

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

PETITION OF THE CITY OF EVANSVILLE, )  
INDIANA, FOR AUTHORITY TO ISSUE BONDS, )  
NOTES, OR OTHER OBLIGATIONS, FOR )  
AUTHORITY TO INCREASE ITS RATES AND )  
CHARGES FOR WATER SERVICE, AND FOR )  
APPROVAL OF NEW SCHEDULES OF WATER )  
RATES AND CHARGES. )

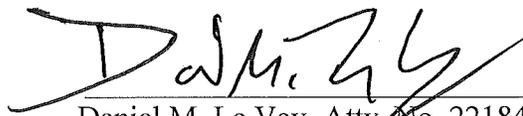
CAUSE NO. 45073

OUCC's PROPOSED ORDER

The Office of Utility Consumer Counselor ("OUCC"), by counsel, hereby submits its proposed order and related schedules.

Respectfully Submitted,

INDIANA OFFICE OF UTILITY CONSUMER COUNSELOR



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**CERTIFICATE OF SERVICE**

This is to certify that a copy of the foregoing *Office of Utility Consumer Counselor Proposed Order* has been served upon the following counsel of record in the captioned proceeding by electronic service on October 15, 2017.

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**STATE OF INDIANA  
INDIANA UTILITY REGULATORY COMMISSION**

**PETITION OF THE CITY OF )  
EVANSVILLE, INDIANA, FOR )  
AUTHORITY TO INCREASE ITS RATES ) CAUSE NO. 45073  
AND CHARGES FOR WATER SERVICE, )  
AND FOR APPROVAL OF NEW )  
SCHEDULES OF WATER RATES AND )  
CHARGES.**

**ORDER OF THE COMMISSION**

**Presiding Officers:**

**David Ober, Commissioner**

**Loraine L. Seyfried, Chief Administrative Law Judge**

On March 29, 2018, the City of Evansville, Indiana (“Evansville”, “City”, or “Petitioner”) filed its Petition seeking authority to issue bonds, notes or other evidence of indebtedness, to increase Petitioner’s rates and charges for water service and for approval of new schedules of water rates and charges. Included with its Petition, Evansville filed the direct testimony, including attachments, of Douglas L. Baldessari - CPA with H.J. Umbaugh & Associates, Certified Public Accountants, LLP (“Umbaugh”) and Patrick Keepes - Water Superintendent for the Evansville Water and Sewer Utility, which is owned by Evansville.

On April 26, 2018, Petitioner and the Indiana Office of Utility Consumer Counselor (“OUCC”) filed a Stipulation as to Procedural Matters. On April 30, 2018, the Indiana Utility Regulatory Commission (“Commission”) issued a docket entry vacating the prehearing conference and establishing a procedural schedule in this Cause.

Pursuant to Ind. Code § 8-1-2-61(b), the Commission conducted a public field hearing in this Cause at Benjamin Bosse High School in Evansville on June 25, 2018 at 6:00 p.m. at which Evansville and the OUCC appeared and members of the public offered oral and/or written comments.

On July 20, 2018, the OUCC filed its case consisting of the testimony and attachments of Edward R. Kaufman – Assistant Director of the OUCC’s Water and Wastewater Division; Carl N. Seals – Utility Analyst; James T. Parks– Utility Analyst II; Jennifer L. Sisson – Utility Analyst II; and Margaret A. Stull – Chief Technical Advisor.

On August 10, 2018, Evansville filed the rebuttal testimony of Allen R. Mounts – Director of Evansville Water and Sewer Utility, Michael Labitzke – Deputy Director of the Program Management Office for Evansville Water and Sewer Utility, Patrick Keepes and Doug Baldessari.

Pursuant to notice published as required by law, a public evidentiary hearing commenced on September 5, 2018, at 9:30 a.m., in Room 222 of the PNC Center, 101 West Washington Street, Indianapolis, Indiana. Proofs of publication of the notice of the hearing were incorporated into the

record of this proceeding by reference. Petitioner and the OUCC were present and participated. No members of the general public appeared or sought to testify at the hearing.

Having considered the evidence of record as well as the applicable law, the Commission now finds that:

1. **Notice and Jurisdiction.** Due, legal, and timely notice of the hearings conducted in this cause was given as required by law. Evansville is a municipally owned utility as defined by Ind. Code § 8-1-2-1(h). Under Ind. Code § 8-1-2-42 and -42.7 and Ind. Code § 8-1.5-3-8(f)(2) the Commission has jurisdiction over changes to Evansville's water utility rates and charges. Further, the Commission has jurisdiction under Ind. Code 8-1.5-2-19 to approve issuances of long-term debt. Thus, this Commission has jurisdiction over Evansville and the subject matter of this proceeding.

2. **Petitioner's Characteristics.** Petitioner owns and operates municipal waterworks facilities providing water sales and service to customers in and near the City of Evansville, Indiana. Additionally, Petitioner sells water at wholesale to certain other customers.

3. **Relief Requested.** In its case-in-chief, Petitioner requested authority to issue bonds, notes or other evidence of indebtedness and increase its rates and charges by 48.30% on an across-the-board basis through a three-phase rate increase: an increase of approximately 18.90% to be effective upon approval pursuant to this Commission's order in this Cause ("Phase I"), an increase of approximately 15.50% to be effective twelve (12) months after the first phase ("Phase II"), and an increase of approximately 8.00% to be effective twelve (12) months after the second phase ("Phase III).

In its rebuttal case, Petitioner requested authority to issue bonds, notes or other evidence of indebtedness and increase its rates and charges by 47.87% on an across-the-board basis through a three-phase rate increase: an increase of approximately 18.43% to be effective upon approval pursuant to this Commission's order in this Cause ("Phase I"), an increase of approximately 15.96% to be effective twelve (12) months after the first phase ("Phase II"), and an increase of approximately 7.67% to be effective twelve (12) months after the second phase ("Phase III).

4. **Test Year.** The test year selected for determining Petitioner's actual and pro forma operating revenues, expenses and operating income under present and proposed rates was the twelve months ended September 30, 2017. With adjustments for changes that are fixed, known, and measurable and occurring within 12 months of September 30, 2017, we find that this test period is sufficiently representative of Petitioner's normal operations for purposes of establishing Petitioner's rates.

5. **The Parties' Evidence.**

A. **Evansville's Case-in-Chief.** Evansville introduced evidence from its Water Superintendent, Patrick R. Keepes. Mr. Keepes sponsored Attachment PRK-1 the three Resolutions approved by the Utility's Board authorizing Evansville's requested 48.30% rate increase to be phased in over three phases. Mr. Keepes also sponsored Attachments PRK-2 through Attachments PRK-6 Evansville's 3-year capital improvement plan ("CIP"). Mr. Keepes described Evansville's CIP and testified that each of the projects listed in Evansville's CIP is reasonably

necessary for the provision of reasonable and adequate service. Mr. Keepes testified that there are two major projects set forth in Evansville's CIP: (1) a new \$18 million clearwell needed to perform maintenance, inspections and repairs on the existing 6.5 million gallon clearwell and to create redundancy in Evansville's system; and (2) \$107,535,200 of water main replacement projects to replace Evansville's aging water infrastructure. Mr. Keepes testified that Evansville's system includes approximately 600 miles of cast iron water main with an estimated average age of approximately 90 years.<sup>1</sup> He testified that like Evansville's last rate case (Cause No. 44760) Evansville is attempting to achieve a 1.5% replacement rate per year.

Mr. Doug L. Baldessari, a Certified Public Accountant and Partner with Umbaugh reviewed Petitioner's rate needs and sponsored the Accounting Report as set forth in Attachment DLB-1. Mr. Baldessari testified the Report contains *pro forma* financial information for Evansville's test year, the 12 months ended September 30, 2017, adjusted for fixed, known and measureable changes during the succeeding 12 months. Mr. Baldessari described Evansville's proposal to issue \$147,355,000 in debt to be issued in one or more series on the open market or through the State Revolving Fund ("SRF"). *Id.*, p. 6. Mr. Baldessari testified that there are an additional \$132.5 million in planned distribution system projects that are not included in the proposed debt- or rate-funded projects and that if other parties identify potential savings or offsets to the revenue requirement that the savings and/or offsets be used to fund these identified and unfunded projects. Petitioner's Ex. 1, p. 10.

Mr. Baldessari testified regarding the adjustments that have been made in Umbaugh's Accounting Report to arrive at the *pro forma* annual revenue requirement. The adjustments that were contested are a reduction to revenues for declining usage calculated from baseline revenues from 2014-2017; an adjustment for customer growth normalization; an adjustment to reflect implementation of the remaining Phase I increase and Phase II increase from Cause No. 44760; an adjustment to PERF expense based on increased salaries and the annual accrual pursuant to GASB 68 & 71; and an adjustment for the periodic maintenance from planned maintenance activities and competitive proposals. He testified that each of the *pro forma* annual cash operating expense adjustments is explained in detail on pages 9 through 15 of the report. He also testified regarding the Utility's *pro forma* annual revenue requirements and explained that those revenue requirements are summarized on pages 26 and 29 of the Accounting Report. Mr. Baldessari testified that the Utility's *pro forma* revenue requirements incorporate the Utility's adjusted operation and maintenance expenses and payment in lieu of taxes, as well as annual payments on outstanding debt, additional utility receipts tax, and replacements and improvements. He stated that the *pro forma* annual revenues are shown in three phases. Phase I reflects those expected requirements and revenues needed now through the end of 2019 with \$7.1 million of the CIP to help phase-in the required increase. Phase II reflect those expected requirements and revenues needed through 2020 with \$8.3 million of the CIP, an increase in the payment in lieu of taxes and an additional phase-in of the debt service on the proposed bonds. Phase III reflects those requirements and revenues needed during 2021 and thereafter including increased payment in lieu of property taxes, increased debt service to the average annual *pro forma* amount for the five bond years ended January 1, 2026 and the full proposed \$9.6 million annual CIP requirement for Extensions and Replacements (E&R).

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<sup>1</sup> Keepes Direct, page 2, lines 9-11.

Mr. Baldessari concluded his testimony by stating that in his opinion, the rates proposed in Umbaugh's Accounting Report are fair, just, non-discriminatory and reasonable and necessary to meet the projected revenue requirements of the Utility, as those requirements have been approved by the Evansville Water and Sewer Utility Board.

**B. OUCC's Case-in-Chief.** The OUCC offered prefiled testimony from Jennifer L. Sisson (Public's Exhibit No. 1), Margaret A. Stull (Public's Exhibit No. 2), James T. Parks (Public's Exhibit No. 3), Carl N. Seals (Public's Exhibit No. 4), and Edward R. Kaufman (Public's Exhibit No. 5). The OUCC also offered comments it received from Petitioner's customers about the rate case (Public's Exhibit No. 6).

Ms. Jennifer L. Sisson, Utility Analyst II, testified regarding the OUCC's proposed adjustments and revenue requirement offsets. Ms. Sisson outlined the OUCC's proposal in this Cause and, based on this proposal, Ms. Sisson testified the OUCC recommended an overall across-the-board rate increase of 24.21% to produce an increase in water revenues of \$8,182,223 based on a *pro forma* net revenue requirement of \$41,839,420. Ms. Sisson also recommended a three-phase increase. For Phase I, the OUCC proposed an across the board 2.70% increase for a \$913,245 increase in operating revenues. For Phase II, the OUCC proposed an additional 12.08% increase to provide \$4,191,142 of additional operating revenues. Finally for Phase III, the OUCC proposed an additional 7.91% increase to provide \$3,077,836 of additional operating revenues.

Ms. Margaret A. Stull, Chief Technical Advisor, testified regarding an opposition to Evansville's proposed declining consumption adjustment, to the method of calculating the effect of the Cause No. 44760 Phase II increase, customer growth normalization, and Evansville's proposed adjustment to reflect the elimination of outside city fire protection rate differential. She also testified regarding the OUCC's recommended adjustments to Evansville's Public Employee Retirement Fund (PERF) expenses, periodic maintenance expense, bad debt expense, and utility receipts tax expense. She also testified regarding the OUCC's recommended revenue requirement for E&R for Evansville. Ms. Stull proposed a \$200,111 decrease to test year PERF expense because she disagreed with Evansville's inclusion of additional book pension expense based on GASB #68 requirements. Ms. Stull further testified that while she did accept some of Evansville's proposed periodic maintenance expense adjustments, she disagreed with Evansville's proposed adjustments for High Service Pumps, Low Service Pumps, Booster Station Pumps and Filter Media for the reasons set forth in OUCC witness Carl N. Seals' testimony. Finally, Ms. Stull recommended an E&R revenue requirement of \$6,442,862 (Phase I), \$5,960,944 (Phase II), and \$6,154,201 (Phase III) for a total of \$18,558,007 or \$6,412,700 lower than Evansville's proposal. Ms. Stull testified the difference between the OUCC's proposed E&R revenue requirement and Evansville's related to four differences between the proposals including, as follows: (1) the elimination of two distribution system projects included in Evansville's SRF debt application; (2) the elimination of funds proposed for new service connections; (3) the elimination of annual on-call CES/RPR costs; and (4) the amortization of the remaining distribution project costs ratably over a three year period to levelize the phased rate increase.

Mr. James T. Parks, P.E., Utility Analyst II, testified regarding Petitioner's escalating cost estimates for water main projects included in Evansville's 2018 request for \$157.4 million to fund

the next three years of capital improvements (2019 to 2021). The requested \$157.4 million consists of \$132.4 million in additional borrowing authority and \$25 million for Extensions & Replacements (“E&R”).<sup>2</sup> He noted that under Cause No. 44760 in 2016, Petitioner previously requested and received \$60,705,500 over four years (2017 to 2020) to fund 48 priority projects.<sup>3</sup> Mr. Parks testified Evansville has not been able to meet its proposed completion years for its 2017 and 2018 projects<sup>4</sup> with less than half of the 34 water main projects completed or under construction.<sup>5</sup> Mr. Parks also testified Petitioner did not complete any of the \$10.65 million in preliminary design engineering and land acquisition for a new water treatment plant proposed under Cause No. 44760.<sup>6</sup>

Mr. Parks stated that unlike prior rate cases, Petitioner identified projects only by name (no descriptions), a single line estimated cost (no detail), and year.<sup>7</sup> He noted Petitioner did not list project numbers<sup>8</sup> and did not include any engineering study, Master Plan, Preliminary Engineering Reports or detailed cost estimates in its Case-in-Chief which would have been helpful to the OUCC in reviewing project needs, costs, and reasonableness.<sup>9</sup> Mr. Parks reported the OUCC obtained additional reports, studies and cost information for some of Petitioner’s capital projects through discovery and from the Drinking Water State Revolving Fund (“DWRSF”) program staff at the Indiana Finance Authority.<sup>10</sup>

Based on reviewing this additional information, Mr. Parks opposed the \$18.1 million clearwell project but none of the 56 specific water main replacement and relocation projects listed in Petitioner’s Attachments PRK-2 and PRK-6,<sup>11</sup> considering them to be reasonably necessary.<sup>12</sup> However, Mr. Parks criticized Petitioner’s escalated cost estimates, testifying that Petitioner’s total project cost estimates for water main projects appear to be overstated by approximately 45% above actual total project costs.<sup>13</sup> Mr. Parks did not offer testimony regarding other water main projects beyond Petitioner’s requested projects other than to recommend Evansville not use funds justified on the basis of specific projects in this Cause for other projects. Additionally, to the extent Evansville completes its planned projects below estimates, Mr. Parks recommended Petitioner use the savings for other needed water main replacement projects identified in the 2016 Water Master Plan only and not for other projects such as a new water treatment plant.<sup>14</sup>

Mr. Parks testified that the pace and number of projects Petitioner seeks far exceeds its history of completing water main replacements.<sup>15</sup> Evansville’s request to spend \$110.5 million

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<sup>2</sup> Parks, page 1, lines 9 to 12.

<sup>3</sup> *Id.*, page 4, lines 15-17 and page 5, lines 1-2.

<sup>4</sup> *Id.*, page 6, lines 2-3.

<sup>5</sup> *Id.*, page 5, lines 11-14.

<sup>6</sup> *Id.*, page 6, lines 8-12.

<sup>7</sup> *Id.*, page 8, lines 14 to 16.

<sup>8</sup> *Id.*, page 9, lines 1-7.

<sup>9</sup> *Id.*, page 8, lines 16 to 19 and page 12, lines 13-14.

<sup>10</sup> *Id.*, page 12, lines 4 to 6.

<sup>11</sup> *Id.*, page 11, footnote 16.

<sup>12</sup> *Id.*, page 19, lines 18-20.

<sup>13</sup> *Id.*, page 18, lines 2-3.

<sup>14</sup> *Id.*, page 21, lines 3-17.

<sup>15</sup> *Id.*, page 10, lines 9-10.

(\$36.8 million per year on average) for water main replacements and relocations during 2019-2021 is over eight times greater than its 2014-2017 historical \$4.3 million replacement level.<sup>16</sup> Mr. Parks agreed Petitioner should accelerate water main replacement<sup>17</sup> but he did not provide his opinion on the appropriate annual replacement percentage. He testified Evansville's proposed large spike in the pace of projects is not, in the near term, realistically attainable, since Petitioner may be unable to find sufficient contractors to complete its program on the schedule it proposes,<sup>18</sup> and that such an immediate increase in the pace is undesirable<sup>19</sup> because if Evansville bids too many projects above what contractors can perform, bids will rise and escalate costs to ratepayers.<sup>20</sup> He testified Petitioner should ramp up replacement, consistent with contractor capacity to attain a steady, cost effective water main replacement program.<sup>21</sup> He noted Petitioner had to reach out to contractors in February 2018<sup>22</sup> seeking to foster competitive bids and control overall costs by increasing the number of firms bidding on their projects.<sup>23</sup>

Mr. Parks testified regarding cost discrepancies in Petitioner's financing request including that Petitioner's DWSRF loan application (Document 6 – Attachment JTP-8) and "PER A" show different financing amounts and number of bonds than Petitioner indicated in its Case-in-Chief.<sup>24</sup> He provided Attachment JTP-5 (Petitioner's response to OUCC Data Request 7-1) showing \$107,535,200 in total project costs for 48 projects to replace 236,240 lineal feet (44.7 miles) of water main over 2019 to 2021. He also provided Attachment JTP-8 (Petitioner's DWSRF Application) seeking \$148,881,800 for 49 projects to replace 471,680 lineal feet (89.3 miles) of water main over 2019 to 2022.

Mr. Parks testified Petitioner increased its estimates of water main costs above prior estimates shown recently in its 2016 *Water Master Plan* and Cause No. 44760. Based on Petitioner's total project cost estimates and water main lengths presented in this Cause, he calculated Petitioner more than doubled the average unit cost (2017 dollars) to replace water mains to \$391 per foot from the \$171 per foot (2016 dollars) shown in Cause No. 44760.<sup>25</sup> Mr. Parks also testified that Petitioner increased project costs by an average of 81 % between the 2016 and 2017 estimates for a sampling of five specific not yet constructed Cause No. 44760 projects delayed to this Cause which he summarized in Table 5 and Attachment JTP-10 and that these increases appeared to be excessive.<sup>26</sup>

In Table 7, Mr. Parks summarized Engineer Estimates and actual low bid construction prices for Petitioner's five most recent water main projects (2018) showing the average Engineer Estimate of \$333 per foot is over 50% higher than the \$220 average cost per foot derived from

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<sup>16</sup> *Id.*, page 11, lines 9-12.

<sup>17</sup> *Id.*, page 10, line 11.

<sup>18</sup> *Id.*, page 10, lines 21-22.

<sup>19</sup> *Id.*, page 10, line 13.

<sup>20</sup> *Id.*, page 11, lines 4-7.

<sup>21</sup> *Id.*, page 10, lines 22-24.

<sup>22</sup> *Id.*, Attachment JTP-6 (Contractor Outreach Presentation, February 8, 2018)

<sup>23</sup> *Id.*, page 10, lines 24-25 and page 11, line 1.

<sup>24</sup> *Id.*, page 13, lines 4-6.

<sup>25</sup> *Id.*, page 13, lines 8-15.

<sup>26</sup> *Id.*, page 14, lines 8-11, page 15, lines 1-2, Table 5, and Attachment JTP-10.

actual low bid prices.<sup>27</sup> He provided Petitioner's response to OUCC Data Request 7-1 as Attachment JTP-5 where Petitioner indicated all cost estimates were prepared by engineering firms except for those projects listed in Petitioner's Attachment PRK-6. Mr. Parks recommended Petitioner set project budgets starting from a database of actual local bid prices to improve accuracy of budgeting, financing requests, and engineering fees instead of continuing to use Engineer Estimates. In Table 8, Mr. Parks summarized Petitioner's water main total project costs from 2014 to 2017 showing that Petitioner spent \$24,448,931 constructing 96,598 feet of water mains at an average cost of \$253 per foot. Mr. Parks supported OUCC Witness, Edward Kaufman's recommendation to reduce the funding amount for distribution system improvements to a more reasonable amount that can actually be completed during the next three-years.<sup>28</sup>

Mr. Parks further testified regarding Petitioner's request for funding to construct the \$18.1 million clearwell project. He testified the project should be disallowed because Petitioner has not made a decision as to whether to proceed with a new ground water treatment plant or whether to upgrade its existing facility and continue to use the Ohio River as a source of supply<sup>29</sup> and has not supported the need for the project, as Petitioner's only justification for the project is the need for redundancy for the existing 6.5 MG clearwell. Mr. Parks testified the 2011 inspection report did not identify any major structural deficiencies in the existing 6.5 MG clearwell and that needed repairs could be performed during non-peak hours when Petitioner's other two clearwells could be kept in service to supply water.<sup>30</sup>

Mr. Carl N. Seals, Utility Analyst, disagreed with certain aspects of the proposed expenditures for (1) Filter Media replacement, (2) Pump Maintenance and (3) Booster Stations. Mr. Seals testified he disagreed with Petitioner's proposed six-year replacement cycle because it was not based on any test, analysis or manual to support that interval. Also, Mr. Seals believe Petitioner's proposed costs had been incorrectly estimated.

With regard to the replacement intervals, Mr. Seals cited an article and manual from publications of the American Water Works Association, both of which suggested that media replacement should be based upon media analysis and assessment as opposed to being based only upon time intervals as Petitioner has proposed. With regard to the proposed costs of media replacement, Mr. Seals contrasted current bid prices (\$251,705 per filter bed) with a Budgetary Estimate provided in Petitioner's 2016 rate case (\$112,000 per filter bed) and questioned the increase.

Mr. Seals' concern regarding Pump Maintenance expenditures focused on the per-unit cost of maintenance, which Mr. Seals believed was unexpectedly high, particularly when compared with the same costs from Petitioner's 2016 rate case. According to Mr. Seals, these latest quotes for high-service pumps (\$90,240) and low-service pumps (\$100,140) were 153% and 109% higher respectively, and are based only upon "Mandatory Deducts" from a larger base bid by Deig Brothers. Mr. Seals further stated that no engineering estimate was provided by Evansville's

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<sup>27</sup> *Id.*, page 16, lines 3-12.

<sup>28</sup> *Id.*, Page 19, lines 22-24.

<sup>29</sup> *Id.*, Page 20, lines 2-7.

<sup>30</sup> *Id.*, page 19, lines 9-14

engineer, HNTB, and that the estimates provided by Xylem in Cause No. 44760 were much more detailed, breaking down the different costs by individual high service pumps.

The cost of Booster Pump Maintenance was Mr. Seals' final area of concern regarding Petitioner's proposed periodic maintenance expenditures. According to Mr. Seals, Petitioner's proposed per-unit booster pump maintenance cost in its 2016 rate case was \$7,630, based upon budget quotations from Xylem. In the current case, Mr. Seals notes that the average cost per pump has increased 170%, to \$20,637 per pump. Mr. Seals further observed during his review that one of the current quotes involved replacement of a pump, as opposed to maintenance, which could have caused higher expenditures.

Mr. Edward R. Kaufman, Assistant Director with the Water-Wastewater Division of the OUCC, discussed the City of Evansville's request for authority to issue \$147,355,000 of long term debt. His testimony explained that because Petitioner had not determined the amount and timing of its open market and SRF loans, it was difficult to assess the reasonableness of Petitioner's request. Mr. Kaufman commented that in general, Petitioner's plan to issue long-term debt to fund capital projects was reasonable. However, due to several factors discussed later in his testimony as well as that of James Parks, Evansville's borrowing authority should be set at a lower amount of approximately \$117,355,000. In addition, Mr. Kaufman recommend the Commission approve certain adjustments and reporting requirements. He also recommend placing restrictions on Petitioner's debt service reserve that should be implemented to ensure the funds are available as needed.

Mr. Kaufman explained an accurate and reasonable estimate of annual debt service costs balances the needs of the utility with the interests of ratepayers. A utility needs revenues sufficient to meet its real debt service requirements, while ratepayers are entitled to rates that do not exceed actual debt service requirements. Mr. Kaufman also explained Petitioner's rates should not be based on a hypothetical single bond issuance and that multiple debt issuances make over-collection more likely. And that during the time period rates are in place and before the true-up is implemented, a utility will either over-collect or under-collect. When the rates are based on one issuance but the number, timing and amount of debt issuances is unknown, the over collection or under collection could be material.

In his analysis Mr. Kaufman estimated an annual debt service and borrowing authority based on a total bond issuances of \$117,355,000 (Compared to Petitioner's proposed borrowing authority of \$147,355,000). Mr. Kaufman testified that Petitioner adjusted the cost of its proposed projects, proposed borrowing authority and subsequent annual debt service for inflation. Mr. Kaufman asserted Petitioner's unsupported adjustment for inflation is one reason why the OUCC believes that Petitioner has overstated its estimated project costs. Mr. Kaufman also expressed concerns about project timing and pointed out that Petitioner had included projects in both its proposed E&R and its proposed debt issuance. Mr. Kaufman also described how Petitioner's proposed debt issuances would earn interest prior to their use, and the any interest earned should be recognized a source of funds and subsequently reduce the total amount Petitioner borrowed.

Mr. Kaufman also testified that there will be a gap between the time Petitioner receives an order in this cause and when it issues its proposed debt. Mr. Kaufman proposed that Petitioner

should reserve any funds collected in rates for its 2018 debt issuances and that Petitioner should use those funds to offset the amount it needs to borrow. However, Mr. Kaufman conceded that so long as the debt was issued within two month of a final order this step would not be needed.

Mr. Kaufman recommended the Commission require Petitioner to file a report within thirty (30) days of closing on any of its long term debt issuances explaining the terms of the new loan, the amount of debt service reserve and an itemized account of all issuance costs. The report should include a revised tariff, amortization schedule and also calculate the rate impact in a manner similar to the OUCC's schedules. Mr. Kaufman also proposed that the OUCC should have fourteen (14) days to challenge Petitioner's proposed true-up. Petitioner should similarly have fourteen (14) days to file a response to the OUCC if it has challenged Petitioner's calculation. Thereafter, the Commission should resolve the issue through a process it considers appropriate. Mr. Kaufman also stated if both parties agree in writing that the increase or decrease would be immaterial, the true-up should not be implemented. Finally, Mr. Kaufman recommended that unused financing authority should not expire until December 31, 2021.

On the stand Mr. Kaufman explained that, according to Petitioner's direct testimony, its annual debt service was based on a single open market debt issuance. However, Mr. Baldessari explained Petitioner may issue debt through both the SRF and through a market issuance. To estimate an annual debt service for Evansville, Mr. Kaufman anticipated an SRF loan and assumed that SRF funds would be issued through a draw. Mr. Kaufman said he spoke to Bill Harkin of the SRF and confirmed that debt issued through SRF's pooled financing is not a draw, but it issued in single payment. Therefore, Mr. Kaufman revised his testimony on the stand stating that it is appropriate to develop an amortization schedule that recognizes interest will be paid on the entire amount of debt from day one. Mr. Kaufman then explained that because Petitioner's proposed debt will be issued all at once, it will earn interest on a larger balance than what Mr. Kaufman initially calculated. Next, Mr. Kaufman noted that in its rebuttal testimony Petitioner proposed to use the interest earned as an offset to the amount of debt being issued. Mr. Kaufman explained he accepts Petitioner's methodology to use estimated interest of \$2,894,400 (Baldessari rebuttal) as a source to fund construction projects instead as an offset to overall revenue requirements

Finally, Mr. Kaufman explained that in the amortization schedule filed with his testimony, he had assumed semi-annual principle and interest payments over the life of the loan. Mr. Kaufman clarified that was his understanding that Petitioner intends to have annual payments during the first 18 years its proposed debt issuances is outstanding and semi-annual payments thereafter. In this case Mr. Kaufman accept Petitioner's payment schedule and agreed that its annual debt service should be based on loans that reflect annual payments for the first 18 years and semi-annual payments thereafter.

**C. Evansville's Rebuttal Case.** On rebuttal, Evansville offered testimony from Patrick Keepes, Doug Baldessari, Michael Labitzke - Deputy Director of the Program Management Office for Evansville Water and Sewer and Allen Mounts - Director of Evansville Water and Sewer Utility.

Mr. Allen Mounts provided rebuttal testimony in response to the OUCC's position that Evansville should not receive the level of funding or borrowing authority it requested for its main

extension program, otherwise known as Refresh Evansville. Mr. Mounts testified that this program is vital to Evansville being able to provide clean, healthy water to future generations. Mr. Mounts also noted the OUCC did not question the need for the program, and in fact, OUCC witness James Parks agreed that Evansville “should accelerate replacement of aging water mains.” (Parks Direct at p. 10, line 11). Mr. Mounts responded to the OUCC’s position that Evansville should not receive the level of funding requested because it is delayed in completing projects and project costs are overstated. Mr. Mounts testified that Evansville’s Refresh Program is an entirely new program for the Utility, which requires the Utility to deploy resources and manage capital projects on a scale that has never before been seen in the Utility’s history. He testified that any program of this magnitude would take some time to ramp up and perform efficiently. Mr. Mounts echoed the testimony of Mr. Keepes and Mr. Labitzke and explained the only reason Evansville is completing projects at a slower pace than what was projected in 2016 is because they are out of money.

Mr. Mounts further testified that Evansville’s decision to prioritize and plan for the long-term replacement of aging infrastructure through its Refresh Evansville program aligns with the policy objectives set forth by the Indiana Legislature in Ind. Code § 8-1-2-0.5. He explained that Refresh Evansville is a long-term strategy developed by EWSU for making necessary improvements to Evansville’s aging water infrastructure. Mr. Mounts explained that if Evansville does not address the problem proactively and aggressively today, it will create much higher costs to address it for future generations. Mr. Mounts testified the OUCC has adopted a “kick the can down the road approach” in this case because the OUCC’s position in this Cause would delay needed infrastructure projects to the future so that current ratepayers do not have to share the costs in paying for them. Mr. Mounts further testified the primary obstacle to infrastructure replacement is lack of access to capital or a utility that is unwilling to make the hard decisions to raise rates to attack the problem the public cannot see. He explained that, here, you have local officials who are prepared today to borrow the funds, raise the rates, and fully support an aggressive program of infrastructure replacement, but it is OUCC witnesses who put restrictions on funds and advocate for a slower approach.

Michael Labitzke testified in response to positions taken by the OUCC through witness Edward Kaufman regarding the project costs included in Evansville’s CIP and the position taken by Mr. Parks regarding Evansville completing projects at a slower pace than was anticipated in Cause No. 44760. He explained the OUCC’s position is concerning because it is very well known in the industry that there is a massive infrastructure need and further delay in addressing it is simply not acceptable. He further testified the concern is now reaching a “point of no return” with respect to water main replacement. He explained that this point of no return is where a water utility gets so far behind in replacing aging infrastructure that total replacement never actually gets done.

Mr. Labitzke also testified regarding the OUCC’s position to cut funding in this Cause. He stated he is very concerned by the OUCC’s position because he fears it will push Evansville one step closer to the “point of no return” and reiterated that Evansville still has \$132.5 million of projects left unfunded in this Cause. Mr. Labitzke also responded to Mr. Parks’ contention that Evansville’s estimated project costs are overstated. Mr. Labitzke sponsored Attachment ML-1R which is a table comparing the estimated and actual composite costs per foot for all of the projects Evansville completed from Cause No. 44760. He also explained that contrary to Mr. Parks’

assertion, the project cost estimates included in this Cause were developed based on actual bids received in 2017, not Engineer's Estimates as Mr. Parks claims.

Mr. Labitzke also described how Evansville developed the "Water Machine" to manage the Refresh Evansville program. He explained the "Water Machine" was created in response to Mr. Mounts' desire to develop a program and deploy resources that could predictably and consistently complete 2-3 water main replacement projects every quarter. In order to achieve this, Mr. Labitzke explained the Utility hired two outside consultants to manage the planning/design phase of the projects (HTNB) and to manage the construction work (American Structurepoint). He explained they hired these two firms to manage every decision in order to streamline and maintain consistency in the process.

Mr. Patrick Keepes also provided rebuttal testimony and testified the only potential delay in completing water main replacement projects is funding. He explained Evansville is out of money to fund these projects and needs additional funds to complete the projects at its current rate of replacement. He testified that with respect to timing of completing projects included in the CIP, Mr. Parks is incorrect in his contention that Evansville is delayed in completing CIP projects.

Mr. Keepes also testified in response to Mr. Parks' assertion that Evansville should not receive funding for the \$18 million clearwell. He testified he disagrees with Mr. Parks' assertion that repairs can be performed during non-peak periods with the other two tanks in service. He further testified that contrary to the OUCC's suggestion, the need for the clearwell is not tied to any pending decision related to the new water treatment plant. He explained the necessary maintenance and repairs to the clearwell need to be made whether a new treatment plant is built or not. Mr. Keepes also explained that attempting to make the necessary repairs as Mr. Parks suggests during a non-peak period with the other two tanks in service would require shutting down 3 of the 7 existing high service pumps, which would present a very real possibility that the required pumping capacity to the service area could not be met. Further, reliance on the 2 remaining clearwells, which total only 2 MG, could put the Utility at risk of not meeting regulatory water quality compliance standards. Mr. Keepes included Attachment PRK-1R, which is the OUCC's response to Petitioner's Data Request 2-2 asking the OUCC to provide all calculations made by Mr. Parks supporting his statement that "it appears that these repairs can be performed during non-peak periods where Petitioner's other two clearwells can be kept in service." This attachment shows Evansville can achieve the concentration time values ("CT" or "CT values") required for water disinfection using two of Evansville's three existing interconnected clearwells and High Service Pump Station No. 2 ("HSP Station No. 2") while the 6.5 million gallon ("MG") clearwell is offline for inspection and chemical grout injections to repair concrete wall cracks.<sup>1</sup> Mr. Keepes offered no rebuttal testimony or studies by Petitioner's engineers disputing Mr. Parks' calculations and conclusion that Evansville could meet the required CT values.

Mr. Keepes also responded to the OUCC's adjustments to Evansville's proposed periodic maintenance expense for Pump Maintenance, Booster Station Pumps and Filter Media. Mr. Keepes testified Evansville is not proposing a 6-year replacement cycle and reiterated that Evansville is proposing "to rehabilitate four beds in each of the three phases of this rate case in order to achieve the 10 to 20 year rehabilitation cycle discussed in the Stipulation and Settlement Agreement for IURC Cause No. 44760." Petitioner's Ex. 2, p. 12, lines 2-5. Mr. Keepes also testified Mr. Seals is incorrect in his contention that media replacement costs included capital costs for underdrain

replacement and provided a calculation showing such capital costs were not included. Mr. Keepes also responded to the OUCC's recommendation to use budgetary estimates from the last case to estimate periodic maintenance costs for filter media replacement, pump maintenance and booster station maintenance in this case. He testified stale budgetary estimates are not the best indicator of cost, and actual bids received from competitive bidding should be used to estimate periodic maintenance expenses in this Cause because actual bids represent the costs Evansville will actually incur for this work.

Mr. Baldessari responded to the OUCC's proposed drastic reductions to Evansville's overall capital and financing plan. Specifically, Mr. Baldessari responded to Mr. Kaufman's concerns that the timing and amounts of the Petitioner's debt issuances were not clearly set forth in Evansville's case-in-chief, as well as his recommendation to reduce Evansville's borrowing authority by \$30 million. Mr. Baldessari explained the Commission has for many years approved financing programs for public utilities so that they can fund ongoing capital requirements over a period of years without incurring the delay and cost of approval and individual issues. This way, utilities can quickly enter the capital markets at opportune times to meet their capital needs. Mr. Baldessari testified that a large municipality like Evansville needs the same flexibility.

Mr. Baldessari further testified that Evansville and its consulting engineers had now identified those projects to be included in the SRF financing and those projects to be included in open market financing. He sponsored Attachment DLB-2R which detailed the estimated project costs and bond issues to be included in the Financing Plan. He testified the financing plan resulted in the same total aggregate par amount of proposed bonds totaling \$147,355,000 included in Evansville's original filing, and is comprised of \$111.175 million par amount of proposed SRF bonds through a combined SRF subsidized interest rate and pooled SRF bond issue. The subsidized interest rate portion totals \$7.5 million with the balance to be funded with SRF's pooled program. The remaining \$36.18 million par amount of bonds will be issued with a competitively bid open market bond issue. He testified that minor modifications to the financing plan have produced a slight modification to the overall rate request in this Cause.

Mr. Baldessari responded to Ms. Stull's opposition to the declining consumption adjustment with additional years of data. When additional years are included, he testified the trend shows that Petitioner's adjustment is conservative. Mr. Baldessari also testified that the City's adjustment for customer growth normalization is consistent with past cases by noting that the adjustment and methodology here are consistent with the last three proceedings before this Commission (Cause No. 43190 - Commission Order September 26, 2007; Cause No. 44137 - Commission Order February 13, 2013; and Cause No. 44760 - Commission Order October 5, 2016), Evansville has filed similar customer growth normalization adjustments as was filed in this case-in-chief. He noted that Ms. Stull alludes to Evansville not using the correct tariff rates in its customer growth normalization adjustment and this causes an understatement of revenues. Mr. Baldessari testified that the actual tariff rates in effect in the month of the customer count over the test year was used in prior Evansville rate proceeding. This was done not to overstate the revenues, as Evansville already adjusted or normalized total revenues for any future approved rate increases. He also responded to Ms. Stull's opposition to the method for normalizing the phased increase from Cause No. 44760 and for the elimination of the outside city fire protection rates.

Mr. Baldessari also testified regarding the OUCC's adjustments for periodic maintenance. He testified that Schedule I included with Ms. Sisson's testimony showed a periodic maintenance adjustment total of \$973,561. However, Table 9 in Ms. Stull's testimony shows a periodic maintenance adjustment of \$950,671. This results in an unidentified difference of \$22,890. He explained the difference appears to be Mr. Seals' proposed adjustment for booster stations and that this amount did not get carried forward to Ms. Sisson's schedules and results in incorrectly calculated revenue requirements. He testified that this results in incorrect percentage rate increases and also incorrect rates and charges proposed by the OUCC. Mr. Baldessari also testified he disagreed with Mr. Seals' proposed periodic maintenance adjustments related to filter media replacement, pump maintenance and booster station maintenance.

Finally, Mr. Baldessari testified he considers the proposed rates in this Cause to be affordable and comparable to other water utility rates. He testified that this rate is comparable with surrounding and like sized utilities which have actively begun replacing their aging infrastructure.

## **6. Commission Discussion and Findings.**

We must approve rates and charges that are reasonable and just, while balancing the interests of the ratepayers and the utility. To be reasonable and just, the revenues to be produced must be sufficient to, among other things, "provide adequate money for making extensions and replacements to the extent not provided for through depreciation." Ind. Code § 8-1.5-3-8(c)(5). Evansville seeks money from a combination of debt and rate revenues. We will begin with the proposed debt issuances.

**A. Evansville's Proposed Financing.** The standard applied for approving municipal utility financing is a two-prong standard. "First, we consider whether the proposed capital improvements are reasonably necessary for the provision of adequate and efficient utility service. Second, we determine whether the proposed debt issuance is a reasonable method for financing the necessary capital improvements." *City of Evansville*, Cause No. 44123 (IURC 8/15/2012), p. 10. Evansville requested authority to issue long-term debt in a principal amount not to exceed \$147,355,000. Through witness Edward Kaufman, the OUCC recommended Evansville's be authorized to borrow \$117,355,000, \$30,000,000 less than the authority Evansville requested. While Mr. Kaufman did not generally take issue with Petitioner's plan to issue long-term debt to fund capital projects, he did have difficulty in assessing the reasonableness of Petitioner's request. Mr. Kaufman's recommendation was based on several factors including the uncertainty of the timing and number of debt issuances and the testimony of Mr. Parks regarding the overstatement of capital project estimates.

In his case-in-chief testimony, Mr. Baldessari testified that the extensions and replacements eligible to be funded with the proposed debt are not limited to the projects shown in Petitioner's Ex. 1, Attachment DLB-1, p. 7-9. Mr. Baldessari testified on direct that there are specific projects totaling approximately \$130 million that are not included in the bond issue sizing or the calculation of the rates. Petitioner argues these unfunded projects should render claims of overestimated project costs moot. We reject this argument. Every utility has a list of future projects that are unfunded, but this does not mean the concerns raised by the OUCC about overstated cost estimates should be ignored or our ability to reduce the amount of financing is diminished.

In order to provide adequate funding that does not unduly burden the ratepayers, it is important to evaluate the quality of Petitioner's estimated project costs for financing purposes. It is also important to understand how many projects Petitioner will be able to accomplish during the anticipated borrowing period. Because Petitioner will be borrowing pooled money, over estimating project costs or the number of projects Petitioner can reasonably complete will have the effect of unnecessarily burdening ratepayers with unnecessarily high rates. Mr. Kaufman and Mr. Parks testified that the project costs included in Evansville's CIP are overstated. The OUCC reached this conclusion based on additional documents obtained by the OUCC that it included as attachments and the OUCC's several different estimate comparisons detailed in the summary of Mr. Parks' testimony. These estimate comparisons use Petitioner's cost data from actual projects, proposed financing in Cause No. 44760 and 45073, the 2016 Master Plan, and documents submitted to the DWSRF program. These comparisons include the OUCC's comparison of escalated 2017 project cost estimates in this case to 2016 project cost estimates for five delayed projects from Evansville's last rate case showing an 81% cost estimate escalation, Mr. Parks' review of actual total project costs for water mains from 2014 through 2017 (Table 8, p. 17, Public's Exhibit No. 3) showing total project costs averaging \$253 per foot, and a comparison of low bids showing actual construction costs averaging \$220 per foot and Engineer Estimates for Evansville's five most recent main replacement projects which Petitioner uses to set project budgets and Petitioner's response to Docket Entry Question 4.

One example of overstated cost estimates is the amount of inflation Petitioner included in its estimated project costs for its distribution systems, Page 1 of 5, Attachment ERK 6 shows a pre inflation adjusted project costs for proposed distribution system improvements of \$93,519,500 and inflation adjusted costs of \$105,133,500. Thus, Petitioner estimated over \$11.6 million to account for inflation. Importantly, the HNTB report relied on by Petitioner overstates inflation in two key ways. First it overstates the inflation rate. In contradiction to its own Master Plan, Petitioner uses an inflation rate of 3.0% instead of 2.28% as used in the Master Plan. Next Petitioner overstates the amount of time for the inflation added to its proposed projects. On page 10 and 11 of his rebuttal testimony Mr. Labitzke states "Two years of inflation from 2017 dollars would be required for projects slated for 2018." This statement would only be correct if initial costs were based on January 2017 dollars and all of the projects costs were incurred at the end of 2018. Neither is the case. On page 7 of his testimony Mr. Labitzke states: "The estimates included in this Cause were prepared in the 4<sup>th</sup> quarter of 2017 based off of actual bids received in 2017." Moreover, projects slated for 2018 should be assumed to be built throughout the entire year. Thus, Petitioner's estimates overstates inflation on both ends of its proposed project timing. While Petitioner uses two years of inflation to gross up projects from 2017 to 2018, only one year of inflation should be used.<sup>31</sup> Similar overstatements occur for projects estimated to be constructed in 2019 and 2021.

Comparing actual costs per foot with Petitioner's estimates illustrates how Petitioner has based its financing request on overestimates. During cross examination Mr. Labitzke confirmed the cost per foot of main replacements contained in Petitioner's response to docket entry question

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<sup>31</sup> If the 4<sup>th</sup> quarter bids were based on mid-year 2017 prices, then these projects should assume only six months of inflation for 2017 and not one full year. Similarly, projects constructed in 2018 should have 6 months of inflation for 2018 and not 12 months.

4. OUCC CX-3. The response to docket entry question 4 provided a list of seventeen projects under contract for 2017-2018. These seventeen projects replaced 88,485 feet of main. The total construction contract amount for these 17 projects was \$22,365,952. This equates to \$253 dollars per foot of main. This cost per foot is significantly less than the \$455 dollar cost per foot contained in Petitioner's request. Transcript B-9. Even if we inflate this \$253 dollar per foot by 22.6% for non-construction costs we arrive at cost of \$310 dollars per foot. This \$310 dollars per foot for main replacement is very similar to the \$318 dollar cost per foot figure Mr. Labitzke put forward in his rebuttal testimony. See attachment ML-1R. If we use Mr. Labitzke's \$318 dollar per foot of main Evansville can install all 236,240 lineal feet (1.5% replacement rate) of its requested main replacements for approximately \$75 million dollars. This is \$32 million dollars less than Evansville has requested. This reduction is only based on using cost estimates that take into account contract amounts that Evansville has actually engaged in for main replacement work. We conclude that Evansville will be able to replace water mains at the pace and quantity they have requested, but rates will include a more reasonable amount for the financing of these projects.

Review of the actual contract amounts for projects Petitioner has completed or contracted for is a very good indication of the costs Petitioner will experience in the near future, and we agree with the OUCC that Petitioner has overstated its costs. We agree with Petitioner and the OUCC that the proposed projects are reasonable, but by overstating the costs Petitioner has needlessly inflated the rates requested. While actual costs achieved are relevant to our inquiry, the existence of unfunded projects are irrelevant to our determination of the amount of financing authority Petitioner should be granted in this case. We reject Petitioner's argument that any reduction to rates should be ignored because of the existence of additional water main projects Petitioner did not see fit to request in its case-in-chief and describe or support with substantive evidence. As the Petitioner in this case, Evansville has the burden of presenting and proving its case including any alternative remedies it may wish to propose. It is not the job of the responding parties or this Commission to seek out and find additional projects that would justify not reducing rates to the level indicated by the probative evidence provided. Moreover, even if it were appropriate to dive into the thirty year master plan to find additional worthy projects, we should also consider Petitioner's ability to complete more projects than those it has slated for 2019, 2020, and 2021.

OUCC witnesses Mr. Kaufman and Mr. Parks expressed concern about the ability and wisdom of Evansville more than tripling its annual spend from the \$15 million authorized in the last rate case to the more than \$52 million that it requested in this case. Despite the concern, the OUCC agreed that all but one CIP project should be used to support financing approval. The OUCC supports increasing Petitioner's revenue requirements for capital improvements from a spend of \$15 million per year approved in 2016 to more than \$41 million per year. Petitioner provided testimony that it has not been able to achieve its goal of replacing 15 miles of water mains per year but that it will meet the goal going forward. Mr. Labitzke testified about the OUCC's concerns related to lack of available contractors to perform the influx of work, saying that Evansville's contractor outreach programs have been successful in attracting regional contractors to the area. We believe this may explain the lower bid prices Petitioner obtained in 2018 that Mr. Labitzke describes in his rebuttal testimony and we encourage Petitioner to continue its outreach in order the attract potential bidders with a goal of fostering competitive bids to lower costs.

In response to the Commission's Docket Entry request dated August 29, 2018, Mr. Labitzke prepared a spreadsheet showing the status of 17 water main projects Evansville has bid since 2017. Evansville's spreadsheet showed the average unit cost based on Engineers' Estimates was \$320 per foot<sup>32</sup> which is comparable to the \$333 cost per foot Mr. Parks calculated in Table 7. Evansville's spreadsheet also showed the average unit cost from actual construction contracts was \$253 per foot<sup>33</sup> which exactly matches the value shown by Mr. Parks in Table 8 as the average unit cost for Evansville's 2014 to 2017 water main projects. Our review of the above costs calculated from Petitioner supplied data from its response to Docket Entry question No. 4 confirms the unit costs shown by OUCC witness Parks. This data also shows that Petitioner's financing request based on an escalated average cost of \$455 per foot of water main is substantially overstated.

Mr. Labitzke and Mr. Mounts also testified why the 1.5% rate of replacement is necessary to replace Evansville's aging infrastructure. The OUCC agreed Evansville should accelerate its main replacements but did not opine on the appropriate replacement rate. We likewise support increasing Petitioner's replacement program as proposed in its case-in-chief to counter Petitioner's acknowledged underinvestment in its distribution system, but we decline to further strain Petitioner or its ratepayers. The record evidence simply does not support a conclusion expanding the CIP beyond Petitioner's requested replacement over the next three years of 236,240 lineal feet to specifically include any of the additional 292,100 lineal feet listed as "additional distribution system projects for consideration" in Petitioner's application to the DWSRF program. Instead, the opportunity for savings identified by the OUCC should benefit Petitioner's existing customers.

(a) **Amounts and Timing.** Mr. Kaufman testified he was concerned that the timing and amounts of Petitioner's debt issuances were not clearly set forth in Evansville's case-in-chief. He testified that approval of debt issuances without specific terms could result in over- or under-recovery and would deprive the Commission and OUCC of the opportunity to evaluate Evansville's plan as it takes place. On rebuttal, Mr. Baldessari testified the Commission routinely approves financing programs where the specific timing, number and amounts of issues are not known at time of approval to allow utilities the flexibility to quickly enter capital markets at opportune times.<sup>34</sup> Mr. Baldessari also provided additional details related to Evansville's financing plan on rebuttal including the specific projects to be included in the SRF financing and those projects which will be included in the open market financing. Mr. Baldessari also reiterated Evansville's intention to file a true-up report after the bonds are issued to address the OUCC's concerns and the true-up report will include an updated amortization schedule with actual interest rates, the amount borrowed and the resulting trued-up water rates and charges.

We are concerned that a municipal utility would request financing authority without knowing the specifics of its proposed financing. Mr. Baldessari states that the Commission

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<sup>32</sup> Calculated as the sum of the Engineer Estimates totaling \$28,321,182 divided by the water main length of 88,485 lineal feet equals \$320 per foot.

<sup>33</sup> Calculated as the sum of the actual construction contract amounts totaling \$22,365,952 divided by the same water main length of 88,485 lineal feet equals \$253 per foot.

routinely approves financing programs where the specific timing, number and amounts of issues are not known at the time of approval. Mr. Baldessari is correct, but those approvals are all for investor owned utilities. There are major differences between the financing authority granted to a municipal utility and that granted to an investor owned utility. When an investor owned utility is granted financing authority the cost of debt service does not go into rates. Instead if the utility prudently issues the debt and prudently spends its proposed debt the cost of the plant goes into rate base and the utility earns a return on its investment in plant. The investor owned utility does not earn a return until after it has prudently spend the funds from authorized debt. If the funds are not spent prudently, then the utility will not earn a return and it bears the risk. Under municipal ratemaking debt service on a proposed loan goes into rates before the debt is even issued. The ratepayers bear the risk if funds are spent imprudently. Thus, for Petitioner to argue the same standards that apply to investor owned utilities borrowing authority should apply to it are misstated and are concerning. The inclusion of debt service in rates is a major and very important difference between the financing programs approved for an investor owned utility and the financing authority awarded to a municipal utility.

(c) **Clearwell.** The only project in dispute is Evansville's clearwell. OUCC witness Parks recommended that funding be disallowed for Evansville's proposed \$18 million clearwell because the only justification Petitioner provided for constructing the clearwell was to take the existing 6.5 MG clearwell offline for needed repairs. Mr. Parks testified that Evansville has 3 existing clearwells totaling 8.5 MG and Evansville has not completed its alternative water source investigation. Mr. Parks discussed the inspection Evansville completed on the existing 6.5 million gallon clearwell. The inspection indicated some repairs to ladders, curbing and crack grouting are recommended. He discussed how these repairs could be performed during non-peak periods where Petitioner's other two clearwells can be kept in service. There were no major structural deficiencies noted. Petitioner has not shown any need for this clearwell other than claiming it is needed for redundancy to perform maintenance on the existing 6.5 MG clearwell. Through its docket entry response Petitioner sought to provide further justification for the clearwell while continuing to assert it is needed for system redundancy. We are not persuaded that Petitioner needs an additional 6.0 MG clearwell. Petitioner has not completed its alternative water source investigation which may lead to the need for a different treatment plant. We also are convinced by Mr. Parks' calculation and analysis included by Petitioner as Attachment PRK-1R showing that Petitioner can meet treatment requirements using its other two clearwells while it repairs the 6.5 MG clearwell during non-peak times. Petitioner did not provide any testimony or engineering studies refuting Mr. Parks disinfection calculations. Therefore we find that Petitioner should not construct a new forth clearwell at this time.

(d) **Ultimate Finding.** We agree with the OUCC that Evansville's estimates are overstated and a reduction to its requested borrowing authority is appropriate. Evansville has also not demonstrated a need for an additional 6.0 MG clearwell. We find that Petitioner's proposal to issue long-term debt in one or more series in principle amounts not to exceed \$147,355,000 should be reduced by approximately \$30 million dollars to \$115,115,000 and that the 6.0 MG clearwell should not be constructed.

**B. Operating Revenues at Present Rates.** Petitioner proposed present rate operating revenues of \$34,030,241 (excluding sewer utility operating expense reimbursement) consisting of \$28,670,069 metered water sales, \$4,660,771 public and private fire protection, \$174,925 forfeited discounts and \$524,476 other operating revenues. Petitioner proposed adjustments for the Phase I and Phase II rate increases approved in Cause No. 44760, declining consumption, customer growth, and elimination of a year-end adjustment.

The OUCC proposed present rate operating revenues of \$34,316,686 (excluding sewer utility operating expense reimbursement) consisting of \$29,279,710 metered water sales, \$4,337,575 public and private fire protection, \$174,925 forfeited discounts and \$524,476 other operating revenues. The OUCC rejected Petitioner's declining consumption adjustment but accepted Petitioner's adjustments to reflect the Phase I increase approved in Cause No. 44760, customer growth for public fire protection (inside city), private fire protection, and commercial customers, and the elimination of a year-end adjustment. The OUCC proposed its own adjustments to reflect the Phase II rate increase approved in Cause No. 44760, customer growth for residential and public authority customers, and customer growth for public fire protection (outside city).

We now discuss the remaining contested revenue adjustments:

(i) *Declining Use Adjustment.* Evansville proposed an adjustment to revenues to address a long-term trend of declining consumption. Mr. Baldessari analyzed baseline revenues from 2014 through 2017 and calculated a 4.0% decrease in residential sales, a 2.7% increase in commercial sales, a 0.7% decrease in industrial sales and a 1.8% decrease in public authority sales. He ultimately calculated an overall decrease in base sales of \$457,165 to "account for a historical decline in the base line metered revenues."

The OUCC Ms. Stull disagreed with Evansville's proposed revenue requirement. OUCC witness Margaret Stull noted that Evansville's calculation did not actually look at customer usage but relied solely on revenue dollars without giving any consideration to the impact of customer growth or actual consumption. She also noted an overlap in the data used by Evansville. Therefore, any changes occurring from October through December 2016 were inappropriately counted twice. (She noted such changes are included in the calculation of the 2016 percentage and in the calculation of the 12 months ended 9/30/17 percentage.)

Ms. Stull indicated Evansville did not provide a thoughtful or complete analysis so as to justify the revenue requirement it seeks. Ms. Stull noted Petitioner only used three data points, which is too few to establish a trend or justify the requested revenue requirement. She explained that even if it was reasonable to estimate declining consumption only from revenues, three data points is insufficient to establish a trend. Too many factors can influence year to year revenues over such a short period of time.

Ms. Stull concluded her testimony by noting that in Cause No. 44022, the Commission found that Indiana American Water Company's declining usage adjustment did "not meet the fixed, known, and measurable standard, and should not be included as a pro forma operating revenue adjustment." (See Final Order, Cause No. 44022, page 61 - 62.) In that case, Indiana American Water Company provided a ten-year regression analysis to support its adjustment, a

more extensive analysis than Evansville has done in the present case. Specifically, in that case the Commission stated:

While Petitioner's evidence may suggest a historical downward trend in residential customer usage, we do not agree that such a trend is sufficiently predictive of future usage to meet the fixed, known, and measurable standard...In addition, Petitioner's request relied solely on the argument that its total revenues will decline based on a decline in per customer usage. Petitioner's analysis does not take into account other sources of additional revenues that might offset the decline, for example, growth in the number of residential customers, increased usage due to weather, and the possibility of increased usage by other customer classes. Further, because Petitioner has traditionally filed base rate cases every two years and anticipates continuing to do the same, any change in actual usage from rate case to rate case is captured on a regular basis and reflected in Petitioner's base rates. Therefore, we conclude that Petitioner's declining usage adjustment does not meet the fixed, known, and measurable standard, and should not be included as a pro forma operating revenue adjustment.

*(Final Order, Cause No. 44022, Indiana American Water Corporation, pages 60-61.)*

In its rebuttal case Evansville responded to Ms. Stull's testimony by submitting evidence of the decline over ten years, which showed that using more data points actually would increase the amount of the adjustment. Mr. Mounts included numerous articles showing that declining consumption has been a trend for multiple years and is continuing.

As we stated in the prehearing conference order, the test year for determining Petitioner's actual and pro forma operating revenues, expenses and operating income under present and proposed rates shall be the 12 months ended September 30, 2017, adjusted for changes that are fixed, known, and measurable for ratemaking purposes and that occur within 12 months following the end of the test year. As such, in determining whether Petitioner should receive additional rates as a revenue requirement for declining consumption, we are guided by our pronouncement in the Indiana-American case Cause No. 42022 that the fixed, known, and measurable standard applies to this inquiry. Petitioner supported its adjustment with 22 lines of testimony describing differences in revenues. (pp. 20-21 Testimony of Doug Baldessari.) In its proposed order, Petitioner states that the OUCC's Ms. Stull "did not dispute the phenomenon of declining consumption." Whether the "phenomenon of declining consumption" exists is not the issue. The question is whether Petitioner has shown with sufficient probative evidence that consumption during the adjustment period will be less than the level of consumption during the test year. Any order issue is inconsistent with our pre-hearing conference order. Moreover, we do not find that the quality of proof affords any conclusion as to what changes of consumption may be expected during the life of these rates. Accordingly, we reject Petitioner's declining consumption revenue requirement.

(ii) *Phase II Rate Increase Approved in Cause No. 44760.* Petitioner proposed a revenue increase of \$3,534,926 to reflect the Phase II rate increase approved in Cause No. 44760

and implemented on January 1, 2018, subsequent to the end of Petitioner's test year. This adjustment reflects the 14.03% rate increase for all customer classes other than public and private fire protection, which are discussed in section (iv) below. Petitioner's adjustment was based on test year revenues adjusted for the remaining Phase I rate increase approved in Cause No. 44760 and Petitioner's proposed declining consumption adjustment.

While OUCC witness Margaret Stull did not dispute the percentage of rate increase applied, she disagreed with Evansville's calculation because the OUCC rejected Petitioner's proposed declining consumption adjustment. Ms. Stull proposed a test year revenue increase of \$3,596,261 to reflect the Phase II rate increase approved in Cause No. 44760.

In its rebuttal case, Evansville provided additional evidence supporting its declining consumption adjustment and continued to assert the necessity of including this adjustment in the determination of its proposed Phase II (Cause No. 44760) revenue increase.

Given our finding in section (i) above rejecting Petitioner's proposed declining consumption adjustment, we agree with Ms. Stull and find the OUCC's proposed revenue increase to reflect the Phase II rate increase approved in Cause No. 44760 to be \$3,596,261.

(iii) *Customer Growth Normalization.* Petitioner's customer growth normalization adjustments proposed for public fire protection (inside City), private fire protection, and commercial customer classes were accepted by the OUCC. Petitioner proposed a test year customer growth normalization adjustment for its residential and public authority customer classes of \$62,596 and \$37,116, respectively. To calculate its proposed test year customer growth normalization adjustment, Petitioner determined the additional bills that would be generated by customer growth (or loss) in each month of the test year and multiplied this increase by the tariff rate in effect for that month based on average consumption - 3,676 gallons (residential) and 122,189 gallons (public authority). Petitioner adjusted the increase (decrease) in billings by irrigation meters and temporary shut-offs.

OUCC witness Margaret Stull disagreed with Evansville's residential customer growth normalization adjustment for two reasons: (1) Evansville used incorrect tariff rates to calculate the adjustment and (2) Evansville's adjustment for irrigation meters and temporary shut-offs was unclear, unsupported by testimony, and calculated incorrectly. Ms. Stull disagreed with Evansville's public authority customer growth normalization adjustment because Evansville used incorrect tariff rates to calculate the adjustment. To calculate her proposed test year customer growth normalization adjustments, Ms. Stull determined the additional bills that would have been generated had all the customers at 9/30/2017 been customers of the utility for the entire year and then multiplied these increased billings by the average bill based on the tariff rate in effect on January 1, 2018 (after the Phase II increase approved in Cause No. 44760) and Petitioner's calculation of average consumption - 3,676 gallons (residential) and 122,189 gallons (public authority). Ms. Stull asserted Petitioner's adjustment for irrigation meters and temporary shut-offs was unclear and confusing. She criticized Petitioner for providing no testimony in support of this adjustment. She found it unreliable and did not apply these adjustments in the determination of her proposed adjustment. Ms. Stull proposed an increase of \$168,448 and \$42,406 to operating revenues to reflect residential and public authority test year customer growth, respectively.

In his rebuttal testimony, Mr. Baldessari testified Petitioner's adjustment for customer growth normalization is consistent with Evansville's last three rate proceedings (Cause Nos. 43190, 44137 and 44760). Mr. Baldessari further testified the OUCC accepted the same adjustment in Cause No. 44760 based on Petitioner's testimony and accounting workpapers filed in that Cause. Mr. Baldessari explained Evansville used actual tariff rates in effect in the month of the customer count over the test year, which is consistent with Evansville's methodology in the last rate case. Mr. Baldessari also explained why he adjusted for irrigation meters and temporary shut-offs and testified this adjustment is again consistent with Evansville's last rate case. He also responded to the alternative method Ms. Stull used to calculate her proposed adjustment and testified the "flaw in Ms. Stull's calculation is the timing of the change in customer count (net of the temporary shut-offs) must be taken into account in the test year." Petitioner's Ex. 1-R, p. 29, lines 18-20. Mr. Baldessari ultimately testified Ms. Stull's adjustment for customer growth normalization is overstated, unreasonable and should not be accepted.

We first deal with the issue of the appropriate tariff rate to be used in calculating the test year customer growth adjustment for residential and public authority customer classes. In his rebuttal testimony, Mr. Baldessari asserted Ms. Stull's proposal to use rates as of January 1, 2018 (which includes all phased increases from Cause No. 44760) would "double count" or over-state revenues. He asserted his "customer growth adjustment adjusts the 'baseline' or test year revenues assuming those customers are essentially there for the full twelve (12) months of the test period. To this normalized baseline it is further adjusted for, in this case, the Phase II rates approved in Cause No. 44760 by the 14.03%, effective January 1, 2018." (Baldessari Rebuttal at 26.) Essentially, Mr. Baldessari asserted Petitioner included the residential and public authority customer growth adjustments in the revenues to which it applied its Cause No. 44760 Phase II rate increase. However, a review of the revenues actually included in Petitioner's Phase II rate increase adjustment does not support Mr. Baldessari's assertions. In Public's Exhibit No. 2, Table 4 (page 9) demonstrates that Petitioner's Phase II rate increase adjustment is based on the following formula: Test Year Revenues plus Phase I Rate Increase Adjustment minus Declining Consumption Adjustment.

Clearly, no customer growth adjustment was included in the determination of Petitioner's Phase II rate increase adjustment. Therefore, we agree with Ms. Stull that Petitioner's customer growth adjustment for residential and public authority customer classes is understated and find the appropriate rate to use in the calculation of these adjustments is the rates implemented with Cause No. 44760 Phase II as implemented in January 2018.

We now deal with the issue of the methodology used to calculate the residential customer growth adjustment. Both Petitioner and the OUCC used essentially the same methodology to determine their respective customer growth adjustments. However, Petitioner adjusted test year growth to remove billing counts for irrigation meters and temporary shut-offs. The OUCC indicated it did not make the adjustment because the adjustment was unsupported, the workpapers were unclear, and the math did not work. In his rebuttal testimony, Mr. Baldessari argued Ms. Stull's "alternative" methodology to calculate test year customer growth was "flawed" because the timing of the change in customer count must be considered when it occurs in the test year. Mr. Baldessari argued it is necessary to adjust for irrigation meters and temporary shut-offs in order to

normalize test year growth. Mr. Baldessari also argued that his adjustment is consistent with past cases and that the OUCC did not ask any discovery questions about its calculation.

Regarding Petitioner's assertions that its adjustment was consistent with past cases and the OUCC asked no discovery questions, we note that the burden is on Petitioner to support its case in its direct testimony, not in prior cases or in its rebuttal testimony in this case. Further, it is not incumbent on the OUCC to make Petitioner's case for it. All evidence Petitioner wishes to place before this Commission should be provided in the present case. Finally, simply because the OUCC accepted an adjustment in prior cases does not preclude it from raising an issue in the present case.

We agree with Mr. Baldessari that Petitioner's adjustment for irrigation meters and temporary shut-offs is necessary to get an accurate count of customer growth during the test year. However, we also agree with Ms. Stull that Petitioner's calculation of this adjustment is confusing and unclear and we also could not "make the math" work. As Ms. Stull's customer growth adjustment uses the same test year customer counts as Petitioner, we know the base level of customer growth before the adjustment for irrigation meters and temporary shut-offs - an additional 7,343 billings. Petitioner's adjustment reflects an additional 3,117 billings after adjusting for irrigation meters and temporary shut-offs, or a difference of 4,226 billings. We calculated our own residential customer growth adjustment reflected in the following table:<sup>35</sup>

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<sup>35</sup> Based on our review of Petitioner's schedule's and workpapers, we identified two relatively small errors in its calculation. First, each month of the test year should be adjusted to account for irrigation meters and temporary shut-offs but Petitioner only adjusted eleven months. Second, Petitioner calculated a decrease of 7 billings in October 2016, the first month of the test year, but there should be no adjustment in the first month as any growth from September 2016 to October 2016 has already been included for the entire test year.

	(A)	(B)	(A) + (B)	(C)	(D)	(C) x (D)
Billing Cycle	Test Year Billings	Irrigation Meters & Temporary Shut-offs	Adjusted Test Year Billings	Increased (Decreased) Billings		Additional Billings
Oct-16	59,238	(72)	59,166			
Nov-16	58,985	175	59,160	(6)	1	(6)
Dec-16	58,618	437	59,055	(105)	2	(210)
Jan-17	58,518	154	58,672	(383)	3	(1,149)
Feb-17	58,432	39	58,471	(201)	4	(804)
Mar-17	58,307	20	58,327	(144)	5	(720)
Apr-17	58,403	(43)	58,360	33	6	198
May-17	58,651	(231)	58,420	60	7	420
Jun-17	59,028	(254)	58,774	354	8	2,832
Jul-17	59,296	(180)	59,116	342	9	3,078
Aug-17	59,296	(29)	59,267	151	10	1,510
Sep-17	59,465	(16)	59,449	182	11	2,002
	706,237	-	706,237	283		7,151
						Times: Average Monthly Billing (3,676 Gallons)
						\$ 22.94
						Residential Customer Growth Adjustment
						\$ 164,044

Accordingly, we find Petitioner’s test year customer growth normalization adjustment for its residential and public authority customer classes to be \$164,044 and \$42,406, respectively

(iii) *Public Fire Protection (Outside City)*. With respect to outside city public fire protection, Petitioner proposed a revenue neutral adjustment for the proposed monthly fire protection charges for all customers prior to applying the proposed across-the-board rate increases. The proposed adjustment assumes the final one-third of the territorial rate differential is phased-out. Petitioner also proposed increases of \$886,488 and \$3,534,926, respectively, to test year operating revenues to reflect the Phase I 29.37% and Phase II 14.03% rate increases approved in Cause No. 44760.

OUCG witness Margaret Stull accepted the methodology Evansville used to calculate its public fire protection adjustments but disagreed with the tariff rates Petitioner used to calculate its outside city limits public fire protection adjustment. Evansville used the current tariff rates for outside city limits public fire protection, which include a surcharge being eliminated in this rate case. Ms. Stull explained why it is incorrect to use current outside city surcharge. She explained that the elimination of this surcharge represents a decrease in revenues and should be captured in the determination of *pro forma* present rate revenues in this rate case. She added that if this adjustment is not made, Evansville’s rates will not generate the revenues needed to cover its revenue requirements. Ms. Stull testified that to capture customer growth and eliminate the surcharge included in outside city limits public fire protection revenues, there should be a \$134,963 decrease to test year operating revenues reflecting the current customer count for outside city limits

public fire protection and elimination of the outside city surcharge. She said this is a decrease of \$323,196 (\$188,233 (Pet) + \$134,963 (OUCC)) as compared to Evansville's proposed adjustment.

Mr. Baldessari asserted in his rebuttal testimony that he had used the correct schedule of rates and charges to calculate his rates. Further, he explained that the public fire protection rate was not calculated "across the board" as the other tariff rates were calculated in this case. Instead, Petitioner adjusted public fire protection for customer growth and then made a "revenue neutral" adjustment to the tariff rate to yield the same amount of revenues as recovered in the test year. (Petitioner's Attachment DLR-1, page 25.) Petitioner then applied the calculated rate increase to this adjusted tariff rate to determine the public fire protection rate included in its proposed tariff.

Based on Mr. Baldessari's explanation in his rebuttal testimony regarding how the public fire protection rate was determined, we find Petitioner's public fire protection (outside city) customer growth adjustment is an increase to test year revenues of \$188,233.

We find Petitioner's *pro forma* present rate revenues are \$34,635,478 (excluding sewer utility operating expense reimbursement) consisting of \$29,275,306 metered water sales, \$4,660,771 public and private fire protection, \$174,925 forfeited discounts and \$524,476 other operating revenues.

**C. Petitioner's Revenue Requirements.** As indicated previously, our charge is to approve rates that are reasonable and just. Reasonable and just rates are those which produce sufficient revenue to:

- (1) pay all the legal and other necessary expenses incident to the operation of the utility, including:
  - (A) maintenance costs;
  - (B) operating charges;
  - (C) upkeep;
  - (D) repairs;
  - (E) depreciation;
  - (F) interest charges on bonds or other obligations, including leases; and
  - (G) costs associated with the acquisition of utility property under IC 8-1.5-2;
- (2) provide a sinking fund for the liquidation of bonds or other obligations, including leases;
- (3) provide a debt service reserve for bonds or other obligations, including leases, in an amount established by the municipality, not to exceed the maximum annual debt service on the bonds or obligations or the maximum annual lease rentals;
- (4) provide adequate money for working capital;
- (5) provide adequate money for making extensions and replacements to the extent not provided for through depreciation in subdivision (1); and

(6) provide money for the payment of any taxes that may be assessed against the utility.

Ind. Code § 8-1.5-3-8(c).

(a) **Operating Expenses.** Petitioner's test year operating expenses, including utility receipts taxes, were \$20,141,395. Petitioner proposed \$4,638,551 in adjustments to salaries and wages (\$1,027,839), employee benefits (\$1,204,100), payroll taxes (\$89,092), periodic maintenance (\$1,972,788), various contractual services (\$155,203), bad debt expense (\$22,222), rent (\$131,852), postage (\$23,438), utility receipts tax (\$40,863), year-end adjustment reclassified (-\$450,858), additional costs related to the sewer utility (\$625,579) and to eliminate non-recurring expenses (-\$203,567). Petitioner's *pro forma* proposed operating expenses are \$24,779,946.

The OUCC proposed *pro forma* operating expenses of \$23,415,103. The OUCC accepted all of Petitioner's adjustments except for periodic maintenance and PERF. The OUCC proposed its own adjustments for periodic maintenance (\$999,227) and PERF (-\$200,114). While the OUCC does not dispute the methodology or rates used by Petitioner to calculate its bad debt expense and utility receipts tax, the OUCC's proposed adjustments differ from Petitioner's because these are pass through expenses based on the level of operating revenues.

We now discuss the contested expense adjustments.

(i) **PERF Pension Expense.** Petitioner proposed a \$201,371 increase to its test year PERF expense of \$1,285,601 for total *pro forma* PERF expense of \$1,486,972. Petitioner's proposed adjustment consisted of two amounts. First, Evansville calculated a \$1,085,490 *pro forma* PERF cash contribution based on the current PERF contribution rate of 14.2% (11.2% + 3.0%) and *pro forma* salary and wage expense. Second, Evansville added \$401,482 of "book" pension expense, which it stated was based on GAS #68 requirements to reflect the pension liability on the utility's balance sheet.

The OUCC agreed with Evansville's calculation of its *pro forma* cash contribution to PERF, but opposed including the additional book pension expense attributed to Governmental Accounting Standard ("GAS") #68 requirements. OUCC witness Margaret proposed a \$200,111 decrease to test year PERF expense of \$1,285,601, yielding *pro forma* PERF expense of \$1,085,490 (OUCC Schedule 6, Adjustment No. 2) Ms. Stull explained that, while Evansville is required under US generally accepted accounting principles ("GAAP") to reflect its pension liability in its balance sheet, no additional cash payment to PERF is required. She asserted that, with no associated cash revenue requirement, there is no need to include this expense in the determination of rates.

Ms. Stull disagreed that putting the funds into a restricted account, as Mr. Baldessari proposed, would adequately address the OUCC's concerns, as it remained unnecessary and inappropriate to include this expense in Evansville's revenue requirements. She stated PERF will provide an annual contribution rate for Evansville that will fund its share of the PERF pension expense, and there is no reason this cash contribution will not always be included in Evansville's revenue requirement for ratemaking purposes. She noted it is PERF's responsibility to manage the

“gap” between the liability and the contributions from PERF participants making it unnecessary and inappropriate to provide additional monies for some future expense of the utility that will not occur.

Mr. Baldessari responded that GASB 68 & 71 require government entities to recognize accrued pension expense and net pension liability. He asserted unfunded pension liabilities can lead to significant financial issues in the future and, while Petitioner is not having significant financial issues, it could see rising PERF costs in the future if the liability is not funded. Mr. Baldessari noted PERF expense is a future estimate of the liability of PERF and that public utilities have reflected accrued pension expense in ratemaking for many years. Further, he testified that the amount of the expense in excess of the required cash contribution can be placed in a restricted fund.

We reject Mr. Baldessari’s argument. Mr. Baldessari suggested that Evansville could keep the extra PERF money it collects in a restricted count. This suggestion underscores the fact that Evansville’s seeks authority to collect funds for which it has no current expense. Mr. Baldessari’s rebuttal did not address Ms. Stull’s observation that PERF manages the fund and as part of that management, it decides what amount should be collected from participants. If PERF in the future determines that some other level of contribution is required, Evansville may expect the OUCC and this Commission to approve recovery of that amount. We see no reason to impose on Evansville’s ratepayers an amount in excess of what PERF presently requires.

(ii) *Periodic Maintenance.* Petitioner is seeking to recover \$1,006,820 per year for filter media replacement. OUCC witness Carl Seals recommended a \$738,020 reduction to this amount because Evansville’s request is significantly higher than the budgetary estimate it received in its last rate case, that Evansville has requested to replace four filter media beds in each of the three phases or a six year cycle, and that the proposed costs included capital costs for underdrain replacement that should not be included in Periodic Maintenance expense. With respect to the cost estimates, Evansville’s rebuttal testimony discussed how the costs for the filter media are based on actual Dieg Brothers bids. Evansville witness Patrick Keepes made the claim that Evansville is not proposing a 6-year replacement cycle but rather “to rehabilitate four beds in each of the three phases of this rate case in order to achieve the 10 to 20 year rehabilitation cycle discussed in the Stipulation and Settlement Agreement for IURC Cause No. 44760.” (Keepes, at p. 12, lines 2-5).

Petitioner’s testimony attempts to make the claim it is not seeking a 6-year replacement cycle for filter media, but it is simple math. Evansville has requested to fund replacement of four filter media beds per phase. If nothing is done to change the rates Evansville will continue to receive money for replacing filter media in rates and will have enough to replace all media in 6 years. We agree that the actual bids should be used as an indicator of costs, but we would encourage Evansville to seek more competitive bids for projects. We will also believe Evansville when it states it does not intend to replace the filter media on a 6 year cycle. To ensure this does not happen we will allow Evansville to collect its requested amount for filter media replacement in periodic maintenance expense, but once the third set of filter media beds has been replace we direct Evansville to file an updated tariff reducing this amount so the filter media beds will be replaced on a 15 year cycle. We therefore find that Petitioner’s cost for periodic maintenance related to filter media replacement should be \$1,006,820 per year. Once the twelve

filter media bed has been rehabilitated we find Evansville shall file a new tariff incorporating a new periodic maintenance expense of \$402,728 or a reduction of \$604,092.

Mr. Seals also recommended a reduction of \$173,630 to Evansville's proposed total annual pump maintenance expense because Evansville's proposed expenditures were "unexpectedly high." Public's Ex. 4, p. 9, line 16. Mr. Seals reached this conclusion by comparing quotes for the same work included in Petitioner's last case with the actual bids received and included in this case. Mr. Seals testified the quotes provided in the last case provide the best available evidence of these costs. On rebuttal, Mr. Keepes testified that Evansville has current, actual bids from the contractor who is engaged to perform the work. Mr. Keepes further testified the bids reflect the actual cost Evansville will pay for the work.

We agree with Mr. Keepes that actual bids are a good basis for costs Evansville will incur, but again we encourage Evansville to actually seek competitive bids and not just use deducts from a larger bid. Because we have no additional bids to rely on we find Petitioner's periodic maintenance expense related to pump maintenance should be \$308,130 per year.

Mr. Seals also recommended a reduction of \$39,021 to Evansville's proposed Booster Station periodic maintenance expenses of \$61,911 because Evansville's proposed costs were significantly higher than the budgetary estimates from the last case, and recommended the prior maintenance cost of \$7,630 per pump be used to calculate booster pump maintenance. While we are concerned about the increase in costs Evansville's request is showing compared to the budgetary estimates from the last case we do agree that actual bids received by Evansville is an appropriate tool for determining the costs, but we again encourage Evansville to seek additional bids when competitively bidding contracts. We find Petitioner's Booster Station periodic maintenance expenses should be \$61,911 per year.

We approve Evansville's periodic maintenance expense and find Petitioner's total test year *pro forma* periodic maintenance expense to be \$2,682,313 in this Cause. We have afforded Petitioner Periodic Maintenance expense to allow Petitioner to replace its filter media within six years. Accordingly, to the extent Petitioner has not filed a rate case within six years of this order, it must file an adjustment to its rates to reflect lowered periodic maintenance expense of \$2,078,221.

(iii) *Bad Debt Expense*. Based on the level of operating revenues we found in section B above, we find present rate *pro forma* bad debt expense is \$162,394.

(iv) *Utility Receipts Tax*. Based on the level of operating revenues we found in section B above, we find present rate *pro forma* utility receipts tax expense is \$406,539.

(b) *Debt Service*. In Section A(d) above, we found Petitioner's appropriate level of borrowing authority was \$115.115 million. Based on this borrowing level, we find debt service requirements of \$13,333,322 for Phase I, \$16,972,556 for Phase II and \$18,715,600 for Phase III should be approved.

(c) ***Extensions and Replacements (E&R)***. As noted previously, Petitioner proposes capital improvements of \$157,332,531. Of this amount, \$132,361,824 is to be financed with the bond issues we have approved. This leaves \$24,970,707 to be funded through Petitioner's E&R revenue requirement. Petitioner proposed an E&R revenue requirement of \$7,082,200 (Phase I), \$8,344,400 (Phase II), and \$9,544,100 (Phase III) for a total of \$24,970,707 over a three-year period.

OUCC witness Margaret Stull proposed four adjustments to Petitioner's proposed E&R revenue requirement. First, she excluded two projects identified by OUCC witness Kaufman as already having been included in Evansville's proposed borrowing through its application. Second, she eliminated funds proposed for "new service connections" because these costs are already funded through Petitioner's tap fees. Third, she eliminated annual on-call CES/RPR costs because these are already included in capital project costs. (See the testimony of OUCC witness Mr. James Parks.) Finally, she spread the remaining distribution project costs ratably over a three year period to levelize the phased rate increases. (See OUCC Schedule 8, page 2 of 2.)

In Petitioner's rebuttal case, Mr. Baldessari argued Ms. Stull's request to phase in the E&R program ratably is a short-sighted approach and only pushes the problem down the road. He ultimately testified the OUCC's proposed reduction in E&R plan should not be accepted. As to the CES/RPR costs, Mr. Baldessari testified the CES/RPR costs are for smaller line projects and should not be removed. He testified he did not see where Mr. Parks recommended in his testimony CES/RPR issues should be eliminated. However during cross-examination by the OUCC, Mr. Keepes acknowledged that the capital on-call CES/RPR totaling \$3.6 million was part of the 9.6% non-construction costs in the estimates "included in different things." (Hr. Tr. B-8-9) In other words, it was already included in the SRF project costs. With respect to Ms. Stull's adjustment to remove the two projects included in the SRF application, Mr. Baldessari testified that the entire financing package must be viewed in total and these dollars are fungible. He further testified any money Evansville can save in the aggregate will be applied to the \$130 million of unfunded projects. Mr. Baldessari stated Evansville designed the E&R component of the revenue requirement to ramp up in order to pay for as many of the Refresh Evansville projects as possible and reduce the reliance on bond funded improvements. Mr. Baldessari added that while he agreed with Ms. Stull that new service connections should not be paid from E&R funds, he noted Evansville has approximately \$130 million of unfunded Refresh Evansville projects included in this Cause that would replace the new service connection amounts; thus, he testified he would not reduce the proposed rates for this change and would simply fund more projects.

Whether Petitioner agreed or did not agree with the accuracy of the OUCC's observations, the result was the same. Petitioner argued it should in any case receive the level of E&R funding it had stated in its case-in-chief. We must disagree with such a result. Evansville's post 2021 capital improvement plans cannot justify including in E&R expenses that have been met or will be met by other sources during the life of the rates. Another way of viewing this approach is that Petitioner is amending its capital improvement plan as expenses are excluded. Such an approach is not consistent with ideas of due process or principles of ratemaking in Indiana. Petitioner has presented a three year capital improvement plan it has itself described as "aggressive" – a plan the OUCC has by and large agreed should proceed. The \$130 million of projects to which Petitioner referred are not anticipated to be addressed in the three capital improvement plan presented in this

case. The OUCC agreed that if Petitioner is able to complete the projects identified in this Cause and has funds remaining, it should not be prohibited from using those funds to complete other main relocation projects within the 2016 master plan. This should not be construed as license to overestimate costs or include in the E&R revenue requirement items that should otherwise be excluded. Accordingly we accept the OUCC proposed E&R revenue requirement.

(d) **Approved Revenue Requirements and Rate Increases.** We find Petitioner's revenue requirements as follows:

	Phase I	Phase II	Phase III
Operating Expenses	\$ 24,393,098	\$ 24,451,139	\$ 24,514,532
Extensions and Replacements	6,442,862	5,960,944	6,154,201
Payment in Lieu of Taxes	1,882,300	2,509,100	3,112,900
Debt Service			
Existing Debt	10,133,900	10,132,501	10,134,195
New Debt	3,199,422	6,840,055	8,581,405
Total Revenue Requirements	46,051,582	49,893,739	52,497,233
Less Revenue Requirement Offsets:			
Interest Income	(201,999)	(201,999)	(201,999)
Other Operating Revenues	(524,476)	(524,476)	(524,476)
Other Non-Operating Income	(377,928)	(377,928)	(377,928)
Sewer Portion of General Expenses	(7,371,586)	(7,371,586)	(7,371,586)
Fixed Capacity Payments from Wholesaler	-	-	(191,144)
Net Revenue Requirements	37,575,593	41,417,750	43,830,100
Less: Revenues at Current Rates Subject to Increase	(34,111,002)	(37,633,633)	(41,481,143)
Net Revenue Increase Required	3,464,591	3,784,117	2,348,957
Gross Revenue Conversion Factor	101.675245%	101.675245%	101.675245%
Recommended Revenue Increase	\$ 3,522,631	\$ 3,847,510	\$ 2,388,308
Cumulative Revenue Increase	\$ 3,522,631	\$ 7,370,141	\$ 9,758,449
Recommended Percentage Increase	10.33%	10.22%	5.76%
Cumulative Rate Increase	10.33%	21.61%	28.61%

Based on the evidence, the Commission finds that Petitioner's current rates and charges are insufficient to satisfy Petitioner's annual *pro forma* net revenue requirements. As shown above, Petitioner's total annual operating revenues for Phase I, Phase II and Phase III are \$33,505,765, \$39,681,130 and \$46,015,606, respectively. Accordingly, Petitioner's existing rates are insufficient to recover Petitioner's revenue requirement and should be increased to produce an additional \$6,175,365, \$6,334,476 and \$3,529,297 (each inclusive of the prior phase increase) in annual operating revenues for Phase I, Phase II and Phase III, respectively.

(D) **True-Up Report.** Petitioner proposed and we find that Petitioner shall file a true-up report with the Commission under this Cause Number and serve a copy thereof on the parties of record within 30 days of closing on each issuance of long-term debt. The true-up report shall include an amortization schedule with the actual interest rates on the bonds, amount borrowed and

the resulting trued-up water rates and charges and an amended tariff. Further, Petitioner shall include a calculation of any “over-collection” of revenues that results from the period of time between approval of the respective tariff in question and the closing on the issuance of the long term debt. Petitioner shall use this amount of “over-collection” to reduce its debt service reserve. Noting that Petitioner proposes to prefund (borrow) its debt service reserve, the reduced debt service reserve shall reduce the total amount Petitioner needs to borrow and subsequently reduce its annual debt service. If both parties determine in writing that the increase or decrease would be immaterial, the Parties shall so inform the Commission as part of the true-up report or through a subsequent filing. If no such determination is made, or if otherwise ordered by the Commission after the true-up report is filed, Petitioner shall implement the revised rates within two weeks.

**IT IS THEREFORE ORDERED BY THE INDIANA UTILITY REGULATORY COMMISSION that:**

1. Petitioner is authorized to increase its rates and charges for water service, across-the-board, in three Phases with the increase for Phase I constituting a 10.33% increase in order to increase annual operating revenues by \$3,522,631, for Phase II constituting a further 10.22% increase in order to increase additional annual operating revenues by \$3,847,510 and for Phase III constituting a further 5.76% increase in order to increase additional annual operating revenues by \$2,388,308. The total or cumulative rate increase authorized is 28.61% and total additional operating revenues of \$9,758,449. Phase I shall take effect following approval, and Phases II and III shall take effect January 1, 2020 and January 1, 2021, respectively.

2. Petitioner is granted authority to issue additional long-term debt in one or more issues to the SRF or pursuant to competitive sale or private placement at or below competitive market rates and in principle amount not to exceed \$115,115,000 as approved herein. This Order shall be the sole evidence of Petitioner’s certificate.

3. Petitioner shall file under this Cause new schedules of rates and charges with the Water/Wastewater Division of the Commission on the basis set forth above. For Phase I, Petitioner’s new schedules of rates and charges shall be effective upon filing and after approval by the Water/Wastewater Division. The Phase II and Phase III schedules shall then take effect one and two years respectively after such approval.

4. Petitioner shall file a true-up report as provided in Finding Paragraph 6.

5. To the extent Petitioner has not filed a rate case within six years of this order, it must file an adjustment to its rates to reflect lowered periodic maintenance expense of \$2,078,221.

6. In accordance with Ind. Code § 8-1-2-70, Petitioner shall pay the following itemized charges within 20 days from the date of the Order, into the Treasury of the State of Indiana, through the Secretary of the Commission:

Commission Charges:	\$
OUCG Charges:	\$
Legal Advertising Charges:	\$

Total:	\$
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7. In accordance with Ind. Code § 8-1-2-85, Petitioner shall pay a fee equal to \$0.25 for each \$100 of water utility revenue bonds issued, to the Secretary of the Commission, within 30 days of the receipt of the financing proceeds authorized herein.

8. This Order shall be effective on and after the date of its approval.

**HUSTON, FREEMAN, KREVDA, OBER AND ZIEGNER CONCUR:**

**APPROVED:**

**I hereby certify that the above is a true  
and correct copy of the Order as approved.**

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Mary M. Becerra, Secretary to the Commission

**EVANSVILLE MUNICIPAL WATER  
CAUSE NUMBER 45073**

**Overall Revenue Requirement Comparison**

	<b>Per Petitioenr (Rebuttal)</b>	<b>Per OUCC</b>	<b>OUCC Proposed Order</b>	<b>Sch Ref</b>	<b>OUCC P.O. More (Less)</b>
Operating Expenses	\$ 24,958,383	\$ 23,415,103	\$ 24,393,098	4	\$ 977,995
Extensions and Replacements	9,544,100	6,154,201	6,154,201	7	-
Payment in Lieu of Taxes	3,112,900	3,112,900	3,112,900	PET	-
Debt Service					
Existing Debt	10,134,195	10,134,195	10,134,195	PET	-
New Debt	10,408,128	7,691,575	8,581,405	ERK-1	889,830
<b>Total Revenue Requirements</b>	<b>58,157,706</b>	<b>50,507,974</b>	<b>52,375,799</b>		<b>1,867,825</b>
Less Revenue Requirement Offsets:					
Interest Income	(201,999)	(203,420)	(201,999)	PET	1,421
Other Operating Income	(524,476)	(524,476)	(524,476)	PET	-
Other Non-Operating Income	(377,928)	(377,928)	(377,928)	PET	-
Sewer Portion of General Expenses	(7,371,586)	(7,371,586)	(7,371,586)	PET	-
Fixed Capacity Payments from Wholesaler	(191,144)	(191,144)	(191,144)	PET	-
<b>Net Revenue Requirements</b>	<b>49,490,573</b>	<b>41,839,420</b>	<b>43,708,666</b>		<b>1,869,246</b>
Less: Rev at Current Rates Subj to Increase	(33,505,765)	(33,792,210)	(34,111,002)	4	(318,792)
<b>Net Revenue Increase Required</b>	<b>15,984,808</b>	<b>8,047,210</b>	<b>9,597,664</b>		<b>1,550,454</b>
Gross Revenue Conversion Factor	100.339885%	101.677762%	101.675245%	1	-0.002517%
<b>Recommended Revenue Increase</b>	<b>\$ 16,039,138</b>	<b>\$ 8,182,223</b>	<b>\$ 9,758,449</b>		<b>\$ 1,576,226</b>
<b>Recommended Percentage Rate Increase</b>	<b>47.87%</b>	<b>24.21%</b>	<b>28.61%</b>		<b>4.40%</b>

**Current Rate for 5,000 Gallons = \$28.87**

<b>Petitioner</b>	<b>Proposed</b>			<b>OUCC P.O. More (Less)</b>
	<b>OUCC</b>	<b>OUCC P.O.</b>		
\$ 42.74	\$ 35.88	\$ 37.07	8	\$ 1.19

**EVANSVILLE MUNICIPAL WATER  
CAUSE NUMBER 45073**

**Phased-in Revenue Requirement Comparison**

	Phase I			
	Petitioner (Rebuttal)	OUC	OUC P.O.	Sch Ref OUC P.O. More (Less)
Operating Expenses	\$ 24,779,946	\$ 23,415,103	\$ 24,393,098	4 \$ 977,995
Extensions and Replacements	7,082,200	6,442,862	6,442,862	7 -
Payment in Lieu of Taxes	1,882,300	1,882,300	1,882,300	PET -
Debt Service				
Existing Debt	10,133,900	10,133,900	10,133,900	PET -
New Debt	4,201,248	1,667,736	3,199,422	ERK-1 1,531,686
Total Revenue Requirements	48,079,594	43,541,901	46,051,582	2,509,681
Less Revenue Requirement Offsets:				
Interest Income	(201,999)	(577,525)	(201,999)	PET 375,526
Other Operating Revenues	(524,476)	(524,476)	(524,476)	PET -
Other Non-Operating Income	(377,928)	(377,928)	(377,928)	PET -
Sewer Portion of General Expenses	(7,371,586)	(7,371,586)	(7,371,586)	PET -
Fixed Capacity Payments from Wholesaler	-	-	-	-
Net Revenue Requirements	39,603,605	34,690,386	37,575,593	2,885,207
Less: Revenues at Current Rates Subject to Increase	(33,505,765)	(33,792,210)	(34,111,002)	4 (318,792)
Net Revenue Increase Required	6,097,840	898,176	3,464,591	2,566,415
Gross Revenue Conversion Factor	101.271352%	101.677762%	101.675245%	1 -0.002517%
Recommended Increase	\$ 6,175,365	\$ 913,245	\$ 3,522,631	\$ 2,609,386
Recommended Percentage Increase	18.43%	2.70%	10.33%	7.62%

**Current Rate for 5,000Gallons = \$28.87**

	Proposed			OUC P.O. More (Less)
	Petitioner	OUC		
\$ 34.20	\$ 29.64	\$ 31.84	8	\$ 2.20

**EVANSVILLE MUNICIPAL WATER  
CAUSE NUMBER 45073**

**Phased-in Revenue Requirement Comparison**

	Phase II				
	Petitioner (rebuttal)	OUC	OUC P.O.	Sch Ref	OUC P.O. More (Less)
Operating Expenses	\$ 24,857,471	\$ 23,430,172	\$ 24,451,139	4	\$ 1,020,967
Extensions and Replacements	8,344,400	5,960,944	5,960,944	7	-
Payment in Lieu of Taxes	2,509,100	2,509,100	2,509,100	PET	-
Debt Service					
Existing Debt	10,132,501	10,132,501	10,132,501	PET	-
New Debt	8,547,211	5,403,575	6,840,055	ERK-1	1,436,480
Total Revenue Requirements	54,390,683	47,436,292	49,893,739		2,457,447
Less Revenue Requirement Offsets:					
Interest Income	(201,999)	(334,862)	(201,999)	PET	132,863
Other Operating Revenues	(524,476)	(524,476)	(524,476)	PET	-
Other Non-Operating Income	(377,928)	(377,928)	(377,928)	PET	-
Sewer Portion of General Expenses	(7,371,586)	(7,371,586)	(7,371,586)	PET	-
Fixed Capacity Payments from Wholesaler	-	-	-		-
Net Revenue Requirements	45,914,694	38,827,440	41,417,750		2,590,310
Less: Revenues at Current Rates Subject to Increase	(39,681,130)	(34,705,455)	(37,633,633)	4	(2,928,178)
Net Revenue Increase Required	6,233,564	4,121,985	3,784,117		(337,868)
Gross Revenue Conversion Factor	101.618849%	101.677762%	101.675245%	1	-0.002517%
Recommended Increase	\$ 6,334,476	\$ 4,191,142	\$ 3,847,510		\$ (343,632)
Recommended Percentage Increase	15.96%	12.08%	10.22%		-1.86%

	Proposed			Sch Ref	OUC P.O. More (Less)
	Petitioner	OUC	OUC P.O.		
<b>Rate for 5,000 Gallons</b>	\$ 39.68	\$ 33.24	\$ 35.07	8	\$ 1.83

**EVANSVILLE MUNICIPAL WATER  
CAUSE NUMBER 45073**

**Phased-in Revenue Requirement Comparison**

	Phase III			
	Petitioner (Rebuttal)	OUC	OUC P.O.	Sch Ref OUC P.O. More (Less)
Operating Expenses	\$ 24,958,383	\$ 23,499,329	\$ 24,514,532	4 \$ 1,015,203
Extensions and Replacements	9,544,100	6,154,201	6,154,201	7 -
Payment in Lieu of Taxes	3,112,900	3,112,900	3,112,900	PET -
Debt Service				-
Existing Debt	10,134,195	10,134,195	10,134,195	PET -
New Debt	10,408,128	7,691,575	8,581,405	ERK-1 889,830
Total Revenue Requirements	58,157,706	50,592,200	52,497,233	1,905,033
Less Revenue Requirement Offsets:				
Interest Income	(201,999)	(203,420)	(201,999)	FPET 1,421
Other Operating Revenues	(524,476)	(524,476)	(524,476)	PET -
Other Non-Operating Income	(377,928)	(377,928)	(377,928)	PET -
Sewer Portion of General Expenses	(7,371,586)	(7,371,586)	(7,371,586)	PET -
Fixed Capacity Payments from Wholesaler	(191,144)	(191,144)	(191,144)	-
Net Revenue Requirements	49,490,573	41,923,646	43,830,100	1,906,454
Less: Revenues at Current Rates Subject to Increase	(46,015,606)	(38,896,597)	(41,481,143)	4 (2,584,546)
Net Revenue Increase Required	3,474,967	3,027,049	2,348,957	(678,092)
Gross Revenue Conversion Factor	101.563468%	101.677762%	101.675245%	1 -0.002517%
Recommended Increase	\$ 3,529,297	\$ 3,077,836	\$ 2,388,308	\$ (689,528)
Recommended Percentage Increase	7.67%	7.91%	5.76%	-2.15%

	Proposed			OUC P.O. More (Less)
	Petitioner	OUC		
<b><u>Rate for 5,000 Gallons</u></b>	\$ 42.74	\$ 35.88	\$ 37.07	8 \$ 1.19

**EVANSVILLE MUNICIPAL WATER  
CAUSE NUMBER 45073**

**Gross Revenue Conversion Factor  
Phased Revenue Requirements**

	<u>Phase I</u>		<u>Phase II</u>		<u>Phase III</u>	
	<u>OUC P.O.</u>		<u>OUC</u>		<u>OUC</u>	
1 Gross Revenue Change	100.000000%	\$ 3,522,631	100.000000%	\$ 3,847,510	100.000000%	\$ 2,388,308
2 Less: Bad Debt Expense	0.476256%	16,777	0.476256%	18,324	0.476256%	11,374
3 Subtotal	99.523744%		99.523744%		99.523744%	
4 Less: Utility Receipts Tax (See Calculation Below)	1.171386%	41,264	1.171386%	45,069	1.171386%	27,976
5 Change in Operating Income	98.352357%	\$ 3,464,590	98.352357%	\$ 3,784,117	98.352357%	\$ 2,348,958
6 Gross Revenue Conversion Factor	101.675245%		101.675245%		101.675245%	

**Calculation of Bad Debt Expense**

Test Year Expense Rate		0.686000%
Times: Portion of Revenues Subject to Bad Debt Rate		69.425132%
Effective Bad Debt Expense Rate		0.476256%
Total Revenues Subject to Increase	(A)	34,111,002
<i>Pro forma</i> Residential Revenues		16,316,681
<i>Pro forma</i> Commercial Revenues		7,364,927
	(B)	23,681,608
Percent Related to Bad Debt Rate	(B) / (A)	0.69425132

**Calculation of Utility Receipts Tax Rate:**

Statutory Rate		1.400000%
Times: Portion of Revenues Subject to URT		84.070834%
Subtotal		1.176992%
Times: Line 3		99.523744%
Effective Utility Receipts Tax Rate		1.171386%
Total Revenues Subject to Increase	(A)	34,111,002
<i>Pro forma</i> Sales for Resale		1,235,161
<i>Pro Forma</i> Other Exempt Revenues		4,198,437
Total Exempt Revenues	(B)	5,433,598
Percent Related to Sales for Resale	(B) / (A)	15.929166%
Total Revenues		100.000000%
Less: Revenues Exempt from URT		-15.929166%
Portion of Revenues Subject to URT		84.070834%

**EVANSVILLE MUNICIPAL WATER  
CAUSE NUMBER 45073**

**Reconciliation of Net Operating Income Statement Adjustments  
*Pro-forma Present Rates***

	<u>Per Petitioner (Rebuttal)</u>	<u>Per OUCC</u>	<u>OUCC P.O.</u>	<u>OUCC P.O. More (Less)</u>
Operating Revenues				
Water Sales				
Residential	\$ 1,873,085	\$ 2,625,043	\$ 2,620,639	\$ (4,404)
Commercial	1,366,303	1,167,851	1,167,851	-
Industrial	362,807	380,346	380,346	-
Public Authorities	177,713	202,618	202,618	-
Sales for Resale	291,942	305,633	305,633	-
Fire Protection	686,092	362,896	686,092	323,196
Forfeited Discounts	26,979	26,979	26,979	-
Other Operating Income	67,194	67,194	67,194	-
	<u>4,852,115</u>	<u>5,138,560</u>	<u>5,457,352</u>	<u>318,792</u>
O&M Expense				
Salaries and Wages	1,027,839	1,027,839	1,027,839	-
Employee Benefits				
FICA	89,092	89,092	89,092	-
PERF	201,371	(200,111)	(200,111)	-
Health and Life Insurance	1,008,258	1,008,258	1,008,258	-
Workman's Compensation	(5,584)	(5,584)	(5,584)	-
Teamster's Scholarship Fund	55	55	55	-
Purchased Power		-	-	-
Chemicals		-	-	-
Materials and Supplies	23,438	23,438	23,438	-
Repairs and Maintenance	1,972,788	999,227	1,972,788	973,561
Contractual Services	155,203	155,203	155,203	-
Rents	131,852	131,852	131,852	-
Transportation		-	-	-
Insurance		-	-	-
Bad Debt Expense	22,222	26,008	25,978	(30)
Miscellaneous Expense		-	-	-
Non-Recurring Expenses	(203,567)	(203,567)	(203,567)	-
Reclassification of YE Adjustment	(450,858)	(450,858)	(450,858)	-
Additional Sewer O&M Expenses	625,579	625,579	625,579	-
Utility Receipts Tax	40,863	47,277	51,741	4,464
	<u>4,638,551</u>	<u>3,273,708</u>	<u>4,251,703</u>	<u>977,995</u>
Net Operating Income	<u>\$ 213,564</u>	<u>\$ 1,864,852</u>	<u>\$ 1,205,649</u>	<u>\$ (659,203)</u>

**EVANSVILLE MUNICIPAL WATER  
CAUSE NUMBER 45073**

**COMPARATIVE BALANCE SHEET  
As of**

<u>ASSETS</u>	<u>September 30, 2017</u>	<u>December 31, 2017</u>	<u>December 31, 2016</u>	<u>December 31, 2015</u>
Utility Plant:				
Utility Plant in Service	\$ 204,501,974	\$ 214,872,592	\$ 203,136,342	\$ 178,412,977
Construction Work in Progress	14,135,068	13,355,858	9,175,354	23,887,919
Land and Land Improvements	432,435	432,435	432,435	432,435
Less: Accumulated Depreciation	(70,908,927)	(71,868,580)	(67,976,349)	(64,630,377)
Net Utility Plant in Service	<u>148,160,550</u>	<u>156,792,305</u>	<u>144,767,782</u>	<u>138,102,954</u>
Restricted Assets:				
Bond and Interest Fund	3,692,201	5,838,912	3,200,420	90,952
Debt Service Reserve	8,168,473	6,110,000	8,074,683	4,345,963
Construction Fund	36,523,233	21,450,000	41,583,296	12,391,463
Improvement funds	612,475	833,758	569,693	347,011
Periodic maintenance Fund	725,250	2,185,676	111,600	-
Cash with fiscal agent	98,184	292,979	97,609	-
Total Restricted Assets	<u>49,819,816</u>	<u>36,711,325</u>	<u>53,637,301</u>	<u>17,175,389</u>
Current Assets:				
Operating Cash	6,576,288	17,927,568	3,815,621	2,559,373
Customer Deposits	1,527,068	1,503,558	1,422,301	1,296,637
Assistance program	8,291	7,231	-	-
Accounts Receivable (Net of Allowance)				
Customer	2,083,380	1,785,257	1,775,977	1,623,491
Other	282,133	119,034	253,815	219,974
Interfund Receivable (Sewer Utility)	448,665	448,665	444,085	593,673
Materials and Supplies Inventory	962,221	1,063,509	962,221	867,855
Prepays	94,192	318,028	68,967	68,992
Interest Receivable	83,651	199,012	30,043	13,620
Other Current Assets	-	-	-	-
Total Current Assets	<u>12,065,889</u>	<u>23,371,862</u>	<u>8,773,030</u>	<u>7,243,615</u>
Deferred Debits				
Unamortized Debt Discount and Expense	2,502,333	2,217,867	2,365,145	1,550,893
Deferred Rate Case Expense	279,238	282,858	352,376	50,317
Defined Benefit Pension Deferred Outflows	2,821,084	1,689,158	2,821,084	2,357,549
Other Miscellaneous Deferred Debits	-	11,966	23,930	109,885
Total Deferred Debits	<u>5,602,655</u>	<u>4,201,849</u>	<u>5,562,535</u>	<u>4,068,644</u>
Total Assets	<u>\$ 215,648,910</u>	<u>\$ 221,077,341</u>	<u>\$ 212,740,648</u>	<u>\$ 166,590,602</u>

**EVANSVILLE MUNICIPAL WATER  
CAUSE NUMBER 44760**

**COMPARATIVE BALANCE SHEET  
As of**

<b><u>EQUITY AND LIABILITIES</u></b>	<b>September 30 2017</b>	<b>December 31 2017</b>	<b>December 31 2016</b>	<b>December 31 2015</b>
Equity				
Retained Earnings	\$ 39,988,362	\$ 39,362,522	\$ 34,190,476	\$ 32,192,601
Contributions in Aid of Construction	30,738,264	33,527,270	30,276,413	28,616,534
Long-term Debt				
Bonds Payable	128,800,000	128,800,000	131,930,000	93,355,000
Required Bonds	(2,574,424)	(2,510,331)	(2,766,703)	(1,019,036)
Other Long-term Debt (PILT)	702,956	702,956	702,956	702,956
Total Long-term Debt	<u>126,928,532</u>	<u>126,992,625</u>	<u>129,866,253</u>	<u>93,038,920</u>
Current Liabilities				
Accounts Payable	1,246,234	3,532,141	1,748,074	2,002,184
Bonds payable - Current	3,130,000	3,130,000	1,765,000	-
Bond Anticipation Note of 2016	-	-	1,050,000	-
Customer Deposits	1,553,172	1,534,463	1,435,969	1,323,223
Taxes Payable	194,171	94,259	159,244	133,909
Accrued Interest	1,345,213	2,690,425	1,437,987	-
Accrued Payroll and Withholdings payable	206,033	197,486	209,774	341,735
Compensated Absences	536,409	602,947	536,409	485,993
Net Pension Liability	5,867,096	5,938,565	5,867,096	5,214,330
Total Liabilities	<u>14,078,328</u>	<u>17,720,286</u>	<u>14,209,553</u>	<u>9,501,374</u>
Deferred Credits				
Unamortized Bond Premium (Discount)	3,161,445	3,109,621	3,443,974	2,662,294
Deferred Loss on Early Retirement	753,979	365,017	753,979	578,879
Total Deferred Credits	<u>3,915,424</u>	<u>3,474,638</u>	<u>4,197,953</u>	<u>3,241,173</u>
Total Liabilities and Equity	<u>\$ 215,648,910</u>	<u>\$ 221,077,341</u>	<u>\$ 212,740,648</u>	<u>\$ 166,590,602</u>

EVANSVILLE MUNICIPAL WATER  
CAUSE NUMBER 45073

COMPARATIVE INCOME STATEMENT  
Twelve Months Ended

	September 30, 2017	December 31, 2017	December 31, 2016	December 31, 2015
Operating Revenues				
Water Sales				
Residential	\$ 13,696,042	\$ 14,049,944	\$ 11,160,679	\$ 11,188,398
Commercial	6,197,076	6,321,110	5,039,561	4,872,646
Industrial	2,120,285	2,346,366	1,980,803	2,032,302
Sales for Resale	1,655,288	1,495,034	1,262,611	1,180,019
Public Authorities	929,528	949,658	739,220	760,917
Fire Protection				
Public	3,447,899	3,591,481	2,827,979	2,763,376
Private	526,780	517,394	397,910	389,479
Late Fees	147,946	157,166	119,071	127,178
Other	457,282	330,330	432,628	487,501
Sewer Utility Portion of General Expenses	5,370,243	5,383,983	5,358,365	5,338,491
Total Operating Revenues	<u>34,548,369</u>	<u>35,142,466</u>	<u>29,318,827</u>	<u>29,140,307</u>
Operating Expenses				
Salaries and Wages	6,626,457	6,717,938	6,477,216	6,315,097
Employee Benefits	3,585,723	4,420,167	3,877,382	4,955,423
Purchased Power	1,331,344	1,307,991	1,278,248	1,125,963
Chemicals	1,096,964	975,310	1,236,254	1,206,901
Materials and Supplies	1,001,035	714,478	1,003,363	833,225
Repairs and Maintenance	2,341,209	-	1,652,894	1,871,403
Contractual Services	2,577,799	5,174,448	2,791,463	2,767,922
Rents	103,066	103,106	102,938	101,679
Transportation	276,125	300,872	296,713	364,229
Insurance	351,141	351,141	351,141	347,664
Bad Debt Expense	136,416	129,712	136,416	294,844
Miscellaneous Expense	359,318	264,858	319,941	320,513
Total O&M Expense	<u>19,786,597</u>	<u>20,460,021</u>	<u>19,523,969</u>	<u>20,504,863</u>
Depreciation Expense	3,845,446	3,892,231	3,484,574	3,331,192
Taxes Other than Income				
Payments in Lieu of Property Taxes	1,135,896	1,677,172	1,363,900	1,363,900
Utility Receipts Tax	354,798	351,599	284,320	292,027
Total Operating Expenses	<u>25,122,737</u>	<u>26,381,023</u>	<u>24,656,763</u>	<u>25,491,982</u>
Net Operating Income	9,425,632	8,761,443	4,662,064	3,648,325
Other Income (Expense)				
Interest Income	127,365	139,958	74,911	41,231
Other Income	479,467	111,684	594,306	221,544
Interest Expense	(3,740,016)	(3,579,771)	(3,137,713)	(2,652,326)
Interest Expense Amortization	(249,252)	(146,229)	(184,151)	(188,852)
Other Expense	(250)	-	(11,542)	(264,562)
Total Other Income (Expense)	<u>(3,382,686)</u>	<u>(3,474,358)</u>	<u>(2,664,189)</u>	<u>(2,842,965)</u>
Net Income	<u>\$ 6,042,946</u>	<u>\$ 5,287,085</u>	<u>\$ 1,997,875</u>	<u>\$ 805,360</u>

(A) As presented in Petitioner's 2017 IURC annual report. Comparable information to that presented for test year and calendar years 2016 and 2015 was unavailable.

**EVANSVILLE MUNICIPAL WATER  
CAUSE NUMBER 45073**

**Operating and Maintenance Expenses by Application Category**

**Test Year Ended September 30, 2017**

	<b>Source of Supply</b>	<b>Treatment</b>	<b>Transmission &amp; Distribution</b>	<b>Customer Accounts</b>	<b>G&amp;A</b>	<b>Total</b>
<b><u>9/30/2017</u></b>						
Salaries and Wages		1,134,759	1,738,227	1,733,660	2,002,431	6,609,077
Board Members Salaries					17,380	17,380
Employee Benefits		592,218	1,080,402	899,339	1,013,764	3,585,723
Purchased Power	881,932	68,623	380,789			1,331,344
Chemicals		1,096,964	-			1,096,964
Materials and Supplies		150,959	449,795	306,400	93,881	1,001,035
Repairs and Maintenance	1,063,679	367,846	845,936	16,461	47,287	2,341,209
Contractual Services		60,017	163,123	65,500	2,289,159	2,577,799
Rents		-	-		103,066	103,066
Transportation		6,889	170,044	57,572	41,620	276,125
Insurance		-	-		351,141	351,141
Regulatory Commission Expense		-	-			-
Bad Debt Expense		-	-	136,416		136,416
Other		-	-	-	359,318	359,318
Total Operating Expenses	<u>1,945,611</u>	<u>3,478,275</u>	<u>4,828,316</u>	<u>3,215,348</u>	<u>6,319,047</u>	<u>19,786,597</u>
Utility Receipts Tax					354,798	354,798
Total Operating Expenses as Reported by Petitioner					<u>6,673,845</u>	<u>20,141,395</u>
Lab Expense		-				
Office Supplies		-	-	-		
Postage					3,714	
Office Expense					-	
Permits					63,000	
Other					292,604	
	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>359,318</u>	

**EVANSVILLE MUNICIPAL WATER  
CAUSE NUMBER 45073**

**Operating and Maintenance Expenses by Application Category**

**Calendar Year 2016**

	<u>Source of Supply</u>	<u>Treatment</u>	<u>Transmission &amp; Distribution</u>	<u>Customer Accounts</u>	<u>G&amp;A</u>	<u>Total</u>
Salaries and Wages		1,090,324	1,748,562	1,853,465	1,769,125	6,461,476
Board Members Salaries					15,740	15,740
Employee Benefits		640,344	1,093,921	1,131,884	1,011,233	3,877,382
Purchased Power	842,041	64,469	371,738			1,278,248
Chemicals		1,236,254				1,236,254
Materials and Supplies		11,601	581,312	345,967	64,483	1,003,363
Repairs and Maintenance	419,892	382,683	827,386	4,254	18,679	1,652,894
Contractual Services		258,378	115,704	66,025	2,351,356	2,791,463
Rents					102,938	102,938
Transportation		19,098	156,788	77,525	43,302	296,713
Insurance					351,141	351,141
Regulatory Commission Expense						-
Bad Debt Expense				136,416		136,416
Other	-	-	-	-	319,941	319,941
<b>Total Operating Expenses</b>	<u>1,261,933</u>	<u>3,703,151</u>	<u>4,895,411</u>	<u>3,615,536</u>	<u>6,047,938</u>	<u>19,523,969</u>
Utility Receipts Tax					284,320	284,320
<b>Total Operating Expenses as Reported by Petitioner</b>					<u>6,332,258</u>	<u>19,808,289</u>
Lab Expense		-				
Office Supplies		-	-			
Postage				-	2,727	
Office Expense				-	-	
Permits					61,200	
Other					256,014	
	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>319,941</u>	

**EVANSVILLE MUNICIPAL WATER  
CAUSE NUMBER 45073**

**Operating and Maintenance Expenses by Application Category**

**Calendar Year 2015**

	<u>Source of Supply</u>	<u>Treatment</u>	<u>Transmission &amp; Distribution</u>	<u>Customer Accounts</u>	<u>G&amp;A</u>	<u>Total</u>
Salaries and Wages		1,076,331	1,595,137	1,893,937	1,733,952	6,299,357
Board Members Salaries					15,740	15,740
Employee Benefits		838,692	1,227,225	1,548,586	1,340,920	4,955,423
Purchased Power	725,024	68,708	332,231			1,125,963
Chemicals		1,206,901				1,206,901
Materials and Supplies		16,050	317,568	403,057	96,550	833,225
Repairs and Maintenance	646,784	226,442	979,028	8,247	10,902	1,871,403
Contractual Services		285,465	201,021	164,871	2,116,565	2,767,922
Rents					101,679	101,679
Transportation		18,868	209,116	98,933	37,312	364,229
Insurance					347,664	347,664
Regulatory Commission Expense						-
Bad Debt Expense				294,844		294,844
Other	-	-	-	-	320,513	320,513
Total Operating Expenses	<u>1,371,808</u>	<u>3,737,457</u>	<u>4,861,326</u>	<u>4,412,475</u>	<u>6,121,797</u>	<u>20,504,863</u>
Utility Receipts Tax					292,027	292,027
Total Operating Expenses as Reported by Petitioner					<u>6,413,824</u>	<u>20,796,890</u>
Lab Expense		-				
Office Supplies		-	-	-		
Postage					2,317	
Office Expense					-	
Permits					63,000	
Other					255,196	
	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>320,513</u>	

EVANSVILLE MUNICIPAL WATER  
CAUSE NUMBER 45073

Pro Forma Net Operating Income Statement - Phase I

	Year Ended		Sch	Pro Forma		Sch	Phase I
	September 30	Adjustments		Present	Adjustments		Pro Forma Proposed
	2017		Ref	Rates		Ref	Rates
Operating Revenues							
Residential Water Sales	\$ 13,696,042	\$ 2,620,639	5-Sum	\$ 16,316,681	1,685,019		\$ 18,001,700
Commercial Water Sales	6,197,076	1,167,851	5-Sum	7,364,927	760,573		8,125,500
Industrial Water Sales	2,120,285	380,346	5-Sum	2,500,631	258,239		2,758,870
Public Authorities Water Sales	1,655,288	202,618	5-Sum	1,857,906	191,865		2,049,771
Sales for Resale	929,528	305,633	5-Sum	1,235,161	127,555		1,362,716
Fire Protection		-					
Public Fire Protection - Inside	2,208,288	415,052	PET	2,623,340	270,911		2,894,251
Public Fire Protection - Outside	1,239,611	188,233	PET	1,427,844	147,453		1,575,297
Private Fire Protection	526,780	82,807	PET	609,587	62,952		672,539
Late Fees	147,946	26,979	5-Sum	174,925	18,064		192,989
Other Operating Revenues	457,282	67,194	PET	524,476			524,476
Total Operating Revenues	<u>29,178,126</u>	<u>5,457,352</u>		<u>34,635,478</u>	<u>3,522,631</u>	1	<u>38,158,109</u>
O&M Expense							
Salaries and Wages	6,626,457	1,027,839	PET	7,654,296			7,654,296
Employee Benefits	3,585,723			4,477,433			4,477,433
FICA		89,092	PET				
PERF		(200,111)	6-1				
Health and Life Insurance		1,008,258	PET				
Workman's Compensation		(5,584)	PET				
Teamster's Scholarship Fund		55	PET				
Purchased Power	1,331,344			1,331,344			1,331,344
Chemicals	1,096,964			1,096,964			1,096,964
Materials and Supplies	1,001,035	23,438	PET	1,024,473			1,024,473
Repairs and Maintenance	2,341,209	1,972,788	6-2	4,313,997			4,313,997
Contractual Services	2,577,799	155,203	PET	2,733,002			2,733,002
Rents	103,066	131,852	PET	234,918			234,918
Transportation	276,125			276,125			276,125
Insurance	351,141			351,141			351,141
Bad Debt Expense	136,416	25,978	6-3	162,394	16,777	1	179,171
Miscellaneous Expense	359,318			330,472			330,472
Non-Recurring Expenses		(203,567)	PET				
Reclassification of YE Adjustment		(450,858)	PET				
Additional Sewer O&M Expenses		625,579	PET				
Depreciation Expense	3,845,446			3,845,446			3,845,446
Taxes Other than Income							
Payment in Lieu of Property Taxes	1,135,896	746,404	PET	1,882,300			1,882,300
Utility Receipts Tax	354,798	51,741	6-4	406,539	41,264	1	447,803
Total Operating Expenses	<u>25,122,737</u>	<u>4,998,107</u>		<u>30,120,844</u>	<u>58,041</u>		<u>30,178,885</u>
Net Operating Income	<u>\$ 4,055,389</u>	<u>\$ 459,245</u>		<u>\$ 4,514,634</u>	<u>\$ 3,464,590</u>		<u>\$ 7,979,224</u>

EVANSVILLE MUNICIPAL WATER  
CAUSE NUMBER 45073

*Pro Forma* Net Operating Income Statement - Phase II

	Phase I <i>Pro Forma</i> Proposed		Sch	Phase II <i>Pro Forma</i> Proposed	
	Rates	Adjustments	Ref	Rates	Adjustments
Operating Revenues					
Residential Water Sales	\$ 18,001,700			\$ 18,001,700	1,840,421
Commercial Water Sales	8,125,500			8,125,500	830,718
Industrial Water Sales	2,758,870			2,758,870	282,056
Public Authorities Water Sales	2,049,771			2,049,771	209,560
Sales for Resale	1,362,716			1,362,716	139,319
Fire Protection					
Public Fire Protection - Inside	2,894,251			2,894,251	295,896
Public Fire Protection - Outside	1,575,297			1,575,297	161,052
Private Fire Protection	672,539			672,539	68,758
Late Fees	192,989			192,989	19,730
Other Operating Revenues	524,476			524,476	
Total Operating Revenues	<u>38,158,109</u>	<u>-</u>		<u>38,158,109</u>	<u>3,847,510</u>
O&M Expense					
Salaries and Wages	7,654,296			7,654,296	
Employee Benefits	4,477,433			4,477,433	
Purchased Power	1,331,344			1,331,344	
Chemicals	1,096,964			1,096,964	
Materials and Supplies	1,024,473			1,024,473	
Repairs and Maintenance	4,313,997			4,313,997	
Contractual Services	2,733,002			2,733,002	
Rents	234,918			234,918	
Transportation	276,125			276,125	
Insurance	351,141			351,141	
Bad Debt Expense	179,171			179,171	18,324
Miscellaneous Expense	330,472			330,472	
Depreciation Expense	3,845,446			3,845,446	
Taxes Other than Income					
Payment in Lieu of Taxes	1,882,300	626,800	PET	2,509,100	
Utility Receipts Tax	447,803			447,803	45,069
Total Operating Expenses	<u>30,178,885</u>	<u>626,800</u>		<u>30,805,685</u>	<u>63,393</u>
Net Operating Income	<u>\$ 7,979,224</u>	<u>\$ (626,800)</u>		<u>\$ 7,352,424</u>	<u>\$ 3,784,117</u>

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EVANSVILLE MUNICIPAL WATER  
CAUSE NUMBER 45073

*Pro Forma* Net Operating Income Statement - Phase III

	Phase II <i>Pro Forma</i> Proposed		Sch	Phase III <i>Pro Forma</i> Proposed		Sch
	Rates	Adjustments	Ref	Rates	Adjustments	Ref
Operating Revenues						
Residential Water Sales	\$ 19,842,121			\$ 19,842,121	1,142,424	
Commercial Water Sales	8,956,218			8,956,218	515,661	
Industrial Water Sales	3,040,926			3,040,926	175,084	
Public Authorities Water Sales	2,259,331			2,259,331	130,083	
Sales for Resale	1,502,035			1,502,035	86,481	
Fire Protection						
Public Fire Protection - Inside	3,190,147			3,190,147	183,675	
Public Fire Protection - Outside	1,736,349			1,736,349	99,972	
Private Fire Protection	741,297			741,297	42,681	
Late Fees	212,719			212,719	12,247	
Other Operating Revenues	524,476			524,476		
Total Operating Revenues	<u>42,005,619</u>	<u>-</u>		<u>42,005,619</u>	<u>2,388,308</u>	1
O&M Expense						
Salaries and Wages	7,654,296			7,654,296		
Employee Benefits	4,477,433			4,477,433		
Purchased Power	1,331,344			1,331,344		
Chemicals	1,096,964			1,096,964		
Materials and Supplies	1,024,473			1,024,473		
Repairs and Maintenance	4,313,997			4,313,997		
Contractual Services	2,733,002			2,733,002		
Rents	234,918			234,918		
Transportation	276,125			276,125		
Insurance	351,141			351,141		
Bad Debt Expense	197,495			197,495	11,374	1
Miscellaneous Expense	330,472			330,472		
Depreciation Expense	3,845,446			3,845,446		
Taxes Other than Income						
Payroll Taxes	2,509,100	603,800	PET	3,112,900		
Utility Receipts Tax	492,872			492,872	27,976	1
Total Operating Expenses	<u>30,869,078</u>	<u>603,800</u>		<u>31,472,878</u>	<u>39,350</u>	
Net Operating Income	<u>\$ 11,136,541</u>	<u>\$ (603,800)</u>		<u>\$ 10,532,741</u>	<u>\$ 2,348,958</u>	

**EVANSVILLE MUNICIPAL WATER  
CAUSE NUMBER 45073**

**Water Operating Revenue Adjustments**

	<b>Residential</b>	<b>Commercial</b>	<b>Industrial</b>	<b>Public Authority</b>	<b>Sales for Resale</b>	<b>Fire Protection</b>	<b>Late Fees</b>	<b>Total</b>
Test Year Revenues	\$ 13,696,042	\$ 6,197,076	\$ 2,120,285	\$ 929,528	\$ 1,655,288	\$ 3,974,679	\$ 147,946	\$ 28,720,844
PET CN 44760 Phase I	469,210	248,648	72,674	26,133	64,366	-	5,457	886,488
5-1 CN 44760 Phase II	1,987,385	904,335	307,672	134,079	241,267	-	21,522	3,596,260
5-2 Growth Normalization	164,044					188,233		352,277
PET Growth Normalization		14,868	-		-	497,859	-	512,727
5-3 Growth Normalization				42,406				42,406
								-
Total Adjustments	<u>2,620,639</u>	<u>1,167,851</u>	<u>380,346</u>	<u>202,618</u>	<u>305,633</u>	<u>686,092</u>	<u>26,979</u>	<u>5,390,158</u>
Sub-total	<u>\$ 16,316,681</u>	<u>\$ 7,364,927</u>	<u>\$ 2,500,631</u>	<u>\$ 1,132,146</u>	<u>\$ 1,960,921</u>	<u>\$ 4,660,771</u>	<u>\$ 174,925</u>	<u>\$ 34,111,002</u>
Other Operating Revenues								524,476
<i>Pro forma</i> Operating Revenues								<u>\$ 34,635,478</u>

**EVANSVILLE MUNICIPAL WATER  
 CAUSE NUMBER 45073**

**Revenue Adjustments**

(1)

**Revenue Adjustment for Phase II of Cause No. 44760**

To adjust test year metered operating revenues for a full year of the Phase II 14.03% rate increase effective January 1, 2018.

	<b>Test Year</b>	<b>CN 44760 Phase I Adj.</b>	<b>Normalized Revenues</b>		<b>Phase II Adjustment</b>
Residential	\$ 13,696,042	\$ 469,210	\$ 14,165,252	14.03%	\$ 1,987,385
Commercial	6,197,076	248,648	6,445,724	14.03%	904,335
Industrial	2,120,285	72,674	2,192,959	14.03%	307,672
Public Authority	929,528	26,133	955,661	14.03%	134,079
Sales for Resale	1,655,288	64,366	1,719,654	14.03%	241,267
Late Fees	147,946	5,457	153,403	14.03%	21,522
<b>Totals</b>	<b>\$ 24,746,165</b>	<b>\$ 886,488</b>	<b>\$ 25,632,653</b>		<b>\$ 3,596,260</b>

**Adjustment Increase (Decrease)**

**\$ 3,596,260**

(2)

**Residential Customer Growth Adjustment**

To adjust operating revenues to reflect test year Residential customer growth.

		<b>Consumption</b>	<b>Test Year Billings</b>	<b>Irrigation Meters &amp; Temp Shut- offs</b>	<b>Adjusted Test Year Billings</b>	<b>Increase (Decrease)</b>	<b>Additional Monthly Bills</b>
October	2016	243,142	59,238	-72	59,166		
November	2016	210,818	58,985	175	59,160	(6)	1 (6)
December	2016	192,216	58,618	437	59,055	(105)	2 (210)
January	2017	191,009	58,518	154	58,672	(383)	3 (1,149)
February	2017	165,704	58,432	39	58,471	(201)	4 (804)
March	2017	202,425	58,307	20	58,327	(144)	5 (720)
April	2017	173,638	58,403	-43	58,360	33	6 198
May	2017	185,799	58,651	-231	58,420	60	7 420
June	2017	261,089	59,028	-254	58,774	354	8 2,832
July	2017	258,359	59,296	-180	59,116	342	9 3,078
August	2017	285,357	59,296	-29	59,267	151	10 1,510
September	2017	226,570	59,465	-16	59,449	182	11 2,002
<b>Totals</b>		<b>2,596,126</b>	<b>706,237</b>	<b>-</b>	<b>706,237</b>	<b>283</b>	<b>7,151</b>
		<b>(A)</b>	<b>(B)</b>				

Times Average Monthly Billing

**\$ 22.94**

**Adjustment Increase (Decrease)**

**\$ 164,044**

Monthly Service Charge (5/8")	\$ 6.47	Total Test Year Consumption	2,596,126 <sup>(A)</sup>
Volumetric Charge at \$4.48 per thousand gallons	16.47	Divided by Total Test Year Billings	706,237 <sup>(B)</sup>
Average Monthly Billing	<u>\$ 22.94 <sup>(1)</sup></u>	Average Monthly consumption	<u>3.676 <sup>(A)/(B)</sup></u>

**EVANSVILLE MUNICIPAL WATER  
 CAUSE NUMBER 45073**

**Revenue Adjustments**

(3)

**Public Authority Customer Growth Adjustment**

To adjust operating revenues to reflect test year Public Authority customer growth.

		<u>Consumption</u>	<u>Billings</u>	<u>Bills Remaining</u>		<u>Additional Monthly Bills</u>
October	2016	28,368	217			
November	2016	26,793	217	-	1	-
December	2016	20,132	217	-	2	-
January	2017	19,178	220	3	3	9
February	2017	19,034	225	5	4	20
March	2017	21,139	233	8	5	40
April	2017	21,161	236	3	6	18
May	2017	28,467	235	(1)	7	(7)
June	2017	35,023	234	(1)	8	(8)
July	2017	47,789	234	-	9	-
August	2017	35,237	235	1	10	10
September	2017	32,356	236	1	11	11
Totals		<u>334,677</u>	<u>2,739</u>	<u>19</u>		<u>93</u>
		<b>(A)</b>	<b>(B)</b>			

Times Average Monthly Billing \$ 455.98 <sup>(1)</sup>

**Adjustment Increase (Decrease)** \$ 42,406

Monthly Service Charge (5/8")	\$ 7.70	Total Test Year Consumption	334,677 <sup>(A)</sup>
Volumetric Charge at \$4.48 per thousand gallons	89.60	Divided by Total Test Year Billings	<u>2,739 <sup>(B)</sup></u>
Volumetric Charge at \$3.51 per thousand gallons	<u>358.68</u>	Average Monthly consumption	<u>122.189 <sup>(A)/(B)</sup></u>
Average Monthly Billing	<u>\$ 455.98</u> <sup>(1)</sup>		

**EVANSVILLE MUNICIPAL WATER  
 CAUSE NUMBER 45073**

**OUCS Expense Adjustments**

**(1)  
PERF**

To adjust test year PERF expense to reflect *pro forma* salaries and wages expense, which includes an increase in PERF rate to 14.20%.

<i>Pro forma</i> Salaries and Wages Expense	\$ 7,654,296	
Less: Payroll Applicable to Board Members	10,000	
	<hr/>	
Net Salaries and Wages Expense	\$ 7,644,296	
Times: PERF Rate of 14.20% (11.2% + 3.0%)	14.20%	
	<hr/>	
<i>Pro forma</i> PERF Expense		\$ 1,085,490
Less: Test Year PERF Expense		<hr/> 1,285,601
	<b>Adjustment Increase (Decrease)</b>	<b><u>\$ (200,111)</u></b>

**(2)  
Periodic Maintenance**

To adjust the test year to allow for periodic maintenance expense.

<u>Pump Maintenance</u>	<u>Number of Pumps</u>	<u>Serviced Per Year</u>	<u>Interval of Service</u>	<u>Average Cost Each</u>		<u>Annual Cost</u>
High Service Pumps	7	4	1.75	\$ 90,240	\$	157,920
Low Service Pumps	6	4	1.50	100,140	<hr/>	150,210
<b>Annual Pump Maintenance</b>						\$ 308,130
<b><u>Filter Media</u></b>						
Filter Media Replacement	24	4	6.00	251,705		1,006,820
<b><u>Dredging in Front of Intake Structure</u></b>				<b>(per Petitioner)</b>		236,580
<b><u>Tank Maintenance</u></b>				<b>(per Petitioner)</b>		514,309
<b><u>Booster Stations</u></b> (3 pumps per year @ \$20,637 Each)				<b>(per Petitioner)</b>		61,911
<b><u>Traveling Screens Maintenance</u></b>				<b>(per Petitioner)</b>		61,680
<b><u>Leak Detection and Distribution System Maintenance</u></b>				<b>(per Petitioner)</b>		<hr/> 492,883
Pro forma Periodic Maintenance Expense						\$ 2,682,313
Less: Test Year Periodic Maintenance Expense						<hr/> 709,525
				<b>Adjustment Increase (Decrease)</b>		<b><u>\$ 1,972,788</u></b>

**EVANSVILLE MUNICIPAL WATER  
 CAUSE NUMBER 45073**

**OUCC Expense Adjustments**

(3)

**Bad Debt Expense**

To adjust operating and maintenance expenses for bad debt expense on additional present rate water sales revenues.

Test Year Residential Water Sales	\$ 13,696,042
Test Year Commercial Water Sales	6,197,076
Total	<u>19,893,118</u>
Divide by: Test Year Bad Debt Expense	136,416
Bad Debt Expense Rate	<u><u>0.6857%</u></u>

Adjustments to Test Year Operating Revenues

Residential	\$ 2,620,639
Commercial	<u>1,167,851</u>

Increase in Residential and Commercial Revenues	\$ 3,788,490
Times: Bad Debt % for Test Year	<u>0.6857%</u>

**Adjustment Increase (Decrease) \$ 25,978**

(4)

**Utility Receipts Tax**

To adjust the test year to normalize Utility Receipts Tax expense.

Normalized Operating Revenues for Test Year Ended 9/30/2017	\$ 34,635,478
Less: Exemption	(1,000)
Bad Debt Expense	(162,394)
Sales for Resale	(1,235,161)
Other Exempt Sales	<u>(4,198,437)</u>

<i>Pro forma</i> Revenues Subject to URT	\$ 29,038,486
Times: URT Rate	<u>1.40%</u>

<i>Pro forma</i> URT Expense	406,539
Less: Test Year URT Expense	<u>354,798</u>

**Adjustment Increase (Decrease) \$ 51,741**

**EVANSVILLE MUNICIPAL WATER  
CAUSE NUMBER 45073**

**Extension and Replacements**

	<u>Phase I</u>	<u>Phase II</u>	<u>Phase III</u>	<u>Total</u>
<b><u>Distribution System</u></b> (see page 2 of 2 for details)	\$ 2,952,500	\$ 2,952,500	\$ 2,952,500	\$ 8,857,500
<b><u>Treatment Plant</u></b>				
Filter Backwash System - Replace main in/out of floodwall to tanks	787,000			
Line 36" outfall #4 sewer and below existing filter buildings	88,000			
Enclose Filters 13-20 at Gallery Access, Relocate 1.5 MG clearwell vent	66,000			
	<u>941,000</u>	<u>-</u>	<u>-</u>	941,000
<b><u>Other Capital Improvement Projects</u></b>				
Enclose Switch Gear Housing	70,000			
Pump Replacement			130,000	
Add VFD for pump #1 on Campground Booster			33,000	
	<u>70,000</u>	<u>-</u>	<u>163,000</u>	233,000
<b><u>Annual Capital Improvement Projects</u></b>				
Annual Blow-offs	41,400	42,600	43,900	
Distribution System Improvements	268,000	268,000	268,000	
Engineering Equipment	36,540	37,700	38,830	
Hydrant Replacement Program	275,000	275,000	275,000	
Operations Equipment	360,948	500,632	649,596	
Surveying Equipment	-	53,350	-	
Annual Resetters	45,672	45,672	45,672	
Residential Meters	494,888	648,970	826,583	
Industrial Meters	366,000	377,000	388,000	
Valve Replacement Program	113,000	113,000	113,000	
Annual Vehicles	477,914	646,520	390,120	
Annual Capital On-Call CES/RPR	-	-	-	
New Service Connections	-	-	-	
	<u>2,479,362</u>	<u>3,008,444</u>	<u>3,038,701</u>	<u>8,526,507</u>
<b>Total Annual Extensions and Replacements</b>	<u>\$ 6,442,862</u>	<u>\$ 5,960,944</u>	<u>\$ 6,154,201</u>	<u>\$18,558,007</u>

**EVANSVILLE MUNICIPAL WATER  
CAUSE NUMBER 45073**

**Extension and Replacements**

	<u>Phase I</u>	<u>Phase II</u>	<u>Phase III</u>	<u>Total</u>
New Harmony Road, Allens Lane to Harmony Way	\$ -	\$ -	\$ -	
Ingle Ave, Forest to Marion		477,400		
Kerth Avenue, St. George to Christ		590,300		
Rosewood Drive, Weaver to Herman and Karch Drive east of Herman		402,100		
Gayne Street, West of Van Ness		-		
Schmitt Lane, east of Oak Hill		513,300		
Peerless Road, Upper Mt Vernon to Moya			2,203,000	
Covert Ave - Phase II and Wedge Ave.			1,718,400	
320' of new 8" main on Kathleen Ave	167,000			
Inglefield Road	490,000			
Install new 8" on Dexter and Jackson Ave.	300,000			
Replace 8" on Lake Dr.		384,000		
Replace water main on Cardinal Drive		288,000		
Replace water main on Wall Street		160,000		
Virginia Avenue		338,000		
1100 of 8" to replace existing 2" along Helfrich Avenue			200,000	
2,600 of 8" to replace existing 6" along Alvord and Columbia			338,000	
1100 of 8" to replace existing 2" and 4" along Washington Avenue			253,000	
Southeast Blvd- Phase I Tie-in at Powell			35,000	
Total Distribution System Projects	<u>957,000</u>	<u>3,153,100</u>	<u>4,747,400</u>	<u>8,857,500</u>
Distribution System Projects - Annual Three-Year Average				<u>\$ 2,952,500</u>

**Evansville Municipal Water  
 CAUSE NUMBER. 45073**

**Schedule of Rates and Charges**

	Current	Petitioner (Rebuttal)			OUCC			OUCC P.O.			OUCC More (Less)		
		Phase I	Phase II	Phase II	Phase I	Phase II	Phase II	Phase I	Phase II	Phase II	Phase I	Phase II	Phase II
<b>(A) Monthly Service Charge</b>													
5/8-3/4 Inch Meter	\$ 6.47	\$ 7.66	\$ 8.88	\$ 9.56	\$ 6.64	\$ 7.44	\$ 8.03	\$ 7.14	\$ 7.87	\$ 8.32	\$ 0.50	\$ 0.43	\$ 0.29
1 Inch Meter	7.70	9.12	10.58	11.39	7.91	8.87	9.57	8.50	9.37	9.91	0.59	0.50	0.34
1 1/4 Inch Meter	8.50	10.07	11.68	12.58	8.73	9.78	10.55	9.38	10.34	10.94	0.65	0.56	0.39
1 1/2 Inch Meter	9.09	10.77	12.49	13.45	9.34	10.47	11.30	10.03	11.06	11.70	0.69	0.59	0.40
2 Inch Meter	12.44	14.73	17.08	18.39	12.78	14.32	15.45	13.72	15.12	15.99	0.94	0.80	0.54
3 Inch Meter	37.77	44.73	51.87	55.85	38.79	43.48	46.92	41.67	45.93	48.58	2.88	2.45	1.66
4 Inch Meter	47.12	55.80	64.71	69.67	48.39	54.24	58.53	51.99	57.30	60.60	3.60	3.06	2.07
6 Inch Meter	68.97	81.68	94.72	101.99	70.83	79.39	85.67	76.09	83.87	88.70	5.26	4.48	3.03
8 Inch Meter	93.94	111.25	129.01	138.91	96.48	108.13	116.68	103.64	114.23	120.81	7.16	6.10	4.13
10 Inch Meter	121.99	144.47	167.53	180.38	125.29	140.43	151.54	134.59	148.35	156.89	9.30	7.92	5.35
<b>(B) Volume Charge (per Thousand Gallons)</b>													
First 20,000 Gallons	\$ 4.48	\$ 5.31	\$ 6.16	\$ 6.63	\$ 4.60	\$ 5.16	\$ 5.57	\$ 4.94	\$ 5.44	\$ 5.75	\$ 0.34	\$ 0.28	\$ 0.18
Next 280,000 Gallons	3.51	4.16	4.82	5.19	3.60	4.03	4.35	3.87	4.27	4.52	0.27	0.24	0.17
Next 700,000 Gallons	3.17	3.75	4.35	4.68	3.26	3.65	3.94	3.50	3.86	4.08	0.24	0.21	0.14
Next 2,000,000 Gallons	2.79	3.30	3.83	4.12	2.87	3.22	3.47	3.08	3.39	3.59	0.21	0.17	0.12
Over 3,000,000 Gallons	2.11	2.50	2.90	3.12	2.17	2.43	2.62	2.33	2.57	2.72	0.16	0.14	0.10

Evansville Municipal Water  
 CAUSE NUMBER. 45073

Schedule of Rates and Charges

(C) Public Fire Protection Charges

		Petitioner (Rebuttal)			OUCG			OUCG P.O.			OUCG More (Less)		
		Phase I	Phase II	Phase II	Phase I	Phase II	Phase II	Phase I	Phase II	Phase II	Phase I	Phase II	Phase II
5/8"	\$ 3.75	\$ 4.44	\$ 5.15	\$ 5.55	\$ 3.77	\$ 4.23	\$ 4.56	\$ 4.14	\$ 4.56	\$ 4.82	\$ 0.37	\$ 0.33	\$ 0.26
1"	9.38	11.11	12.88	13.87	8.10	9.08	9.80	10.35	11.41	12.07	2.25	2.33	2.27
1 1/2"	18.77	22.23	25.78	27.76	14.96	16.77	18.10	20.71	22.83	24.15	5.75	6.06	6.05
2	30.03	35.56	41.24	44.40	23.98	26.88	29.01	33.13	36.52	38.62	9.15	9.64	9.61
3	56.31	66.69	77.33	83.26	52.45	58.79	63.44	62.13	68.48	72.42	9.68	9.69	8.98
4	93.84	111.13	128.87	138.75	80.94	90.72	97.90	103.53	114.11	120.68	22.59	23.39	22.78
6	187.69	222.28	257.76	277.53	153.36	171.89	185.49	207.07	228.23	241.38	53.71	56.34	55.89

(D) Private Fire Protection Charges, each per annum:

		Petitioner (Rebuttal)			OUCG			OUCG P.O.			OUCG More (Less)		
		Phase I	Phase II	Phase II	Phase I	Phase II	Phase II	Phase I	Phase II	Phase II	Phase I	Phase II	Phase II
1"	\$ 5.52	\$ 6.54	\$ 7.58	\$ 8.16	\$ 5.67	\$ 6.35	\$ 6.85	\$ 6.09	\$ 6.71	\$ 7.10	\$ 0.42	\$ 0.36	\$ 0.25
2"	30.64	36.29	42.08	45.31	31.47	35.27	38.06	33.80	37.25	39.40	2.33	1.98	1.34
3"	84.72	100.33	116.34	125.26	87.01	97.52	105.23	93.47	103.02	108.95	6.46	5.50	3.72
4"	173.58	205.57	238.38	256.66	178.27	199.81	215.61	191.51	211.08	223.24	13.24	11.27	7.63
6"	477.98	566.07	656.41	706.76	490.90	550.20	593.72	527.34	581.23	614.71	36.44	31.03	20.99
8"	981.46	1,162.34	1,347.85	1,451.23	1,007.98	1,129.74	1,219.10	1,082.82	1,193.48	1,262.22	74.84	63.74	43.12
10"	1,714.24	2,030.17	2,354.19	2,534.76	1,760.57	1,973.25	2,129.33	1,891.27	2,084.56	2,204.63	130.70	111.31	75.30
12"	2,704.31	3,202.71	3,713.86	3,998.71	2,777.39	3,112.90	3,359.13	2,983.58	3,288.50	3,477.92	206.19	175.60	118.79

## OUCC Revised Total Debt Issuances

Line No.

1	SRF Subsidized	\$ 7,500,000
2	Open Market	\$ 35,560,000
3	SRF Pooled (see table below)	<u>\$ 72,055,000</u>
4	Total	\$ 115,115,000

Calculate SRF Pooled

5	OUCC Direct Testimony	\$ 117,335,000
6	Less Open Market	\$ 35,560,000
7	Less SRF subsidized	\$ 7,500,000
8	Less Interest Earned SRF	\$ 1,596,600
9	Less Interest Earned Open Market	\$ 623,900
10	Sub-total	\$ 72,054,500
11	Total Rounded add \$500	<u>\$ 72,055,000</u>

Calculate Open Market Debt

12	Open Market	\$ 36,180,000
13	Less Interest Earned	\$ 623,900
14	Sub-total	\$ 35,556,100
14	Total Rounded add \$3,900	<u>\$ 35,560,000</u>
16	OUCC Total (Line 11 + Line 14)	<u>\$ 115,115,000</u>
17	Net Difference	\$ 2,220,000

## EVANSVILLE (INDIANA) WATERWORKS DISTRICT

SRF Bond Issue - SubsidizedSCHEDULE OF AMORTIZATION OF \$7,500,000 PRINCIPAL AMOUNT OF  
PROPOSED WATERWORKS DISTRICT REVENUE BONDS, SERIES 2018A

Principal payable annually January 1st, beginning January 1, 2021 and semi-annually on July 1, 2038.

Interest payable semi-annually January 1st and July 1st, beginning July 1, 2019.

Assumes interest rates as indicated.

Assumes bonds dated November 8, 2018.

Payment Date	Principal Balance (In thousands)	Principal	Assumed Interest Rates (%)	Debt Service		Bond Year Total
				Interest	Total (-----In Dollars-----)	
07/01/19				\$121,354.17	\$121,354.17	
01/01/20	\$7,500			93,750.00	93,750.00	\$215,104.17
07/01/20				93,750.00	93,750.00	
01/01/21	7,500	\$293	2.50	93,750.00	386,750.00	480,500.00
07/01/21				90,087.50	90,087.50	
01/01/22	7,207	301	2.50	90,087.50	391,087.50	481,175.00
07/01/22				86,325.00	86,325.00	
01/01/23	6,906	308	2.50	86,325.00	394,325.00	480,650.00
07/01/23				82,475.00	82,475.00	
01/01/24	6,598	316	2.50	82,475.00	398,475.00	480,950.00
07/01/24				78,525.00	78,525.00	
01/01/25	6,282	324	2.50	78,525.00	402,525.00	481,050.00
07/01/25				74,475.00	74,475.00	
01/01/26	5,958	332	2.50	74,475.00	406,475.00	480,950.00
07/01/26				70,325.00	70,325.00	
01/01/27	5,626	340	2.50	70,325.00	410,325.00	480,650.00
07/01/27				66,075.00	66,075.00	
01/01/28	5,286	349	2.50	66,075.00	415,075.00	481,150.00
07/01/28				61,712.50	61,712.50	
01/01/29	4,937	358	2.50	61,712.50	419,712.50	481,425.00
07/01/29				57,237.50	57,237.50	
01/01/30	4,579	366	2.50	57,237.50	423,237.50	480,475.00
07/01/30				52,662.50	52,662.50	
01/01/31	4,213	376	2.50	52,662.50	428,662.50	481,325.00
07/01/31				47,962.50	47,962.50	
01/01/32	3,837	385	2.50	47,962.50	432,962.50	480,925.00
07/01/32				43,150.00	43,150.00	
01/01/33	3,452	395	2.50	43,150.00	438,150.00	481,300.00
07/01/33				38,212.50	38,212.50	
01/01/34	3,057	405	2.50	38,212.50	443,212.50	481,425.00
07/01/34				33,150.00	33,150.00	
01/01/35	2,652	415	2.50	33,150.00	448,150.00	481,300.00
07/01/35				27,962.50	27,962.50	
01/01/36	2,237	425	2.50	27,962.50	452,962.50	480,925.00
07/01/36				22,650.00	22,650.00	
01/01/37	1,812	436	2.50	22,650.00	458,650.00	481,300.00
07/01/37				17,200.00	17,200.00	
01/01/38	1,376	447	2.50	17,200.00	464,200.00	481,400.00
07/01/38	929	228	2.50	11,612.50	239,612.50	
01/01/39	701	231	2.50	8,762.50	239,762.50	479,375.00
07/01/39	470	234	2.50	5,875.00	239,875.00	
01/01/40	236	236	2.50	2,950.00	238,950.00	478,825.00
Totals		<u>\$7,500</u>		<u>\$2,332,179.17</u>	<u>\$9,832,179.17</u>	<u>\$9,832,179.17</u>

Average annual debt service for the five bond years ending January 1, 2026.

\$480,955.00

## EVANSVILLE (INDIANA) WATERWORKS DISTRICT

SRF Bond Issue - Non-SubsidizedSCHEDULE OF AMORTIZATION OF \$72,055,000 PRINCIPAL AMOUNT OF  
PROPOSED WATERWORKS DISTRICT REVENUE BONDS, SERIES 2018A

Principal payable annually January 1st, beginning January 1, 2021 and semi-annually on July 1, 2038.

Interest payable semi-annually January 1st and July 1st, beginning July 1, 2019.

Assumes interest rates as indicated.

Assumes bonds dated November 8, 2018.

Payment Date	Principal		Assumed Interest Rates (%)	Debt Service		Bond Year	
	Balance	Principal		Interest	Total	Total	
	(In thousands)			(-----In Dollars-----)			
07/01/19				\$1,562,292.51	\$1,562,292.51		
01/01/20	\$72,055			1,206,921.25	1,206,921.25	\$2,769,213.76	2,984,317.93
07/01/20				1,206,921.25	1,206,921.25		
01/01/21	72,055	\$1,840	3.35	1,206,921.25	3,046,921.25	4,253,842.50	4,734,342.50
07/01/21				1,176,101.25	1,176,101.25		
01/01/22	70,215	2,640	3.35	1,176,101.25	3,816,101.25	4,992,202.50	5,473,377.50
07/01/22				1,131,881.25	1,131,881.25		
01/01/23	67,575	2,740	3.35	1,131,881.25	3,871,881.25	5,003,762.50	5,484,412.50
07/01/23				1,085,986.25	1,085,986.25		
01/01/24	64,835	2,840	3.35	1,085,986.25	3,925,986.25	5,011,972.50	5,492,922.50
07/01/24				1,038,416.25	1,038,416.25		
01/01/25	61,995	2,980	3.35	1,038,416.25	4,018,416.25	5,056,832.50	5,537,882.50
07/01/25				988,501.25	988,501.25		
01/01/26	59,015	3,090	3.35	988,501.25	4,078,501.25	5,067,002.50	5,547,952.50
07/01/26				936,743.75	936,743.75		
01/01/27	55,925	3,190	3.35	936,743.75	4,126,743.75	5,063,487.50	5,544,137.50
07/01/27				883,311.25	883,311.25		
01/01/28	52,735	3,290	3.35	883,311.25	4,173,311.25	5,056,622.50	5,537,772.50
07/01/28				828,203.75	828,203.75		
01/01/29	49,445	3,395	3.35	828,203.75	4,223,203.75	5,051,407.50	5,532,832.50
07/01/29				771,337.50	771,337.50		
01/01/30	46,050	3,440	3.35	771,337.50	4,211,337.50	4,982,675.00	5,463,150.00
07/01/30				713,717.50	713,717.50		
01/01/31	42,610	3,640	3.35	713,717.50	4,353,717.50	5,067,435.00	5,548,760.00
07/01/31				652,747.50	652,747.50		
01/01/32	38,970	3,740	3.35	652,747.50	4,392,747.50	5,045,495.00	5,526,420.00
07/01/32				590,102.50	590,102.50		
01/01/33	35,230	3,890	3.35	590,102.50	4,480,102.50	5,070,205.00	5,551,505.00
07/01/33				524,945.00	524,945.00		
01/01/34	31,340	3,990	3.35	524,945.00	4,514,945.00	5,039,890.00	5,521,315.00
07/01/34				458,112.50	458,112.50		
01/01/35	27,350	4,190	3.35	458,112.50	4,648,112.50	5,106,225.00	5,587,525.00
07/01/35				387,930.00	387,930.00		
01/01/36	23,160	4,290	3.35	387,930.00	4,677,930.00	5,065,860.00	5,546,785.00
07/01/36				316,072.50	316,072.50		
01/01/37	18,870	4,480	3.35	316,072.50	4,796,072.50	5,112,145.00	5,593,445.00
07/01/37				241,032.50	241,032.50		
01/01/38	14,390	4,510	3.35	241,032.50	4,751,032.50	4,992,065.00	5,473,465.00
07/01/38	9,880	2,440	3.35	165,490.00	2,605,490.00		
01/01/39	7,440	2,445	3.35	124,620.00	2,569,620.00	5,175,110.00	5,654,485.00
07/01/39	4,995	2,490	3.35	83,666.25	2,573,666.25		
01/01/40	2,505	2,505	3.35	41,958.75	2,546,958.75	5,120,625.00	5,599,450.00
Sub-totals		<u>\$72,055</u>		<u>\$31,049,076.26</u>	<u>\$103,104,076.26</u>	<u>\$103,104,076.26</u>	

Average annual debt service for the five bond years ending January 1, 2026.

\$5,026,354.50

## EVANSVILLE (INDIANA) WATERWORKS DISTRICT

**SCHEDULE OF AMORTIZATION OF \$35,560,000 PRINCIPAL AMOUNT OF  
PROPOSED WATERWORKS DISTRICT REVENUE BONDS, SERIES 2018B**

Principal payable annually January 1st, beginning January 1, 2021 and semi-annually on July 1, 2038.

Interest payable semi-annually January 1st and July 1st, beginning July 1, 2019.

Assumes interest rates as indicated.

Assumes bonds dated December 4, 2018.

Payment Date	Principal Balance	Principal	Assumed Interest Rates	Debt Service		Bond Year Total
				Interest	Capitalized Interest	
	(In thousands)		(%)	(-----In Dollars-----)		
07/01/19				\$721,747.19	(721,747.19)	\$721,747.19
01/01/20	\$35,560			627,606.25	(627,606.25)	627,606.25
07/01/20				627,606.25		627,606.25
01/01/21	35,560	\$370	2.20%	627,606.25		997,606.25
07/01/21				623,536.25		623,536.25
01/01/22	35,190	1,380	2.30%	623,536.25		2,003,536.25
07/01/22				607,666.25		607,666.25
01/01/23	33,810	1,415	2.45%	607,666.25		2,022,666.25
07/01/23				590,332.50		590,332.50
01/01/24	32,395	1,450	2.65%	590,332.50		2,040,332.50
07/01/24				571,120.00		571,120.00
01/01/25	30,945	1,480	2.75%	571,120.00		2,051,120.00
07/01/25				550,770.00		550,770.00
01/01/26	29,465	1,530	2.90%	550,770.00		2,080,770.00
07/01/26				528,585.00		528,585.00
01/01/27	27,935	1,575	3.00%	528,585.00		2,103,585.00
07/01/27				504,960.00		504,960.00
01/01/28	26,360	1,620	3.10%	504,960.00		2,124,960.00
07/01/28				479,850.00		479,850.00
01/01/29	24,740	1,670	3.25%	479,850.00		2,149,850.00
07/01/29				452,712.50		452,712.50
01/01/30	23,070	1,730	3.35%	452,712.50		2,182,712.50
07/01/30				423,735.00		423,735.00
01/01/31	21,340	1,790	3.50%	423,735.00		2,213,735.00
07/01/31				392,410.00		392,410.00
01/01/32	19,550	1,850	3.60%	392,410.00		2,242,410.00
07/01/32				359,110.00		359,110.00
01/01/33	17,700	1,915	3.70%	359,110.00		2,274,110.00
07/01/33				323,682.50		323,682.50
01/01/34	15,785	1,990	3.80%	323,682.50		2,313,682.50
07/01/34				285,872.50		285,872.50
01/01/35	13,795	2,070	3.90%	285,872.50		2,355,872.50
07/01/35				245,507.50		245,507.50
01/01/36	11,725	2,150	4.00%	245,507.50		2,395,507.50
07/01/36				202,507.50		202,507.50
01/01/37	9,575	2,230	4.10%	202,507.50		2,432,507.50
07/01/37				156,792.50		156,792.50
01/01/38	7,345	2,330	4.20%	156,792.50		2,486,792.50
07/01/38	5,015	1,215	4.20%	107,862.50		1,322,862.50
01/01/39	3,800	1,240	4.30%	82,347.50		1,322,347.50
07/01/39	2,560	1,265	4.30%	55,687.50		1,320,687.50
01/01/40	1,295	1,295	4.40%	28,490.00		1,323,490.00
Totals		<u>\$35,560</u>		<u>\$17,477,253.44</u>		<u>\$53,037,253.44</u>
						<u>\$51,687,900.00</u>

Average annual debt service for the five bond years ending January 1, 2026.

\$2,628,370.00

## EVANSVILLE (INDIANA) WATERWORKS DISTRICT

**SCHEDULE OF ESTIMATED DRAW DOWNS ON BONDS****\$79,550,000 Principal Amount of 2018A SRF Bonds****(Per Utility Management & Consulting Engineers)**

<u>Account:</u>	Proposed Project	
Total SRF Bond issues	\$ 79,555,000	
Plus interest income rounded		<u>\$1,596,600</u> **
Less amount drawdown from BAN	-	
Less debt service reserve amount	(5,656,535)	
Less capitalized interest	-	
Less allowance for issuance costs	<u>(677,800)</u>	
Net bond issue to be drawdown	<u>\$73,220,665</u>	
Monthly construction cash drawdown*	<u>\$2,033,900</u>	

\* Assumes a 36 month construction period.

\*\* Assumes earned ratably over the construction period.

<u>Month</u>	<u>Estimated Draw downs</u>	<u>Running Total</u>	<u>1.50% Interest</u>	<u>Semiannual Interest Income</u>	<u>Annual Interest Income</u>
November **	\$2,033,900	\$71,186,765	\$0		
December	2,033,900	69,152,865	86,400	\$170,300	\$170,300
January, 2019	2,033,900	67,118,965	83,900		
February	2,033,900	65,085,065	81,400		
March	2,033,900	63,051,165	78,800		
April	2,033,900	61,017,265	76,300		
May	2,033,900	58,983,365	73,700		
June	2,033,900	56,949,465	71,200	465,300	
July	2,033,900	54,915,565	68,600		
August	2,033,900	52,881,665	66,100		
September	2,033,900	50,847,765	63,600		
October	2,033,900	48,813,865	61,000		
November	2,033,900	46,779,965	58,500		
December	2,033,900	44,746,065	55,900	373,700	839,000
January, 2020	2,033,900	42,712,165	53,400		
February	2,033,900	40,678,265	50,800		
March	2,033,900	38,644,365	48,300		
April	2,033,900	36,610,465	45,800		
May	2,033,900	34,576,565	43,200		
June	2,033,900	32,542,665	40,700	282,200	
July	2,033,900	30,508,765	38,100		
August	2,033,900	28,474,865	35,600		
September	2,033,900	26,440,965	33,100		
October	2,033,900	24,407,065	30,500		
November	2,033,900	22,373,165	28,000		
December	2,033,900	20,339,265	25,400	190,700	472,900
January, 2021	2,033,900	18,305,365	22,900		
February	2,033,900	16,271,465	20,300		
March	2,033,900	14,237,565	17,800		
April	2,033,900	12,203,665	15,300		
May	2,033,900	10,169,765	12,700		
June	2,033,900	8,135,865	10,200	99,200	
July	2,033,900	6,101,965	7,600		
August	2,033,900	4,068,065	5,100		
September	2,033,900	2,034,165	2,500		
October	<u>2,033,700</u>	465	0	15,200	114,400
Totals	<u>\$73,220,200</u>		<u>\$1,512,700</u>	<u>\$1,596,600</u>	<u>\$1,596,600</u>

EVANSVILLE (INDIANA) WATERWORKS DISTRICT

**SCHEDULE OF ESTIMATED DRAW DOWNS ON BONDS**  
**\$35,560,000 Principal Amount of 2018B Open Market Bonds**  
**(Per Utility Management & Consulting Engineers)**

<u>Account:</u>	<u>Proposed Project</u>	
Open Market Bond issue	\$35,556,100	35,560,000 (rounded figure)
Plus interest income rounded		<u>\$623,900</u>
Less amount drawdown from BAN	-	
Less debt service reserve amount	(2,645,210)	
Less underwriter's discount	(542,700)	
Less allowance for issuance costs	(726,300)	
Less capitalized interest	<u>(1,349,353)</u>	
Net bond issue to be drawdown	<u>\$30,292,537</u>	
Monthly construction cash drawdown*	<u>\$841,500</u>	

\* Assumes a 36 month construction period.  
 \*\* Assumes earned ratably over the construction period.

<u>Month</u>	<u>Estimated Draw downs</u>	<u>Running Total</u>	<u>1.50% Interest</u>	<u>Semiannual Interest Income</u>	<u>Annual Interest Income</u>
December **	\$841,500	\$29,451,037	\$0	\$0	\$0
January, 2019	841,500	28,609,537	35,800		
February	841,500	27,768,037	34,700		
March	841,500	26,926,537	33,700		
April	841,500	26,085,037	32,600		
May	841,500	25,243,537	31,600		
June	841,500	24,402,037	30,500	198,900	
July	841,500	23,560,537	29,500		
August	841,500	22,719,037	28,400		
September	841,500	21,877,537	27,300		
October	841,500	21,036,037	26,300		
November	841,500	20,194,537	25,200		
December	841,500	19,353,037	24,200	160,900	359,800
January, 2020	841,500	18,511,537	23,100		
February	841,500	17,670,037	22,100		
March	841,500	16,828,537	21,000		
April	841,500	15,987,037	20,000		
May	841,500	15,145,537	18,900		
June	841,500	14,304,037	17,900	123,000	
July	841,500	13,462,537	16,800		
August	841,500	12,621,037	15,800		
September	841,500	11,779,537	14,700		
October	841,500	10,938,037	13,700		
November	841,500	10,096,537	12,600		
December	841,500	9,255,037	11,600	85,200	208,200
January, 2021	841,500	8,413,537	10,500		
February	841,500	7,572,037	9,500		
March	841,500	6,730,537	8,400		
April	841,500	5,889,037	7,400		
May	841,500	5,047,537	6,300		
June	841,500	4,206,037	5,300	47,400	
July	841,500	3,364,537	4,200		
August	841,500	2,523,037	3,200		
September	841,500	1,681,537	2,100		
October	841,500	840,037	1,100		
November	<u>841,600</u>	<u>(1,563)</u>	<u>0</u>	<u>10,600</u>	<u>58,000</u>
Totals	<u>\$30,294,100</u>		<u>\$626,000</u>	<u>\$626,000</u>	<u>\$626,000</u>

**OUCC Corrected**  
 Combined Annual Debt Service  
 Open Market and SRF Debt

	Phase I	Phase II	Phase III
	<u>2019</u>	<u>2020</u>	<u>2021 - 2025</u>
Open Market Issuance \$35.560 million		\$ 1,625,213	\$ 2,627,073
SRF Subsidized \$7.5 million	\$ 215,104	\$ 480,500	\$ 480,955
SRF \$72.055 million	\$ 2,984,318	\$ 4,734,343	\$ 5,473,378
<b>Total</b>	<b>\$ 3,199,422</b>	<b>\$ 6,840,055</b>	<b>\$ 8,581,405</b>
Increase Year over Year		\$ 3,640,633	\$ 1,741,350
Petitioner's proposed annual debt service	\$ 4,355,836	\$ 8,543,713	\$ 10,551,613
OUCC Increase vs. Petitioner		\$ 4,187,876	\$ 2,007,900
Difference between Petitioner and OUCC	\$ 1,156,414	\$ 1,703,658	\$ 1,970,208
 OUCC Direct	 \$ 1,667,736	 \$ 5,403,575	 \$ 7,691,575
Increase over OUCC Direct	\$ 1,531,686	\$ 1,436,480	\$ 889,830