purchase of the water system on March 31, 2016. Since acquiring the water system, Indian Hills has invested approximately \$1,843,653 for water improvements required to upgrade the water system to Department of Natural Resource (“DNR”) standards and to improve quality of service for the Indian Hills customers. To update Indian Hills’ rate base, Staff began with the plant and depreciation reserve balances identified in Case No. WO-2016-0045, Indian Hills’ acquisition case and updated these amounts through June 19, 2017, the deadline for completed construction projected to be included in the case.

Staff has included the cost of FR’s plant improvements in Indian Hills’ current cost of service. In order to ensure accuracy of the Company’s plant in service and accumulated depreciation reserve balances for FR and Indian Hills, Staff reviewed all invoices relating to the additions of plant in service for the water improvements. As a result of review of the invoices and general ledger related to capital expenditures, the following adjustments were proposed:

- Staff made adjustments to the test period booked plant balances to equal the invoiced plant cost amounts where there was a discrepancy.
- Staff made adjustments to reduce the booked plant amounts for some legal services which were not related to Indian Hills.

- Staff reclassified some items between expense and capital, which had been recorded to the incorrect account(s).
- Staff included in capital costs an allowance for funds used during construction (“AFUDC”). AFUDC was calculated by applying Staff’s recommended long-term debt rate to monthly capital expenditures.
- In the Indian Hills cost of service, Staff included a 10-year amortization of organizational costs that was booked to National Association of Regulatory Utility Commissions (“NARUC”) Uniform Systems of Accounts (“USOA”) Account 301, Organization.
- Staff retired various amounts from plant in service and booked Contributions in Aid of Construction (“CIAC”) amounts, as appropriate.

Plant in Service, Depreciation Reserve, CIAC, and CIAC Amortization balances were updated through June 19, 2017. For Prepayments, Staff allocated 16.61% of the FR balances for the most current twelve month period ending March 31, 2017 to Indian Hills.

Staff’s ending balance of net rate base as of June 19, 2017 for Indian Hills of \$1,880,112.

Materials and Supplies – Inventory

The Company holds a variety of materials and supplies in inventory so these items can be readily available in performing utility operations. The Company purchased 762 meters during the test year. Of those, 724 were installed and 21 were returned to the vendor, leaving 17 meters to be stored as inventory for materials and supplies. Seventeen meter pit lids were also included as inventory for materials and supplies.

Depreciation Rates

The Engineering Analysis Unit (“EAU”) performed a review of the depreciation rates for utility assets, plant-in-service, and the accumulated depreciation reserves for Indian Hills. Indian Hills has placed new plant into service and has retired old plant. Staff therefore recommends a revised depreciation schedule for Indian Hills, and that the Commission order Indian Hills to use the depreciation accrual rates for plant that are included with this memo as Attachment A and incorporated herein by reference.

Operating Revenue

For purposes of annualizing water revenues, Staff used the customer number as of June 15, 2017. These customer numbers were multiplied by the current monthly tariff rate, and then multiplied by twelve to derive the annualized customer charge for revenues.

Miscellaneous Revenue

Staff included miscellaneous revenue from Primacy Fees collected from customers and other miscellaneous revenues received for returned check fees, late fees, door collection fees, emergency call out fees, turn-off/on fees, and new service connection fees. Staff annualized the amounts for miscellaneous fees for Indian Hills totaling \$4,736.

Bad Debt Expense or Uncollectible Accounts

The Company did not record bad debt on the general ledger, therefore, Staff recommends an adjustment to remove bad debt expense to \$0 for Indian Hills.

Weighted Cost of Capital

Staff's recommendation is based on a hypothetical capital structure of 65% long term debt and 35% common equity. Staff used a return on equity of 9.34% and a cost of debt of 14.00% to arrive at a total overall rate of return of 12.37%.

Payroll, Payroll Tax, and 401(K)

FR and Indian Hills do not have employees. The employees are hired through CSWR which manages Indian Hills and CSWR currently has six employees. The President is Josiah Cox, along with Forest "Todd" Thomas, Senior Vice President; Phil Macias, Chief Financial Officer; Yolanda Rousseau, Senior Accountant; Daniel Janowiak, Accounting Clerk; and Brenda Eaves, Manager Customer Service. All of the employees complete timesheets allocating their hours between different operating companies and regulated and nonregulated functions.

Staff used the hours directly assigned to Indian Hills by CSWR employees in the test year as the starting point of its payroll expense calculation. Since two individuals employed in part of the test year are no longer employed by CSWR (Amica Banks and Jack Chalfant), Staff included their test year hours to calculate the hours assumed for Yolanda Rousseau, Phil Macias, and Daniel Janowiak. For Josiah Cox, Brenda Eaves, and Todd Thomas, Staff used their hours directly assigned to Indian Hills during the test year.

Staff then used an allocation percentage to determine the annualized level for "indirect" or "administrative" hours charged by employees that are not attributable to a specific operating company or other regulated activity. In some instances, Staff reclassified some of the administrative hours charged by employees to an operating company if a description of the task in the timesheet allowed for such assignment. For each employee, Staff totaled the appropriate amount of administrative hours, and then used an allocation factor for how much of these indirect hours should be assigned to CSWR's regulated operations (Hillcrest, Indian Hills, Raccoon Creek, Elm Hills, Smithview, and Ridge Creek). The regulated allocation factor for Brenda Eaves, Yolanda Rousseau and Daniel Janowiak

was determined by comparing the number of direct hours CSWR employees work on regulated companies to the total directly charged to both regulated and non-regulated operations (93.13%). Staff allocated 66.67% of the total indirect hours Phil Macias and Todd Thomas to regulated operations, which the remainder allocated to nonregulated. Staff allocated Josiah Cox's indirect hours on a 50/50 basis between regulated and nonregulated. The 66.67% and 50.0% allocation percentages for various CSWR employees between regulated and nonregulated operations are appropriate, in Staff's judgement, to recognize the substantial amount of time and effort devoted by CSWR to exploration of future acquisition opportunities. Finally, Staff used an 18.81% allocation factor to determine the percentage of indirect regulated hours in the test year that should be allocated to Indian Hills. This percentage is derived from a comparison of direct hours charged by employees to Indian Hills to total regulated direct hours in the test year. Using this approach, Staff calculated the total annual hours used for Indian Hills to be 1346.18 for purposes of determining its cost of service for this case.

Staff then compared each employee's base salary as of June 2017 against the annual wage for similar occupants listed on the Missouri Economic Research and Information Center ("MERIC") website to determine if CSWR employee's pay scale was comparable to salaries paid within the St. Louis Region. Staff's analysis determined that the base salary for each employee was not comparable to the annual wage for the mean (average) individual in the same occupation according to the MERIC database. Therefore, Staff made adjustments to CSWR's payroll to align each individual's salary within the average MERIC levels. Staff used the total hours assigned to Indian Hills for each employee multiplied by the MERIC hourly salary rate.

To account for the amount of labor that is associated with construction activities, Staff applied an estimated operation and maintenance expense ratio (O&M expense ratio) to the CSWR employee's payroll expense. Staff has requested any available data pertaining to the actual amount of time each employee spends on construction and operations/maintenance related activity, respectively, from the Company, but has not received adequate information from Indian Hills on this matter. Therefore, Staff estimated a 90% O&M expense ratio or all employees. This is a conservative percentage when considering all of the plant improvements that have occurred at Indian Hills since its acquisition.

Staff calculated payroll taxes based on Staff's annualized base salary and the current tax rates. In addition, CSWR has a 401k plan for its employees. CSWR is matching up to 3% of each employee's pay for the Company 401k plan. Therefore, Staff has included the Company's match (3%) into its cost of service for Indian Hills using Staff's annualized salary.

Employee Benefits

CSWR provides medical, dental, vision, and life insurance for their employees. Staff reviewed all of the policies and invoices for the benefits in the test year period through June 2017 in order to determine the level of insurance that should be included in the cost of service.

CSWR is paying 99% of the premium for health, dental, and vision insurance, with 1% to be paid by the employee. All Missouri utilities of which Staff is aware require their employees to assume a greater percentage of responsibility for health benefits. After reviewing the practices of other water and sewer companies, Staff determined 90% was a more reasonable level for CSWR to pay for its employees. Therefore, Staff annualized the health, dental, and vision insurance by multiplying the monthly premium (90%) in effect as of June 2017 by 12 months to arrive at an annual amount.

CSWR provides its employees life insurance based on two years of their salary. Staff reviewed other utilities' level of life insurance and determined a two year salary basis was reasonable. However, Mr. Cox is provided an additional \$2.5 million insurance policy with the premiums being paid by CSWR. Staff believes that this amount of coverage is excessive, so Staff made an adjustment to remove the premiums for the \$2.5 million policy for Mr. Cox and instead included life insurance valued at two years of Staff's annualized salary level for Mr. Cox in the Cost of Service. Staff annualized Accidental Death & Dismemberment, Long Term Disability, and Short Term Disability based on Staff's calculated salary amounts.

Workman's Compensation Insurance

Workers' compensation insurance was adjusted by taking the amount of the premiums for the applicable period and adjusting the test year to match the amount of the premiums. Staff applied the corporate allocation of 16.61% for this expense to Indian Hills.

Maintenance Expense

Staff reviewed all invoices related to repairs and maintenance expense booked to Accounts 611, 631, 632, 670, and 673 for water operations through March 31, 2017. Staff annualized the test year maintenance expense for these accounts as of March 31, 2017.

During the test year, Indian Hills repaired an abnormally large amount of water leaks. Many of the leaks had not been repaired by the previous owner and many of the leaks were a result of Indian Hills increasing the water pressure to the system to properly serve customers when it took over operation of the water system. In the first three months of operation, Indian Hills incurred \$56,969 in main leak repairs, and then the level of main leak repairs decreased significantly for the rest of the test year. Staff has removed these costs from its normalized level of main repair expense and has instead

included this amount in an amortization that will be recovered over a five-year period. Staff's normalized maintenance expense is \$26,532, which represents the maintenance expense for the rest of the test year less the abnormally high amounts for the first three months.

Operations Expense

1. Purchased Power

Staff has reviewed the electric bills from Crawford Electric to determine the amount of electricity expense to include in the rates for water operations. Staff used the actual amount billed for electricity for 12 months as Well No. 3 uses more energy than the old Well House account. Fuel for the back-up generator was also included in this account.

2. Chemicals

Staff reviewed the invoices regarding chemical expense for Account 641 for Indian Hills from June 2016 through February 2017. Based on this analysis, Staff annualized the level of this expense over a twelve month period and included that amount in Staff's cost of service.

3. Testing Expense

Staff reviewed all invoices within the test year related to water testing. Staff annualized the level of this expense over a twelve month period and included that amount in Staff's cost of service.

Travel Expenses

Staff reviewed all documents pertaining to travel expenses for FR during the test year. In addition, Staff reviewed mileage and meals claimed by the employees and included only the mileage expenses directly charged to Indian Hills.

Communication Expense

Staff examined the amounts of AT&T Wireless payments and Spectrum payments made by FR during the test year. Since Mrs. Eaves, the Customer Service Manager, uses her work cell phone for personal communication, Staff disallowed half of the associated expense. Staff annualized communication expense by developing a monthly level using the data that was available in the general ledger and Company invoices. Staff then applied the corporate allocation factor of 16.61% to FR's communication expense.

Property Insurance

FR has Commercial Property, Environmental, and Excess Liability over General Liability Insurance in place for Indian Hills.

Property Insurance includes insurance for building, personal property, and business income with extra expenses including “rental value” for the systems. After reviewing the policy and discussing it with the Company, Staff determined that the insurance for business income with extra expense including “rental value” is an inappropriate cost for Indian Hills customers to pay. Staff allocated the dollar amount to Indian Hills based on the insurance limits for each of the systems. Staff removed the percentage that was allocated to the business income premium from Indian Hills and allocated the portion for FR by 16.61%. Staff disallowed auto insurance for Josiah Cox’s personal truck; instead, Staff reimbursed his mileage for Indian Hills travel expenses. Staff adjusted the environmental and excess liability for environmental insurance to match the amount of the insurance premiums, and then applied the corporate allocation factor of 16.61% to Indian Hills.

Certified Operator

Indian Hills has a contract with Midwest Water Operations, LLC, (“MWO”) to operate the Indian Hills water system. The contract start date is March 1, 2016 and is effective for a period of three years. Indian Hills pays MWO an operator fee for basic service annualized at \$57,000 (\$4,750 a month). Staff included an annualized level of twelve months of this expense in Indian Hills’ cost of service. Staff also annualized costs for services provided by MWO that are not included in the basic service fee.

Billing and Collection

Indian Hills has a contract with Nitor Billing Services, LLC, regarding billing, payment collection, customer service, and coordination services as of March 29, 2016. Nitor’s monthly fee is \$2.00 per customer per month for customers up to 5,000 customers. This fee includes postage and materials for billing each customer. These fees are directly assigned to Indian Hills. The annual amount of this expense was included in Indian Hills’ cost of service.

Rate Case Expense / Regulatory Commission Expense (PSC and DNR)

At this time, there have been no invoices received from Indian Hills related to this rate case (Case No. WR-2017-0259). Staff will examine the rate case invoices in order to determine and analyze the appropriate allowance for this cost once the invoices are provided.

In addition to rate case expense, Staff has included an annualized amount for the Company’s PSC assessment expense that was issued for fiscal year 2017.

Property Tax

Property taxes are those taxes assessed by state and local county taxing authorities on a utility's "real property" as of January 1st of each year. On the first of each year, utilities are required to file with the taxing authorities a valuation of their utility property owned as of the January 1 assessment date. Property tax bills are issued to the utilities with "due dates" of December 31 of the same year. Property taxes for this case are based on the amount paid as of December 31, 2016.

Additional Adjustments

Staff also excluded from the cost of service amounts relating to: 1) invoices that did not match the General Ledger; 2) non-reoccurring expenses; and 3) an adjustment for CIAC offset for depreciation expense.

Audit Staff Recommendations for Indian Hills:

- 1) The Company needs to develop and update Continuing Property Records (CPR) for all assets for its water system. **This recommendation should be completed within one hundred and eighty (180) days of any Commission order issued in this Case, No. WR-2017-0259.**
- 2) The Company shall document on each invoice when each item on the invoice is placed into inventory and then subsequently the date when the item is placed into plant in service. **This recommendation should be completed within one hundred and eighty (180) days of any Commission order issued in this Case, No. WR-2017-0259.**
- 3) The Company shall immediately maintain a spreadsheet for Plant Additions and Retirement of Property (including book cost of plant retired, cost of removal, or salvage credit) along with supporting documentation (i.e. invoices) to ensure all plant assets are properly reflected in future rate case proceedings. This spreadsheet should reconcile to the invoices provided by vendor (refer to #2 listed above). **This recommendation should be completed within one hundred and eighty (180) days of any Commission order issued in this Case, No. WR-2017-0259.**
- 4) Staff recommends the Company discuss banking options with other banks to determine if the current types of bank fees (i.e. account analysis fees) are most cost effective for Indian Hills. **This recommendation should be completed within one hundred and eighty (180) days of any Commission order issued in this Case, No. WR-2017-0259.**
- 5) The Company needs to develop a better employee timesheet for hours spent working on each system. This timesheet should provide a description of the job

performed; number of hours spent and breakout the hours by system. **This recommendation should be completed within ninety (90) days of any Commission order issued in this Case, No. WR-2017-0259**

Indian Hills Utility Operating Company

SCHEDULE of DEPRECIATION RATES

(WATER Class A & B)

WR-2017-0259 Attachment A

<u>ACCOUNT NUMBER</u>	<u>ACCOUNT DESCRIPTION</u>	<u>DEPRECIATION RATE</u>	<u>AVERAGE SERVICE LIFE (YEARS)</u>	<u>NET SALVAGE</u>
Source of Supply				
311	Structures & Improvements	2.5%	44	-10%
314	Wells & Springs	2.0%	55	-8%
Pumping Plant				
325	Electric Pumping Equipment	10.0%	10	0%
Water Treatment Plant				
332	Water Treatment Equipment	2.9%	35	0%
Transmission and Distribution				
342	Distribution Reservoirs & Standpipes	2.5%	42	-5%
343	Transmission & Distribution Mains	2.0%	50	0%
345	Customer Services	2.5%	40	0%
346	Customer Meters, Polymer	10.0%	10	0%
347	Customer Meter Pits & Installation	2.5%	40	0%
General Plant				
391	Office Furniture & Equipment	5.0%	20	0%
391.1	Office Electronic and Computer Equip.	14.3%	7	0%
394	Tools, Shop, Garage Equipment	5.0%	18	10%
396	Power Operated Equipment	6.7%	13	13%

Indian Hills Utility Operating Company, Inc.
Case No.
WR-2017-0259
Test Year Ending March 31, 2017
Rate Design Schedule - Water

Line Number	A Description	B Account Number (Optional)	C Staff Annualized	D Customer Charge	E Commodity	F Percentage Rate
Rev-1	ANNUALIZED REVENUES					
Rev-2	Annualized Rate Revenues		(1) \$92,555			
Rev-3	Miscellaneous Revenues		(1) \$4,736			
Rev-4	TOTAL ANNUALIZED REVENUES		\$97,291			
1	OPERATIONS EXPENSES		(2)			
2	Miscellaneous Expense (Source of Supply Expense)	603.000	200	\$0	\$200	0
3	Fuel or Power Purchased for Pumping (Pumping Exp)	623.000	\$13,681	\$0	\$13,681	0.00%
4	Chemicals (Water Treatment Expense)	641.000	\$5,381	\$0	\$5,381	0.00%
5	Operation Labor & Expense (Water Treatment)	642.000	\$71,104	\$0	\$71,104	0.00%
6	Operation Supervision and Engin (Trans & Dist. Exp)	660.000	\$800	\$0	\$800	0.00%
7	Transmission and Distribution Lines Expense	662.000	\$0	\$0	\$0	0.00%
8	Contractual Services - Water Testing	635.000	\$630	\$0	\$630	0.00%
9	TOTAL OPERATIONS EXPENSE		\$91,796	\$0	\$91,796	
10	MAINTENANCE EXPENSES					
11	Maintenance of Structure and Improvements (Source of Supply Expense)	611.000	\$26,532	\$0	\$26,532	0.00%
12	Maintenance of Structure & Improvements (Pumping Expense)	631.000	\$5,071	\$0	\$5,071	0.00%
13	Maintenance Supervision and Engineering	670.000	\$495	\$0	\$495	0.00%
14	Maintenance of Transmission and Dist. Mains	673.000	\$127	\$0	\$127	0.00%
15	TOTAL MAINTENANCE EXPENSE		\$32,225	\$0	\$32,225	
16	CUSTOMER ACCOUNT EXPENSE					
17	Customer Record Collect (Billings & Collections)	903.100	\$17,961	\$0	\$17,961	0.00%
18	Customer Record Collect (Postage) - CSWR 16.61%	903.200	\$0	\$0	\$0	0.00%
19	Customer Record Collect (Bank Fees)	903.280	\$4,932	\$0	\$4,932	0.00%
20	Uncollectible Accounts	904.000	\$0	\$0	\$0	0.00%
21	Customer Service & Information Expense (Web Page)	907.000	\$0	\$0	\$0	0.00%
22	TOTAL CUSTOMER ACCOUNT EXPENSE		\$22,893	\$0	\$22,893	
23	ADMINISTRATIVE & GENERAL EXPENSES					
24	Administrative & General Salaries - CSWR 16.61%	920.000	\$51,722	\$0	\$51,722	0.00%
25	Office Supplies Expense (Meals, Travel) - CSWR 16.61%	921.110	\$1,204	\$0	\$1,204	0.00%
26	Office Supplies Expense (Communication)	921.500	\$2,790	\$0	\$2,790	0.00%
27	Office Supplies Expense (Communication) - CSWR 16.61%	921.500	\$1,016	\$0	\$1,016	0.00%
28	Office Supplies Expense - CSWR 16.61%	921.800	\$794	\$0	\$794	0.00%
29	Office Supplies and Other Expense - Other -	921.000	\$46	\$0	\$46	0.00%
30	Outside Services Employed (Bank Fees)	923.100	\$188	\$0	\$188	0.00%
31	Outside Services (Legal Fees)	923.400	\$193	\$0	\$193	0.00%
32	Outside Services (Legal Fees) - CSWR 16.61%	923.400	\$30	\$0	\$30	0.00%
33	Outside Services (Accountants/Auditors) - CSWR 16.61%	923.500	\$2,242	\$0	\$2,242	0.00%
34	Outside Services (Management Consult)	923.600	\$6,000	\$0	\$6,000	0.00%
35	Outside Services (Payroll Fees) - CSWR 16.61%	923.800	\$270	\$0	\$270	0.00%
36	Outside Services Employed (IT) -CSWR 16.61%	923.900	\$960	\$0	\$960	0.00%
37	Outside Services Employed (IT)	923.900	\$1,240	\$0	\$1,240	0.00%

Attachment B

Indian Hills Utility Operating Company, Inc.
Case No.
WR-2017-0259
Test Year Ending March 31, 2017
Rate Design Schedule - Water

Line Number	A Description	B Account Number (Optional)	C Staff Annualized	D Customer Charge	E Commodity	F Percentage Rate
38	Property Insurance (Environmental) - CSWR 16.61%	924.200	\$9,756	\$0	\$9,756	0.00%
39	Property Insurance (Workers Comp) -CSWR 16.61%	924.300	\$240	\$0	\$240	0.00%
40	Property Insurance (Commercial) - CSWR 16.61%	924.400	\$7,372	\$0	\$7,372	0.00%
41	Employee Benefits (Keyman) - CSWR 16.61%	926.100	\$0	\$0	\$0	0.00%
42	Employee Benefits (United Healthcare) - CSWR 16.61%	926.200	\$21,243	\$0	\$21,243	0.00%
43	Employee Benefits (401k) - CSWR 16.61%	926.300	\$1,711	\$0	\$1,711	0.00%
44	Employee Benefits (Life/STD/LTD/AD&D) - CSWR 16.61%	926.400	\$853	\$0	\$853	0.00%
45	Misc General Expense - CSWR 16.61%	930.200	\$1	\$0	\$1	0.00%
46	Rent - CSWR 16.61%	931.000	\$14,443	\$0	\$14,443	0.00%
47	TOTAL ADMINISTRATIVE AND GENERAL		\$124,314	\$0	\$124,314	
48	OTHER OPERATING EXPENSES					
49	Regulatory Commission Expense (DNR)	928.100	\$0	\$0	\$0	0.00%
50	Regulatory Commission Expense (PSC)	928.200	\$1,025	\$0	\$1,025	0.00%
51	Regulatory Commission Expense (Rate Case)	928.300	\$0	\$0	\$0	0.00%
52	Regulatory Expense (Bus License) - CSWR 16.61%	928.400	\$74	\$0	\$74	0.00%
53	Amortization Expense		\$13,415	\$0	\$13,415	0.00%
54	Depreciation	403.000	\$98,735	\$0	\$98,735	0.00%
55	TOTAL OTHER OPERATING EXPENSES		\$113,249	\$0	\$113,249	
56	TAXES OTHER THAN INCOME					
57	SS & Medicare - CSWR 16.61%	408.120	\$4,396	\$0	\$4,396	0.00%
58	Unemployment Tax - CSWR 16.61%	408.100	\$1,373	\$0	\$1,373	0.00%
59	Property Tax	408.160	\$4,956	\$0	\$4,956	0.00%
60	TOTAL TAXES OTHER THAN INCOME		\$10,725	\$0	\$10,725	
61	TOTAL OPERATING EXPENSES		\$395,202	\$0	\$395,202	
62	Interest Expense		(3) \$171,090	\$0	\$171,090	0.00%
63	Return on Equity		(3) \$61,461	\$0	\$61,461	0.00%
64	Income Taxes		(3) \$18,418	\$0	\$18,418	0.00%
65	TOTAL INTEREST RETURN & TAXES		\$250,969	\$0	\$250,969	
66	TOTAL COST OF SERVICE		\$646,171	\$0	\$646,171	
67	Less: Miscellaneous Revenues		\$4,736	\$0	\$4,736	0.00%
68	COST TO RECOVER IN RATES		\$641,435	\$0	\$641,435	
69	INCREMENTAL INCREASE IN RATE REVENUES		\$548,880			
70	PERCENTAGE OF INCREASE		564.16%			
71	REQUESTED INCREASE IN REVENUES		\$0			

- (1) From Revenue Schedule
(2) From Expense Schedule
(3) From PreTax Rate of Return Schedule, Rate Base & Return Schedule

Indian Hills Utility Operating Company, Inc.
Case No.
WR-2017-0259
Test Year Ending March 31, 2017
Rate Base Required Return on Investment Schedule - Water

Line Number	<u>A</u> Rate Base Description	<u>B</u> Dollar Amount	
1	Plant In Service	\$1,910,275	From Plant Schedule
2	Less Accumulated Depreciation Reserve	<u>\$83,380</u>	From Depreciation Reserve Schedule
3	Net Plant In Service	\$1,826,895	
4	Other Rate Base Items:	\$0	
	Contribution in Aid of Construction Amortization (positive or zero)	\$1,605	
	Prepayments (Workers Comp)	\$151	
	Amortization of Initial Water Leaks	\$56,969	
	Materials and Supplies	\$3,221	
	Contribution in Aid of Construction (negative or zero)	-\$8,729	
5	Total Rate Base	<u>\$1,880,112</u>	
6	Total Weighted Rate of Return Including Income Tax	<u>13.35%</u>	From PreTax Return & Taxes Schedule
7	Required Return & Income Tax	<u><u>\$250,969</u></u>	

Indian Hills Utility Operating Company, Inc.
Case No.
WR-2017-0259
Test Year Ending March 31, 2017
Rate of Return Including Income Tax - Water

	A		B	formulas
1 State Income Tax Rate Statutory / Effective	6.25%	(2)	5.71%	(1 - (B2 x .5)) x A1
2 Federal Income Tax Rate Statutory / Effective	18.40%	(1) & (2)	<u>17.35%</u>	(1 - B1) x A2
3 Composite Effective Income Tax Rate			23.06%	B1 + B2
4 Equity Tax Factor			1.2997	1 / (1-B3)
5 Recommended Weighted Rate of Return on Equity - Common and Preferred			<u>3.27%</u>	From Capital Structure Schedule
6 Weighted Rate of Return on Equity Including Income Tax			4.25%	B4 x B5
7 Recommended Weighted Rate of Return on Debt - Long-Term and Short-Term			<u>9.10%</u>	From Capital Structure Schedule
8 Total Weighted Rate of Return Including Income Tax			<u><u>13.35%</u></u>	B6+B7

To Rate Base Schedule

(1) If Sub-Chapter S Corporation, Enter Y: N

Equity Income Required **\$75,319**
& Preliminary Federal Tax

Tax Rate Table

Net Income Range				
Start	End	Tax Rate	Amount in Range	Tax on Range
\$0	\$50,000	15.00%	\$50,000	\$7,500
\$50,001	\$75,000	25.00%	\$25,000	\$6,250
\$75,001	\$100,000	34.00%	\$319	\$108
\$100,001	\$335,000	39.00%	\$0	\$0
\$335,001	\$9,999,999,999	34.00%	\$0	\$0
			<u>\$75,319</u>	<u>\$13,858</u>
			Consolidated Tax Rate:	
			Average Tax Rate:	0.184

Indian Hills Utility Operating Company, Inc.
Case No.
WR-2017-0259
Test Year Ending March 31, 2017
Capital Structure Schedule - Water

Line Number	<u>A</u> Description	<u>B</u> Dollar Amount	<u>C</u> Percentage of Total Capital Structure	<u>D</u> Embedded Cost of Capital	<u>E</u> Weighted Cost of Capital
1	Common Stock	\$643,298	35.00%	9.34%	3.269%
2	Other Security-Non Tax Deductible	\$0	0.00%	0.00%	0.000%
3	Preferred Stock	\$0	0.00%	0.00%	0.000%
4	Long Term Debt	\$1,194,699	65.00%	14.00%	9.100%
5	Short Term Debt	\$0	0.00%	0.00%	0.000%
6	Other Security-Tax Deductible	\$0	0.00%	0.00%	0.000%
7	TOTAL CAPITALIZATION	<u>\$1,837,997</u>	<u>100.00%</u>		<u>12.369%</u>

To PreTax Return Rate Schedule

Note: column C: is 6 positions with 4 that are displayed (if not totaled correctly, due to rounding)

Indian Hills Utility Operating Company, Inc.
Case No.
WR-2017-0259
Test Year Ending March 31, 2017
Plant In Service - Water

Line Number	A Account # (Optional)	B Plant Account Description	C Total Plant	D Adjustment Number	E Adjustments	F Jurisdictional Allocation	G Adjusted Jurisdictional
1		INTANGIBLE PLANT					
2	301.000	Organization	\$25,388	P-2	\$793	100.00%	\$26,181
3		TOTAL INTANGIBLE PLANT	\$25,388		\$793		\$26,181
4		SOURCE OF SUPPLY PLANT					
5	310.000	Land & Land Rights - SSP	\$0			100.00%	\$0
6	311.000	Structures & Improvements - SSP	\$25,051	P-6	\$914	100.00%	\$25,965
7	312.000	Collection & Impounding Reservoirs	\$0			100.00%	\$0
8	313.000	Lake, River & Other Intakes	\$0			100.00%	\$0
9	314.000	Wells and Springs	\$208,271	P-9	\$7,370	100.00%	\$215,641
10	315.000	Infiltration Galleries and Tunnels	\$0			100.00%	\$0
11	316.000	Supply Mains	\$0			100.00%	\$0
12		TOTAL SOURCE OF SUPPLY PLANT	\$233,322		\$8,284		\$241,606
13		PUMPING PLANT					
14	325.000	Electric Pumping Equipment	\$550,248	P-14	\$19,713	100.00%	\$569,961
15	328.000	Other Pumping Equipment	\$0			100.00%	\$0
16		TOTAL PUMPING PLANT	\$550,248		\$19,713		\$569,961
17		WATER TREATMENT PLANT					
18	330.000	Land & Land Rights-WTP	\$0			100.00%	\$0
19	331.000	Structures & Improvements - WTP	\$0			100.00%	\$0
20	332.000	Water Treatment Equipment	\$107,653	P-20	\$3,930	100.00%	\$111,583
21		TOTAL WATER TREATMENT PLANT	\$107,653		\$3,930		\$111,583
22		TRANSMISSION & DISTRIBUTION PLANT					
23	340.000	Land & Land Rights-T&D	\$0			100.00%	\$0
24	342.000	Distribution Reservoirs & Standpipes	\$272,886	P-24	\$9,959	100.00%	\$282,845
25	343.000	Transmission & Distribution Mains	\$256,806	P-25	\$8,790	100.00%	\$265,596
26	344.000	Fire Mains	\$0			100.00%	\$0
27	345.000	Services	\$30,315	P-27	\$1,159	100.00%	\$31,474
28	346.000	Meters	\$127,836	P-28	\$4,661	100.00%	\$132,497
29	347.000	Meter Installations	\$214,720	P-29	\$8,213	100.00%	\$222,933
30	348.000	Other Transmission & Distribution Plant	\$0			100.00%	\$0
31	349.000	Hydrants	\$0			50.00%	\$0
32		TOTAL TRANS. & DISTRIBUTION PLANT	\$902,563		\$32,782		\$935,345
33		GENERAL PLANT					
34	389.000	Land & Land Rights-GP	\$0			100.00%	\$0
35	391.000	Office Furniture & Equipment	\$0	P-35	\$860	100.00%	\$860
36	391.100	Office Computer Equipment	\$0	P-36	\$383	100.00%	\$383
37	392.000	Transportation Equip.	\$0			100.00%	\$0
38	393.000	Stores Equipment	\$0			100.00%	\$0
39	394.000	Tools, Shop and Garage Equipment	\$352			100.00%	\$352
40	395.000	Laboratory Equipment	\$0			100.00%	\$0
41	396.000	Power Operated Equipment	\$23,994	P-41	\$10	100.00%	\$24,004
42	398.000	Micellaneous Equipment	\$0			100.00%	\$0
43	399.000	Other Tangible Property	\$0			100.00%	\$0
44		TOTAL GENERAL PLANT	\$24,346		\$1,253		\$25,599
45		TOTAL PLANT IN SERVICE	\$1,843,520		\$66,755		\$1,910,275

Indian Hills Utility Operating Company, Inc.
Case No.
WR-2017-0259
Test Year Ending March 31, 2017
Schedule of Adjustments for Plant in Service - Water

<u>A</u> Plant Adjustment Number	<u>B</u> Plant In Service Adjustment Description	<u>C</u> Account Number	<u>D</u> Adjustment Amount	<u>E</u> Total Adjustment
P-2	Organization	301.000		\$793
	1. AFUDC - Carrying Cost. (J. Grisham)		\$793	
P-6	Structures & Improvements - SSP	311.000		\$914
	1. AFUDC - Carrying Costs. (J. Grisham)		\$914	
P-9	Wells and Springs	314.000		\$7,370
	1. AFUDC - Carrying Costs. (J. Grisham)		\$7,370	
P-14	Electric Pumping Equipment	325.000		\$19,713
	1. AFUDC - Carrying Costs. (J. Grisham)		\$19,713	
P-20	Water Treatment Equipment	332.000		\$3,930
	1. AFUDC - Carrying Costs. (J. Grisham)		\$3,930	
P-24	Distribution Reservoirs & Standpipes	342.000		\$9,959
	1. AFUDC - Carrying Costs. (J. Grisham)		\$9,959	
P-25	Transmission & Distribution Mains	343.000		\$8,790
	1. AFUDC - Carrying Costs. (J. Grisham)		\$8,790	
P-27	Services	345.000		\$1,159
	1. AFUDC - Carrying Costs. (J. Grisham)		\$1,159	
P-28	Meters	346.000		\$4,661
	1. AFUDC - Carrying Costs. (J. Grisham)		\$4,661	

Indian Hills Utility Operating Company, Inc.
Case No.
WR-2017-0259
Test Year Ending March 31, 2017
Schedule of Adjustments for Plant in Service - Water

<u>A</u> Plant Adjustment Number	<u>B</u> Plant In Service Adjustment Description	<u>C</u> Account Number	<u>D</u> Adjustment Amount	<u>E</u> Total Adjustment
P-29	Meter Installations	347.000		\$8,213
	1. AFUDC - Carrying Costs. (J. Grisham)		\$8,213	
P-35	Office Furniture & Equipment	391.000		\$860
	1. To include plant improvements since acquisition for office furniture equip (desk). (A. Sarver)		\$510	
	2. To include plant improvements since acquisition for office furniture equip (copier). (A. Sarver)		\$922	
	3. To retire copier from plant. (A. Sarver)		-\$572	
P-36	Office Computer Equipment	391.100		\$383
	1. To include plant improvements since acquisition for office computer equipment. (A. Sarver)		\$383	
P-41	Power Operated Equipment	396.000		\$10
	1. AFUDC- Carrying Costs. (J. Grisham)		\$10	
Total Plant Adjustments				\$66,755

Indian Hills Utility Operating Company, Inc.

Case No.

WR-2017-0259

Test Year Ending March 31, 2017

Depreciation Expense - Water

Line Number	A Account Number	B Plant Account Description	C Adjusted Jurisdictional	D Depreciation Rate	E Depreciation Expense	F Average Life	G Net Salvage
1		INTANGIBLE PLANT					
2	301.000	Organization	\$26,181	0.00%	\$0	0	0.00%
3		TOTAL INTANGIBLE PLANT	\$26,181		\$0		
4		SOURCE OF SUPPLY PLANT					
5	310.000	Land & Land Rights - SSP	\$0	0.00%	\$0	0	0.00%
6	311.000	Structures & Improvements - SSP	\$25,965	2.50%	\$649	44	-10.00%
7	312.000	Collection & Impounding Reservoirs	\$0	0.00%	\$0	0	0.00%
8	313.000	Lake, River & Other Intakes	\$0	0.00%	\$0	0	0.00%
9	314.000	Wells and Springs	\$215,641	2.00%	\$4,313	55	-8.00%
10	315.000	Infiltration Galleries and Tunnels	\$0	0.00%	\$0	0	0.00%
11	316.000	Supply Mains	\$0	0.00%	\$0	0	0.00%
12		TOTAL SOURCE OF SUPPLY PLANT	\$241,606		\$4,962		
13		PUMPING PLANT					
14	325.000	Electric Pumping Equipment	\$569,961	10.00%	\$56,996	10	0.00%
15	328.000	Other Pumping Equipment	\$0	0.00%	\$0	0	0.00%
16		TOTAL PUMPING PLANT	\$569,961		\$56,996		
17		WATER TREATMENT PLANT					
18	330.000	Land & Land Rights-WTP	\$0	0.00%	\$0	0	0.00%
19	331.000	Structures & Improvements - WTP	\$0	0.00%	\$0	0	0.00%
20	332.000	Water Treatment Equipment	\$111,583	2.90%	\$3,236	35	0.00%
21		TOTAL WATER TREATMENT PLANT	\$111,583		\$3,236		
22		TRANSMISSION & DISTRIBUTION PLANT					
23	340.000	Land & Land Rights-T&D	\$0	0.00%	\$0	0	0.00%
24	342.000	Distribution Reservoirs & Standpipes	\$282,845	2.50%	\$7,071	42	-5.00%
25	343.000	Transmission & Distribution Mains	\$265,596	2.00%	\$5,312	50	0.00%
26	344.000	Fire Mains	\$0	0.00%	\$0	0	0.00%
27	345.000	Services	\$31,474	2.50%	\$787	40	0.00%
28	346.000	Meters	\$132,497	10.00%	\$13,250	10	0.00%
29	347.000	Meter Installations	\$222,933	2.50%	\$5,573	40	0.00%
30	348.000	Other Transmission & Distribution Plant	\$0	0.00%	\$0	0	0.00%
31	349.000	Hydrants	\$0	0.00%	\$0	0	0.00%
32		TOTAL TRANS. & DISTRIBUTION PLANT	\$935,345		\$31,993		
33		GENERAL PLANT					
34	389.000	Land & Land Rights-GP	\$0	0.00%	\$0	0	0.00%
35	391.000	Office Furniture & Equipment	\$860	5.00%	\$43	20	0.00%
36	391.100	Office Computer Equipment	\$383	14.30%	\$55	7	0.00%
37	392.000	Transportation Equip.	\$0	0.00%	\$0	0	0.00%
38	393.000	Stores Equipment	\$0	0.00%	\$0	0	0.00%
39	394.000	Tools, Shop and Garage Equipment	\$352	5.00%	\$18	18	10.00%
40	395.000	Laboratory Equipment	\$0	0.00%	\$0	0	0.00%
41	396.000	Power Operated Equipment	\$24,004	6.70%	\$1,608	13	13.00%
42	398.000	Micellaneous Equipment	\$0	0.00%	\$0	0	0.00%
43	399.000	Other Tangible Property	\$0	0.00%	\$0	0	0.00%
44		TOTAL GENERAL PLANT	\$25,599		\$1,724		
45		Total Depreciation	\$1,910,275		\$98,911		

Note: Average Life and Net Salvage columns are informational and have no impact on the entered Depreciation Rate.

Indian Hills Utility Operating Company, Inc.
Case No.
WR-2017-0259
Test Year Ending March 31, 2017
Accumulated Depreciation Reserve - Water

Line Number	A Account Number	B Depreciation Reserve Description	C Total Reserve	D Adjustment Number	E Adjustments	F Jurisdictional Allocation	G Adjusted Jurisdictional
1		INTANGIBLE PLANT					
2	301.000	Organization	\$0			100.00%	\$0
3		TOTAL INTANGIBLE PLANT	<u>\$0</u>		<u>\$0</u>		<u>\$0</u>
4		SOURCE OF SUPPLY PLANT					
5	310.000	Land & Land Rights - SSP	\$0			100.00%	\$0
6	311.000	Structures & Improvements - SSP	-\$6,964			100.00%	-\$6,964
7	312.000	Collection & Impounding Reservoirs	\$0			100.00%	\$0
8	313.000	Lake, River & Other Intakes	\$0			100.00%	\$0
9	314.000	Wells and Springs	\$5,260			100.00%	\$5,260
10	315.000	Infiltration Galleries and Tunnels	\$0			100.00%	\$0
11	316.000	Supply Mains	\$0			100.00%	\$0
12		TOTAL SOURCE OF SUPPLY PLANT	<u>-\$1,704</u>		<u>\$0</u>		<u>-\$1,704</u>
13		PUMPING PLANT					
14	325.000	Electric Pumping Equipment	\$67,869			100.00%	\$67,869
15	328.000	Other Pumping Equipment	\$0			100.00%	\$0
16		TOTAL PUMPING PLANT	<u>\$67,869</u>		<u>\$0</u>		<u>\$67,869</u>
17		WATER TREATMENT PLANT					
18	330.000	Land & Land Rights-WTP	\$0			100.00%	\$0
19	331.000	Structures & Improvements - WTP	\$0			100.00%	\$0
20	332.000	Water Treatment Equipment	-\$11,590			100.00%	-\$11,590
21		TOTAL WATER TREATMENT PLANT	<u>-\$11,590</u>		<u>\$0</u>		<u>-\$11,590</u>
22		TRANSMISSION & DISTRIBUTION PLANT					
23	340.000	Land & Land Rights-T&D	\$0			100.00%	\$0
24	342.000	Distribution Reservoirs & Standpipes	-\$1,564			100.00%	-\$1,564
25	343.000	Transmission & Distribution Mains	\$14,029			100.00%	\$14,029
26	344.000	Fire Mains	\$0			100.00%	\$0
27	345.000	Services	\$701			100.00%	\$701
28	346.000	Meters	-\$8,564			100.00%	-\$8,564
29	347.000	Meter Installations	\$4,992			100.00%	\$4,992
30	348.000	Other Transmission & Distribution Plant	\$0			100.00%	\$0
31	349.000	Hydrants	\$0			100.00%	\$0
32		TOTAL TRANS. & DISTRIBUTION PLANT	<u>\$9,594</u>		<u>\$0</u>		<u>\$9,594</u>
33		GENERAL PLANT					
34	389.000	Land & Land Rights-GP	\$0			100.00%	\$0
35	391.000	Office Furniture & Equipment	\$502	R-35	-\$137	100.00%	\$365
36	391.100	Office Computer Equipment	\$0	R-36	\$519	100.00%	\$519
37	392.000	Transportation Equip.	\$0			100.00%	\$0
38	393.000	Stores Equipment	\$0			100.00%	\$0
39	394.000	Tools, Shop and Garage Equipment	\$211			100.00%	\$211
40	395.000	Laboratory Equipment	\$0			100.00%	\$0
41	396.000	Power Operated Equipment	\$19,582			100.00%	\$19,582
42	398.000	Micellaneous Equipment	-\$1,466			100.00%	-\$1,466
43	399.000	Other Tangible Property	\$0			100.00%	\$0
44		TOTAL GENERAL PLANT	<u>\$18,829</u>		<u>\$382</u>		<u>\$19,211</u>
45		TOTAL DEPRECIATION RESERVE	<u><u>\$82,998</u></u>		<u><u>\$382</u></u>		<u><u>\$83,380</u></u>

Indian Hills Utility Operating Company, Inc.
Case No.
WR-2017-0259
Test Year Ending March 31, 2017
Schedule of Adjustments for Accumulated Depreciation Reserve - Water

<u>A</u> Reserve Adjustment Number	<u>B</u> Accumulated Depreciation Reserve Adjustments Description	<u>C</u> Account Number	<u>D</u> Adjustment Amount	<u>E</u> Total Adjustment Amount
R-35	Office Furniture & Equipment	391.000		-\$137
	1. To update reserves for desk. (A. Sarver)		\$280	
	2. To update reserves for copier. (A.Sarver)		-\$417	
R-36	Office Computer Equipment	391.100		\$519
	1. To update reserves for IT. (A. Sarver)		\$519	
Total Reserve Adjustments				\$382

Indian Hills Utility Operating Company, Inc.
 Case No.
 WR-2017-0259
 Test Year Ending March 31, 2017
 Revenue Schedule - Water

Line Number	A Account Number (Optional)	B Revenue Description	C Company/ Test Year Amount	D Adjustment Number	E Jurisdictional Adjustments	F Jurisdictional Allocation	G Adjusted Jurisdictional
Rev-1		ANNUALIZED REVENUES					
Rev-2		Annualized Rate Revenues	\$98,087	Rev-2	-\$5,532	100.00%	\$92,555
Rev-3		Miscellaneous Revenues	\$0	Rev-3	\$4,736	100.00%	\$4,736
Rev-4		TOTAL ANNUALIZED REVENUES	\$98,087		-\$796		\$97,291

Indian Hills Utility Operating Company, Inc.
Case No.
WR-2017-0259
Test Year Ending March 31, 2017
Revenue Adjustment Schedule - Water

<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>
Revenue Adj Number	Adjustment Description	Account Number	Adjustment Amount	Total Adjustment
Rev-2	Annualized Rate Revenues			-\$5,532
	1. To Annualize Rate Revenues		-\$5,532	
Rev-3	Miscellaneous Revenues			\$4,736
	1. To Annualize Miscellaneous Revenues		\$4,736	
Total Revenue Adjustments				-\$796

Indian Hills Utility Operating Company, Inc.
Case No.
WR-2017-0259
Test Year Ending March 31, 2017
Rate Revenue Feeder Schedule - Water

Line Number	A Description	Residential 5/8"		Commercial 5/8"	
		B Amount	C Amount	D Amount	E Amount
1	Customer Charge Revenues:				
2	Customer Number	707		5	
3	Bills Per Year	12		12	
4	Customer Bills Per year	8,484		60	
5	Current Customer Charge	<u>\$10.81</u>		<u>\$10.81</u>	
6	Annualized Customer Charge Revenues		\$91,712		\$649
7	Commodity Charge Revenues:				
8	Total Gallons Sold	0		0	
9	Less: Base Gallons Included In Customer Charge	<u>0</u>		<u>0</u>	
10	Commodity Gallons	0		0	
11	Block 1, Commodity Gallons per Block	0		0	
12	Block 1, Number of Commodity Gallons per Unit	<u>0</u>		<u>0</u>	
13	Block 1, Commodity Billing Units	0.00		0.00	
14	Block 1, Existing Commodity Charge	<u>\$0.00</u>		<u>\$0.00</u>	
15	Block 1, Annualized Commodity Charge Rev.		\$0		\$0
16	Total Annualized Water Rate Revenues		<u>\$91,712</u>		<u>\$649</u>

Commodity Billing Units are based on the number of commodity gallons applicable to each block, divided by the tariff usage rate gallons (e.g. for tariff rate of \$2.50 per 1,000 gallons of usage, the commodity gallons for that rate would be divided by 1,000 to arrive at the number of commodity billing units).

Indian Hills Utility Operating Company, Inc.
Case No.
WR-2017-0259
Test Year Ending March 31, 2017
Rate Revenue Feeder Schedule - Water

Line Number	A Description	Hydrants 5/8"		Total	
		F Amount	G Amount	H Amount	I Amount
1	Customer Charge Revenues:				
2	Customer Number	3		715	
3	Bills Per Year	12			
4	Customer Bills Per year	36		8,580	
5	Current Customer Charge	<u>\$5.40</u>			
6	Annualized Customer Charge Revenues		\$194		\$92,555
7	Commodity Charge Revenues:				
8	Total Gallons Sold	0		0	
9	Less: Base Gallons Included In Customer Charge	<u>0</u>		0	
10	Commodity Gallons	0		0	
11	Block 1, Commodity Gallons per Block	0			
12	Block 1, Number of Commodity Gallons per Unit	<u>0</u>			
13	Block 1, Commodity Billing Units	0.00			
14	Block 1, Existing Commodity Charge	<u>\$0.00</u>			
15	Block 1, Annualized Commodity Charge Rev.		\$0		\$0
16	Total Annualized Water Rate Revenues		<u>\$194</u>		<u>\$92,555</u>

Commodity Billing Units are based on the number of commodity gallons applicable to each block, divided by the tariff usage rate gallons (e.g. for tariff rate of \$2.50 per 1,000 gallons of usage, the commodity gallons for that rate would be divided by 1,000 to arrive at the number of commodity billing units.

Indian Hills Utility Operating Company, Inc.
Case No.
WR-2017-0259
Test Year Ending March 31, 2017
Miscellaneous Revenues Feeder - Water

Line Number	<u>A</u> Description	<u>B</u> Amount
1	Misc. Revenues	\$4,690
2	Primacy Fee	\$46
3	Total Miscellaneous Revenues	<u>\$4,736</u>

Indian Hills Utility Operating Company, Inc.
Case No.
WR-2017-0259
Test Year Ending March 31, 2017
Expense Schedule - Water

Line Number	A Account Number (Optional)	B Expense Description	C Company/ Test Year Amount	D Adjustment Number	E Adjustments	F Jurisdictional Allocation	G Adjusted Jurisdictional
1		OPERATIONS EXPENSES					
2	603.000	Miscellaneous Expense (Source of Supply Expense)	\$0	W-2	\$200	100.00%	\$200
3	623.000	Fuel or Power Purchased for Pumping (Pumping Exp)	\$7,250	W-3	\$6,431	100.00%	\$13,681
4	641.000	Chemicals (Water Treatment Expense)	\$7,250	W-4	-\$1,869	100.00%	\$5,381
5	642.000	Operation Labor & Expense (Water Treatment)	\$7,250	W-5	\$63,854	100.00%	\$71,104
6	660.000	Operation Supervision and Engin (Trans & Dist. Exp)	\$0	W-6	\$800	100.00%	\$800
7	662.000	Transmission and Distribution Lines Expense	\$0	W-7	\$0	100.00%	\$0
8	635.000	Contractual Services - Water Testing	\$0	W-8	\$630	100.00%	\$630
9		TOTAL OPERATIONS EXPENSE	\$21,750		\$70,046		\$91,796
10		MAINTENANCE EXPENSES					
11	611.000	Maintenance of Structure and Improvements (Source of Supply Expense)	\$0	W-11	\$26,532	100.00%	\$26,532
12	631.000	Maintenance of Structure & Improvements (Pumping Expense)	\$7,250	W-12	-\$2,179	100.00%	\$5,071
13	670.000	Maintenance Supervision and Engineering	\$0	W-13	\$495	100.00%	\$495
14	673.000	Maintenance of Transmission and Dist. Mains	\$0	W-14	\$127	100.00%	\$127
15		TOTAL MAINTENANCE EXPENSE	\$7,250		\$24,975		\$32,225
16		CUSTOMER ACCOUNT EXPENSE					
17	903.100	Customer Record Collect (Billings & Collections)	\$4,478	W-17	\$13,483	100.00%	\$17,961
18	903.200	Customer Record Collect (Postage) - CSWR 16.61%	\$0			100.00%	\$0
19	903.280	Customer Record Collect (Bank Fees)	\$0	W-19	\$4,932	100.00%	\$4,932
20	904.000	Uncollectible Accounts	\$3,450	W-20	-\$3,450	100.00%	\$0
21	907.000	Customer Service & Information Expense (Web Page)	\$0	W-21	\$0	100.00%	\$0
22		TOTAL CUSTOMER ACCOUNT EXPENSE	\$7,928		\$14,965		\$22,893
23		ADMINISTRATIVE & GENERAL EXPENSES					
24	920.000	Administrative & General Salaries - CSWR 16.61%	\$25,973	W-24	\$25,749	100.00%	\$51,722
25	921.110	Office Supplies Expense (Meals, Travel) - CSWR 16.61%	\$5,410	W-25	-\$4,206	100.00%	\$1,204
26	921.500	Office Supplies Expense (Communication)	\$1,975	W-26	\$815	100.00%	\$2,790
27	921.500	Office Supplies Expense (Communication) - CSWR 16.61%	\$0	W-27	\$1,016	100.00%	\$1,016
28	921.800	Office Supplies Expense - CSWR 16.61%	\$1,975	W-28	-\$1,181	100.00%	\$794
29	921.000	Office Supplies and Other Expense - Other - CSWR 16.61%	\$0	W-29	\$46	100.00%	\$46
30	923.100	Outside Services Employed (Bank Fees)	\$0	W-30	\$188	100.00%	\$188
31	923.400	Outside Services (Legal Fees)	\$2,075	W-31	-\$1,882	100.00%	\$193
32	923.400	Outside Services (Legal Fees) - CSWR 16.61%	\$0	W-32	\$30	100.00%	\$30
33	923.500	Outside Services (Accountants/Auditors) - CSWR 16.61%	\$2,075	W-33	\$167	100.00%	\$2,242
34	923.600	Outside Services (Management Consult)	\$2,075	W-34	\$3,925	100.00%	\$6,000
35	923.800	Outside Services (Payroll Fees) - CSWR 16.61%	\$0	W-35	\$270	100.00%	\$270
36	923.900	Outside Services Employed (IT) -CSWR 16.61%	\$0	W-36	\$960	100.00%	\$960
37	923.900	Outside Services Employed (IT)	\$2,075	W-37	-\$835	100.00%	\$1,240
38	924.200	Property Insurance (Environmental) - CSWR 16.61%	\$1,636	W-38	\$8,120	100.00%	\$9,756
39	924.300	Property Insurance (Workers Comp) -CSWR 16.61%	\$0	W-39	\$240	100.00%	\$240

Indian Hills Utility Operating Company, Inc.
Case No.
WR-2017-0259
Test Year Ending March 31, 2017
Expense Schedule - Water

Line Number	A Account Number (Optional)	B Expense Description	C Company/ Test Year Amount	D Adjustment Number	E Adjustments	F Jurisdictional Allocation	G Adjusted Jurisdictional
40	924.400	Property Insurance (Commercial) - CSWR 16.61%	\$1,636	W-40	\$5,736	100.00%	\$7,372
41	926.100	Employee Benefits (Keyman) - CSWR 16.61%	\$0			100.00%	\$0
42	926.200	Employee Benefits (United Healthcare) - CSWR 16.61%	\$0	W-42	\$21,243	100.00%	\$21,243
43	926.300	Employee Benefits (401k) - CSWR 16.61%	\$0	W-43	\$1,711	100.00%	\$1,711
44	926.400	Employee Benefits (Life/STD/LTD/AD&D) - CSWR 16.61%	\$0	W-44	\$853	100.00%	\$853
45	930.200	Misc General Expense - CSWR 16.61%	\$0	W-45	\$1	100.00%	\$1
46	931.000	Rent - CSWR 16.61%	\$0	W-46	\$14,443	100.00%	\$14,443
47		TOTAL ADMINISTRATIVE AND GENERAL	<u>\$46,905</u>		<u>\$77,409</u>		<u>\$124,314</u>
48		OTHER OPERATING EXPENSES					
49	928.100	Regulatory Commission Expense (DNR)	\$360	W-49	-\$360	100.00%	\$0
50	928.200	Regulatory Commission Expense (PSC)	\$360	W-50	\$665	100.00%	\$1,025
51	928.300	Regulatory Commission Expense (Rate Case)	\$0			100.00%	\$0
52	928.400	Regulatory Expense (Bus License) - CSWR 16.61%	\$0	W-52	\$74	100.00%	\$74
53		Amortization Expense	\$0	W-53	\$13,415	100.00%	\$13,415
54	403.000	Depreciation	\$4,189	W-54	\$94,546	100.00%	\$98,735
55		TOTAL OTHER OPERATING EXPENSES	<u>\$4,909</u>		<u>\$108,340</u>		<u>\$113,249</u>
56		TAXES OTHER THAN INCOME					
57	408.120	SS & Medicare - CSWR 16.61%	\$0	W-57	\$4,396	100.00%	\$4,396
58	408.100	Unemployment Tax - CSWR 16.61%	\$0	W-58	\$1,373	100.00%	\$1,373
59	408.160	Property Tax	\$19,240	W-59	-\$14,284	100.00%	\$4,956
60		TOTAL TAXES OTHER THAN INCOME	<u>\$19,240</u>		<u>-\$8,515</u>		<u>\$10,725</u>
61		TOTAL OPERATING EXPENSES	<u><u>\$107,982</u></u>		<u><u>\$287,220</u></u>		<u><u>\$395,202</u></u>

Indian Hills Utility Operating Company, Inc.
Case No.
WR-2017-0259
Test Year Ending March 31, 2017
Expense Adjustment Schedule - Water

<u>A</u> Expense Adj Number	<u>B</u> Adjustment Description	<u>C</u> Account Number	<u>D</u> Adjustment Amount	<u>E</u> Total Adjustment
W-2	Miscellaneous Expense (Source of Supply Expense)	603.000		\$200
	1. To include expense classified at plant. (J. Grisham)		\$200	
W-3	Fuel or Power Purchased for Pumping (Pumping Exp)	623.000		\$6,431
	1. Adjustments to power cost in test year. (J. Grisham)		\$6,431	
W-4	Chemicals (Water Treatment Expense)	641.000		-\$1,869
	1. To annualize chemicals. (J. Grisham)		-\$1,869	
W-5	Operation Labor& Expense (Water Treatment)	642.000		\$63,854
	1. To annaualize operation and labor expense. (J. Grisham)		\$63,122	
	2. To reclassify leak expense \$731.25 from act 611. (J. Grisham)		\$732	
W-6	Operation Supervision and Engin (Trans & Dist. Exp)	660.000		\$800
	1. Adjustments for operations supervision and engin. (J. Grisham)		\$800	
W-7	Transmission and Distribution Lines Expense	662.000		\$0
	No Adjustment		\$0	
W-8	Contractual Services - Water Testing	635.000		\$630
	1. To include water testing fee from a different account 928.1. (J. Grisham)		\$630	
W-11	Maintenance of Structure and Improvements (Source	611.000		\$26,532

Indian Hills Utility Operating Company, Inc.
Case No.
WR-2017-0259
Test Year Ending March 31, 2017
Expense Adjustment Schedule - Water

<u>A</u> Expense Adj Number	<u>B</u> Adjustment Description	<u>C</u> Account Number	<u>D</u> Adjustment Amount	<u>E</u> Total Adjustment
	1. To annualize maintenance of structures and improvements. (J. Grisham)		\$11,681	
	2. To reclassify rock \$1,496.82 to plant in service Act 343. (J. Grisham)		-\$1,497	
	3. To reclassify leak expense \$731.25 to act 642. (J. Grisham)		-\$731	
	4. To reclassify from account 642. (J. Grisham)		\$17,079	
W-12	Maintenance of Structure & Improvements (Pumping	631.000		-\$2,179
	1. Adjustment to maintenance of structure and improvements. (J. Grisham)		-\$2,179	
W-13	Maintenance Supervision and Engineering	670.000		\$495
	1. Adjustment to maintenance supervision and engineering. (J. Grisham)		\$495	
W-14	Maintenance of Transmission and Dist. Mains	673.000		\$127
	1. Adjustment to maintenance of transmission and dist. Maints. (J. Grisham)		\$127	
W-17	Customer Record Collect (Billings & Collections)	903.100		\$13,483
	1. Adjustments made to billing and collections. (J. Grisham)		\$13,483	
W-19	Customer Record Collect (Bank Fees)	903.280		\$4,932
	1. To annualize bank fees. (J. Grisham)		\$4,932	
W-20	Uncollectible Accounts	904.000		-\$3,450
	1. To remove bad debt. (J. Grisham)		-\$3,450	
W-21	Customer Service & Information Expense (Web Page	907.000		\$0

Indian Hills Utility Operating Company, Inc.
Case No.
WR-2017-0259
Test Year Ending March 31, 2017
Expense Adjustment Schedule - Water

<u>A</u> Expense Adj Number	<u>B</u> Adjustment Description Description	<u>C</u> Account Number	<u>D</u> Adjustment Amount	<u>E</u> Total Adjustment
			\$0	
W-24	Administrative & General Salaries - CSWR 16.61%	920.000		\$25,749
	1. To adjust test year payroll to reflect Staff's annualized payroll expense. (A. Sarver)		\$25,749	
W-25	Office Supplies Expense (Meals, Travel) - CSWR 16.6	921.110		-\$4,206
	1. Adjustment to annualize travel and meal expense relating only to Indian Hills. (A. Sarver)		-\$4,206	
W-26	Office Supplies Expense (Communication)	921.500		\$815
	1. Adjustment made to communication. (J. Grisham)		\$815	
W-27	Office Supplies Expense (Communication) - CSWR 1	921.500		\$1,016
	1. To annualize communication expense. (A. Sarver)		\$1,016	
W-28	Office Supplies Expense - CSWR 16.61%	921.800		-\$1,181
	1. Adjustments to office supplies. (A. Sarver)		-\$1,181	
W-29	Office Supplies and Other Expense - Other - CSWR 1	921.000		\$46
	1. Adjustment to office supplies and other expenses. (A. Sarver)		\$46	
W-30	Outside Services Employed (Bank Fees)	923.100		\$188
	1. Adjustment to bank fees. (J. Grisham)		\$188	
W-31	Outside Services (Legal Fees)	923.400		-\$1,882
	1. Adjustment to legal fees. (J. Grisham)		-\$1,882	

Indian Hills Utility Operating Company, Inc.
Case No.
WR-2017-0259
Test Year Ending March 31, 2017
Expense Adjustment Schedule - Water

<u>A</u> Expense Adj Number	<u>B</u> Adjustment Description	<u>C</u> Account Number	<u>D</u> Adjustment Amount	<u>E</u> Total Adjustment
W-32	Outside Services (Legal Fees) - CSWR 16.61%	923.400		\$30
	1. Adjustment to legal fees. (A. Sarver)		\$30	
W-33	Outside Services (Accountants/Auditors) - CSWR 16.	923.500		\$167
	1. Adjustment to auditor/accountants. (A. Sarver)		\$167	
W-34	Outside Services (Management Consult)	923.600		\$3,925
	1. Adjustment to management consult. (J. Grisham)		\$3,925	
W-35	Outside Services (Payroll Fees) - CSWR 16.61%	923.800		\$270
	1. To annualize payroll fees. (A. Sarver)		\$270	
W-36	Outside Services Employed (IT) -CSWR 16.61%	923.900		\$960
	1. Adjustment to office services IT. (A. Sarver)		\$960	
W-37	Outside Services Employed (IT)	923.900		-\$835
	1. Adjustment to outside servies employed IT. (J. Grisham)		-\$835	
W-38	Property Insurance (Environmental) - CSWR 16.61%	924.200		\$8,120
	1. To annualize property insurance (Environmental). (A. Sarver)		\$8,120	
W-39	Property Insurance (Workers Comp) -CSWR 16.61%	924.300		\$240
	1. To annualize workman comp insurance. (A. Sarver)		\$240	
W-40	Property Insurance (Commercial) - CSWR 16.61%	924.400		\$5,736

Indian Hills Utility Operating Company, Inc.
Case No.
WR-2017-0259
Test Year Ending March 31, 2017
Expense Adjustment Schedule - Water

<u>A</u> Expense Adj Number	<u>B</u> Adjustment Description	<u>C</u> Account Number	<u>D</u> Adjustment Amount	<u>E</u> Total Adjustment
	1. To annualize commerical property insurance. (A. Sarver)		\$5,736	
W-42	Employee Benefits (United Healthcare) - CSWR 16.61	926.200		\$21,243
	1. To annualize healthcare benefits. (A. Sarver)		\$21,243	
W-43	Employee Benefits (401k) - CSWR 16.61%	926.300		\$1,711
	1. To annualize 401k benefits. (A. Sarver)		\$1,711	
W-44	Employee Benefits (Life/STD/LTD/AD&D) - CSWR 16.61	926.400		\$853
	1. To annualize Life/STD/LTD/AD&D benefits. (A. Sarver)		\$853	
W-45	Misc General Expense - CSWR 16.61%	930.200		\$1
	1. Adjustment to misc expense. (A. Sarver)		\$1	
W-46	Rent - CSWR 16.61%	931.000		\$14,443
	1. To annualize rent. (A. Sarver)		\$14,443	
W-49	Regulatory Commission Expense (DNR)	928.100		-\$360
	1. To reclassify water testing expense classified to act 635. (J. Grisham)		-\$630	
	2. To adjust/remove DNR primacy fee. (J. Grisham)		\$270	
W-50	Regulatory Commission Expense (PSC)	928.200		\$665
	1. Adjustment to regulatory commission expense. (J. Grisham)		\$665	
W-52	Regulatory Expense (Bus License) - CSWR 16.61%	928.400		\$74
	1. Adjustment to business license. (A. Sarver)		\$74	

Indian Hills Utility Operating Company, Inc.
Case No.
WR-2017-0259
Test Year Ending March 31, 2017
Expense Adjustment Schedule - Water

<u>A</u> Expense Adj Number	<u>B</u> Adjustment Description	<u>C</u> Account Number	<u>D</u> Adjustment Amount	<u>E</u> Total Adjustment
W-53	Amortization Expense			\$13,415
	1. Amortization of initial water leaks. (J. Grisham)		\$11,394	
	2. Amortization of Orginzation (Act 301). (J. Grisham)		\$2,021	
W-54	Depreciation	403.000		\$94,546
	1. To Annualize Depreciation		\$94,722	
	2. CIAC depreciation off set. (S. Moilanen)		-\$176	
W-57	SS & Medicare - CSWR 16.61%	408.120		\$4,396
	1. To adjust for Staff's annualized amount for social security and medicare tax. (A. Sarver)		\$4,396	
W-58	Unemployment Tax - CSWR 16.61%	408.100		\$1,373
	1. To adjust for Staff's annualized amount for unemployment tax. (A. Sarver)		\$1,373	
W-59	Property Tax	408.160		-\$14,284
	1. To annualize property tax for Indian Hills. (J. Grisham)		-\$14,187	
	2. To annualize property tax for corporate. (A. Sarver)		-\$97	
Total Expense Adjustments				\$287,220

REPORT OF CUSTOMER SERVICE AND BUSINESS OPERATIONS REVIEW

Consumer and Management Analysis Unit

Small Company Rate Increase Request

Case No. WR-2017-0259

Indian Hills Utility Operating Company, Inc.

Brooke Richter and Gary Bangert

The purpose of the Consumer and Management Analysis Unit (“CMAU”) is to promote and encourage efficient and effective utility management. These objectives contribute to the Commission’s overall mission to ensure that customers receive safe and adequate service at reasonable rates while providing utilities the opportunity to earn a fair return on their investment.

The objectives of this review are to document and analyze the management control processes, procedures, and practices used by Indian Hills Utility Operating Company, Inc. (“Company” or “Indian Hills”) to ensure that its customers’ service needs are met and to make recommendations, where appropriate, by which the Company may improve the quality of services provided to its customers. The findings of this review will also provide the Commission with information regarding the Company’s customer service and business operations.

The scope of this review focuses on processes, procedures, and practices related to:

- Customer Billing
- Payment Remittance
- Meter Reading
- Credit and Collections
- Complaints and Inquiries
- Customer Communication

This report contains the results of the CMAU staff’s review.

The CMAU staff of the Missouri Public Service Commission (“Commission”) initiated an informal review in April 2017 of the customer service and business processes, procedures, and practices of Indian Hills. The review was performed in response to the Company’s request for a rate increase in Case No. WR-2017-0259, which was filed on April 4, 2017. The Company’s request is for an increase of \$750,280 in its annual water system operating revenues.

The CMAU staff examined the Company's tariffs, annual reports, Commission complaint and inquiry records, and other documentation related to the Company's customer service and business operations. In preparation of this report, the CMAU staff submitted data requests to the Company and performed an on-site interview with four Company employees in June 2017. The CMAU staff's review of the Company resulted in the following recommendations:

THE CMAU STAFF RECOMMENDS THAT COMPANY MANAGEMENT:

1. Update and distribute, to all current and future customers, written information specifying the rights and responsibilities of the Company and its customers as required by Commission Rule 4 CSR 240-13.040(3). This recommendation should be completed within thirty (30) days of the effective date of the Commission order that resolves Case No. WR-2017-0259.
2. Evaluate the benefits of providing customers the maintenance emergency contact number directly on their bill. This recommendation should be completed within ninety (90) days of the effective date of the Commission order that resolves Case No. WR-2017-0259.

History

Indian Hills provides drinking water distribution and treatment services in Crawford County, Missouri, in a subdivision known as Indian Lake. The Commission order issued in Case No. WO-2016-0045, which became effective on March 31, 2016, authorized a regulated water utility, I.H. Utilities, Inc. (IHU), to sell and transfer assets to Indian Hills, and granted Indian Hills a certificate of convenience and necessity ("CCN") to provide water utility service. The Company is currently charging customer rates for water service at the same rate that was established for IHU in its Commission-approved tariff in IHU's most recent rate case.

IHU was first authorized by the Commission in 1964 to provide water service in an area commonly known as Indian Lake Subdivision in Cuba, Missouri. At present, the Company provides water service to a total of approximately 715 customers. The number of customers since the Company has been granted their CCN approximately one year ago has been very stable and limited growth is anticipated. Customer service and business office operation reviews have not been conducted by the CMAU staff since Indian Hills was granted its Certificate in March 31, 2016. Prior to the acquisition by Indian Hills, CMAU staff previously performed a complaint case in 2013 in Case No. WC-2013-0357 and a customer service review in 2010 in Case No. WR-2010-0048, when IHU was the utility.

Overview

Indian Hills is wholly-owned by First Round CSWR, LLC (“First Round”). First Round wholly-owns utility companies that provide water & wastewater management facilities for small communities. Josiah Cox is the president of Indian Hills. An office manager performs all business office operations and the Company contracts with Midwest Water Operations, Inc. to perform all outside operations and maintenance. Outside operations activities include emergency service calls, routine maintenance of the water system, performing monthly inspections, obtaining water samples, generally complying with requirements of the Missouri Department of Natural Resources (DNR) and providing general lawn maintenance. Company personnel represent that time associated with Company work activity is tracked for all employees on QuickBooks software, and the CMAU staff has reviewed these timesheets from April 2016 through March 2017.

The Company’s business office is located at 500 Northwest Plaza Drive, Suite 500, St. Ann, Missouri 63074 and hours of operation are 7:00 a.m. to 4:00 p.m. Monday thru Friday. The Company has a contract with Nitor Billing to provide 24/7 customer support for any billing questions. Business office operations of CSWR include maintaining customer account records, responding to customer complaints and inquiries, answering the phone, opening the mail, and processing payments for contracting services. The president also responds to emergency customer calls.

Customer Billing

Indian Hills contracts with Nitor Billing to generate and mail all customer bills. Company personnel indicate that the monthly bills are mailed on or about the 4th of each month, with customer bills due 23 days from the date the bills are mailed. Indian Hills uses Munibilling software to maintain customer records. Office personnel assert that customer account data is backed up to a cloud-based Software as a Service (“SAAS”), otherwise known as Munibilling. The Company asserted that data is also stored on MicroSoft OneDrive, a SAAS vendor, and is backed up using Backupify for Office 365, another cloud-based storage backup.

Payment Remittance

Customer payment options include check, debit card, credit card, or E-check. Customers currently do not incur fees for use of any of the payment options, as their present tariff does not

permit it. However, the Company is requesting to add a fee to debit/credit card payment options in their future tariff. Nitor Billing processes all payment remittance. Most payments are received in the mail at the lockbox at the bank, or online through Nitor's web-based software, Munibilling. Company personnel assert that bill payments are processed, recorded, and deposited on the day they are received.

Meter Reading

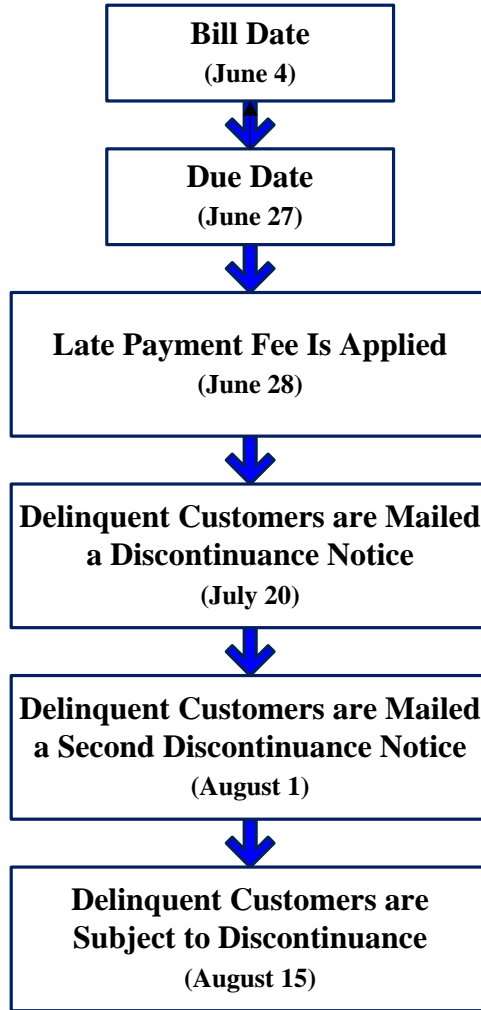
The Company currently does not have any meter readings, as they are completing the process to install new remote read meters. These new meters are manufactured by Badger Meter Inc., and will include the use of wireless internet readings that load electronically to the Munibilling software cloud. Company personnel asserted that there have been no actual meter readings, nor usage estimations thus far. Billing has been based only on the "minimum rate" portion of the approved rates and has not included the commodity charge portion. Once the new meters are all installed, they do not anticipate meter reading estimations unless the new Internet wireless meters are not working correctly. Upon visual examination, any meter readings that appear unusual will result in a reread. The Company plans to read the usage from the new meters in the month of June, and start billing for this usage in July. Company personnel represented that there has been no problem with theft of water service.

Credit and Collections

All new customers requesting water service are required to complete a written application. A security deposit is not required as a condition for providing service. Company personnel assert that returned checks have not been a problem. The Company sends a letter to customers with a returned check along with a copy of the check. The Company's current tariff provides for a returned check fee of \$25.00.

Indian Hills has an established procedure for handling delinquent accounts. The following illustration shows the actions that would be taken on delinquent accounts:

Delinquent Account Actions



Source: Indian Hills Utility Operating Company, Inc. Management Interview Information

As shown in the illustration, a bill with a June 4 bill date would be due on June 27. Consequently, customers have 23 days to pay their bill before a late fee is assessed. Customers with unpaid accounts have approximately 1 ½ months from the due date before they are subject to discontinuance.

Indian Hills personnel indicate that an average of 74 customers are delinquent and pay the late fee each month. Company personnel assert that, of those customers with delinquent accounts, usually about 40 - 50 customers have not paid their bills by the time the first discontinuance notice is mailed. Company management represents that an average of four delinquent account customers have their water service discontinued each month. The Company's tariff provides for a \$25.00 turn-off fee and a \$25.00 turn-on fee, which must be paid

in addition to the total balance due before water service is turned on. Security deposits are not collected as a condition of continued service. Company management indicates that no delinquent accounts were written off in 2016 or through May 2017. The Company contracts with a collection agency to pursue the collection of any uncollectible accounts. There were four accounts totaling \$273.83 sent to the collection agency in 2017 and no accounts were sent in 2016. The collection agency charges a 25% fee on the accounts it collects.

Complaints and Inquiries

Customers with questions or concerns may call the telephone number appearing on their bill, which is the Nitor billing answering service. Their answering service is available from 7 am -5 pm Monday through Friday, otherwise the customer can leave a message and the answering service will get back to them the next business day. If a customer calls with an emergency, Nitor's answering service will give the customer the emergency number. This number is a 24/7 toll-free telephone number. Nitor billing answering service keeps a log of all calls that the Indian Hills office manager can view at any time. If it is a general Company question or complaint, then Nitor billing answering service will transfer the call to Indian Hill's office manager.

Company personnel indicated that customer contacts are recorded on the Customer Complaint Log that includes the created date, follow-up date, account number, customer name, reason for the contact, and whether the resolution was completed. A review of the Commission's complaint/inquiry records since the Company was certified in March 2016 shows there have been nine complaints. A review of the Commission's public comments records shows there have been 208 comments since the Company requested this rate increase. Most of these public comments have been against the rate increase.

Customer Communication

The Company has an informational brochure which contains information required by Commission Rule 4 CSR 240-13.040; however it does not meet all of the requirements of this rule. The CMAU staff is currently working with the Company to ensure all items under the Commission rule are included in the informational brochure. The Company is currently mailing the brochure to all new customers. Customers can also view the brochure online on the

Company's website at <http://www.centralstateswaterresources.com>. Some information is also conveyed through a newsletter when there are expected major water disruptions that take place.

Findings, Conclusions, and Recommendations

The following discussion presents a summary of the findings, conclusions, and recommendations pertaining to the Company's customer service operations. Recommendations resulting from rule or tariff violations are specifically noted and associated with a 30-day implementation requirement. The information presented in this section focuses on the following issue that requires Company management's attention:

- Customer Communication
- Customer Bill

Customer Communication

The informational brochure still does not include all the requirements of Commission Rule 4 CSR 240-13.040(3). The subparts under CSR 240-13.040(3) that still need to be included consist of:

- (a) Billing and estimated billing procedures;
- (b) Methods for customer verification of accuracy;

The Company is working with CMAU staff to include all requirements of Commission Rule CSR 240-13.040(3) in the brochure for distribution to existing and future customers.

THE CMAU STAFF RECOMMENDS THAT COMPANY MANAGEMENT:

Update and distribute, to all current and future customers, written information specifying the rights and responsibilities of the Company and its customers as required by Commission Rule 4 CSR 240-13.040(3). This recommendation should be completed within thirty (30) days of the effective date of the Commission order that resolves Case No. WR-2017-0259.

Customer Bill

The Company's billing statements only provide a phone number for the Nitor's billing answering service; however, they do not provide a phone number for maintenance emergencies. While this emergency number is provided on the customer brochure,

CMAU staff is of the opinion that it may be helpful to customers with emergencies to locate the number directly on a bill. Easy access to an emergency phone number could help minimize the time required for corrective action.

THE CMAU STAFF RECOMMENDS THAT COMPANY MANAGEMENT:

Evaluate the benefits of providing customers the maintenance emergency contact number directly on their bill. This recommendation should be completed within ninety (90) days of the effective date of the Commission order that resolves Case No. WR-2017-0259.

Implementation Review

The CMAU staff will conduct a review of the Company's progress regarding the implementation of the two recommendations made in this report.

**REPORT OF WATER AND SEWER DEPARTMENT
FIELD OPERATIONS AND TARIFF REVIEW
Case No. WR-2017-0259
Indian Hills Utility Operating Company, Inc.
David Spratt /Jonathan Dallas / Curt Gateley**

Introduction

Indian Hills Utility Operating Company Inc. (Company) provides water service to approximately 715 customers at Indian Lake Resort, located just North East of Cuba, Missouri in Crawford County. The Commission's Water and Sewer Department Staff (Staff) performed an inspection of the water system on May 17, 2017. Observations and suggested improvements are listed below.

Facilities

The Company recently purchased the water system from I.H. Utilities, Inc. (I.H.), with the Commission's approval in Case No. WO-2016-0045 which became effective March 4, 2016. I.H. received its CCN in 1964 in Case No. 15,389. Originally developed as a fishing resort community, the development has been adding more permanent residents, such that now just over half of the customers are full-time. The Missouri Department of Natural Resources (MDNR) has documented numerous recommendations of items that required maintenance since 2009 including the condition of the well house, the poor condition of the distribution pipe, the condition of the ground storage tank, the need for back-up power, and only providing one chlorine pump at each well. Since the purchase of the water system, the new Company has made numerous renovations and improvements to the water system, which will be discussed below, to get the public water supply back into compliance with MDNR regulations.

Both of the wells presently in service have newly constructed well houses, electrical controls, high service pumps, and chlorine disinfection equipment. The old well house structures and all of the equipment inside the well houses, including piping, had already exceeded life expectancy. Fencing has been installed around both well houses for security.

The water is chlorinated inside the well houses as it is pumped from the wells and sent to the storage tanks for contact time. The chlorine equipment is kept in a separate room of the well house for safety purposes and to prevent corrosion of metal parts inside the well house caused by the chlorine gas venting. The Company installed two chlorine pumps in each of the well houses. The duplicate chlorine pump is a safety precaution in case one chlorine pump stops working. Each well house also has a continuous chlorine monitor that alerts the Company of any issues to ensure continuous chlorination of the water.

Well #1 is an eight-inch well drilled in 1963 to a depth of 990 feet, with 275 feet of steel casing. A new drop pipe and a 25-horsepower (hp) pump were installed in 2016. The new pump produces approximately 220 gallons of water per minute (gpm). The new wellhead is located outside of the well house and uses a “pitless unit” to make access easier if repairs are needed.

The old ground storage tank, located at Well #1, was buried in the ground on three sides which did not comply with MDNR “Minimum Design Standards for Missouri Community Water Systems” (“design guide” publication 2489) specification 7.0.3.D. The storage tank only provided approximately 20,000 gallons of water in the past, which also did not meet MDNR design guide specification 7.1.2, which states that at least an average day amount of water usage must be provided in storage in the event of an outage. According to the design guide (1.1.2 (d) (3) (ii) - Page 3), an average day of water use per residence is. With 724 homes using an average of 300 gallons of water per day, the Company would need 217,200 gallons of water in storage to comply. A new 263,000-gallon ground storage tank has been placed at the site of well #1 as well as electric high service pumps to provide system pressure. The new storage tank meets the MDNR guidelines requiring a public water supply to have an average day of storage on hand in the event of a power outage or system failure. The storage tank is large enough to store an average day supply of water, but it is not tall enough to supply water pressure to the distribution system without high service pumps which were also installed. In the event of a power outage, the Company has a generator on site to allow the high service pumps to keep running to continually provide water to its customers.

Well #2 experienced mechanical failure in 2010. I.H. did not have the money to replace the pump and motor, so the well was taken out of service. Two booster pumps remained in operation to boost the pressure at the higher elevation of the distribution system. It was determined by the Company when it examined well #2 that the well, the well house, and booster station were on land that was not owned by the utility. Well #2 has since been abandoned and properly plugged according to MDNR standards.

The design guide (3.2.1.2 – Page 28) states that a water system serving more than 500 people shall have more than one well. The Company drilled a new ten-inch well, well #3, in 2016 to a depth of 1,050 feet to replace the abandoned well #2. The new well is located at a different site than well #2, which the Company determined was better for water distribution and pressure to the south side of the service area. Well #3 contains a 25 hp pump that produces approximately 250 gpm. A 53,000 gallon ground storage tank with high service pumps has been placed on this site for additional storage.

Pressure had previously been maintained at well #1 using a 5,000 gallon hydro pneumatic pressure tank. Pressure was maintained at the higher elevation of the development on Highway DD by using two small bladder tanks. To address the frequent low-pressure incidents, the Company has installed two new 25 hp high service pumps and a three-hp jockey pump that runs continuously, all to maintain pressure on the distribution system.

MDNR requires a water distribution system to maintain minimum water pressure of 20 pounds per square inch (psi). Failure to maintain this minimum pressure can cause a health hazard and is a violation of Commission regulation 10 CSR 60-4.080 (9). The water system had numerous leaks in the past. Some parts of the distribution system had reported low water pressure as well as no water at all at certain times of the day. These low pressure events could be attributed to low water volume in storage, water leaks in the system, or other factors. The Company has added storage and is repairing leaks in water mains and service connections. The Company has increased the water pressure and water volume to the distribution system with its new high service pumps and storage tanks in an attempt to keep the water pressure above 20 psi. This increase in pressure has revealed some weak spots in the mains and the service connections, which resulted in further breaks and leaks. The Company has replaced 34 leaking service connections from the main to the meter and repaired multiple water main breaks. The Company is committed to continuing efforts to eliminate leaks as they become apparent and ensure reliable service going forward.

Over time water meters have a tendency to “drag,” and thus read less than the actual use which is why meters are supposed to be tested or replaced every ten years according to 4 CSR 240 10.030 (38). The meters in this system were out of date and in need of replacement. The Company has replaced all of the 3/4” meters in the distribution system with new remote read meters, which will assist the Company with determining usage and leaks as well as make meter reading more efficient. To date, the Company has replaced 272 of the old compressed cardboard meter pits because they were damaged and collapsing, allowing ground water into the meter pit.

According to the annual report submitted by I.H., the distribution system consists of 80,610 feet of three-inch and four-inch PVC as well as 1,320 feet of six-inch cast iron pipe. The Company has installed valves to allow for the isolation of water shut-offs in the event of a water main break or repair to prevent a water outage to the entire system. Flush hydrants have also been installed on some dead-end water mains to allow the mains to be cleaned and to flush sediments.

Water and Sewer Staff Observations and Recommendations

The Company has made a significant investment into this system to make much needed repairs. New water meters were installed but were not operational until June. The Company should be monitoring water use through the meters that were installed for information about the operations of the system. Staff recommends that the Company monitor meter readings closely to get an accurate figure for water loss. Staff recommends that the Company continue to pay close attention to the water mains to watch for leaks and breaks, and undertake needed repairs or replacements as necessary. If water loss remains high, Staff recommends the Company contact the Missouri Rural Water Association (MRWA) about leak detection.

Tariff Review

Staff routinely works with utilities to update tariffs of the individual companies using a generic tariff that is modified for specific operations of the individual companies as they file rate cases with the Commission. Because significant portions of this company's tariff have not been updated to current regulations, Staff recommends replacing the entire tariff. The service territory map is difficult to read and should also be replaced.

Rate Design

Staff also reviewed the Company's current rate design in its investigation. The current rate structure consists of a monthly service charge which includes a minimum of 4,000 gallons of water, and a commodity charge for usage above 4,000 gallons. The tariff also included a hydrant-only rate for some customers who only occasionally used a lot for a temporary connection to a recreational vehicle. Staff proposes to revise the rate structure. Staff's proposal is to eliminate the 4,000 gallon limit included in the minimum monthly charge and to create a simple monthly customer charge and a separate commodity charge for all water usage. This rate structure will also eliminate the hydrant-only rate, as these customers will then be charged the same as conventional customers. The rates will be updated based on the results of the new cost of service studies performed as part of this rate case.