OPEN MEETING ITEM

ARIZONA CORPORATION COMMISSION

DATE: MAY 28, 2014

DOCKET NO.: W-02113A-13-0118

ORIGINAL

TO ALL PARTIES:

Enclosed please find the recommendation of Administrative Law Judge Teena Jibilian. The recommendation has been filed in the form of an Opinion and Order on:

CHAPARRAL CITY WATER COMPANY
(RATES)

Pursuant to A.A.C. R14-3-110(B), you may file exceptions to the recommendation of the Administrative Law Judge by filing an original and thirteen (13) copies of the exceptions with the Commission's Docket Control at the address listed below by **4:00** p.m. on or before:

JUNE 6, 2014

The enclosed is NOT an order of the Commission, but a recommendation of the Administrative Law Judge to the Commissioners. Consideration of this matter has tentatively been scheduled for the Commission's Open Meeting to be held on:

JUNE 10, 2014 AND JUNE 11, 2014

For more information, you may contact Docket Control at (602) 542-3477 or the Hearing Division at (602) 542-4250. For information about the Open Meeting, contact the Executive Director's Office at (602) 542-3931.

JODI JERICH
EXECUTIVE DIRECTOR

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

BOB STUMP - Chairman
GARY PIERCE
BRENDA BURNS
BOB BURNS
SUSAN BITTER SMITH

IN THE MATTER OF THE APPLICATION OF CHAPARRAL CITY WATER COMPANY FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASE IN ITS RATES AND CHARGES BASED THEREON.	DOCKET NO. W-02113A-13-0118 DECISION NO. _____ **OPINION AND ORDER**

DATES OF HEARING:	February 18, 19, 20, 21, and 28, 2014
PLACE OF HEARING:	Phoenix, Arizona
ADMINISTRATIVE LAW JUDGE:	Teena Jibilian
APPEARANCES:	Mr. Michael Hallam, LEWIS ROCA ROTHGERBER, LLP, on behalf of Applicant; Mr. Greg Patterson, on behalf of the Water Utility Association of Arizona; Mr. Daniel Pozefsky, Chief Counsel, on behalf of the Residential Utility Consumer Office; and Ms. Bridget Humphrey and Mr. Matthew Laudone, Staff Attorneys, Legal Division, on behalf of the Utilities Division of the Arizona Corporation Commission.

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BY THE COMMISSION:

I. INTRODUCTION AND PROCEDURAL HISTORY

On April 26, 2013, Chaparral City Water Company ("CCWC" or "Company") filed the above-captioned rate application with the Arizona Corporation Commission ("Commission").

On May 28, 2013, the Commission's Utilities Division ("Staff") filed a Letter of Sufficiency indicating that CCWC's application met the sufficiency requirements of Arizona Administrative Code ("A.A.C.") R14-2-103, and classifying CCWC as a Class A Utility. A Rate Case Procedural Order was issued setting a hearing date and associated procedural deadlines.

Intervention in this matter was granted to the Town of Fountain Hills ("Fountain Hills"), the Residential Utility Consumer Office ("RUCO"), Lina Bellenir, Gale Evans, Patricia Huffman, Leigh M. Oberfeld-Berger, Tracey Holland, Leonora M. Hebenstreit, and the Water Utility Association of Arizona ("WUAA").[1]

On August 22, 2013, CCWC filed a supplement to the application to which was attached 10 draft BMP Tariffs, for which it requested approval as part of an order authorizing CCWC to implement a system improvement benefits ("SIB") surcharge mechanism.

On August 23, 2013, CCWC filed a supplement to the application to which was attached a SIB eligibility report dated August 7, 2013, a SIB Table I dated August 21, 2013, and a SIB Table II dated August 21, 2013.

On December 6, 2013, CCWC filed a supplement to its application to which was attached a SIB Table II dated December 6, 2013.

On February 18, 2014, the hearing commenced as scheduled. CCWC, WUAA, RUCO, and Staff appeared through counsel. Intervenor Lina Bellenir appeared on her own behalf and stated that she did not wish to cross examine witnesses or provide sworn testimony, but wished to provide public comment instead.[2] WUAA appeared through counsel and requested authority to intervene pursuant to the Application for Leave to Intervene filed on February 14, 2014. Due to the lateness of the request, WUAA was not granted leave to introduce evidence, but was granted intervention limited

[1] Because WUAA's intervention request was not filed until February 14, 2014, the day following the pre-hearing conference for the hearing, which commenced on February 18, 2014, WUAA's intervention was limited to cross-examining witnesses and filing legal briefs.

[2] Hearing Transcript ("Tr.") at 7-8.

to cross examination of witnesses and providing legal argument. No other intervenors made appearances at the hearing.[3] Ms. Bellenir and one other member of the public provided public comment for the record. CCWC, RUCO and Staff presented evidence and cross examined witnesses. WUAA cross examined witnesses.

During the hearing on February 21, 2014, Staff requested a continuance of the hearing in order to have time to prepare and file Amended Surrebuttal Testimony based on information that CCWC provided on February 18, 2013, in response to Staff's request made in its Surrebuttal Testimony. With no objection from any party, the hearing was continued to February 28, 2014, the first date on which facilities were available.[4]

On February 26 and 27, 2014, Staff filed Amended Surrebuttal Testimony of its witness Gerald W. Becker, and the hearing concluded on February 28, 2014.

Following the filing of Final Post-Hearing Schedules, Initial Closing Briefs, and Reply Closing Briefs according to the schedule agreed to by the parties, the matter was taken under advisement.

II. APPLICATION

CCWC is a C Corporation and a Class "A" Arizona public service corporation authorized by the Commission to provide public water utility service to approximately 13,567 metered customers located in the Town of Fountain Hills, and in a small portion of the City of Scottsdale, all in Maricopa County, Arizona.

CCWC is a wholly-owned subsidiary of EPCOR Utilities, Inc. ("EPCOR").[5] EPCOR Water (USA) Inc. ("EPCOR USA"), a subsidiary of EPCOR, assumed direct ownership of CCWC on May 11, 2011. Prior to that date, CCWC had been owned by American States Water Company.[6]

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[3] Fountain Hills made no appearance and did not participate in the proceeding. The prefiled testimony of Kenneth Buchanan docketed on December 23, 2013, was not offered and not admitted as evidence.

[4] Due to the delay in concluding the hearing caused by the requested continuance of the hearing to allow time for Staff to prepare and file Amended Surrebuttal Testimony, based on the information provided by CCWC on February 18, 2013, the timeclock in this matter should be extended to June 17, 2014, pursuant to A.A.C. R14-2-103(b)(11)(ii). At the time the continuance was discussed, the Company expressed an understanding that a continuance of the hearing would require an accompanying extension of the Commission's timeclock rules.

[5] EPCOR is wholly owned by the City of Edmonton, Alberta, Canada.

[6] Decision No. 72259 (April 7, 2011) authorized the reorganization by which EPCOR USA acquired all the outstanding and issued shares of CCWC's common stock from American States Water Company.

The Company's current rates were approved in Decision No. 71308 (October 21, 2009),[7] using a test year ending December 31, 2006. The application is based on a test year ended December 31, 2012. The Commission recently issued Decision No. 74388 (March 19, 2014) in Docket No. W-02113A-13-0047, approving CCWC's request to refinance its existing debt with a portion of the debt proceeds obtained from a recent Canadian bond issuance by EPCOR.

CCWC proposes a revenue requirement of $11,742,107, which is an increase of $2,727,122, or 30.25 percent, over its adjusted test year revenues of $9,014,985.[8] CCWC's recommendation would result in an approximate $13.18 increase for the average usage (7,870 gallons per month) 3/4 inch water meter residential customer, from $37.85 per month to $51.03 per month, or approximately 34.82 percent.

RUCO proposes a revenue requirement of $9,835,885, which is an increase of $754,940, or 8.31 percent, over its adjusted test year revenues of $9,080,945.[9] RUCO's recommendation would result in an approximate $2.98 increase for the average usage (7,870 gallons per month) 3/4 inch water meter residential customer, from $37.85 per month to $40.83 per month, or approximately 7.87 percent.

Staff proposes a revenue requirement of $10,319,310, which is an increase of $1,304,325, or 14.47 percent, over its adjusted test year revenues of $9,014,985.[10] Staff's recommendation would result in an approximate $4.25 increase for the average usage (7,870 gallons per month) 3/4 inch water meter residential customer, from $37.85 per month to $42.10 per month, or approximately 11.23 percent.

III. RATE BASE

A. Parties' Rate Base Recommendations

CCWC did not prepare schedules showing the elements of Reconstruction Cost New Rate Base ("RCND"), and instead requests that its Original Cost Rate Base ("OCRB") be treated as its Fair

[7] As corrected *nunc pro tunc* by Decision No. 71424 (December 8, 2009), and as amended by Decision No. 72258 (April 7, 2011).
[8] CCWC Final Schedule C-1, page 1.
[9] RUCO Final Schedule JMM-1.
[10] Staff Final Schedule GWB-1.

Value Rate Base ("FVRB").[11] The parties recommend the following FVRB in their final schedules:

Company	$ 27,295,481
RUCO	24,443,178
Staff	26,782,933

B. Plant in Service

The Company and Staff are in agreement on gross utility plant in service of $70,097,288, and on an accumulated depreciation balance of $25,320,747, but still have disagreements on working capital and deferred debits.[12] RUCO disagrees with the inclusion of post-test year plant placed in service in the second half of 2013,[13] and proposes gross utility plant in service of $67,726,056, and an accumulated depreciation balance of $25,200,657.[14]

C. Post Test Year Plant

The Company is seeking to include in rate base post test year plant for the period ending one year after the test year.[15] In Direct Testimony, Staff agreed that post test year plant placed in service through July 31, 2013, with one exception, is used and useful and should be included in rate base.[16] In Surrebuttal Testimony, Staff agreed that additional post test year plant placed in service by December 31, 2013 is used and useful and should be included in rate base.[17]

RUCO recommends disallowance of $1,693,408 of post test year plant placed in service after July 31, 2013.[18] RUCO states that it relied on Staff's engineering analysis for a determination of whether plant in service is used and useful in this case, and because Staff did not conduct an additional onsite engineering inspection of plant in service following its August 2013 inspection, RUCO disagrees with inclusion in rate base of post test year plant placed into service after July 31, 2013.[19]

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[11] Direct Testimony of CCWC witness Sheryl L. Hubbard, Hearing Exhibit ("Exh.") A-4 at 7.
[12] Staff Initial Closing Brief ("Br.") at 2; Company Br. at 12.
[13] RUCO Br. at 3.
[14] RUCO Final Schedule JMM-3.
[15] Rebuttal Testimony of Jeffrey W. Stuck, Exh. A-19 at 6-9.
[16] Direct Testimony of Staff witness Gerald Becker, Exh. S-8 at 9-12 and Schedules GWB 4 and 6. Staff recommended disallowance of half the cost of a planning study related to certain items of plant, and the Company agreed.
[17] Surrebuttal Testimony of Staff witness Gerald Becker, Exh. S-10 at 3 and Surrebuttal Schedules GWB 4 and 6.
[18] RUCO Final Schedule JMM-4.
[19] RUCO Br. at 4, citing to Tr. at 689.

Staff disagrees with RUCO's implication that Staff failed to perform its due diligence in determining whether the post test year plant is used and useful.[20] Staff contends that it was completely reasonable for Staff's engineering witness to make a determination that the post test year plant is used and useful based on the Company's testimony and data request responses, as her prior examination had indicated that the Company had reported plant accurately and fully, and she could use her expertise to determine whether an additional plant inspection would be necessary.[21] CCWC argues that all post test year plant for which Staff proposes allowance is used and useful and providing benefits to customers, and characterizes RUCO's July 31, 2013 cutoff as an arbitrary distinction.[22]

Staff's engineering witness made an onsite inspection of the utility, reviewed the Company's schedules showing the amount of the plant additions, and determined that the costs are reasonable and appropriate.[23] The Company's witness Mr. Stuck testified that all of the requested post test year plant is in service.[24] No controverting evidence was presented regarding whether the post test year plant in this case is in service and used and useful. Staff has analyzed the costs of the post test year plant and found them reasonable and appropriate. Inclusion of the post test year plant as recommended by Staff is reasonable and will be allowed.

D. Asset Retirement Obligation

RUCO argues that the Company should have removed a portion of a well which it received in a settlement from the Fountain Hills Sanitary District, and recommends removal of $5,252 from account 305, collecting and impounding reservoirs, and $4,364 in associated accumulated depreciation.[25] RUCO's witness asserts that the Company failed to remove this portion of the asset retirement obligation associated with the Fountain Hills Sanitary District settlement, pursuant to which CCWC agreed to permanently remove a well from service in exchange for a $1.52 million

[20] Staff Reply Brief ("Reply Br.") at 8-9.
[21] *Id.*
[22] Co. Br. at 13.
[23] Tr. at 583.
[24] Rebuttal Testimony of Jeffrey W. Stuck, Exh. A-19 at 6-9; Tr. at 463-464.
[25] RUCO Br. at 5, citing to Surrebuttal Testimony of RUCO witness Jeffrey M. Michlik, Exh. R-15 at 4-5 and Schedule JMM-7.

settlement.[26] Neither the Company nor Staff responded to RUCO's proposed adjustments either in rejoinder testimony or on brief. RUCO's proposed adjustments are reasonable and will be adopted.

E. Deferred CAP M&I

CCWC relies on a Central Arizona Project ("CAP") allocation for the bulk of its water supply. In CCWC's prior ratesetting decision, Decision No. 71308, CCWC had a CAP allocation of 6,978 acre-feet of Colorado River Water,[27] and was allowed to include in rate base the $1.28 million acquisition cost of an additional CAP allocation of 1,931 acre-feet.[28] The allowance was based on the finding that CCWC had acted prudently under the circumstances when it purchased the additional allocation in December, 2007, for which it had become eligible based on a recommendation by the Arizona Department of Water Resources ("ADWR").[29] The Municipal and Industrial ("M&I") pool of CAP water is now fully allocated and contracted for, such that CCWC will have no further opportunity to obtain additional CAP allocations.[30] As with its first CAP allocation, CCWC's contract for the additional 1,931 acre-feet allocation requires CCWC to pay annual CAP M&I charges based on the size of the additional allocation, and to pay purchased water charges based on annual water use.[31] In addition to the $1.28 million acquisition cost, Decision No. 71308 allowed CCWC recovery of 50 percent of the CAP M&I charges related to the CAP allocation, or $20,306, as an operating expense.[32] Decision No. 71308 ordered that CCWC could defer for 48 months from January 1, 2008, for possible later recovery through rates, the remaining 50 percent of costs incurred for the annual CAP M&I charges, excluding any interest or other carrying charges.[33] Decision No. 71308 further stated that if CCWC had a rate case pending at the end of the 48 month period, that the costs could continue to be deferred until the conclusion of such rate case, and that any additional properly deferred amounts recorded after that time could be considered in subsequent rate cases.[34] In

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[26] Surrebuttal Testimony of RUCO witness Jeffrey M. Michlik, Exh. R-15 at 4.
[27] Decision No. 71308 at 9.
[28] *Id.* at 9-17, 67-68, 74-75.
[29] Decision No. 71308 at 16-17, 67.
[30] Direct Testimony of CCWC witness Jake Lenderking, Exh. A-25 at 6.
[31] Decision No. 71308 at 9. *See also* Direct Testimony of CCWC witness Jake Lenderking, Exh. A-25 at 3.
[32] Decision No. 71308 at 74.
[33] *Id.*
[34] Decision No. 71308 at 74-75.

this proceeding, CCWC is requesting recovery of $78,205.50,[35] the remaining 50 percent of its deferred CAP M&I costs, over 60 months, excluding any interest or other carrying charges, amortized over five years at $15,641.[36] The Company argues that it was prudent for CCWC to have purchased the additional CAP allocation as determined in Decision No. 71308, and it is also prudent and sound public policy for the Commission to include the properly deferred costs associated with it in rate base.[37]

Staff has included the requested CAP M&I deferred costs in its schedules. RUCO has not. RUCO does not dispute the calculation of the costs, stating that CCWC is properly deferring them.[38] Rather RUCO argues, as it did in the rate proceeding leading to Decision No. 71308, that the additional 1,931 acre-feet CAP allocation was not used and useful.[39] RUCO argues that the evidence in this case has shown that the additional CAP allocation is not even 50 percent used and useful at this time,[40] and that actual usage has declined in the last two years.[41] RUCO contends that inclusion of the CAP acquisition costs in the last rate case has resulted in generational inequities, such that current ratepayers are paying for future ratepayers.[42] RUCO recommends that the CAP M&I costs continue to be deferred, with no carrying costs, until at least 50 percent of the additional allocation is used and useful.[43]

In response to RUCO's arguments that CCWC's request is untimely because it was not filed with 48 months and a rate case was not pending, CCWC explains that after EPCOR purchased CCWC, it waited to file a rate case in order to gain a year of operational and ownership experience.[44] CCWC contends that whether the additional CAP allocation is used and useful is not in dispute, as the Commission has already determined that the purchase was prudent.[45] CCWC also argues that customer demand is variable, and it is not prudent for a water utility to have only enough water

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[35] Direct Testimony of CCWC witness Jake Lenderking, Exh. A-25 at 4-5.
[36] CCWC Final Schedule C-2 page 6.
[37] CCWC Br. at 17; CCWC Reply Br. at 14.
[38] RUCO Br. at 6.
[39] RUCO Br. at 5-6; RUCO Reply Br. at 10-12.
[40] RUCO Br. at 5.
[41] RUCO Reply Br. at 11, citing to Surrebuttal Testimony of RUCO witness Jeffrey M. Michlik, Exh. R-15 at 6.
[42] RUCO Br. at 6, citing to Direct Testimony of RUCO witness Jeffrey M. Michlik, Exh. R-13 at 12.
[43] RUCO Reply Br. at 11, citing to Surrebuttal Testimony of RUCO witness Jeffrey M. Michlik, Exh. R-15 at 6.
[44] CCWC Reply Br. at 14, fn. 82, citing to Direct Testimony of CCWC witness Thomas M. Broderick, Exh. A-3 at 2.
[45] CCWC Reply Br. at 13.

supply to meet the needs of its customers in only a single year.[46]

RUCO's generational inequity argument demonstrates a misunderstanding of the purpose of our original decision to allow the additional CAP allocation in rate base. The acquisition costs were allowed because the acquisition was a prudent means for CCWC to guarantee continued access to adequate renewable water supplies, providing an assurance that benefits both current and future ratepayers. As set forth in Decision No. 71308, at the time that the additional CAP allocation was offered to CCWC, it was made clear that the allocation would not likely be available again. Also, CCWC was not provided an option to purchase any amount of additional CAP allocation it wished; the size of the additional allocation available to CCWC was a set amount of 1,931 acre-feet. RUCO states that it is raising the issue of used and usefulness only as it pertains to the deferred CAP M&I charges, and not to the acquisition costs that are already in rate base.[47] However, the two issues are intertwined. With its purchase of the allocation, CCWC has no choice but to pay the annual CAP M&I costs; these costs comprise a part of the additional CAP allocation costs. Contrary to RUCO's argument,[48] Decision No. 71308 did not find a need for, and did not order, an additional used and useful determination of the CAP M&I costs it authorized to be deferred.[49]

CCWC has paid and properly deferred the CAP M&I costs, and nothing in the record of this proceeding has demonstrated any imprudence, error or inappropriate application of the requirements of Decision No. 71308. It was reasonable for CCWC to wait to file a rate case for a year following the purchase of CCWC by EPCOR, and we will therefore extend the deferral period authorized in Decision No. 71308 from 48 months to 60 months. The five year annualization of $15,641 of the 60 months of deferred CAP M&I costs of $78,205.50, which excludes any interest or other carrying charges, will therefore be allowed. This annualization will be subject to true-up in a future rate case if it results in an over- or under-collection of the $78,205.50 deferral amount.

F. 24-Month AFUDC and Depreciation Deferral Mechanism

CCWC requests approval of a new deferral mechanism that would allow the deferral of

[46] CCWC Br. at 17 and CCWC Reply Br. at 13, citing to Direct Testimony of CCWC witness Jake Lenderking, Exh. A-25 at 2-9 and Rebuttal Testimony of CCWC witness Jake Lenderking, Exh. A-26 at 1-2. .
[47] RUCO Reply Br. at 10.
[48] RUCO Reply Br. at 11, ll. 1-9.
[49] Decision No. 71308 at 67-69, 74-75.

AFUDC (allowance for funds used during construction) costs and depreciation costs beginning on the first day of the test year, continuing throughout the test year for any plant placed in service in the test year, and for the following twelve months.[50] For this case, the deferral request would cover plant additions from January 1, 2012, through December 31, 2013, and the amount requested is $473,463, with an annualized deferred debit of $18,276.[51] CCWC states that its request does not seek to recover amounts that would be recovered under the SIB mechanism, for which it also requests approval in this proceeding, and that it is not difficult to segregate plant included in a SIB request.[52] CCWC states that the intent of the proposed 24-Month AFUDC and Depreciation Deferral Mechanism is to allow the Company to recover a return on and of assets from the day they are placed in service during the 24 month period beginning on the first day of the test year, through the 24-month period that ends with the Commission's issuance of the ratesetting decision.[53] CCWC bases its request on a Staff Report recommendation issued in Docket No. SW-20445A-09-0077 et al. which resulted from a series of workshops held in Docket No. W-00000C-06-0149.[54]

CCWC contends that its request is an appropriate means of addressing regulatory lag, and that Staff and RUCO provide no principled basis for rejection of the deferral.[55] RUCO and Staff disagree.

RUCO's witness testified that utilities are already allowed to earn a return, including the associated financing cost, as part of plant that will be put in rate base in a future rate case through AFUDC, when plant items are included in a construction work in progress ("CWIP") account.[56] RUCO is concerned that approval of this request would allow the Company to include, as a deferred regulatory asset, an additional return of AFUDC on its plant that is in service but has not yet been put in rate base in a rate case, along with the associated depreciation expense.[57] RUCO recommends disallowance of the deferral amount and the amortization of the deferred debits.

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[50] CCWC Br. at 14-15. The 24-Month AFUDC and Depreciation Deferral Mechanism is described by CCWC witness Sheryl L. Hubbard in her Rebuttal Testimony, Exh. A-6 at 13-15.
[51] CCWC Br. at 16; CCWC Reply Br. at 12; Rebuttal Testimony of CCWC witness Sheryl L. Hubbard, Exh. A-6 at 15, Rebuttal Schedule C-2 pages 1 and 6, and Final Schedule C-2 page 6. While not explained in CCWC's testimony, this appears to be an annualization of the $473,463 requested in this rate case over approximately 26 years.
[52] CCWC Br. at 15; CCWC Reply Br. at 12.
[53] CCWC Br. at 15-16.
[54] CCWC Br. at 14-15. A copy of the Staff Report in that docket was admitted in this proceeding as Exh. A-33.
[55] CCWC Br. at 15.
[56] Direct Testimony of RUCO witness Jeffrey M. Michlik, Exh. R-13 at 20.
[57] *Id.* at 19.

Staff also opposes the proposed deferral, and recommends that it be rejected.[58] Staff explains that the Staff Report on which the Company relies for its proposal was authored by Mr. Becker, Staff's rate analyst witness for this proceeding, after a series of workshops conducted in 2010 and 2011 for the purpose of addressing alternative methods of financing to help achieve the Commission's objectives of encouraging the acquisition of troubled water companies and developing a regional infrastructure.[59] Staff states that the 24-month deferral mechanism was recommended by Staff at the time as an alternative to a distribution system improvement charges ("DSIC") mechanism that was then being considered, and that the Commission has subsequently adopted the SIB in lieu of a DSIC, in subsequent cases.[60] Because Staff had recommended the 24-month deferral mechanism in the place of, and not in addition to, a DISC-type of mechanism, and the Commission ultimately adopted a SIB, Staff is opposed to the adoption of the 24-month deferral mechanism.[61] Staff contends that even though the two mechanisms would address different plant items, it would be inappropriate to allow utilities to use both mechanisms.[62]

CCWC's presentation of the deferral it requests lacks any definition and explanation regarding how the mechanism would function either in this case, or more importantly, following this rate case. Neither the record in this case, nor the Staff Report issued in Docket No. SW-20445A-09-0077 et al. and admitted in this proceeding as Hearing Exhibit A-33, provide sufficient detail to permit adoption of the requested deferral at this time. The manner in which the proposed deferral mechanism would be implemented has not been fully vetted. Though there was ample opportunity to do so, the Company failed to explain what effect the proposed deferral treatment would have on rate base in future proceedings, and what its actual eventual cost would be. The deferred debit appearing on the Company's schedules was not mentioned or explained in witness testimony, and was not explained on brief. CCWC's argument on brief that "Staff's Report discussed the recommendation in detail," is not supported by the evidence, as the Staff Report lacked detail regarding implementation of the mechanism. While the Staff Report included discussion of what a utility would be allowed to

[58] Staff Br. at 5.
[59] Staff Br. at 5, citing to Exh. A-33. The workshops were ordered by Decision No. 71878.
[60] Staff Br. at 5.
[61] Staff Br. at 5-6.
[62] *Id.*

request recovery of, the mechanism described in the Staff Report comments is not a fully-considered mechanism, but only an outline offered for Commission review. While the Staff comments state that "deferral of AFUDC and depreciation would allow a Company to request recovery of both amounts, which it would not normally be allowed to do absent an approved deferral," the Staff comments go on to state: "[t]he precise entries to effect this would need to be determined."[63] Because CCWC's proposal for a 24-Month AFUDC and Depreciation Deferral Mechanism lacks sufficient detail to be fully considered in this proceeding, it is not reasonable or appropriate to approve it.

G. Cash Working Capital

CCWC proposes a Working Capital allowance in the amount of $161,335.[64] RUCO proposes $111,842,[65] and Staff proposes $122,251.[66] Cash Working Capital is a component of the Working Capital allowance included in rate base, and represents the average amount of capital provided by investors, over and above the investment in plant and other rate base items, to finance cost of service during the time lag before revenues are collected.[67] CCWC performed a lead-lag study upon which it bases its Cash Working Capital calculation.[68] Three items in the Cash Working Capital calculation are in dispute: interest expense, regulatory (rate case) expense, and bad debt expense.[69] CCWC's proposed amount of interest expense is based on the Company's reported interest expense, while Staff and RUCO's recommendations call for hypothetical interest expense based on their proposed hypothetical capital structure, as discussed below in the Cost of Capital section. Staff excludes regulatory expense in its cash working capital calculation.[70] RUCO excludes regulatory expense and bad debt expense.[71]

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[63] Exh. A-33 at page 3.
[64] CCWC Final Schedule B-1.
[65] RUCO Final Schedule JMM-3.
[66] Staff Final Schedule GWB-3.
[67] *See, e.g.,* Direct Testimony of CCWC witness Sheryl L. Hubbard, Exh. A-4 at 7-9.
[68] Direct Testimony of CCWC witness Sheryl L. Hubbard, Exh. A-4 at 25, referring to Application and Original Schedules, Exh. A-1 at Schedules B-5 and B-6. *See also* Exh. A-2 at Rebuttal Schedules B-5 and B-6.
[69] Following approval of its refinancing request in Decision No. 74388, the Company removed from the working capital allowance the amount of the Industrial Development Authority ("IDA") compensating bank balance requirement, as well as removing the amount that had been included for the annual audit that had been required under its IDA bond financing. CCWC Reply Br. at 15.
[70] Staff Br. at 3.
[71] RUCO Br. at 7.

1. Cash Working Capital - Interest Expense

In conjunction with their position that a hypothetical capital structure should be employed for the determination of CCWC's cost of capital, RUCO and Staff propose that the resulting hypothetical interest expense be used in calculating Cash Working Capital. In this proceeding, because CCWC's actual test year capital structure is used in the cost of capital determination, hypothetical interest expense is not appropriate in determining Cash Working Capital. Cash Working Capital will be calculated using actual expense.

2. Cash Working Capital - Regulatory Expense

While CCWC includes regulatory rate case expense in its working capital calculation, RUCO and Staff do not. RUCO contends that it should not be included because it is a one-time, nonrecurring expense, and not a reoccurring cash expense of the type that should be included in a utility's cash working capital requirements.[72] Staff's witness also testified that rate case expense is a non-recurring expense.[73] CCWC argues that rate case expense is a cash expenditure; that it has traditionally been included in the cash working capital calculation for CCWC's EPCOR Water USA affiliates in Arizona; that it should be included just as any other recurring expense because it is amortized over a period of years; and that its exclusion would unfairly result in an understatement of cash working capital.[74]

We concur with Staff and RUCO. As RUCO's witness Mr. Michlik testified, rate case expense is an expense properly normalized over a period of years, not amortized, for recovery through rates. It is not appropriate to include rate case expense in the calculation of working capital, and it should be removed.

3. Cash Working Capital - Bad Debt Expense

RUCO contends that because there is no actual payment of bad debt expense, or any payment of cash associated with bad debt expense, bad debt expense does not affect CCWC's cash requirements, and should not therefore be included in the calculation of Cash Working Capital.[75] The

[72] *Id.* at 8.
[73] Direct Testimony of Staff witness Gerald Becker, Exh. S-8 at 19.
[74] CCWC Br. at 15 and CCWC Reply Br. at 18-19, citing to Rebuttal Testimony of CCWC witness Sheryl L. Hubbard, Exh. A-6 at 19.
[75] RUCO Br. at 8, citing to Direct Testimony of RUCO witness Jeffrey M. Michlik, Exh. R13 at 26.

Company and Staff calculated Cash Working Capital to include bad debt expense at a level that includes an estimated amount for additional bad debt expense expected to occur with increased revenues.[76] Because bad debt expense represents an ongoing loss in revenue that would otherwise be collected, it is properly included in the Cash Working Capital calculation.

4. Conclusion

Based on the forgoing determinations, we find that Cash Working Capital in the amount of ($69,578) is reasonable and appropriate in this case, for a Total Working Capital Allowance of $178,906.

H. Fair Value Rate Base Summary

Based on our determinations on the rate base issues discussed above, we find CCWC's FVRB to be $26,838,702.

IV. OPERATING INCOME

A. Test Year Revenues - Declining Usage Adjustment

The Company and Staff are in agreement on adjusted test year revenues of $9,014,985. RUCO proposes adjusted test year revenues of $9,080,945. The test year revenues proposed by the Company and Staff include a reduction of $65,960 in order to compensate for the impact of declining residential usage per customer.[77] RUCO opposes the declining usage adjustment.

CCWC calculated a 12-month moving average of residential usage per customer for the three years 2010, 2011, and 2012, and then computed annualized current rate residential revenues to break out the proportion of revenue attributable to fixed charges and commodity charges, in order to quantify the proportion of residential revenue attributable to consumption charges.[78] The declining residential usage percentage was multiplied by the length of time before the rates will become effective, and the product was applied to the consumption revenue to arrive at the residential revenue adjustment.[79] In addition to the reduction to test year revenues, the Company proposes corresponding adjustments reducing purchased water expense by $13,196, fuel and power expense by $7,501, and

[76] Rebuttal Testimony of CCWC witness Sheryl L. Hubbard, Exh. A-6 at 31; Surrebuttal Testimony of Staff witness Gerald Becker, Exh. S-10 at 4.
[77] Direct Testimony of CCWC witness Sheryl L. Hubbard, Exh. A-4 at 17.
[78] *Id.*; Direct Testimony of RUCO witness Jeffrey M. Michlik, Exh. R-13 at 28.
[79] Direct Testimony of CCWC witness Sheryl L. Hubbard, Exh. A-4 at 17.

chemicals by $1,476, with a net effect of reducing operating income by $43,786.[80]

RUCO disagrees with the Company's methodology in calculating the moving average of 1.0531 percent, asserting that the calculation methodology allows for data manipulation.[81] RUCO's witness claims that if a 13 month moving average is used, the declining average is reduced from 1.0531 percent to 0.6832 percent.[82] RUCO recommends that if the declining usage adjustment is adopted, CCWC should be required to annually file a report by March 30 detailing the actual increase or decrease in water usage by customer class for both residential and commercial customers, using a calendar year starting with the 2013 information.[83]

Staff agrees that a declining usage adjustment is appropriate in this case, but not for the same reasons as the Company.[84] Staff's agreement is based not on the Company's analysis of the three years prior to the test year, but on data provided to Staff by the Company which showed that consumption patterns continued to change during the post test year period.[85] Staff states that its recommendation to adopt the declining usage adjustment is based on a known and measurable change to the test year usage levels, and not on events that predate and are already reflected in test year results.[86]

For the reasons provided by Staff, the declining usage adjustments proposed by the Company are reasonable and will be adopted. Accordingly, adjusted test year revenues for purposes of this proceeding are $9,014,985.

The annual reporting recommended by RUCO is reasonable, and we will direct the Company to file reports as a compliance item in this proceeding. While CCWC contends that only residential customer usage should be included in the reporting,[87] we agree with RUCO that it will be more helpful in designing rates in CCWC's next rate case to examine the usage of all customer classes, and not just residential customers, in order to determine whether any declining usage is isolated to

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[80] Direct Testimony of RUCO witness Jeffrey M. Michlik, Exh. R-13 at 27-28.
[81] *Id.*
[82] Direct Testimony of RUCO witness Jeffrey M. Michlik, Exh. R-13 at 28.
[83] *Id.*; Surrebuttal Testimony of RUCO witness Jeffrey M. Michlik, Exh. R-15 at 10-11.
[84] Staff Br. at 15.
[85] Direct Testimony of Staff witness Gerald Becker, Exh. S-8 at 26.
[86] *Id.*
[87] Rebuttal Testimony of CCWC witness Sheryl L. Hubbard at 22.

residential customers, or whether it is spread across other classes as well. We will therefore require the Company to file within 90 days in this docket, a report that details the monthly usage of each meter size and customer class for the January-December 2013 calendar year, and to annually file in this docket, commencing on or before March 30, 2015, and until the filing of its next rate case, a report that details the monthly usage of each meter size and customer class for the prior January-December calendar year. We will also direct Staff to analyze the data, and to provide a recommendation to the Commission if Staff believes Commission action should be taken based on the filed reports.

B. Test Year Operating Expenses

1. Depreciation Expense Methodology

In its review of the Company's filing, Staff identified two plant accounts, Account 341-Transportation Equipment and Account 311-Pumping Equipment, which included components that had been fully depreciated.[88] Their costs had been fully recovered through rates via depreciation expense, but under the depreciation method used by the Company, they had continued to accrue depreciation expense.[89] Staff recommends that no further depreciation be calculated on the fully depreciated plant in the Transportation Equipment account and the Pumping Equipment account;[90] adoption of its adjustments reducing the amount of plant subject to depreciation in the Transportation Equipment account by $1,539,667 and reducing the amount of plant subject to depreciation from the Pumping Equipment account by $400,253,[91] thereby reducing depreciation expense by $272,509; and that the Company be required to employ the vintage year group method of depreciation developed by Staff several years ago ("Staff's vintage year method") and adopted in Decision No. 74294 (January 29, 2014) (New River Utility Company).[92] RUCO agrees with Staff's recommendation, stating that unlike the group method approach to depreciation currently used by the Company, which may cause

[88] Direct Testimony of Staff witness Gerald Becker, Exh. S-8 at 15-17. Staff found three such accounts, but based on its accumulated depreciation calculation, determined that one of the accounts, Account 340 - Office Furniture does not include any plant that would be considered to be fully depreciated based on a vintage year approach. Surrebuttal Testimony of Staff witness Gerald Becker, Exh. S-10 at 7.

[89] Direct Testimony of Staff witness Gerald Becker, Exh. S-8 at 15-17.

[90] Direct Testimony of Staff witness Gerald Becker, Exh. S-8 at 15-17.

[91] Staff Final Schedule GWB-16.

[92] Staff Br. at 5, 9, 11.

plant assets to be over-depreciated, Staff's vintage year method would prevent the Company from continuing to collect depreciation expense on plant that has been fully depreciated.[93] CCWC and WUAA are opposed to Staff's recommendations.

a. CCWC's Position

CCWC argues that instead of adopting Staff's recommendation to adopt its vintage year depreciation methodology, as we did in Decision No. 74294, the Commission should instead simply revise the depreciation rates for the accounts where Staff identified over-appreciated assets.[94] CCWC's final schedules show adjustments removing depreciation expense of $41,734 from the Transportation Equipment account, and $186,780 from the Pumping Equipment account, for a total reduction in its requested depreciation expense of $228,514.[95] CCWC states that these adjustments are based on CCWC's proposed revisions to the depreciation rates for the Transportation Equipment account from 20 percent (5 years) to 10 percent (ten years), and for the Pumping Equipment account from 12.50 (8 years) percent to 8 percent (12.5 years).[96] CCWC contends that its witness' cross-examination testimony at the hearing supports these changes to depreciation rates and the corresponding adjustments in its final schedules.[97] CCWC asserts that its proffered solution would provide a less costly and time consuming change than would adoption of Staff's vintage year method, and argues that Staff conceded on cross-examination at the hearing that lowering depreciation rates "effectively does the same thing, more or less."[98] CCWC's witness testified that if CCWC is required to adopt Staff's vintage year method, CCWC's sister utilities would also be required to change their methodology, and estimated the total cost at approximately $500,000 for all the systems.[99] Repeating a concern raised by WUAA on brief, CCWC contends that a change to its depreciation methodology should be adopted only with extensive analysis and input from all interested and affected parties.[100]

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[93] RUCO Br. at 19, citing to Surrebuttal Testimony of RUCO witness Jeffrey M. Michlik, Exh. R-15 at 41; RUCO Reply Br. at 5.
[94] CCWC Br. at 20, 22-23; CCWC Reply Br. at 17-18.
[95] CCWC Final Schedule C-2 page 2.
[96] CCWC Br. at 23.
[97] *Id.*, citing to Tr. at 853-54.
[98] CCWC Br. at 23, citing to Tr. at 950; CCWC Reply Br. at 17.
[99] Tr. at 75, 759-60, 790-92.
[100] CCWC Reply Br. at 18.

CCWC also argues that Staff's recommended vintage year method is not the Vintage Method found in the National Association of Regulatory Utility Commissioners ("NARUC") August 1996 publication Public Utility Depreciation Practices ("PUDP");[101] that Staff's vintage year method uses the group depreciation rates set by Staff more than 10 years ago;[102] that the issues Staff's vintage year method addresses would continue to exist if the Vintage Method appearing in the NARUC PUDP were appropriately applied;[103] that there is no claim in this case that CCWC improperly depreciated accounts;[104] and that Staff did not analyze whether the costs of implementation would outweigh its benefits.[105]

b. WUAA's Position

WUAA characterizes Staff's recommendation as a policy change, and disagrees with the proposed change in depreciation methodology in this rate case, because other utilities might be affected.[106] WUAA contends that the group depreciation methodology used by CCWC is simple and effective, and argues that Staff's proposed methodology is complex, unwieldy, expensive to design and maintain, and provides little if any additional accuracy over the group methodology.[107]

Claiming that the problem of over-depreciated assets is already automatically addressed in the group depreciation method, WUAA criticizes Staff's analysis for failing to look for "under-depreciated" assets.[108] WUAA states that the size of EPCOR's capital investment plans of $5 million for 2014 and 2015 is larger than the value of the assets that Staff found to be over-recovered in this case.[109] WUAA argues that the recommendations of Staff and RUCO fail to take into account that the extra depreciation utilities collect from fully depreciated plant can offset lost revenue from regulatory lag.[110]

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[101] The August 1996 NARUC PUDP was compiled and edited by Staff Subcommittee on Depreciation of the NARUC Finance and Technology Committee. An excerpt of the NARUC PUDP was admitted as Hearing Exhibit A-32. Judicial notice was taken at the hearing of the entire document, so that the parties could cite to it on brief if desired.
[102] CCWC Reply Br. at 16-17.
[103] CCWC Reply Br. at 17, citing to NARUC PUDP at 43 and 195.
[104] CCWC Br. at 20, citing to Tr. at 932-34 and 643-444, to RUCO's and Staff's Schedules, and to Amended Surrebuttal Testimony of Gerald Becker, Exh. S-11 at 6-11; CCWC Reply Br. at 17, citing to Staff Br. at 11.
[105] CCWC Reply Br. at 17.
[106] WUAA Br. at 9; WUAA Reply Br. at 1.
[107] WUAA Br. at 5-6, 9.
[108] *Id.* at 5-6.
[109] WUAA Br. at 5.
[110] *Id.* at 4-5.

WUAA contends that under the Company's methodology, depreciation expense is not really over-collected because each year's depreciation expense increases the accumulated depreciation account, which is then used to decrease the balance of future asset purchases.[111] WUAA claims that if an asset is in service longer than its book life, the depreciation a utility collects beyond the book value will decrease the value of the asset that eventually replaces it, and that this mechanism already solves the problem Staff brought to the Commission's attention in this case.[112] WUAA also argues that Staff's methodology is too complex for utilities to administer,[113] and that vintage depreciation information is not readily available to utilities for capitalized labor costs or major repairs associated with major assets.[114] WUAA further posits that as products improve, certain asset lives could change over time, which could lead to absurd results with a vintage year methodology.[115]

c. RUCO's Position

RUCO supports Staff's recommendation because it will eliminate negative depreciation balances and assure that CCWC's ratepayers will be charged the correct amount of depreciation expense by not paying for plant that is fully depreciated.[116] RUCO notes that Staff's vintage year depreciation method only eliminates over-depreciation of assets, and does not deprive the Company's shareholders of any authorized revenues.[117] RUCO states that adoption of Staff's vintage year depreciation method would not constitute a deviation from Commission policy as alleged by WUAA, as it was approved by the Commission in Decision No. 74294, and there is no stated Commission policy that specifically addresses which depreciation methodology must be used.[118] RUCO asserts that the Company's arguments that Staff's vintage year depreciation method does not measure up to NARUC PUDP guidelines is misguided, and that the Company does not argue that Staff's proposal offends any Commission rules.[119]

RUCO takes issue with WUAA's argument that "depreciation expense is not really over-

[111] WUAA Br. at 6.
[112] *Id.* at 6-7.
[113] WUAA Br. at 7-8, 9.
[114] *Id.* at 8.
[115] *Id.*
[116] RUCO Reply Br. at 5, 8.
[117] RUCO Br. at 19; RUCO Reply Br. at 6.
[118] RUCO Reply Br. at 4, 8.
[119] *Id.* at 6.

collected" because it is recorded in the utility's accumulated depreciation account.[120] RUCO explains that elimination of over-depreciation is important because while depreciation expense is passed through to the ratepayer and benefits a utility on a dollar-for-dollar basis, the accumulation of depreciation expense in the accumulated depreciation account benefits the ratepayer only to the extent that the utility does not earn a return on collected depreciation expense.[121]

RUCO asserts that the Company has the information necessary to stop over-depreciating assets, and that the costs of changing the way the Company keeps its records should not be a barrier to implementation of the proposed vintage year depreciation method. RUCO points out that there are also costs involved to implement the many surcharge mechanisms the Company proposes in this case which benefit the Company by reducing regulatory lag.[122] RUCO argues that it is only fair that CCWC's ratepayers benefit from Staff's proposed accounting methodology by not continuing to pay depreciation expense on plant that is fully depreciated.[123]

d. Staff's Position

Staff states that the fundamental problem with the group depreciation method used by the Company is that it allows plant to be depreciated beyond its original cost, and the basic question on this issue is whether the Commission should continue to allow over-recovery that has been identified.[124] Staff states that its vintage year method more accurately reflects actual and appropriate depreciation balances, and is more appropriate than the Company's group method, because it allows the Company to recover the original cost of an asset, while preventing customers from over-paying recovery of the Company's investment.[125] Staff contends that because the group method calculates depreciation expense on a group of assets regardless of when they were placed in service, and calculates depreciation expense on the assets in the group as long as they are in service, regardless of whether the assets are fully recovered, it is inconsistent with the widely accepted ratemaking principle of recovering only the cost of the asset through rates.[126]

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[120] RUCO Reply Br. at 8, citing to WUAA Br. at 5-7.
[121] RUCO Br. at 19; RUCO Reply Br. at 5.
[122] RUCO Br. at 19; RUCO Reply Br. at 6.
[123] RUCO Br. at 19.
[124] Staff Br. at 9, 11.
[125] *Id.* at 13, 14.
[126] Staff Br. at 10.

Staff disagrees with the Company's assertion that it should be allowed to collect depreciation expense on plant as long as it remains in service, regardless of any over-collection of the original cost.[127] Staff states that no evidence was presented of any instances of under-recovery in this case, and it therefore disagrees with the Company's assertion that the Company's methodology assumes that while some plant will outlast its expected life and continue to accrue depreciation, some plant will be retired prior to the end of its useful life, and the resulting over- and under-recoveries of depreciation expense will balance out.[128]

Staff contends that its vintage year method, which was discussed and adopted in Decision No. 74294, is superior to the methodology used by the Company in this case because it more accurately matches the recovery of assets through depreciation expense to the original cost of the asset, thus providing for more appropriate recovery.[129] In response to the Company's criticisms that Staff's recommended vintage year method is not the Vintage Method found in the NARUC PUDP, Staff states that it did not base its methodology on that described in the NARUC PUDP, and has not suggested that the Vintage Method found in the NARUC PUDP be used here.[130] Staff points out that it created its vintage year methodology independently years ago, and that the Commission recognized in Decision No. 74294 that Staff's vintage year method meets NARUC and Commission requirements.[131]

Staff argues that the Company has acknowledged the risk of over-collection, by its adjustment to depreciation rates in its final schedules for the over-depreciated accounts.[132] Staff states that while the Company's adjustment could mitigate the risk of over-collection in this case, it was a last minute, not well thought-out proposal, and it does not adequately eliminate the future risk of over-collection.[133] Staff contends that the best means of preventing over-collection is to require the Company to cease depreciation on fully depreciated plant.[134] Staff expressed concerns regarding the

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[127] Staff Br. at 9, citing to Tr. at 75.
[128] Staff Br. at 9, citing to Tr. at 818.
[129] Staff Br. at 10.
[130] *Id.* at 11.
[131] Staff Br. at 12; Staff Reply Br. at 5.
[132] Staff Br. at 12; citing to Tr. at 776-77 and 853-54 and CCWC Final Schedule C-2.
[133] Staff Br. at 12; Staff Reply Br. at 6.
[134] Staff Br. at 12.

accuracy of the adjustments in CCWC's final schedules, which were made only after the conclusion of the hearing, and which are not adequately delineated by component in the supporting schedules.[135] Based on these concerns, Staff contends that its recommended depreciation expense amount is calculated more accurately than the Company's.

Staff disagrees that changing its depreciation methodology to the vintage year method would be overly burdensome to CCWC, stating that CCWC conceded that it currently maintains the data necessary to apply the vintage year method, and that insufficient evidence was provided that all of EPCOR would need to change its methodology. Staff questioned the estimate of CCWC's witness that the cost of such a change would be $500,000, but points out that if all the affiliates were to change their methodology, the cost would be allocated among all of the EPCOR entities, significantly reducing any portion attributable to CCWC.[136] Staff states that given the annual savings in this case from disallowing the over-depreciation, a net savings to ratepayers would likely result if the estimated $500,000 were allocated over 10 systems.[137] Staff points out that while CCWC and WUAA express concern with the cost of implementing the vintage year method, they do not address the potential cost to conduct the workshops they recommend instead.[138]

Staff contends that WUAA's arguments fail to address any means of mitigating the over-collection of depreciation expense in this case. Staff disagrees with WUAA's contention that Staff's proposed vintage year methodology is a "new policy," stating that it is neither new nor a policy, explaining that Staff's methodology has been under consideration for at least four years, and that Staff has previously proposed, and the Commission has previously adopted, its vintage year methodology.[139]

Like RUCO, Staff takes issue with WUAA's argument that "depreciation expense is not really over-collected" because it is recorded in the utility's accumulated depreciation account.[140] Staff confirms RUCO's point that the reduction in rate base stemming from accumulated depreciation

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[135] *Id.* at 14.
[136] Staff Br. at 12-13.
[137] Staff Br. at 13.
[138] Staff Reply Br. at 6-7.
[139] *Id.*
[140] Staff Reply Br. at 7, citing to WUAA Br. at 5-7.

does not provide a dollar-for-dollar benefit to ratepayers, but benefits them only at a rate of approximately $0.11 per depreciation dollar.[141] Staff adds that the plant in service balance, on which depreciation expense is calculated, is not reduced when replacement plant is placed in service.[142] Staff explains that, contrary to WUAA's argument that the replacement plant's reduction in book value by the accumulated depreciation balance solves the problem of depreciation expense over-recovery, the reduction to the book value of replacement plant does not affect the collection of depreciation expense on the replacement plant, because the utility will collect depreciation expense on the purchase price of the replacement plant.[143]

Staff states that no evidence was presented to support WUAA's assertion that Staff's proposed methodology is complex and unwieldy, and that WUAA also referred to CCWC's depreciation system as complex.[144] Staff describes its method as simple, stating that the Company must merely maintain records of when plant is added on an annual basis, and when the plant reaches the end of its expected life and is fully depreciated, the Company must cease the collection of depreciation expense.[145]

e. Conclusion

Staff's vintage year method calls for depreciation expense on an asset to cease when the utility has fully recovered an asset's book cost. While CCWC argued that the NARUC PUDP "makes clear" that "a utility must continue to depreciate an asset until its retirement," citing to NARUC PUDP, Exh. A-32 at 43, 195,[146] the NARUC PUDP does not so state. It does, however, state that "[g]enerally accepted accounting does not require any specific method of determining depreciation expense," and that the method used to allocate the cost of assets to accounting periods must be systematic and rational.[147] The Commission's rules do not mandate a specific depreciation methodology, but require that the cost of depreciable plant adjusted for net salvage be distributed in a

[141] Staff Reply Br. at 7-8, citing to Tr. at 820-22.
[142] Staff Reply Br. at 7-8.
[143] *Id.* at 8.
[144] *Id.*, citing to WUAA Br. at 7.
[145] Staff Reply Br. at 8.
[146] CCWC Br. at 22.
[147] NARUC PUDP, Exh. A-32 at 43.

rational and systematic manner over the estimated service life of the plant.[148] The Commission has the authority under A.R.S. § 40-222, as well as pursuant to the Commission's exclusive and plenary constitutional ratemaking authority, to prescribe depreciation methodology. We have previously determined, in Decision No. 74294, that Staff's vintage year depreciation method results in a rational and systematic depreciation methodology consistent with NARUC and Commission requirements.[149]

We find that Staff's vintage year depreciation method is superior to the depreciation methodology used by CCWC in this case, because it more accurately matches the recovery of assets through depreciation expense to the original cost of the asset, thus providing for more appropriate recovery of investment. CCWC is not entitled to use of a depreciation methodology that allows plant to be depreciated beyond its original cost.

CCWC contends that changing depreciation rates in two accounts would provide an equally effective and less costly and time consuming change than would adoption of Staff's vintage year method for addressing the over-recovery issue Staff revealed. However, as Staff's witness testified, adjusting the depreciation rates in this case as proposed by CCWC fails to address the long-term concern that CCWC will continue to recover depreciation expense on assets that have been fully depreciated.[150] In addition, there is no depreciation study in evidence in this proceeding to support the changes to depreciation rates that the Company proposed following the hearing. Even assuming the existence of evidentiary support for reducing the depreciation rates, the changes proposed by CCWC would not adequately address, on a going-forward basis, the continuing issue of the potential for over-depreciating assets in other plant accounts. In regard to the cost issue CCWC raised, the administrative costs associated with making accounting changes to ensure that CCWC does not over-recover its investment do not outweigh the consequences of allowing continued use of a methodology

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[148] A.A.C. R14-2-102(B).

[149] Decision No. 74294 at 19.

[150] Staff's witness testified as follows:

> Well, [adjusting the depreciation rates in those accounts] fixes the problem for this case. But then what about down the road when, you know, you have very large account balances and very large accumulated depreciation balances, and, you know, effectively the depreciation dwarfs the net asset value as of the end of the year just because you have such a large utility plant in service balance? So it kind of – adjusting the depreciation rate in this case does help to solve the monetary concern, but it doesn't solve the long-term concern.

Tr. at 950-951.

that has been demonstrated to allow the inclusion of unjustified costs in CCWC's rates.

CCWC echoed the argument of WUAA that a change to its depreciation methodology should be adopted only with extensive analysis and input from all interested and affected parties. We find such an endeavor unwarranted and unnecessary. The analysis in this proceeding was extensive and the conclusion is clear. The evidence in this case demonstrates that the depreciation methodology used by CCWC resulted in over-recovery of depreciation expense, and the over-recovery must be discontinued, in this proceeding. Both CCWC and WUAA provided input on the depreciation methodology issue, and both failed to provide justification for their position that it would be appropriate to allow CCWC to continue to over-recover depreciation expense in CCWC's customers' rates.

WUAA expressed a concern that our determination in this case might affect other utilities. We of course have not, in this proceeding, examined the depreciation methodology practices of other utilities, and make no finding in regard to whether any other utility has over-recovered depreciation expense.

Staff's proposed adjustments to depreciation expense in the Transportation Equipment and Pumping Equipment accounts are reasonable and will be adopted. Staff's recommendation that CCWC should be required to cease depreciation on fully depreciated assets and to use Staff's vintage year depreciation methodology on a going forward basis is reasonable and supported by the evidence in this case, and will be adopted.

2. Corporate Allocation Expense/Incentive Pay

In its application, CCWC requested recovery of $500,330 in corporate allocation expense.[151] After accepting several adjustments proposed by Staff and RUCO, the Company proposes total corporate allocation expense of $442,409.[152] RUCO proposes total corporate allocation expense of $359,073, and Staff proposes $352,892.[153]

Staff's recommended corporate expense allocation removes 100 percent of CCWC's requested incentive pay. Staff argues that CCWC failed to properly quantify or justify its

[151] CCWC Application Schedules, Exh. A-1 at Schedule C-1, page 1.
[152] CCWC Final Schedule C-2, page 1.
[153] RUCO Final Schedule JMM-13, and Staff Final Schedule GWB-11.

calculations of amounts paid under the incentive payment plan.[154] RUCO proposes that incentive pay expenses be shared 50/50 between ratepayers and shareholders, as RUCO states the Commission has done in recent Decisions where the issue was litigated.[155] In addition to removing 50 percent of CCWC's proposed incentive pay, RUCO's proposal also removes 100 percent of at-risk cost pool expenses, which it states fund incentive programs at the EPCOR corporate level which are allocated to EPCOR's utilities.[156] RUCO contends that the at-risk cost pool has nothing to do with CCWC's day-to-day operations.[157]

The Company contends that 100 percent of its incentive pay/at-risk compensation package should be treated as a cost of service no different from labor expense, because it provides a means to motivate employees to deliver results in line with EPCOR's corporate culture, which stresses the importance of working safely and responsibly, and the importance of quality customer service in customer communication and billing.[158] The Company argues that all of its incentive pay should be allowed, because only 10 percent of its incentive compensation is based on the Company's financial performance, with the other 90 percent based on specific activities of the individual business unit or department, and that the intention of designating a portion of the employee's compensation as at-risk subject to performance is to drive employees' performance and to focus them on improving their business unit.[159]

Staff disagrees with the Company's argument, stating that the 10 percent policy reflects the criteria on which the Company might possibly pay incentive payments as a result of Company financial performance.[160] Staff states that records of the calculations would be required to determine the basis for the actual payments and to allocate the benefit between shareholders and customers. Staff bases its disallowance on the Company's failure to provide data necessary to support the breakdowns of operational versus financial goals used in calculating the amounts paid.[161] Staff states

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[154] Staff Br. at 7-8.
[155] RUCO Br. at 10, citing to Decision No. 70011 (November 27, 2007) (UNS Gas, Inc.) at 27, Decision No. 70360 (May 27, 2008) (UNS Electric, Inc.); and Decision No. 68487 (February 23, 2006) (Southwest Gas Corporation).
[156] Direct Testimony of Jeffrey M. Michlik, Exh. R-13 at 33.
[157] RUCO Br. at 12.
[158] CCWC Br. at 20-21; CCWC Reply Br. at 25-26.
[159] CCWC Br. at 20; CCWC Reply Br. at 25.
[160] Staff Br. at 7.
[161] *Id.* at 7-8.

that although requested from CCWC, such records were not produced.[162]

We agree with Staff that the Company failed to quantify or justify its proposed recovery of incentive pay, and disagree with RUCO that half of the incentive pay request should be allowed. RUCO's reasoning in advocating allowing half of the proposed incentive pay, but none of the at-risk compensation at the corporate level, was not clear. Considering all the evidence in this case, we find Staff's proposed corporate allocation allowance to be reasonable and will adopt it, for total corporate allocation expense of $352,892.

3. Purchased Water Expense

In conjunction with its opposition to the Company's proposed CAP surcharge, discussed further below, RUCO recommends, in lieu of approval of the CAP surcharge, an adjustment of the Company's purchased water expense upward by $87,678 for CAP M&I charges and capital charges. RUCO's recommendation is based on a five year average of CAP charges from 2013-2018, using the Company's original CAP allocation of 6,978 acre-feet, and one half of the additional CAP allocation of 1,931 acre-feet approved in Decision No. 71308.[163] Because we authorize the CAP Surcharge, as discussed further below, and the CAP Surcharge will only account for changes in CAP-associated costs above or below the adjusted test year expense, RUCO's proposed adjustment is unnecessary and will not be adopted.

4. Water Loss Adjustment

CCWC experienced a water loss of 13.9 percent during the test year.[164] In addition to recommending that CCWC ensure the accuracy of its meters, repair any leak as soon as it is discovered, continue to record and monitor monthly water losses, and implement a deteriorating infrastructure replacement plan under the SIB discussed later in this Decision, Staff proposes an adjustment that eliminates test year expenses related to water loss in excess of 10 percent.[165]

CCWC agrees with Staff that water loss is an issue that must be addressed.[166] CCWC argues, however, that Staff's proposed reductions to expenses associated with lost water are punitive, and

[162] Staff Br. at 8.
[163] RUCO Br. at 11.
[164] Direct Testimony of Staff witness Katrin Stukov, Exh. S-6 at Exhibit KS at 9-10; Tr. at 567.
[165] Direct Testimony of Staff witness Gerald Becker, Exh. S-8 at 20.
[166] CCWC Br. at 27; CCWC Reply Br. at 22.

that it would prefer instead to file a plan addressing the water loss.[167]

Staff's adjustment reduces purchased CAP water expense by $39,598, fuel and power expenses by $20,746, and chemical costs by $4,084. Staff states that the ability to control water loss rests solely with the Company, and because these expense amounts provide no benefit to customers, it would be fundamentally unfair to include them in rates.[168] Staff notes that the Company does not oppose Staff's adjustment to increase purchased water expense to reflect the increase in CAP rates since the test year, and asserts that it is fair to both CCWC and its ratepayers to recognize both adjustments in rates.[169]

We do not accept CCWC's assertion that Staff's proposed adjustment is punitive. For the reasons outlined by Staff, the water loss adjustment proposed by Staff is reasonable and will be adopted.

5. Property Tax Expense

The Company proposes to use the 2014 assessment ratio of 19 percent in calculating property tax expense.[170] Staff recommends that an 18.5 percent assessment ratio be used in the calculation of Property Tax expense, which results in a decrease of $18,828, from $251,038 to $232,210.[171] Staff's proposed 18.5 percent rate reflects the three year average of the current rate of 19 percent, the 2015 rate of 18.5 percent, and the 2016 rate of 18 percent.[172] RUCO agrees with Staff's adjustment.[173] CCWC argues that relying on the current assessment ratio is appropriate to determine an appropriate property tax expense in this case, despite the fact that assessment ratios are scheduled to drop, because property taxes on the whole will continue to rise as property values rise.[174]

Staff contends that its adjustment is based on known and measurable tax rates, and that applying the current higher rate, which will be in effect only until the end of 2014, would be unfair to ratepayers.[175]

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[167] *Id.*
[168] Direct Testimony of Staff witness Gerald Becker, Exh. S-8 at 20; Staff Br. at 6.
[169] Staff Br. at 7.
[170] CCWC Br. at 28.
[171] Direct Testimony of Staff witness Gerald Becker, Exh. S-8 at 24.
[172] Staff Br. at 15.
[173] RUCO Br. at 15.
[174] CCWC Br. at 28, CCWC Reply Br. at 22-23.
[175] Staff Br. at 15.

Setting a level of property tax expense requires an estimate of the amount of expense the Company will incur during the period when rates will be in effect. Staff's adjustment to property tax expense more appropriately recognizes the known and measureable tax rates that will be in effect when the rates approved in this proceeding will be in effect than does the Company's proposal. Staff's adjustment will therefore be adopted.

6. Tank Maintenance Expense

The Company proposes a tank maintenance plan spanning 18 years at a total cost of $3,639,307, to be recovered as an annual expense spread over the 18 year timeframe at $202,184.[176] The Company's witness Mr. Stuck testified that the Company anticipates review and adjustment of this estimated expense as necessary in subsequent rate cases filed by the Company.[177] Staff accepted the expense.[178] RUCO opposes the proposed expense, arguing that its treatment is different from tank maintenance expenses allowed in other proceedings.[179] RUCO advocates against allowance of the proposed amount of expense because it is based on cost estimates, and because it is not known at this time whether the actual tank maintenance will follow the Company's estimated schedule.[180] RUCO instead proposes that the Company be allowed to defer the costs for future recovery once the Company has performed the maintenance and the actual costs are known.[181]

The Company's witness testified that the request is based on the number of tanks in the CCWC service territory, the age of the tanks, and their construction material, and that the overall plan cost estimate was derived from data collected from a certified inspection of one of the Company's nine reservoirs by Riley Industrial Services.[182] Mr. Stuck testified that the estimate reflects costs associated with stripping, treating, and coating tanks that will be required for all the storage tanks, which have in-service dates ranging from 1972 to 2005.[183] He testified that the condition of the

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[176] Direct Testimony of CCWC witness Jeffrey W. Stuck, Exh. A-18 at 6-7; Exh. A-1 at Schedule C-2 page 2, column R.
[177] Direct Testimony of CCWC witness Jeffrey W. Stuck, Exh. A-18 at 7.
[178] Staff Final Schedule at GWB-11.
[179] RUCO Br. at 12-15; RUCO Reply Br. at 8-10.
[180] RUCO Br. at 12.
[181] RUCO Reply Br. at 10.
[182] Direct Testimony of CCWC witness Jeffrey W. Stuck, Exh. A-18 at 6-7. Reports on the inspection of Reservoir #2 were attached as Exhibits ICC-4 and ICC-5 to the Direct Testimony of CCWC witness Ian C. Crooks, P.E., Hearing Exhibit A-17.
[183] Direct Testimony of CCWC witness Jeffrey W. Stuck, Exh. A-18 at 6-7.

tanks in CCWC's service territory are similar to those in the EPCOR company Sun City Water's service territory, and that a tank maintenance plan has proved to be an effective means of addressing the tank maintenance issues in that district.[184]

RUCO does not disagree with the reasonableness of the Company's cost estimates.[185] RUCO's disagreement lies with the means of cost recovery. While we appreciate RUCO's concern with assuring that the Company does not over-recover the ongoing expense of tank maintenance, we agree with Staff that the $202,184 expense is reasonable in this case, and we are satisfied that over the 18-year life of the Company's maintenance plan, the actual costs will be subject to further Commission review in future rate cases, including the rate case it will file using a 2017 test year pursuant to the SIB surcharge mechanism authorized below. The $202,184 level of expense is reasonable based on the evidence in this proceeding and will be adopted. We make no finding in this case whether this level of expense should reasonably be included in test year operating expenses in future rate proceedings.

C. Operating Income Summary

With adjusted test year revenues of $10,640,529, and adjusted test year operating expenses of $8,477,330 including the adjustments discussed above, we find test year adjusted operating income to be $2,163,199.

V. COST OF CAPITAL

The parties' rate of return recommendations based on their proposed weighted average cost of capital ("WACC") are as follows:

	Cost of Debt	Cost of Equity	Capital Structure (Debt/Equity)	Weighted Cost of Debt	Weighted Cost of Equity	WACC
Company	5.97%	10.50%	14.45% / 85.55%	0.86%	8.98%	9.84%
RUCO	5.92%	9.35%	40% / 60%	2.37%	5.61%	7.98%
Staff	5.20%	9.60%	40% / 60%	2.10%	5.80%	7.90%

[184] Rejoinder Testimony of CCWC witness Jeffrey W. Stuck, Exh. A-20 at 1-3.
[185] RUCO Br. at 15.

A. Capital Structure

1. Actual Capital Structure

CCWC's capital structure at the end of the test year consisted of 14.45 percent debt and 85.55 percent equity.[186] The Company proposes to use its actual capital structure to determine its cost of capital, and WUAA supports the Company's position.

Staff and RUCO both recommend that a hypothetical capital structure of 60 percent equity and 40 percent debt be employed to determine the cost of capital.

2. Hypothetical Capital Structure

Staff states that the purpose of its recommended hypothetical capital structure is to give recognition to CCWC's reduced exposure to financial risk relative to the risk of the proxy group Staff used to estimate CCWC's cost of equity, and to encourage CCWC to move toward a more balanced capital structure in the future.[187] RUCO asserts that it is not appropriate to use an actual capital structure in the determination of cost of capital where the equity ratio is so high, and the Company has been on notice since its last rate case that a hypothetical capital structure might be imposed.[188] RUCO and Staff both argue that a hypothetical capital structure would best balance the interests of CCWC's ratepayers and shareholders, and is warranted because CCWC's capital structure is not balanced and is out of line with most other Arizona utilities, water industry averages, and CCWC's parent and sister companies.[189] Staff states that all of the other affiliates operating under CCWC's holding company have more balanced capital structures that are more aligned with what Staff typically deems appropriate, and that CCWC's capital structure, which is heavily skewed toward equity, results in an unreasonable increase in costs to ratepayers.[190] Both RUCO and Staff argue that use of a hypothetical capital structure would lead to a more appropriate level of income tax expense than CCWC's proposed capital structure, due to the resulting lower weighted average cost of debt

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[186] CCWC recently obtained authority, in Decision No. 74388, to refinance its outstanding debt, which was in the form of IDA bonds issued through the IDA of Maricopa County. The source of the approved refinancing was a portion of the debt proceeds obtained from a recent Canadian bond issuance by EPCOR.

[187] Staff Br. at 25.

[188] RUCO Reply Br. at 4.

[189] RUCO Br. at 21; RUCO Reply Br. at 3, 7; Staff Br. at 4.

[190] Staff Br. at 4; Staff Reply Br. at 4.

and lower synchronized interest expense.[191] Staff contends that the higher income tax burden caused by use of CCWC's equity-rich capital structure would be unfair to CCWC's ratepayers, pointing out that CCWC's parent company, with its balanced capital structure, enjoys the benefit of tax savings associated with higher interest expense deductions.[192]

CCWC argues that the practical effect of the proposed hypothetical capital structure constitutes an effective return on equity recommendation of 7.67 percent.[193] CCWC contends that the proposed hypothetical capital structure for purposes of addressing cost of capital runs contrary to Staff's use of actual capital structures in recent cases with similar capital structures or 100 percent equity capital structures,[194] and that in three recent CCWC proceedings: CCWC's prior rate case; the case which approved CCWC's acquisition by EPCOR; and CCWC's recent financing application; the Commission has given no indication prior to this proceeding that CCWC should move to a different capital structure.[195] WUAA joins in CCWC's argument that CCWC had no notice that a hypothetical capital structure might be imposed in this proceeding.[196] CCWC and WUAA point out that in CCWC's recent refinancing proceeding, Staff rejected a proposal to issue non-amortizing, interest-only debt that would have had the effect of maintaining debt to equity percentages, and instead recommended standard amortizing debt, which is more likely to increase the amount of CCWC's equity ratio.[197] CCWC states that if the Commission wishes the Company to move toward a more balanced capital structure, CCWC would require time to do so, and that the Commission has, in other cases involving other utilities, required the utility to put forth a plan to do so, or to do so prior to its

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[191] Staff Br. at 4-5; RUCO Br. at 22-23.
[192] Staff Br. at 4-5.
[193] CCWC Br. at 4 and CCWC Reply Br. at 3, citing to Rejoinder Testimony of CCWC witness Pauline Ahern, Exh. A-12 at 10.
[194] CCWC Br. at 4, citing to Decision No. 74294 (January 29, 2014)(New River Utility Company)(adopting Staff's recommendation to apply New River Utility Company's actual capital structure of 100 percent equity in calculating the cost of capital, while noting that the utility should consider adding low-cost debt to its capital structure when it next determines that capital improvements are needed) and Decision No. 73996 (July 30, 2013)(Rio Rico Utilities, Inc.)(declining to adopt Staff's recommendation to use Rio Rico Utilities, Inc.'s actual capital structure of 100 percent equity, and instead employing the 20 percent debt/80 percent equity hypothetical capital structure the utility had initially proposed, and which had been used in the utility's previous rate Decision); CCWC Reply Br. at 3, 4, citing to Decision No. 74097 (September 23, 2013) (Far West Water and Sewer, Inc.) (adopting a capital structure comprised of 20.8 percent equity and 79.2 percent debt, as agreed upon by the parties).
[195] CCWC Reply Br. at 2, 4, citing to Decision Nos. 71308, 72259, and 74388.
[196] WUAA Br. at 4.
[197] CCWC Br. at 5; CCWC Reply Br. at 4; WUAA Br. at 4.

next rate case filing.[198] WUAA argues that a regulated utility can only alter its capital structure by increasing dividends to remove equity, or by taking on debt.[199] CCWC also states that the only means for it to adjust its capital structure are for it to issue dividends or issue more debt or both, that neither RUCO nor Staff analyzed how CCWC could or should move to a different capital structure, and that adopting Staff's proposal would not provide the Company time to implement any plan by which it can move to a different capital structure.[200] CCWC contends that it is not practical or sensible for a utility to change its structure overnight.[201]

WUAA argues that the recommended hypothetical capital structure is "a policy change in the guise of an adjustment," that is impossible to achieve and is unsupported by evidence.[202] Staff disagrees with WUAA that its hypothetical capital structure recommendation in this case represents a policy change, pointing to several Commission Decisions where a hypothetical capital structure has been employed.[203] RUCO also cites to cases in which the Commission has approved hypothetical capital structures.[204]

RUCO and Staff disagree with CCWC's claim that it has had inadequate notice of the possibility of a hypothetical capital structure being used in this case. Both contend that CCWC has been on notice for some time that its capital structure could be at issue in this case. Staff's testimony raised the issue in CCWC's previous rate case. Staff's Surrebuttal witness in that case, Mr. Parcell, testified in that proceeding that the Company's approximately 75 percent common equity ratio was high in comparison to the proxy group of publicly traded utilities used in his cost of capital analysis,[205] and that a case could be made for adopting the more balanced capital structure of

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[198] CCWC Br. at 5-6; CCWC Reply Br. at 5.
[199] WUAA Br. at 4.
[200] CCWC Br. at 6.
[201] CCWC Reply Br. at 5.
[202] WUAA Br. at 2-4.
[203] Staff Br. at 2-3, citing to Decision No. 68487 (February 23, 2006) (Southwest Gas Corporation)(employing a hypothetical capital structure to address high level of debt, as proposed by all parties); Decision No. 59594 (March 29, 1996) (Tucson Electric Power Company) (employing a hypothetical capital structure to address issue of 100 percent debt); and Decision No. 71878 (September 15, 2010)(Global Water – Palo Verde Utilities Company et al.)(all parties proposed hypothetical capital structures for all six equity-heavy Global water systems in the case).
[204] RUCO Reply Br. at 7, citing to Decision No. 70662 (December 23, 2008) (Gold Canyon Sewer Company; Decision No. 73996 (July 30, 2013) (Rio Rico Utilities, Inc.); and Decision No. 70628 (December 1, 2008) (Tucson Electric Power Company).
[205] RUCO Br. at 22 and Staff Br. at 25-26, citing to Hearing Exh. R-9, which is an excerpt of pages 12-13 the Surrebuttal Testimony of Staff witness David C. Parcell in Docket No. W-02113A-07-0551, and Tr. at 283; RUCO Reply Br. at 4.

CCWC's parent at the time, American States Water Company.[206] Staff states that the Commission is not bound to use a utility's actual capital structure, and that a Commission determination to employ a hypothetical capital structure to determine cost of capital does not require the Company to change its capital structure.[207] Staff argues that use of its recommended hypothetical capital structure would equalize the benefits and burdens of the equity ratio between the Company and its ratepayers, who have no control over what that equity ratio is.[208] In this proceeding, Mr. Parcell, as RUCO's witness, testified that with CCWC's current capital structure having now grown to almost 86 percent, while its parent and affiliates have balanced capital structures, the case for a hypothetical capital structure is stronger now than in CCWC's prior rate case.[209]

RUCO changed its position in Surrebuttal Testimony in this case to support Staff's recommendation in its direct case for a hypothetical capital structure.[210] RUCO's witness Mr. Parcell testified that his changed recommendation came from new information showing how widely CCWC's capital structure varies from that of its parent and affiliate companies.[211] CCWC points out that RUCO's witness Mr. Parcell, as a witness for Staff in the Company's prior rate case, recommended use of CCWC's actual capital structure, as he initially proposed in this case.[212] The Company urges that RUCO's revised capital structure recommendation, which caused its overall cost of capital recommendation to drop from 8.7 percent to 7.98 percent, be rejected as results-driven.[213]

In Surrebuttal Testimony, Staff raised the issue of "double leveraging," or the possibility that CCWC's equity may actually be financed with debt at its parent level. Staff states that the existence

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[206] Hearing Exh. R-9. In that case, neither Staff nor RUCO proposed or recommended a hypothetical capital structure, and Decision No. 71308 adopted the Company's actual capital structure for purposes of a cost of capital determination. Decision No. 71308 at 29. The capital structure agreed to by the parties and adopted by the Commission in that case was 76 percent equity and 24 percent debt. Mr. Parcell adopted the testimony of the Staff witness who had prepared Direct Testimony on cost of capital, and stated in his Surrebuttal Testimony that the significant difference in CCWC's common equity ratio compared to the proxy group reflected "a risk differential between Chaparral and the proxy group - a risk differential that should be recognized in the cost of equity for the Company."

[207] Staff Br. at 4.

[208] *Id.*

[209] RUCO Br. at 22, citing to Tr. at 283.

[210] RUCO Br. at 2.

[211] Surrebuttal Testimony of RUCO witness David C. Parcell, Exh. R-8 at 18-19.

[212] CCWC Reply Br. at 6. As RUCO points out on brief, in its Direct Testimony, RUCO's witness performed a cost of capital analysis based on the Company's actual test year capital structure of 81.83 percent equity, 17.68 percent long-term debt and 0.48 percent short-term debt. Direct Testimony of RUCO witness David C. Parcell, Exh. R-7 at 13-16 and Exhibit DCP-1, Schedule 1.

[213] CCWC Reply Br. at 6.

of double leveraging is not a requirement for using a hypothetical capital structure.[214] Staff admits that it is very difficult to prove the existence of double leveraging, but asserts that the potential exists in this case for double leveraging, and that the potential alone provides support for the use of a hypothetical capital structure.[215] RUCO asserts that if in fact CCWC is double leveraged, use of a hypothetical capital structure would be the appropriate solution in this case.[216]

The Company and WUAA contend that the double leveraging concept should not be accepted as support for the use of a hypothetical capital structure. The Company argues that the issue has no basis or relevance, and denies that CCWC is double leveraged.[217] WUAA argues that because EPCOR has made no capital infusion into CCWC, CCWC's capital structure cannot be double leveraged.[218] WUAA also contends that because Staff only raised the issue of double leverage *post hoc*, only after making its recommendation for use of a hypothetical capital structure, any argument that double leverage supports a hypothetical capital structure should be disregarded.[219]

3. Conclusion

We share the concerns raised by RUCO and Staff in regard to the common equity ratio of CCWC in comparison to those of its parent companies EPCOR and EPCOR Water Arizona over the five year period leading to and including the test year. The comparison as set forth in the testimony of RUCO's witness shows a very sharp contrast in equity ratios.[220] In fairness to CCWC's

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[214] Staff Br. at 4.
[215] *Id.*
[216] RUCO Br. at 22.
[217] CCWC Reply Br. at 5-6, citing to Rejoinder Testimony of CCWC witness Pauline M. Ahern, Exh. A-12 at 5-6.
[218] WUAA Br. at 3, citing to Tr. at 208-209.
[219] *Id.*
[220] The table appearing in the Surrebuttal Testimony of RUCO witness David C. Parcell, Exh, R-8 at 18, is reproduced here for ease of reference:

Company	2008	2009	2010	2011	2012
Chaparral City	79%	79%	81%	82%	86%
EPCOR Utilities, Inc.	46%	57%	59%	58%	54%
EPCOR Transmission, Inc.	34%	38%	37%	40%	32%
EPCOR Distribution Inc.	39%	41%	42%	39%	41%
EPCOR Water Arizona	38%	38%	38%	40%	39%
EPCOR Energy Alberta, Inc.	36%	40%	40%	24%	40%
EPCOR Water Services Inc. (Edmonton & Region Water)	38%	41%	42%	42%	40%
EPCOR Water Services Inc. (Edmonton Wastewater)		37%	46%	41%	41%
EPCOR White Rock Water Inc.	-16%	-20%	-26%	-13%	-14%
EPCOR Water (West) Inc.	35%	7%	-1%	29%	28%

ratepayers, the reduced exposure to financial risk CCWC enjoys due to its high equity ratio should be recognized in the cost of capital.

We are cognizant, however, that as CCWC and WUAA point out, in the last three CCWC proceedings before us, we have not ordered CCWC to take action to address the issue of its unbalanced capital structure, or indicated an intent to consider employing a hypothetical capital structure in future proceedings. We agree with Staff and RUCO that the Company was ostensibly aware of the issue, because Staff's testimony in the prior case raised the issue. However, the issue was not litigated because no party to that case advocated use of a hypothetical capital structure.

Our cost of capital determination in this case will reflect the risk differential between CCWC and the proxy utilities, but will be made using the Company's actual capital structure. On a going forward basis, however, CCWC should consider making plans to rectify the imbalance in its capital structure relative to the capital structures of its parent companies. We will order CCWC to file in this docket, within 120 days, a plan including analysis on how it might achieve a more balanced, reasonable, and appropriate capital structure. In future ratesetting proceedings, regardless of whether CCWC has chosen to rebalance its capital structure, CCWC can expect that a hypothetical capital structure will be considered.

We make no finding with respect to the double leverage issue raised in this proceeding. However, we agree with Staff that the existence of double leveraging is not a prerequisite for employing a hypothetical capital structure in a cost of capital determination. Further, we note that a hypothetical capital structure, as the name indicates, does not require a utility to actually change its capital structure, as CCWC and WUAA seem to imply.

B. Cost of Debt

In this proceeding, CCWC proposed a cost of debt of 5.97 percent,[221] RUCO recommended a cost of debt of 5.92 percent based on actual test year debt cost,[222] and Staff recommended a 5.2 percent cost of debt.[223] Decision No. 74388 authorized the Company to refinance all of its existing

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[221] CCWC Final Schedules at Schedule D-1.
[222] Direct Testimony of RUCO witness David C. Parcell, Exh. R-7 at 3; Surrebuttal Testimony of RUCO witness David C. Parcell, Exh. R-8 at 19.
[223] Surrebuttal Testimony of Staff witness John A. Cassidy, Exh. S-3 at 6.

debt, and ordered the Company to file, as a compliance item in Docket No. W-02113A-13-0047, a copy of the loan documents. On May 15, 2014, CCWC filed in that docket a copy of a promissory note dated April 15, 2014, which shows an interest rate of 4.565 percent per annum. Accordingly, a 4.565 cost of debt will be adopted in this proceeding.

C. Cost of Equity

While CCWC's cost of debt is known, its cost of equity must be estimated, because the stock of CCWC is not publicly traded. To that end, expert witnesses for CCWC, RUCO and Staff each performed cost of capital analyses to reach their cost of equity recommendations. The Company proposes a cost of equity of 10.50 percent,[224] RUCO recommends 9.35 percent,[225] and Staff recommends 9.60 percent.[226]

1. Parties' Cost of Capital Analysis Results

To estimate CCWC's cost of equity, the expert witnesses for CCWC, RUCO and Staff, using financial models, assessed financial market data from a proxy group of publicly-traded utilities similar to CCWC to determine their cost of equity. CCWC's witness Ms. Ahern applied three models to the market data of the nine publicly traded water utilities in her proxy group: a constant-growth Discounted Cash Flow ("DCF") model; two Risk Premium Models ("RPM"), the Predictive RPM and an RPM using an adjusted total market approach; and two Capital Asset Pricing Models ("CAPM"), the traditional CAPM and the empirical CAPM. RUCO's witness Mr. Parcell selected the same proxy group of nine water companies as Ms. Ahern, to which he applied a constant-growth DCF analysis, a CAPM analysis, and a comparable earnings ("CE") analysis.[227] Staff's witness Mr. Cassidy applied a constant-growth DCF model and a multi-stage DCF model to a proxy group consisting of seven of the same nine water utilities selected by Ms. Ahern and Mr. Parcell.

Ms. Ahern's DCF analysis produced an estimated 8.24 percent cost of equity; her RPM analysis yielded 11.44 percent; and her CAPM analysis produced a 9.77 percent cost of equity. She averaged the results to arrive at 9.80 percent as her unadjusted indicated equity cost rate; then she

[224] CCWC Final Schedules at Schedule D-1.
[225] Surrebuttal Testimony of RUCO witness David C. Parcell, Exh. R-8 at 19.
[226] Surrebuttal Testimony of Staff witness John A. Cassidy, Exh. S-3 at 6.
[227] For his CE analysis, Mr. Parcell also examined, in addition to his proxy group, the Standard & Poor's 500 Composite group ("S&P 500").

added a credit risk adjustment of 0.32 percent and a business risk adjustment of 0.40 percent, to arrive at an indicated cost of common equity of 10.52 percent, which she rounded down to 10.50 percent.

Mr. Parcell's estimation result from his DCF analysis was an 8.7 percent cost of equity (upper portion of 7.4-8.7 percent range); from his CAPM analysis, 7.25 percent (mid-point of 7.2-7.3 percent range), and from his CE analysis, 9.5 percent (midpoint of 9.0-10.0 percent range). From this, Mr. Parcell recommends a cost of equity range of 8.7 percent to 10.0 percent, and proposes the 9.35 percent average of that range as his recommended cost of equity.

Mr. Cassidy's estimation result from his DCF analysis was a 9.0 percent cost of equity (average of 8.6 percent constant-growth result and 9.4 percent multi-stage result). To this estimate he added a 0.6 percent economic assessment adjustment, and proposes a 9.6 percent cost of equity.

2. Parties' Arguments

The Company is critical of the cost of equity analysis performed by Staff's witness, because it did not include a CAPM analysis, and because it did not include the credit risk adjustment and the business risk adjustment that CCWC's witness Ms. Ahern applied to her cost of equity estimate.[228] CCWC argues that with the addition of a CAPM analysis and recalculation adjustments to Mr. Cassidy's DCF analysis advocated by Ms. Ahern, and with the addition of her credit risk adjustment of 0.32 percent and business risk adjustment of 0.40 percent, Staff's common equity cost rate recommendation of 9.6 percent would increase to 10.42 percent, which is only slightly lower than Ms. Ahern's proposed 10.50 percent cost of equity.[229]

CCWC criticizes RUCO's witness's decision not to update his cost of equity recommendation in his Surrebuttal Testimony.[230] CCWC argues that Mr. Parcell's CAPM analysis is flawed because it relies on a historical risk-free rate, and fails to employ a prospective or forward-looking equity risk premium.[231] CCWC also criticizes Mr. Parcell's calculation of his market equity risk premium because it relies on achieved rates of return on book common equity for the S&P 500, a geometric

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[228] CCWC Br. at 10-11.
[229] CCWC Br. at 11, citing to Rebuttal Testimony of CCWC witness Pauline M. Ahern, Exh. A-11 at 14-35.
[230] CCWC Br. at 10-11.
[231] CCWC Br. at 12, citing to Rebuttal Testimony of CCWC witness Pauline M. Ahern, Exh. A-11 at 39-40 and 46.

mean historical market equity risk premium, and the historical total return on U.S. Treasury securities.[232] CCWC also faults Mr. Parcell for failing to use upward credit risk or business risk adjustments.[233] CCWC contends that with the recalculation adjustments to Mr. Parcell's CAPM analysis advocated by Ms. Ahern, and with the addition of her credit risk adjustment of 0.32 percent and business risk adjustment of 0.40 percent, RUCO's common equity cost rate recommendation of 9.35 percent would increase to 10.59 percent, higher than CCWC's proposed 10.50 percent.[234]

RUCO defends the equity risk premium Mr. Parcell used in his CAPM analysis, arguing that it is appropriate to consider both geometric and arithmetic mean returns in the CAPM, because mutual fund investors regularly receive reports on their own funds as well as prospective funds, which show only geometric means.[235] Mr. Parcell stated that his use of returns on U.S. Treasury securities in his CAPM model uses the most recent three-month average yields, which he states are more properly described as current yields rather than historic yields.[236] Mr. Parcell also stated that it is appropriate to consider the level of return on book equity because the rates of public utilities are set based on book values of rate base, capital structures, revenues, and expenses.[237]

RUCO takes issue with CCWC's witness Ms. Ahern's claim that risk premiums are increasing, noting that Ms. Ahern's analysis on this point is based on a selective use of the period from 2009 to present, when the ending of 2009 was in the midst of the Great Recession.[238] According to Mr. Parcell's analysis of Morningstar (Ibbotson) data, risk premiums have actually declined from prevailing levels in the years prior to 2009 and from years since 2009 as well.[239] CCWC responds that Ms. Ahern chose the 2009 starting date for her analysis not because of the Great Recession, but because Decision No. 71308 was issued at the end of that year, and determined a cost of equity of 9.90 percent for CCWC.[240] CCWC argues that risk premiums are trending

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[232] CCWC Br. at 12, citing to Rebuttal Testimony of CCWC witness Pauline M. Ahern, Exh. A-11 at 40-46.
[233] CCWC Br. at 8-9, citing to Rebuttal Testimony of CCWC witness Pauline M. Ahern, Exh. A-11 at 60-61.
[234] CCWC Br. at 12, citing to Rebuttal Testimony of CCWC witness Pauline M. Ahern, Exh. A-11 at 50, 60-62.
[235] RUCO Br. at 24, citing to Surrebuttal Testimony of RUCO witness David C. Parcell, Exh. R-8 at 6-8.
[236] Surrebuttal Testimony of RUCO witness David C. Parcell, Exh. R-8 at 8.
[237] *Id.*
[238] RUCO Br. at 24, citing to Surrebuttal Testimony of RUCO witness David C. Parcell, Exh. R-8 at 9.
[239] *Id.*
[240] CCWC Br. at 9-10, citing to Rebuttal Testimony of CCWC witness Pauline M. Ahern, Exh. A-11 at 50-51.

upward since that time, such that a cost of equity lower than 9.90 percent would not be appropriate.[241]

In regard to CCWC's criticism that RUCO's witness failed to add a credit risk adjustment and a business risk adjustment, RUCO responds that neither CCWC's upward business risk adjustment nor Staff's economic assessment adjustment are warranted, pointing out that CCWC does not raise its own capital.[242] In regard to Ms. Ahern's financial risk adjustment, Mr. Parcell testified that a financial risk adjustment is not justified in light of the high common equity ratio the Company is requesting.[243]

Staff also opposes CCWC's proposed small firm business risk adjustment because CCWC is a subsidiary of EPCOR, a much larger parent corporation, and is not an unassociated small utility.[244] Staff argues that the Commission has consistently rejected risk adjustments for small firm size, and recommends that it be rejected in this case.[245] Staff states that any risk associated with the size of a company is a unique, firm-specific risk, with which investors are not concerned because such risk can be eliminated by portfolio diversification.[246] Staff also explains that any risk that would be reflected in CCWC's beta as a result of its size is dissipated by CCWC's status as an EPCOR subsidiary, which allows it wider access to resources and capital markets than would be afforded to an unaffiliated smaller company.[247]

3. Conclusion

As noted in the discussion of CCWC's capital structure above, our determination of an appropriate cost of equity in this proceeding will be based on CCWC's capital structure at the end of the test year, as it was in our last ratesetting decision for CCWC. However, for the reasons Staff and RUCO articulated in their arguments advocating a hypothetical capital structure, CCWC's use of an unbalanced, equity-rich capital structure must be reflected in our determination of CCWC's cost of equity. After considering all the testimony and evidence presented by the parties, we find that a cost of equity of 8.65 percent should be approved.

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[241] *Id.*
[242] RUCO Br. at 24, citing to Direct Testimony of RUCO witness David C. Parcell, Exh. R-7 at 31.
[243] Direct Testimony of RUCO witness David C. Parcell, Exh. R-7 at 31.
[244] Staff Br. at 26.
[245] *Id.* at 27.
[246] *Id.*, citing to Direct Testimony of Staff witness John A. Cassidy, Exh. S-2 at 41.
[247] Staff Br. at 26.

D. Cost of Capital Summary

Capital Item	Percent	Cost	Weighted Cost
Debt	14.45%	4.565%	0.66%
Equity	85.55%	8.65%	7.40%
Total Cost of Capital			8.06%

VI. REVENUE REQUIREMENT

The revenue requirement approved herein is $10,640,529, which is an increase of $1,625,544, or 18.03 percent, over adjusted test year revenues of $9,014,985.[248]

The rates adopted herein result in an approximate $6.16 increase for the average usage (7,870 gallons per month) 3/4 inch water meter residential customer, from $37.85 per month to $44.01 per month, or approximately16.28 percent.

VII. RATE DESIGN

A. Cost of Service Study

CCWC conducted a cost of service study, and Staff found the results acceptable.[249] The cost of service study serves as a reasonable guide for the rate design we adopt in this proceeding.

B. Low Income Program

All parties recommend adoption of a low income rate for residential customers with 3/4-inch or 1-inch meters. Such customers who qualify as low income would qualify for a discount of $7.50 per month from the monthly minimum charge.[250] The Company's rate design allows for this discount to be provided to up to 250 customers at a total cost of $22,500.[251] The Company proposes to spread this cost over the highest block consumption of residential and commercial customers, stating that this same approach has been used in other EPCOR districts in which a low income program has been implemented.

CCWC's proposed low income recovery mechanism is reasonable and will be adopted. The Company has agreed to file a Plan of Administration ("POA") for the proposed Low Income

[248] To reach the appropriate revenue requirement, a Gross Revenue Conversion Factor ("GRCF") of 1.649197 was used.
[249] Staff Br. at 22, citing to Tr. at 587-588.
[250] CCWC Final Schedule H-3; RUCO Final Schedule JMM-24; Staff Final Schedule GWB-1.
[251] CCWC Reply Br. at 28.

Program, and we will direct it to do so as a compliance item in this matter.

C. Rate Structure

All parties proposed similar inverted tier rate designs. The primary difference between the rate designs proposed by the parties is in the amount of the commodity charge for the first tier of usage. The rate designs proposed by RUCO and CCWC include a first tier rate that is nearly the same, proportionally, as CCWC's current rate design. Staff, however, proposes a discounted first tier, and states that its purpose is to increase the affordability of non-discretionary usage.[252]

CCWC opposes Staff's reduction in the first tier rate, arguing that such a reduction would send customers inappropriate pricing signals, and that it would make it difficult for CCWC to achieve its authorized revenue requirement.[253] CCWC argues that the cost of providing water service is increasing, and the increasing costs should be reflected in customers' rates.[254] CCWC requests that the Commission adopt its rate design.

While we appreciate Staff's effort to make non-discretionary water usage more affordable, we find that such a change should be approached more gradually, and the rate design we adopt herein includes a first tier rate that lies proportionately between that proposed by CCWC and RUCO and that proposed by Staff. As shown in Exhibit C, attached hereto and incorporated herein by reference, for 3/4-inch meter customers, we adopt a monthly minimum charge of $20 per month and a first tier commodity rate from 0-3,000 gallons of $2.32 per thousand gallons. The second tier rate, for usage from 3,001 gallons to 9,000 gallons, is $3.50 per thousand gallons, and the third tier rate, for all usage over 9,000 gallons, is $4.22 per thousand gallons.

In addition, we note that, as discussed above, the Low Income Program we adopt today will also make water utility service more affordable by discounting the monthly usage charge by $7.50 per month for qualifying residential customers of limited means. We intend the authorized rate design to strike a balance between providing affordable non-discretionary water use, incorporating the concept of gradualism, providing rate stability, and promoting water conservation.

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[252] Staff Br. at 23, citing to Staff Final Schedule GWB-1.
[253] CCWC Br. at 32; CCWC Reply Br. at 26-27.
[254] CCWC Reply Br. at 27.

D. Miscellaneous Service Charges

CCWC proposes to increase its establishment of service charge from $25.00 to $60.00, and its reconnection (delinquent) charge from $35.00 to $60.00.[255] Staff proposes an increase to the establishment of service charge from $25.00 to $30.00, and that the reconnection (delinquent) charge remain at $35.00.

CCWC also proposes to increase its after-hours establishment of service fee from $35.00 to $90.00. Staff proposes instead an after-hours service charge of $35.00 to be charged in addition to the tariffed establishment of service charge and reconnection (delinquent) charge as a fee for service provided after normal business hours when the after-hours service is at the customer's request. Under Staff's proposal, the fee for an after-hours establishment of service at the customer's request would total $65.00, and the fee for an after-hours reconnection (delinquent) at the customer's request would total $70.00.

CCWC proposes to decrease the meter test fee from $35.00 to $30.00, and Staff recommends that the fee remain at $35.00.

CCWC argues that service charges for items such as after-hours and regular hours establishment of service should be directly related to the costs to provide such service, and that Staff's proposed miscellaneous charges reflect lower rates not tied to actual costs.[256] CCWC's witness asserted that its proposed increases are based upon actual costs, and relate directly to the costs incurred by the Company for those services.[257] Staff states that its recommended fees are within the range of other EPCOR Arizona companies with more current rates, and contends that while CCWC's witness asserted that its proposed charges represent the actual costs, the Company did not provide sufficient information to support its position.[258]

We agree with Staff that imposition of a $60.00 service establishment charge is not sufficiently supported by evidence in this proceeding. We agree with Staff's proposed Miscellaneous Service Charges, except that instead of a flat after-hours service charge of $35.00, we will approve an

[255] Rebuttal Testimony of CCWC witness Sheryl L. Hubbard, Exh. A-6 at 29.
[256] CCWC Br. at 34; CCWC Reply Br. at 28.
[257] Rebuttal Testimony of CCWC witness Sheryl L. Hubbard at 28-29.
[258] Staff Br. at 23-24.

after-hours service charge of $40.00 per hour, which will apply only to work performed on the customer's property after hours, at the customer's request, and in addition to the charge for any utility service provided.

VIII. OTHER ISSUES

A. Rate Case Expense Surcharge

The Company is requesting $275,000 in rate case expense for this proceeding, normalized over three years, for an expense level of $91,668.[259] Staff's schedules reflect the Company's proposal.[260] There was no dispute in this proceeding regarding the level of rate case expense requested. However, RUCO proposes that in lieu of recovery of this expense in rates as proposed by the Company and Staff, a surcharge be placed on customers' bills for either a period of 36 months, or until CCWC has collected $275,000 in rate case expense recovery, whichever comes first.[261] RUCO is concerned that if CCWC does not file a rate case prior to June 30, 2018, as will be required by the terms of the proposed SIB, discussed below, it will over-recover the rate case expense authorized in this proceeding.[262] As support for its proposal, RUCO notes that the Commission authorized a rate case expense recovery surcharge in Decision No. 73573 (November 21, 2012) (Pima Utility Company). Neither the Company nor Staff addressed this issue on brief.

In the case leading to Decision No. 73573, Pima Utility Company ("Pima") had not filed a rate case for 18 years. Staff recommended a normalization period for rate case expense of five years in that case, and RUCO recommended four years (in addition to several alternative recommendations for recovery). Pima proposed that the Commission authorize a rate case expense surcharge instead, which was based on an alternative position that had been described in RUCO's testimony.[263] In the Pima case, the utility was not under a Commission mandate to file its next rate case by a certain date, as CCWC will be pursuant to the SIB POA. In this case, depending on many other factors, the uncontested amount of rate case expense could possibly be recovered in rates by August 2017, which falls in the third quarter of the Company's next test year as required by the SIB surcharge. Under the

[259] CCWC Final Schedule C-2, page 1; Staff Final Schedule GWB-11.
[260] Staff Final Schedule GWB-11.
[261] RUCO Br. at 20-21.
[262] *Id.* at 20.
[263] Decision No. 73573 at 14-17.

circumstances of this case, we find that a three year normalization of rate case expense is reasonable and appropriate, and it is unnecessary to authorize a rate case expense recovery surcharge.

B. CAP Surcharge

The Company purchases CAP water from the Central Arizona Water Conservation District ("CAWCD"). CAWCD has had rapidly increasing costs and revenue shortfalls, and raises the rates the Company pays for CAP water on an annual basis to recoup its costs.[264] CCWC is proposing a CAP Surcharge to recover future expense increases related to CAP water, including charges for CAP water purchased from the CAWCD, and charges or credits related to water storage with the Central Arizona Groundwater Replenishment District ("CAGRD") and the Maricopa Water District Groundwater Savings Facility ("MWD GSF").[265] CCWC's witness testified that water storage, water replenishment and CAP water are all inter-related and CCWC manages them together.[266]

CCWC proposes to prepare an annual tariff filing for the surcharge that would include a calculation of its annual purchased water costs and its projected annual purchased water costs for the following year.[267] The filing would also contain the prior year's balance, and the prior year's water deliveries, and calculate the "rate" that should be assigned based on the actual historical costs.[268] Under the Company's proposal, the CAP Surcharge would not be assessed until approximately one year following the implementation of rates authorized by this Decision, and in subsequent years, a tariff filing would be due on approximately the anniversary of the CAP Surcharge implementation.[269] The Company proposes that the first CAP Surcharge tariff filing would be based on the adjusted 2012 purchased water expense and water deliveries of 1,784,344 gallons in the 2012 test year.[270]

In its Direct Testimony, Staff noted that in essence, CCWC is proposing a purchased water adjustor, and recommended that the Company file a detailed POA describing its proposed administration.[271] The Company subsequently filed a POA, which is attached hereto and

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[264] Direct Testimony of CCWC witness Jake Lenderking, Exh. A-25 at 10, 14.
[265] *Id.* at 9-15. CCWC originally called this proposed surcharge a Sustainable Water Surcharge, but changed its name to CAP Surcharge at Staff's request. Tr. at 538-39.
[266] Direct Testimony of CCWC witness Jake Lenderking, Exh. A-25 at 12.
[267] *Id.* at 11.
[268] *Id.*
[269] *Id.*
[270] *Id.*
[271] Direct Testimony of Staff witness Gerald Becker, Exh. S-8 at 25-26.

incorporated herein as Exhibit A.[272]

RUCO is opposed to the CAP Surcharge. RUCO recommends instead that the CAP M&I charges and capital costs (excluding the 1,931 acre-feet additional CAP allocation CCWC obtained in 2007), be projected in this case, and that any over- or under-collection be deferred until CCWC's next rate case. RUCO also proposes that if the Commission approves the CAP Surcharge, that the surcharge include a component for revenue generated from customer growth to help offset the CAP M&I expenses. In addition, RUCO contends that a reduction to the Company's return on equity should also be considered to recognize that the CAP Surcharge mechanism cuts the regulatory lag between rate cases, and thereby lowers the Company's risk.[273]

The Company contends that because CAWCD faces many issues which could lead to substantial increases in the cost of CAP water, the proposed CAP Surcharge is necessary to allow exact recovery of known and measurable expense a year following the Company's incurred expense.[274] CCWC asserts that it is unlikely that RUCO's projections will match the Company's actual expenditures, but states that if RUCO's projection is correct, then there would be no issue, because no surcharge, or a very minimal surcharge, would be implemented.[275] CCWC further asserts that the design of the surcharge adequately addresses changes in customer growth as part of its calculation.[276] The Company argues that EPCOR has several other water districts that use CAP water and already have pass-through mechanisms for CAP-related expense, and that the Company's proposed POA was modeled after the surcharge mechanisms already used in EPCOR's Sun City and Sun City West water districts.[277]

The proposed CAP Surcharge is reasonable and appropriate and should be authorized. RUCO did not demonstrate a need to add a customer growth component to the surcharge calculation, and we do not find RUCO's proposal to adjust CCWC's return downward appropriate based on approval of this surcharge. We will direct CCWC to file a CAP Surcharge POA that conforms to the draft POA

[272] Rebuttal Testimony of CCWC witness Jake Lenderking, Exh. A-26 at Exhibit JCL-2.
[273] RUCO Br. at 11-12, citing to Surrebuttal Testimony of RUCO witness Jeffrey M. Michlik, Exh. R-15 at 32-33.
[274] CCWC Br. at 30; CCWC Reply Br. at 24.
[275] CCWC Reply Br. at 24.
[276] CCWC Br. at 30.
[277] *Id.* at 31

attached hereto as Exhibit A, for Commission review and approval.

C. Best Management Practices

On August 22, 2013, the Company filed in this docket ten water conservation BMPs in conjunction with its request for implementation of a SIB mechanism, and requests that they be approved. With its Rebuttal Testimony, CCWC filed tariffs in conformance with a change to BMP 4.2 proposed in Staff's Direct Testimony.[278]

Staff recommends approval of the BMP tariffs, with the change to BMP 4.2.[279] Staff further recommends that CCWC be required to notify its customers, in a form acceptable to Staff, of the BMP tariffs authorized in this proceeding and their effective date by means of either an insert in the next regularly scheduled billing or by a separate mailing, and to provide copies of the BMP tariffs to any customer upon request. Staff also recommends that CCWC be authorized to request recovery of actual expenses associated with the implemented BMPs in its next general rate application.

Staff's recommendations in regard to the BMP tariffs are reasonable and will be adopted.

D. SIB

CCWC is requesting authority to implement a SIB surcharge mechanism that is materially the same as the SIB mechanism approved in Decision No. 73938 (June 27, 2013), and requests that the SIB be governed by all the conditions and requirements set forth for the SIB approved in Decision No. 73938. During preparation for the hearing on its application, CCWC prepared and submitted a SIB Eligibility Report supporting in detail the need for the SIB mechanism within its service territory.[280] The SIB Eligibility Report included a SIB Plant Table I of planned SIB-eligible projects and related costs, as well as an example of SIB Plant Table II.[281] The Commission's Engineering Staff reviewed CCWC's filings in relation to the proposed SIB, and testified that the SIB Eligibility Report identifies the most critical infrastructure areas, estimates the quantity of service lines, meters, hydrants and valves that need to be replaced, and estimates the associated replacement costs.[282]

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[278] Rebuttal Testimony of CCWC witness Jake Lenderking, Exh. A-26 at Exhibit JCL-3; Direct Testimony of Staff witness Katrin Stukov, Exh. S-6 at Exhibit KS, page 15 and Attachment A.
[279] Direct Testimony of Staff witness Katrin Stukov, Exh. S-6 at Exhibit KS, page 15.
[280] *Id.*, pages 15-16.
[281] *Id.*
[282] *Id.*

CCWC's five year plan includes infrastructure additions in four NARUC plant accounts: Services, Meters, Hydrants, and Valves.[283] After reviewing CCWC's SIB Eligibility Report and the proposed 5-year infrastructure replacement plan at a cost of $8,851,392, Engineering Staff found the proposal reasonable and appropriate.[284] Engineering Staff stated, however, that it made no "used and useful" determination of the proposed plant items, and that no conclusions should be inferred for rate making or rate base purposes in the future.[285]

The POA for the proposed SIB, CCWC's SIB Plant Table I, a template for CCWC's SIB Plant Table II, along with sample SIB Schedules A through D, are included in Exhibit B, which is attached hereto and included herein by reference.[286] Engineering Staff recommends that if the Commission approves CCWC's proposed SIB, CCWC be required to file with Docket Control within 30 days, as a compliance item in this docket, a POA for the SIB mechanism consistent with that appearing in Exhibit B.

The proposed SIB mechanism is designed to allow the Commission to authorize CCWC to recover between rate cases, through a surcharge, the pre-tax return on investment and depreciation expense associated with the specific water infrastructure projects, net of associated plant retirements, which have been submitted for review in this rate proceeding and which CCWC plans to complete and place in service, to serve existing connections, prior to CCWC's next rate case filing (no later than June 1, 2018). Under the proposed SIB mechanism, the projects will be subject to a usefulness and prudency review in CCWC's next rate case, and any approved surcharges will be subject to true-up and refund.

The key provisions of CCWC's proposed SIB, as detailed in the proposed POA appearing in Exhibit B, are as follows:

- Approval of SIB-Eligible Projects – All SIB-eligible projects must be reviewed by Staff and approved by the Commission prior to being included in the SIB surcharge. All of the projects must be completed and placed into service prior to

[283] Direct Testimony of Staff witness Katrin Stukov, Exh. S-6 at Exhibit KS, page 16.
[284] *Id.*
[285] *Id.*
[286] The documents in Exhibit B were included as Attachment C to the Direct Testimony of Staff witness Katrin Stukov, Exh. S-6 at Exhibit KS.

being included in the SIB surcharge. CCWC must file a report with the Commission every six months summarizing the status of all SIB-eligible projects.

- Costs Eligible for SIB Recovery – Cost recovery under the SIB mechanism is allowed for the pre-tax return on investment and depreciation expense associated with SIB projects, net of associated plant retirements. The rate of return, depreciation rates, and GRCF/tax multiplier are to be the same as established in this Decision.

- Efficiency Credit – The SIB surcharge will include an efficiency credit equal to five percent of the SIB revenue requirement.

- Surcharge Cap – The amount that can be collected annually by each SIB surcharge filing is limited to five percent of the revenue requirement authorized in this Decision.

- Timing and Requirements of SIB Surcharge Filings – CCWC may file up to five SIB surcharge requests between rate case decisions; may make no more than one SIB surcharge every 12 months; may not make an initial SIB surcharge filing prior to 12 months after this Decision; must make an annual SIB surcharge filing to true-up its surcharge collections; and must file a new rate case application no later than June 30, 2018, with a test year ending no later than December 31, 2017, at which time any SIB surcharge then in effect will be reviewed for inclusion in base rates in that proceeding, and the surcharge will be reset to zero.

- SIB Rate Design – The SIB surcharge will consist of a fixed monthly charge on customers' bills, with the surcharge and the efficiency credit listed as separate line items. The surcharge will increase proportionately based on customer meter size.

- Commission Approval of SIB Surcharge – Each SIB surcharge must be approved by the Commission prior to implementation. Upon filing of the SIB surcharge

application, Staff and RUCO will have 30 days to review the filing and dispute it or file a request for the Commission to alter the surcharge or true-up surcharge/credit.

- Public Notice – At least 30 days prior to a SIB surcharge becoming effective, CCWC is required to provide public notice to customers in the form of a bill insert or customer letter. The notice must include the individual surcharge amount by meter size; the individual efficiency credit by meter size; the individual true-up surcharge/credit by meter size; and a summary of the project(s) included in the current surcharge filing, including a description of each project and its cost.

- SIB Surcharge Request Filing Requirements – In order to allow the Commission to conduct a fair value analysis, all SIB surcharge requests must include CCWC's most current balance sheet at the time of the filing; its most current income statement; an earnings test schedule; a rate review schedule (including the incremental pro forma effects of the proposed increase); a revenue requirement calculation; a surcharge calculation; an adjusted rate base schedule; a CWIP ledger (for each project showing accumulation of charges by month and paid vendor invoices); Excel schedules with formulae intact supporting the revenue requirements approved in this Decision and the same Excel schedules incorporating the effects of SIB-eligible plant for the current SIB surcharge request and any previously approved surcharge and true-up requests; and a typical residential bill analysis showing the effect of the SIB surcharge. CCWC should also provide current bill determinants.

- Reconciliation and True-Ups – Any under- or over-collected SIB authorized revenues will be recovered or refunded, without interest, over a 12-month period by means of a SIB true-up surcharge or true-up credit.

- Earnings Test – To allow the Commission to ensure that rates are just and

reasonable, CCWC must perform an earnings test calculation for each initial SIB filing and SIB annual report filing. The purpose of the earnings test filing is to determine whether the actual rate of return reflected by operating income for the relevant 12-month period exceeded the most recently authorized fair value rate of return. The earnings test must be based on the most recent available operating income, adjusted for any operating revenue and expense adjustments adopted in CCWC's most recent general rate case; on the rate base adopted in CCWC's most recent general rate case, updated to recognize changes in plant, accumulated depreciation, contributions in aid of construction ("CIAC"), advances in aid of construction ("AIAC"), and accumulated deferred income taxes through the most recent available financial statement (quarterly or longer). If the earnings test calculation shows that CCWC will not exceed its authorized rate of return with the SIB surcharge, the surcharge may go into effect once approved by the Commission. If the earnings test calculation shows that CCWC will exceed its authorized rate of return with the implementation of the surcharge, the surcharge may not go into effect. However, if the earnings test shows that CCWC will exceed its authorized rate of return with the implementation of the full surcharge, but a portion of the surcharge may be implemented without CCWC exceeding the authorized rate of return, then the surcharge may be authorized up to that amount, once approved by the Commission.

- Emergency Circumstances - Under the proposed POA, projects may be not be added to SIB Plant Table I subsequent to this Decision, except in the event of emergency circumstances, which are specifically defined in Section V of the POA. Such emergency additions must be approved by the Commission.

As it argued in the case leading up to Decision No. 73938, RUCO argues that the SIB should not be approved. RUCO does not agree with CCWC that the SIB is in the public interest, and does not support its approval. RUCO believes that the SIB is bad public policy, is illegal and

mechanically flawed. RUCO claims that the SIB shifts risk from CCWC to the ratepayer without adequate financial consideration to the ratepayer; that the SIB is not a true adjustor mechanism because it is used to include plant costs, not fluctuating operating expenses; that the SIB would result in interim rates, which CCWC has not requested; that the SIB will increase CCWC's FVRB without any meaningful determination of fair value, and therefore the SIB constitutes single issue ratemaking, and the earnings test required by the SIB POA does not ensure that the Commission will make a fair value finding because it is an after-the-fact indicator of whether the Company's actual rate of return exceeded its authorized rate of return; that *Scates v. Arizona Corp. Comm'n*, 118 Ariz. 531, P.2d 612 (App. 1978) does not provide for an exception that would allow the SIB; that CCWC and Staff did not make a case to support Commission approval of the SIB; and that the SIB is not in the public interest because it eliminates regulatory lag to the benefit of the utility, at the risk of reducing pressure to operate prudently and efficiently, to the detriment of the ratepayer.

RUCO contends that CCWC should not be awarded a SIB under the facts and circumstances of this case, due to the maintenance practices of the owner of CCWC's system prior to EPCOR's acquisition of the system in 2011.[287] RUCO argues that CCWC knew the condition of the system when it acquired it, and that the costs associated with improving the system should not become the burden of the ratepayer through a SIB mechanism. RUCO states that a SIB is not needed because a witness for CCWC testified that it would be possible for CCWC to make its planned repairs without a SIB and request recovery in its next rate proceeding,[288] and that CCWC does not need a SIB due to its equity-rich capital structure and cash reserves.[289] RUCO also recommends that the Commission order CCWC to set aside depreciation expense associated with the SIB to be used to pay for improvements and replacement of plant.[290]

Regarding RUCO's arguments about the necessity for a SIB under the circumstances of this case, CCWC states that it certainly could, and will, maintain the system with or without a SIB. CCWC contends, however, that without the requested SIB, it will under-earn its authorized rate of

[287] RUCO Br. at 26, citing to Direct Testimony of Ian C. Crooks, P.E., Exh. A-17 at 13-14.
[288] RUCO Br. at 28.
[289] RUCO Reply Br. at 12.
[290] RUCO Br. at 37.

return.[291] CCWC states that it is uncontroverted that its system is in need of additional repairs and replacements, including replacements for SIB-eligible repairs. CCWC adds that, as evidenced by the multiple revisions to certain SIB information Staff required in the course of this proceeding, Staff carefully reviewed the information CCWC provided in support of its requested SIB.

Staff contends that CCWC should be awarded a SIB under the facts of this case, that CCWC demonstrated its need for the requested SIB through testimony and extensive engineering reports, all of which was reviewed by Staff, and that RUCO has not provided a valid justification for its rejection.[292] Staff asserts that RUCO presented no controverting evidence through its own witness, and presented no independent analysis of the engineering information CCWC provided to support its request. Staff argues that the depreciation expense set-aside proposed by RUCO is unnecessary for a utility that is committed to making system improvements, and no evidence was presented that the current owner of CCWC has not made maintenance of the system a priority.[293]

Staff disagrees with RUCO's contention that the SIB shifts costs to ratepayers without adequate financial consideration, pointing out that it includes an efficiency credit that reduces the rate of return on SIB-related plant by five percent compared to non SIB –related plant additions. Staff also disagrees with RUCO's implication that a SIB mechanism will provide CCWC no incentive to control its costs, because RUCO and Staff both will have an opportunity to address this issue each time CCWC makes a surcharge filing, as well as in the follow-up rate case required by the SIB POA.[294]

Staff states that the approval process for a SIB is an extensive and rigorous one, and that the Commission must review and approve each request, and has the authority to deny a surcharge request or cancel the SIB at any time. The SIB POA requires CCWC to provide information with each SIB filing that will allow a determination of the impact of the new plant on its FVRB and consider the resulting impact on its rate of return. Staff disputes RUCO's argument that the earnings test required by the SIB POA does not ensure that the Commission will make a fair value finding, because it is an

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[291] CCWC Reply Br. at 25.
[292] Staff Reply Br. at 9-10.
[293] *Id.* at 12.
[294] Staff Reply Br. at 10.

after-the-fact indicator of whether the Company's actual rate of return exceeded its authorized rate of return. RUCO's witness stated at the hearing that the earnings test does not include an examination of expense items, but Staff argues that the earnings test does take expense levels into account, and that it is used to determine whether all or part of a SIB surcharge request should be authorized. Staff states that should extra time be required to perform any part of a SIB filing review, then Staff or RUCO will have an opportunity to request an extension of time.[295]

Staff disagrees with RUCO's contention that the SIB is not a true adjustor mechanism. Staff states that the SIB provides a mechanism to recover capital costs which can be estimated during the rate case but which will change after the rate case has concluded, and that the Commission currently utilizes many such mechanisms.[296] Staff points out that even if the SIB were somehow found not to be an adjustor mechanism, such a determination would not cause the SIB to be illegal or unconstitutional, due to the many safeguards and protections included in its design.

CCWC and Staff argue that the proposed SIB is within the Commission's legal authority, complies with the fair value requirement of the Arizona Constitution, is a lawful adjustor mechanism under Arizona law, and complies with all requirements for adjustor mechanisms under Arizona law.

As Staff describes, the SIB proposed by CCWC and supported by Staff has been developed in the context of a full rate case in which we have determined CCWC's FVRB and after review, approved specific plant projects to be included in the SIB. SIB projects are limited to those that replace plant used to serve existing connections, and the SIB provides for the retirement of replaced plant, such that new SIB plant will not generate a new revenue stream.[297] The cap on the SIB surcharge, the requirement for true-up filings, and the requirement that CCWC file a full rate case by June 30, 2018, with a test year ending no later than December 31, 2017, all serve to ensure that resulting rates will be just and reasonable.

We have comprehensively addressed, in our Opinion and Order set forth in Decision No. 73938, the arguments RUCO again raises in this case in opposition to CCWC's proposed SIB surcharge mechanisms. In Decision No. 73938, we found the SIB mechanism approved therein, upon

[295] *Id.* at 12.
[296] Staff Reply Br. at 11.
[297] Staff Br. at 20.

which CCWC's proposed SIB mechanism is based, to be compliant with the Commission's constitutional requirements, as well as with the case law interpreting the Commission's authority and discretion in setting rates.[298] We find CCWC's proposed SIB mechanism in this case, which is virtually identical to that approved in Decision No. 73938, to also be compliant with the Commission's constitutional requirements and duties, and with the case law interpreting those requirements and duties. The legal analysis set forth in Decision No. 73938 is incorporated in our Decision today. For the reasons stated hereinabove, and with those stated in Decision No. 73938, we find that implementation of CCWC's proposed SIB surcharge mechanism, pursuant to the proposed POA in Exhibit B, and limited to the infrastructure replacement plan set forth in SIB Table I in Exhibit B, is in the public interest, and will therefore approve it.

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Having considered the entire record herein and being fully advised in the premises, the Commission finds, concludes, and orders that:

FINDINGS OF FACT

1. On April 26, 2013, CCWC filed the above-captioned rate application with the Commission. With the application, CCWC filed the Direct Testimony of its witnesses Thomas M. Broderick, Ian C. Crooks, Jeffrey W. Stuck, Jake Lenderking, Sandy L. Murrey, Sheryl L. Hubbard, Tom Bourassa, and Pauline M. Ahern.

2. On May 2, 2013, CCWC filed a Notice of Errata.

3. On May 24, 2013, CCWC filed a letter to confirm its intention to support and adopt a BMP tariff to address meter repair and replacement.

4. On May 28, 2013, Staff filed a Letter of Sufficiency indicating that CCWC's application met the sufficiency requirements of A.A.C. R14-2-103, and classifying CCWC as a Class A Utility.

5. On June 17, 2013, a Rate Case Procedural Order was issued setting a hearing date for the application and associated procedural deadlines.

[298] Decision No. 73938 at 42-54.

6. On June 18, 2013, a Procedural Order was issued correcting the hearing date from February 17, 2014 to February 18, 2014.

7. On July 10, 2013, CCWC filed a supplement to its application requesting approval of an attached meter BMP tariff.

8. On August 7, 2013, CCWC filed an Affidavit of Publication indicating that notice of the application and hearing, in accordance with the requirements of the Rate Case Procedural Order, was published in the *Fountain Hills Times* on July 31, 2013.

9. Intervention in this matter was granted to Fountain Hills, RUCO, Lina Bellenir, Gale Evans, Patricia Huffman, Leigh M. Oberfeld-Berger, Tracey Holland, Leonora M. Hebenstreit, and WUAA.

10. On August 22, 2013, CCWC filed a supplement to the application to which was attached 10 draft BMP Tariffs, for which it requested approval as part of an order authorizing CCWC to implement a SIB surcharge mechanism.

11. On August 23, 2013, CCWC filed a supplement to the application to which was attached a SIB eligibility report dated August 7, 2013, a SIB Table I dated August 21, 2013, and a SIB Table II dated August 21, 2013.

12. On August 7, 2013, CCWC filed an Affidavit of Mailing indicating that notice of the application and hearing was mailed via U.S. Mail to its customers in accordance with the requirements of the Rate Case Procedural Order.

13. On November 20, 2013, a Procedural Order was issued modifying the procedural schedule for filing testimony in response to RUCO's November 15, 2013 Motion for Extension of Time to File Testimony.

14. On December 6, 2013, CCWC filed a supplement to its application to which was attached a SIB Table II dated December 6, 2013.

15. On December 11, 2013, a Procedural Order was issued modifying the procedural schedule in this matter in response to Staff's request for an extension of time to file its testimony.

16. On December 18, 2013, Staff filed the Direct Testimony of its witnesses Gerald W. Becker, Katrin Stukov, and John A. Cassidy.

17. On December 19, 2013, RUCO filed the Direct Testimony of its witnesses Jeffrey M. Michlik and David Parcell.

18. On December 20, 2013, Staff filed Direct Testimony on cost of service and rate design of its witnesses Katrin Stukov and Gerald W. Becker.

19. On December 23, 2013, Fountain Hills filed Direct Testimony of Kenneth W. Buchanan.

20. On January 14, 2014, a Procedural Order was issued modifying the deadline for the filing of Rebuttal Testimony as requested by the Company.

21. On January 21, 2014, CCWC filed the Rebuttal Testimony of its witnesses Sheryl L. Hubbard, Jeffrey W. Stuck, Jake Lenderking, Sandra L. Murrey, Thomas J. Bourassa, Pauline M. Ahern, and Candace Coleman.

22. On January 31, 2014, Staff filed a Notice of Settlement Discussions.

23. On February 7, 2014, Staff filed the Surrebuttal Testimony of its witnesses Gerald W. Becker and John A. Cassidy.

24. On February 7, 2014, RUCO filed the Surrebuttal Testimony of its witnesses Jeffrey M. Michlik and David Parcell.

25. On February 7, 2014, CCWC filed Notice Regarding Adoption of Testimony/Exhibits.

26. On February 12, 2014, CCWC filed the Rejoinder Testimony of its witnesses Sheryl L. Hubbard, Jeffrey W. Stuck, and Pauline M. Ahern.

27. On February 13, 2014, CCWC filed testimony summaries of its witnesses.

28. On February 13, 2014, RUCO filed a Notice of Errata with corrected schedules to the Surrebuttal Testimony of its witness Jeffrey M. Michlik.

29. On February 13, 2014, the prehearing conference convened as scheduled. CCWC, RUCO and Staff appeared through counsel. Procedural matters were discussed and an order of witnesses was established.

30. On February 14, 2014, Staff filed testimony summaries of its witnesses.

31. On February 14, 2014, Staff filed Notice of Amended Surrebuttal Testimony.

32. On February 14, 2014, WUAA filed an Application for Leave to Intervene.

33. On February 14, 2014, RUCO filed testimony summaries of its witnesses.

34. On February 18, 2014, the hearing commenced as scheduled. CCWC, WUAA, RUCO, and Staff appeared through counsel. Intervenor Lina Bellenir appeared on her own behalf and stated that she did not wish to cross examine witnesses or provide sworn testimony, but wished to provide public comment instead.[299] WUAA appeared through counsel and requested authority to intervene pursuant to the Application for Leave to Intervene filed on February 14, 2014. Due to the lateness of the request, WUAA was not granted leave to introduce evidence, but was granted intervention limited to cross examination of witnesses and providing legal argument. No other intervenors made appearances at the hearing.[300] Ms. Bellenir and one other member of the public provided public comment for the record. CCWC, RUCO and Staff presented evidence and cross examined witnesses. WUAA cross examined witnesses.

35. During the fourth day of hearing, on February 21, 2014, Staff requested a continuance of the hearing in order to have time to prepare and file Amended Surrebuttal Testimony based on information provided by CCWC on February 18, 2013, pursuant to Staff's request made in Staff's Surrebuttal Testimony. With no objection from any party, the hearing was continued to February 28, 2014, the first date on which facilities were available for the requested continuation.

36. On February 26 and 27, 2014, Staff filed Amended Surrebuttal Testimony of its witness Gerald W. Becker.

37. The hearing concluded on February 28, 2014.

38. On March 7, 2014, CCWC, RUCO, and Staff filed their Final Post-Hearing Schedules.

39. On April 4, 2014, CCWC, WUAA, RUCO, and Staff filed Initial Closing Briefs.

40. On April 25, 2014, CCWC, WUAA, RUCO, and Staff filed Reply Closing Briefs, and the matter was taken under advisement.

41. Because CCWC's proposal for a 24-Month AFUDC and Depreciation Deferral Mechanism is lacking in sufficient detail to be fully considered in this proceeding, it is not reasonable or appropriate to approve it.

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[299] Hearing Transcript ("Tr.") at 7-8.

[300] Fountain Hills made no appearance. Its December 23, 2013, prefiled testimony will be considered as public comment.

42. It is reasonable and in the public interest to allow the five year annualization of $15,641 of the 60 months of deferred CAP M&I costs of $78,205.50, which costs include no interest or other carrying charges. This annualization should be subject to true-up in a future rate case if it results in an over- or under-collection of the $78,205.50 deferral amount.

43. CCWC's FVRB is $26,838,702.

44. A rate of return of 8.06 percent is just and reasonable in this case.

45. Under the rates we authorize herein, shown in Exhibit C, an average usage (7,870 gallons per month) residential customer with a 3/4 inch meter will experience an increase in rates of $6.16, from $37.85 to $44.01, or 16.28 percent.

46. CCWC should be required to file in this docket, within 120 days, a plan including analysis on how it might achieve a more balanced, reasonable, and appropriate capital structure. In future ratesetting proceedings, regardless of whether CCWC has chosen to rebalance its capital structure, CCWC can expect that a hypothetical capital structure will be considered.

47. It is reasonable to require CCWC to file a POA for the proposed Low Income Program, within 60 days of this Decision.

48. The rates authorized herein include a declining usage adjustment proposed by the Company. It is reasonable to require the Company to file in this docket, within 90 days of this Decision, a report that details the monthly usage of each meter size and customer class for the January-December 2013 calendar year, and to annually file in this docket, commencing on or before March 30, 2015, and until the filing of its next rate case, a report that details the monthly usage of each meter size and customer class for the prior January-December calendar year. It is reasonable to require Staff to analyze the data, and to provide a recommendation to the Commission if Staff believes that Commission action should be taken based on the filed reports.

49. It is reasonable to authorize CCWC to implement a CAP Surcharge, and to require CCWC to file, within 30 days of this Decision, a CAP Surcharge Plan of Administration that substantially conforms to the CAP Surcharge (labeled as Sustainable Water Surcharge) Plan of Administration attached hereto as Exhibit A, for Commission review and approval.

50. It is reasonable to approve BMP tariffs as they appear in Hearing Exhibit A-26, the

Rebuttal Testimony of CCWC witness Jake Lenderking, and to require CCWC to notify its customers about the BMP tariffs and their effective date, in a form acceptable to Staff, by means of either an insert in the next regularly scheduled billing or by a separate mailing, and to provide copies of the BMP tariffs to any customer upon request. It is reasonable to authorize CCWC to request recovery of actual expenses associated with the implemented BMPs in its next general rate application.

51. It is reasonable to authorize CCWC to implement a SIB surcharge pursuant to the requirements and conditions set forth in Exhibit B, and should be required to file with Docket Control within 30 days, as a compliance item in this docket, a POA for the SIB mechanism consistent with that appearing in Exhibit B.

52. CCWC should be authorized to request, pursuant to the requirements and conditions set forth in the POA in Exhibit B, SIB surcharge mechanism treatment for the specific projects listed in SIB Table I in Exhibit B.

53. CCWC should be required to continue using its existing depreciation rates, which are set forth in Hearing Exhibit S-6, Exhibit KS at Table A.

54. CCWC should cease depreciation of all fully depreciated assets and implement the vintage year model of depreciation as recommended by Staff in this proceeding for all of its plant accounts.

55. The Company's water system is currently delivering water that meets water quality standards required by Arizona and Federal law.

56. CCWC's water system is located in the Phoenix Active Management Area.

57. ADWR has determined that CCWC's water system is currently in compliance with ADWR requirements governing water providers and community water systems.

58. CCWC has an approved curtailment plan tariff and an approved backflow prevention tariff on file with the Commission.

59. CCWC is in compliance with Commission requirements.

CONCLUSIONS OF LAW

1. CCWC is a public service corporation within the meaning of Article XV of the Arizona Constitution and A.R.S. Title 40.

2. The Commission has jurisdiction over CCWC and the subject matter of this proceeding.

3. Notice of the application was provided in accordance with the law.

4. CCWC's FVRB is $26,838,702.

5. A rate of return of 8.06 percent is just and reasonable in this case.

6. The rates and charges and terms and conditions of service established herein are just and reasonable and in the public interest.

7. It is reasonable and in the public interest to require CCWC to make a filing in this docket within 120 days of this Decision setting forth its consideration of plans to rectify the imbalance in its capital structure relative to the capital structures of its parent companies, and to put CCWC on notice that in future ratesetting proceedings, regardless of whether CCWC has chosen to rebalance its capital structure, CCWC can expect that a hypothetical capital structure will be considered.

ORDER

IT IS THEREFORE ORDERED that Chaparral City Water Company is hereby authorized and directed to file with the Commission, on or before June 30, 2014, revised schedules of rates and charges consistent with Exhibit C attached hereto.

IT IS FURTHER ORDERED that the revised schedules of rates and charges shall be effective for all service rendered on and after July 1, 2014.

IT IS FURTHER ORDERED that Chaparral City Water Company shall provide notice to its customers of the revised rates and charges, in a form acceptable to the Commission's Utilities Division Staff, in its next regularly scheduled billing.

IT IS FURTHER ORDERED that Chaparral City Water Company shall file, within 120 days, as a compliance filing in this docket, a plan including analysis on how it might achieve a more balanced, reasonable, and appropriate capital structure.

IT IS FURTHER ORDERED that the rates approved herein include Chaparral City Water Company's requested five year annualization of the 60 months of deferred Central Arizona Project Municipal and Industrial charges associated with the additional 1,931 acre-feet Central Arizona

Project allocation approved in Decision No. 71308, which annualization excludes any interest or other carrying charges. This annualization shall be subject to true-up in a future rate case if it results in an over- or under-collection of the authorized deferral amount.

IT IS FURTHER ORDERED that the Low Income Program as proposed by Chaparral City Water Company in this proceeding is hereby approved.

IT IS FURTHER ORDERED that Chaparral City Water Company shall file, within 60 days, a Plan of Administration for the Low Income Program approved herein for Commission review and approval.

IT IS FURTHER ORDERED that Chaparral City Water Company shall file within 90 days in this docket, a report that details the monthly usage of each meter size and customer class for the January-December 2013 calendar year, and shall annually file in this docket, commencing on or before March 30, 2015, and until the filing of its next rate case, a report that details the monthly usage of each meter size and customer class for the prior January-December calendar year. Staff shall analyze the data, and if Staff believes that Commission action should be taken, shall provide a recommendation to the Commission.

IT IS FURTHER ORDERED that Chaparral City Water Company is hereby authorized to implement a CAP Surcharge, and shall file, within 30 days, a CAP Surcharge Plan of Administration that substantially conforms to the CAP Surcharge Plan of Administration (currently labeled as Sustainable Water Surcharge Plan of Administration) attached hereto as Exhibit A, for Commission review and approval.

IT IS FURTHER ORDERED that the BMP tariffs proposed by Chaparral City Water Company are hereby approved, and Chaparral City Water Company shall file tariffs conforming to those appearing in Hearing Exhibit A-26 at the time it files the new rate schedules authorized herein.

IT IS FURTHER ORDERED that Chaparral City Water Company shall notify its customers, in a form acceptable to Staff, of the Best Management Practices tariffs authorized in this proceeding and their effective date by means of either an insert in the next regularly scheduled billing or by a separate mailing, and shall provide copies of the Best Management Practices tariffs to any customer upon request.

IT IS FURTHER ORDERED that Chaparral City Water Company is hereby authorized to request recovery of actual expenses associated with the implemented Best Management Practices tariffs in its next general rate application.

IT IS FURTHER ORDERED that Chaparral City Water Company is hereby authorized to implement a System Improvement Benefit surcharge mechanism pursuant to the requirements and conditions set forth in Exhibit B.

IT IS FURTHER ORDERED that Chaparral City Water Company shall file with Docket Control within 30 days, as a compliance item in this docket, a Plan of Administration for the System Improvement Benefit surcharge mechanism consistent with that appearing in Exhibit B.

IT IS FURTHER ORDERED that Chaparral City Water Company is hereby authorized to request, pursuant to the requirements and conditions set forth in the Plan of Administration appearing in Exhibit B, System Improvement Benefit mechanism treatment only for the specific projects listed in SIB Table I of Exhibit B.

IT IS FURTHER ORDERED that Chaparral City Water Company shall continue to use its existing depreciation rates, which are set forth in Hearing Exhibit S-6, Exhibit KS at Table A.

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IT IS FURTHER ORDERED that Chaparral City Water Company shall cease depreciation of all fully depreciated assets and shall implement the vintage year model of depreciation as recommended by Staff in this proceeding for all its plant accounts.

IT IS FURTHER ORDERED that the timeclock in this matter is hereby extended to June 17, 2014, pursuant to A.A.C. R14-2-103(b)(11)(ii).

IT IS FURTHER ORDERED that this Decision shall become effective immediately.

BY ORDER OF THE ARIZONA CORPORATION COMMISSION.

CHAIRMAN COMMISSIONER

COMMISSIONER COMMISSIONER COMMISSIONER

IN WITNESS WHEREOF, I, JODI JERICH, Executive Director of the Arizona Corporation Commission, have hereunto set my hand and caused the official seal of the Commission to be affixed at the Capitol, in the City of Phoenix, this _____ day of _____ 2014.

JODI JERICH
EXECUTIVE DIRECTOR

DISSENT _____

DISSENT _____

SERVICE LIST FOR: CHAPARRAL CITY WATER COMPANY

DOCKET NO.: W-02113A-13-0118

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Sustainable Water Surcharge Mechanism
Plan of Administration

This Plan of Administration ("Plan") relates to the administration of Chaparral City Water Company's ("CCWC" or the "Company") Central Arizona Project ("CAP') water Surcharge known as the Sustainable Water Surcharge ("SWS"). The purpose of the Plan is to describe how CCWC will administer the SWS if approved by the Arizona Corporation Commission in Docket No. W-02113A-13-0118.

I. Overview

CCWC is a public service corporation providing water utility service in Maricopa County, Arizona pursuant to a Certificate of Convenience and Necessity granted by the Arizona Corporation Commission. CCWC is dependent on CAP water to deliver to its customers. The SWS mechanism has been closely modeled after two other current surcharge mechanisms known as Groundwater Saving Fee mechanisms which EPCOR successfully implements for its Sun City Water and Sun City Water districts.

II. General Description - Surcharge

The purpose of the SWS mechanism is to recover the difference in costs of CAP water and the costs or credits associated with underground storage and recovery of CAP water from the adjusted 2012 test year costs as approved in this case, Docket No. W-02113A-13-0118. Under the Company's proposed SWS mechanism, the Company will make annual filings (by January 31 each year) to adjust the SWS rate. The SWS rate will be billed on a per thousand gallons sold basis similar to a commodity rate for all customers. The SWS will appear on customers' bills as a separate line item labeled "Sustainable Water Surcharge." This rate will be adjusted annually (effective March 1) to true up the previous year's activity and reflect the current year's costs.

III. Components of the SWS Mechanism

The SWS Mechanism will include the following:

- Section 1 - Prior Year Under/(Over) Recovery – This section accounts for the under/(over) recovery of the prior year's costs through the surcharge. It encompasses all of the previous year's revenues and expense and shows the calculation of the under/(over) collection as well as the calculation to either (credit) or charge customers for the (over)/under collection in the previous y ear. It is supported by a sheet

showing monthly revenue/expense calculations and a sheet outlining the previous year's customer consumption by month. The end result of the calculations in Section 1 is a per thousand gallons rate which reflects (over)/under recovery of the previous year's actual expense.

- Section 2 – Estimated Payments/Expense for the Applicable Year – This section estimates the payments and credits that will occur in the applicable year. It includes the cost of the CAP water associated with the expected delivery of the scheduled amount of CAP water in that year, the capital charge for the entire allocation of 8,909 acre feet as required by the CAP Subcontract, and the cost or (credit) associated with storing CAP water underground.

- Section 3 – Total Estimated Increased Expense – This section uses the total from Section 2 and removes the amount of CAP expense approved in this rate case to arrive at a total estimated increased expense.

- Section 4 – Current Year Per Kgal Calculation – This section uses the total from Section 3 and divides it across the projected consumption (to be the test year consumption of 1,784,344 kgals in the first year of the SWS) to arrive at a per thousand gallons rate for the current year's expenses.

- Section 5 – Total Monthly Surcharge Per Kgal – This section sums the two components of the SWS, the previously (over)/under collected amount per kgal rate and the current year per kgal rate – it sums Sections 1 and 4.

V. Reporting

The Company shall file its first surcharge request by January 31, 2015 to be effective on March 1 2015.

On or before January 31 of each year thereafter CCWC will submit to the Commission as a compliance item a report showing its collections under the SWS that includes a calculation of

any under/(over) recovery with detail showing each component's contribution to the change in balance from the prior year. This will be in a form similar to the attached exhibit.

Chaparral City Water Company
SUSTAINABLE WATER SURCHARGE UPDATE

2015 Proposed Rates

Total Monthly Sustainable Water Surcharge:

Chaparral City Water Company -

per 1,000 gallons	$ 0.0473

Chaparral City Water Company
Sustainable Water Surcharge Update

DOCKET NO. W-02113A-13-0118

Recovery Target and Tariff Calculations
Data as of 12/31/14

			Chaparral City Water Co.	
1 - Under/(Over) Recovery				
2014 Annual Costs			$ 1,165,214	
2014 Surcharge Revenues			$ -	
CAP Expense In Base Rates			$ (1,165,214)	
2014 (Over) Under Collected				$ -
Projected Consumption (kgals)				1,784,344 a
Monthly Rate per 1,000 gal. - Previous Years				$ -
2 - Estimated Payments/Expense for 2015				
	2015 Rates	Acre Feet Allocation		
CAP Payments				
M&I Delivery Rate	$ 157	6,861 b	$ 1,077,177	
Capital Charge Rate	$ 21	8,909 c	$ 187,089	
Storage (Credit) or Expense	$ (16)	917 d	$ (14,672)	
Total			$ 1,249,594	
3 - Total Estimated Increased Expense				
Projected 2015 Expense Recovery Total			$ 1,249,594	
CAP Expense In Base Rates			$ (1,165,214)	
Difference			$ 84,380	
4 - Current Year Per Kgal Calculation				
Total 2015 Recovery Target				$ 84,380
Projected Consumption (kgals)				1,784,344 a
Monthly Rate per 1,000 gal. - Current				$ 0.0473
5 - Total Monthly Charge Per Kgal				
Monthly Rate per 1,000 gal. - TOTAL				$ 0.0473

a 2012 test year deliveries.
b Total acre feet ordered for 2015.
c Total allocation.
d All 600 acre feet are scheduled to be stored at the MWD GSF and earn a credit of $16 per acre foot.

DECISION NO. _____

Chaparral City Water Company Sustainable Water Surcharge Reconciliation

2014 Revenue and Expense

2014	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Totals
Surcharge Revenue *	-	-	-	-	-	-	-	-	-	-	-	-	-
M&I	83,476	83,476	83,476	83,476	83,476	83,476	83,476	83,476	83,476	83,476	83,476	83,476	1,001,706
Cap Charges					89,090					89,090	-		178,180
Underground Storage (Credit) or Expense	-	-	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	-	-	(14,672)
CAP Credit for prior year	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Expense / Annual Costs	83,476	83,476	81,642	81,642	170,732	81,642	81,642	81,642	81,642	170,732	83,476	83,476	1,165,214

* Note - The surcharge will not be in effect in 2014, thus no revenues are shown. In future years this field will be populated with actual surcharge revenues.

Chaparral City Water Company
GROUNDWATER SAVINGS FEE

Billing Determinants	2014 January	February	March	April	May	June	July	August	September	October	November	December	TOTAL 2014
Consumption:													
Commercial													-
Irrigation													-
Total Consumption	-	-	-	-	-	-	-	-	-	-	-	-	-

Note - The first annual surcharge calculation is to be based on the test year consumption of 1,784,344 kgals. Subsequent years' calculations will be based on the previous year's actual consumption and this table will display the actual monthly consumption.

DECISION NO. _____

DOCKET NO. W-02113A-13-0118

TABLE OF CONTENTS

EXHIBITS

I. GENERAL DESCRIPTION

This document is the Plan of Administration ("POA") for the System Improvement Benefits ("SIB") Mechanism approved for Chaparral City Water Company ("CCWC" or "Company") by the Arizona Corporation Commission ("ACC" or "Commission") in Decision No. _____ on _____. The SIB provides for recovery of the capital costs (return on investment, income taxes and depreciation expense) associated with distribution system improvement projects listed in SIB Plant Table I that have been verified to be completed,[1] net of associated retirements and placed in service per SIB Plant Table II and where costs have not been included in rate base for recovery in Decision No._____. Any expenditures offset by contributions in aid of construction or advances in aid of construction are not eligible for inclusion in the SIB.

II. DEFINITIONS

- NARUC – National Association of Regulatory Utility Commissioners
- SIB – System Improvement Benefit mechanism to be implemented between rate proceedings to support investment in plant recorded in SIB Eligible NARUC accounts.
- SIB Eligible Plant – Investments in plant recorded in SIB Eligible NARUC accounts.
- SIB Eligible NARUC accounts:
  - NARUC Account No. 309 – Supply Mains
  - NARUC Account No. 331 – Mains
  - NARUC Account No. 333 – Services
  - NARUC Account No. 334 - Meters and Meter Installations;
  - NARUC Account No. 335 – Hydrants
- SIB Plant Table I (Excerpt attached as Exhibit 1)[2] – The schedule of planned SIB eligible projects approved in the Company's most recent rate case decision.

[1] Acceptable form of verifications may include the Maricopa County Environmental Services Department Approval of Construction, Professional Engineer's Certificate of Completion, etc.

[2] See Company filing of August 22, 2013.

- SIB Plant Table II (Sample attached as Exhibit 2) – The schedule of completed and verified SIB eligible projects from SIB Plant Table I and associated retirements.

- Total Revenue Requirement – The revenue requirement approved in Decision No. _____, plus the SIB Revenue Requirement.

- SIB Revenue Requirement – The revenue requirement equal to the return on investment, income taxes and depreciation expense necessary to support the SIB Plant Table II amounts.

- SIB Revenue Requirement Efficiency Credit – An amount equal to 5 percent of the SIB Revenue Requirement.

- SIB Authorized Revenue – Amount equal to the SIB Revenue Requirement less the SIB Revenue Requirement Efficiency Credit plus any SIB True up Adjustment.

- Gross SIB Surcharge – Amount to be shown on customers' bills based on meter sizes without consideration to the SIB Surcharge Efficiency Credit.

- SIB Surcharge Efficiency Credit – An amount equal to 5 percent of the Gross SIB Surcharge to be shown on customers' bills.

- SIB Surcharge – The amount equal to the Gross SIB Surcharge less the SIB Surcharge Efficiency Credit to be charged based on meter size, calculated to recover the SIB Authorized Revenue, to be shown on the customers' bills.

- SIB True-up Adjustment – An amount to adjust for over or under collection of the SIB Authorized Revenues as compared with the total SIB Surcharges collected for the preceding 12 month period. Each true–up shall also analyze the cumulative over or under collections to include a comparison of all past SIB Authorized Revenues, total SIB Surcharge collections, and prior true-ups to be used in calculation of the SIB true-up surcharge or credit.

III. SIB RELATED FILINGS

A. Progress Reports – Once a SIB is approved in a decision, the Company must file with Docket Control semi-annual status reports delineating the status of all SIB Eligible Plant, on a project by project basis as listed in SIB Plant Table I, starting 6 months after the decision and every 6 months thereafter.

B. Reconciliation and True Up – Once a SIB Surcharge is implemented, the Company must file annually to true up its SIB Surcharge collections over the

preceding twelve months with the SIB Authorized Revenue for that period and establish a surcharge or credit to true up over or under collections, regardless of whether it seeks a new surcharge. The filing dates for these annual true-ups shall be as established in the Commission's Decision approving the SIB Surcharge.

C. SIB Surcharge Requests – To obtain its SIB Surcharge the Company must file the following:

1. SIB Plant Table II (with supporting information and documentation), showing the SIB eligible projects completed for which the Company seeks cost recovery. Such projects must

   a) be projects listed in the Company's initial SIB Plant Table I, approved in Decision No._____, or have been added to said SIB Plant Table I pursuant to Section V of this POA;

   b) have been completed by the Company;

   c) have been verified; and

   d) be actually serving customers.

2. A summary of Commission approved SIB-eligible projects contemplated for the next twelve (12)-month SIB surcharge period from SIB Plant Table I.

3. SIB Schedule A (sample attached as Exhibit 3), showing a calculation of the SIB Revenue Requirement and SIB Revenue Requirement Efficiency Credit, SIB Authorized Revenue, Gross SIB Surcharge, SIB Surcharge Efficiency Credit, and the SIB Surcharge. Schedule A shall be supported by revenue requirements schedules supporting the revenue requirements in Decision No. _____ and the pro-forma revenue requirements including the effects of SIB Eligible Plant.

4. Schedule B (sample attached as Exhibit 4) showing the overall SIB True-up Adjustment calculation for the prior twelve-month SIB Surcharge period, as well as the individual SIB True-up Adjustment for each meter size.

5. SIB Schedule C (sample attached as Exhibit 5) showing the effect of the SIB Surcharge on a typical residential customer bill for both median and average usage.

6. SIB Schedule D (sample attached as Exhibit 6) which shall include an analysis of the impact of the SIB Eligible Plant on the fair value rate base, revenue, and the fair value rate of return. The Company shall also file the following:

   a) the most current balance sheet at the time of the filing;

   b) the most current income statement;

   c) an earnings test schedule;

   d) a rate review schedule (including the incremental and pro forma effects of the proposed increase);

   e) an adjusted rate base schedule; and

   f) a Construction Work in Progress ledger (for each project showing accumulation of charges by month and paid vendor invoices).

D. The Company will maintain and provide Excel schedules with formulae intact supporting the revenue requirements approved in the rate decision that approved the SIB and provide same Excel schedules to incorporate the effects of SIB Eligible Plant for the current SIB Surcharge Request and any previously approved Surcharge and True-up requests.

E. The Company may make its initial SIB Surcharge Request through Docket Control no earlier than twelve months after the entry of Decision No._____.

F. The Company may make no more than one SIB Surcharge Request every twelve months with no more than five SIB Surcharge Requests between rate case decisions. A True-up must be filed with each Surcharge Request, except the first.

G. Unless otherwise authorized by the Commission, the Company shall be required to file its next general rate case no later than June 30, 2018, with a test year ending no later than December 31, 2017.

H. Any SIB Surcharges that are in effect shall be reset to zero upon the date new rates become effective in the Company's next general rate case.

I. The Company may request to add Plant to SIB Table I only under emergency circumstances. Any additions or modifications to SIB Plant Table I must be approved by the Commission.

IV. SURCHARGE CALCULATIONS

A. Calculations of Amounts to Be Collected By the SIB Surcharge

1. The amount to be collected by the SIB Authorized Revenue shall be equal to the SIB Revenue Requirement minus the SIB Revenue Requirements Efficiency Credit plus any SIB True up Adjustment.
For purposes of calculating the SIB Revenue Requirement:

   a. The required rate of return is equal to the overall rate of return authorized in Decision No. _____.

   b. The gross revenue conversion factor/tax multiplier is equal to the gross revenue conversion factor/tax multiplier approved in Decision No. _____; and

   c. The applicable depreciation rate(s) is equal to the depreciation rate(s) approved in Decision No. _____.

2. The project cost to be used in calculating the SIB Revenue Requirement shall be the lesser of the actual project cost listed in SIB Plant Table II or 110 percent of the estimated cost listed in SIB Plant Table I as approved in Decision No. _____. Unit costs shall be used if actual units constructed are less than estimated in SIB Plant Table I.

3. The amount to be collected by each SIB Surcharge Request shall be capped annually at five percent of the revenue requirement authorized in Decision No. _____.

B. Reconciliation And True-Ups

1. The revenue collected by the total SIB Surcharges over the preceding twelve months shall be trued-up and reconciled with the SIB Authorized Revenue for that period.

2. A new SIB Surcharge shall be combined with an existing SIB Surcharge such that a single SIB surcharge and SIB Efficiency Credit are shown on a customer's bill.

3. For each twelve (12) month period that a SIB surcharge is in effect, the Company shall reconcile the amounts collected by the SIB Surcharge with the SIB Authorized Revenue, for that twelve (12)-month period, consistent with Schedule B, attached hereto as Exhibit B.

4. Any under- or over-collected SIB Authorized Revenues shall be recovered or refunded, without interest, over a twelve-month period by means of a SIB True-up Surcharge or Credit.

5. Starting with the second annual SIB Surcharge, where there are over or under-collected balances, such over or undercollected balances shall be carried over to the next year, and considered in the calculation of the new SIB True-up Surcharge or Credit. If, after the five-year period there remains an over or undercollected balance, such balance shall be reset to zero, and addressed in the next rate case.

C. Earnings Test

1. Once a SIB Surcharge is in effect, the Company shall be required to perform an annual earnings test calculation for each SIB Surcharge Request to determine whether the actual rate of return reflected by the operating income for the affected system or division for the relevant 12-month period exceeded the most recently authorized fair value rate of return for the affected system or division.

2. The earnings test shall be:

a) based on the most recent available operating income,

b) adjusted for any operating revenue and expense adjustments adopted in the most recent general rate case; and

c) based on the rate base adopted in the most recent general rate case, updated to recognize changes in plant, accumulated depreciation, contributions in aid of construction, advances in aid of construction, and accumulated deferred income taxes through the most recent available financial statement (quarterly or longer).

V. ADDING PROJECTS TO SIB TABLE I UNDER EMERGENCY CIRCUMSTANCES

A. The Company can seek Commission approval to add projects in SIB Plant Table I only in the event of emergency circumstances. No such changes may be made without Commission approval.

B. Any addition to SIB Plant Table I must be plant investment that maintains or improves existing customer service, system reliability, integrity and safety. Eligible plant additions are limited to plant replacement projects. The costs of

extending facilities or capacity to serve new customers are not recoverable through the SIB mechanism.

C. To be eligible for SIB treatment, a project must be SIB Eligible Plant.

D. SIB Eligible Plant must satisfy at least one of the following criteria:

1. Water loss for the system exceeds ten (10) percent, as calculated by the following formula: ((Volume of Water Produced and/ or Purchased) – (Volume of Water Sold + Volume of Water Put to Beneficial Use)) divided by (Volume of Water Produced and/or Purchased). If the Volume of Water Put to Beneficial Use is not metered, it shall be established in a reliable, verifiable manner.

2. Plant assets that have remained in service beyond their useful service lives (based on the Company's system's authorized utility plant depreciation rates) and are in need of replacement due to being worn out or in a deteriorating condition through no fault of the Company;

3. Any other engineering, operational or financial justification supporting the need for a plant asset replacement, other than the Company's negligence or improper maintenance, including, but not limited to:

   a. A documented increasing level of repairs to, or failures of, a plant asset justifying its replacement prior to reaching the end of its useful service life (e.g. black poly pipe);

   b. Assets that are required to be moved, replaced or abandoned by a governmental agency or political subdivision if the Company can show that it has made a good faith effort to seek reimbursement for all or part of the costs incurred.

VI. RATE DESIGN

A. The SIB Surcharge rate design shall be calculated as follows:

1) The SIB Surcharge shall be a fixed monthly surcharge containing a Gross SIB Surcharge and the SIB Surcharge Efficiency Credit as its two components.

2) The SIB Surcharge shall be calculated by dividing the SIB Authorized Revenue by the number of equivalent active 5/8-inch meters at the end of the most recent twelve (12) month period, and shall increase with meter size based on the following meter capacity multipliers:

5/8-inch x ¾-inch	1.0 times
¾-inch	1.5 times
1-inch	2.5 times
1½-inch	5 times
2-inch	8 times
3-inch	16 times
4-inch	25 times
6-inch	50 times
8-inch	80 times
10-inch & above	115 times

B. The SIB Surcharge shall apply to all of the Company's metered customers, including private fire service customers.

VII. SURCHARGE IMPLEMENTATION

A. SIB surcharges shall not become effective until approved by the Commission.

B. At least 30 days prior to the SIB surcharge becoming effective, the Company shall provide public notice in the form of a billing insert or customer letter in a form acceptable to Staff. Such notice shall include the following information:

1. The individual Gross SIB Surcharge, by meter size;

2. The individual SIB Surcharge Efficiency Credit, by meter size;

3. SIB Surcharge, by meter size; and

4. Directions where the customer may obtain a summary of the projects included in the current SIB Surcharge Request, including a description of each project and its cost.

SIB Table I

(Exhibit CC-2)

EPCOR Water (USA) Inc.

Chaparral City Water Company/Fountain Hills

PWS ID No. 07-017

August 21, 2013

Chaparral City Water Company – PWS ID No. 07-017

SIB PLANT TABLE I, 1-1

2014 Service Line Replacements

Information to be included with SIB-Eligible Project Notification

	NARUC Acct No. (DSIC-eligible plant)	Replacement Plant Description (DSIC-eligible plant)					Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary - replacement of existing plant that has exceeded its designated useful life and has worn out or is in deteriorating condition due to no fault of the utility - replacement of existing plant to address excessive water loss (10% or more) - replacement of existing plant for other reasons supported by persuasive showing by utility 2. Provide narrative explaining why this segment of plant is a priority. 3. Provide narrative explaining how replacing this plant will benefit existing customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. 5. Provides reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Engineering Analysis shall also include narrative explaining the utility's systematic assessment, inspection, maintenance, and repair/replacement program.
Project No.	**309 Supply Mains** **331 T&D Mains** **333 Services** **334 Meters** **335 Hydrants**	Description	Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (Estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
S-1	333	service lines	40	¾" & 1"	Copper	$3,881	Ocotillo	12/2014	n/a	$155,232	Replace 40 residential services (3/4" or 1") on Ocotillo between Mustang and Fountain Hills Blvd. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed about 40 years ago, in 1974. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-1 in Exhibit CC-1 for the locations of the replacements.
S-2	333	service lines	105	¾" & 1"	Copper	$3,881	Mustang	12/2014	n/a	$407,484	Replace 105 residential services (3/4" or 1") on Mustang between Palisades and Fountain Hills Blvd. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed about 38 years ago, in 1976. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-2 in Exhibit CC-1 for the locations of the replacements.

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S-3	333	service lines	13	¾" & 1"	Copper	$3,881	Spotted Horse	12/2014	n/a	$50,450	Replace 13 residential services (3/4" or 1") on Spotted Horse between Mustang and Westridge. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed about 35 years ago, in 1979. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-3 in Exhibit CC-1 for the locations of the replacements.
S-4	333	service lines	37	¾" & 1"	Copper	$3,881	Buffalo	12/2014	n/a	$143,590	Replace 37 residential services (3/4" or 1") on Buffalo between Mustang and Fountain Hills Blvd. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed about 38 years ago, in 1976. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-4 in Exhibit CC-1 for the locations of the replacements.
S-5	333	service lines	9	¾" & 1"	Copper	$3,881	Garland	12/2014	n/a	$34,927	Replace 9 residential services (3/4" or 1") on Garland between Buffalo and Palatial. The services are branched black poly lines (one service for two customers) that are failing at a high rate. The services are located on a short dead-end street off of Buffalo, which is scheduled for service line replacements in the same year (project S-4). Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-5 in Exhibit CC-1 for the locations of the replacements.
S-6	333	service lines	43	¾" & 1"	Copper	$3,881	Pinto	12/2014	n/a	$166,874	Replace 43 residential services (3/4" or 1") on Pinto between Palomino and Fountain Hills Blvd. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed about 38 years ago, in 1976. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-6 in Exhibit CC-1 for the locations of the replacements.
Total			**247**							**$958,558**	

Chaparral City Water Company – PWS ID No. 07-017

SIB PLANT TABLE I, 1-2

2015 Service Line Replacements

Information to be included with SIB-Eligible Project Notification

	NARUC Acct No. (DSIC-eligible plant)	Replacement Plant Description (DSIC-eligible plant)					Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary - replacement of existing plant that has exceeded its designated useful life and has worn out or is in deteriorating condition due to no fault of the utility - replacement of existing plant to address excessive water loss (10% or more) - replacement of existing plant for other reasons supported by persuasive showing by utility 2. Provide narrative explaining why this segment of plant is a priority. 3. Provide narrative explaining how replacing this plant will benefit existing customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. 5. Provides reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Engineering Analysis shall also include narrative explaining the utility's systematic assessment, inspection, maintenance, and repair/replacement program.
Project No.	**309 Supply Mains** **331 T&D Mains** **333 Services** **334 Meters** **335 Hydrants**	Description	Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (Estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
S-7	333	service lines	44	¾" & 1"	Copper	$3,881	Sycamore	12/2015	n/a	$170,755	Replace 44 residential services (3/4" or 1") on Sycamore between Thistle and Ocotillo. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed in 1974 and will be 41 years old in 2015. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-7 in Exhibit CC-1 for the locations of the replacements.
S-8	333	service lines	13	¾" & 1"	Copper	$3,881	Winchester	12/2015	n/a	$50,450	Replace 13 residential services (3/4" or 1") on Winchester between Sunburst and Palomino. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority due to their vicinity to the other projects being completed this year, and also because these services are in a very high pressure area (>120 psi), and are therefore more susceptible to failure. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-8 Exhibit CC-1 for the locations of the replacements.

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S-9	333	service lines	31	¾" & 1"	Copper	$3,881	Ridgeway	12/2015	n/a	$120,305	Replace 31 residential services (3/4" or 1") on Ridgeway between Palisades and Winchester. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed in 1976 and will be 39 years old in 2015. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-9 Exhibit CC-1 for the locations of the replacements.
S-10	333	service lines	54	¾" & 1"	Copper	$3,881	Sunburst	12/2015	n/a	$209,563	Replace 54 residential services (3/4" or 1") on Sunburst between Palisades and Sycamore. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority due to their vicinity to the other projects being completed this year, and also because these services are in a very high pressure area (>120 psi), and are therefore more susceptible to failure. Additionally, homes on this street a very large, and are therefore expected to use more water, which reduces meter accuracy faster. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-10 Exhibit CC-1 for the locations of the replacements.
S-11	333	service lines	28	¾" & 1"	Copper	$3,881	Burro	12/2015	n/a	$108,662	Replace 28 residential services (3/4" or 1") on Burro between Palomino and Pinchushion. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed in 1978 and will be 37 years old in 2015. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-11 Exhibit CC-1 for the locations of the replacements.
S-12	333	service lines	26	¾" & 1"	Copper	$3,881	Greystone	12/2015	n/a	$100,901	Replace 26 residential services (3/4" or 1") on Greystone between Sunburst and Sycamore. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are in the vicinity of the other service line replacements for 2015 and will be about 29 years old. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-12 Exhibit CC-1 for the locations of the replacements.

S-13	333	service lines	25	¾" & 1"	Copper	$3,881	Telegraph	12/2015	n/a	$97,020	Replace 25 residential services (3/4" or 1") on Telegraph between Greystone and Sunburst. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are in the vicinity of the other service line replacements for 2015 and will be about 29 years old. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-13 Exhibit CC-1 for the locations of the replacements.
Total			**221**							**$857,656**	

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SIB PLANT TABLE I, 1-3

2016 Service Line Replacements

Information to be included with SIB-Eligible Project Notification

	NARUC Acct No. (DSIC-eligible plant)	Replacement Plant Description (DSIC-eligible plant)					Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary - replacement of existing plant that has exceeded its designated useful life and has worn out or is in deteriorating condition due to no fault of the utility - replacement of existing plant to address excessive water loss (10% or more) - replacement of existing plant for other reasons supported by persuasive showing by utility 2. Provide narrative explaining why this segment of plant is a priority. 3. Provide narrative explaining how replacing this plant will benefit existing customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. 5. Provides reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Engineering Analysis shall also include narrative explaining the utility's systematic assessment, inspection, maintenance, and repair/replacement program.
Project No.	**309 Supply Mains** **331 T&D Mains** **333 Services** **334 Meters** **335 Hydrants**	Description	Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (Estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
S-14	333	service lines	95	¾" & 1"	Copper	$3,881	Cholla	12/2016	n/a	$368,676	Replace 95 residential services (3/4" or 1") on Cholla between Chicory and Fountain Hills Blvd. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed in 1973 and will be 43 years old in 2016. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-14 Exhibit CC-1 for the locations of the replacements.
S-15	333	service lines	49	¾" & 1"	Copper	$3,881	Chicory	12/2016	n/a	$190,159	Replace 49 residential services (3/4" or 1") on Chicory between Sycamore and Thistle. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed around 1974 and will be approximately 42 years old in 2016. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-15 Exhibit CC-1 for the locations of the replacements.

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S-16	333	service lines	26	¾" & 1"	Copper	$3,881	Verbena	12/2016	n/a	$100,901	Replace 26 residential services (3/4" or 1") on Verbena between Sage and El Lago. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed around 1978 and will be approximately 38 years old in 2016. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No.S-16 Exhibit CC-1 for the locations of the replacements.
S-17	333	service lines	56	¾" & 1"	Copper	$3,881	El Lago	12/2016	n/a	$217,325	Replace 56 residential services (3/4" or 1") on El Lago between Palisades and Fountain Hills Blvd. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed around 1979 and will be approximately 37 years old in 2016. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-17 Exhibit CC-1 for the locations of the replacements.
S-18	333	service lines	30	¾" & 1"	Copper	$3,881	Cavern	12/2016	n/a	$116,424	Replace 30 residential services (3/4" or 1") on Cavern between Palisades and El Lago. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed around 1979 and will be approximately 37 years old in 2016. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-18 in Exhibit CC-1 for the locations of the replacements.
Total			**256**							**$993,485**	

Chaparral City Water Company – PWS ID No. 07-017

SIB PLANT TABLE I, 1-4

2017 Service Line Replacements

Information to be included with SIB-Eligible Project Notification

	NARUC Acct No. (DSIC-eligible plant)	Replacement Plant Description (DSIC-eligible plant)					Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary - replacement of existing plant that has exceeded its designated useful life and has worn out or is in deteriorating condition due to no fault of the utility - replacement of existing plant to address excessive water loss (10% or more) - replacement of existing plant for other reasons supported by persuasive showing by utility 2. Provide narrative explaining why this segment of plant is a priority. 3. Provide narrative explaining how replacing this plant will benefit existing customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. 5. Provides reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Engineering Analysis shall also include narrative explaining the utility's systematic assessment, inspection, maintenance, and repair/replacement program.
Project No.	**309 Supply Mains** **331 T&D Mains** **333 Services** **334 Meters** **335 Hydrants**	Description	Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (Estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
S-19	333	service lines	56	¾" & 1"	Copper	$3,881	Mimosa	12/2017	n/a	$217,325	Replace 56 residential services (3/4" or 1") on Mimosa between Sunflower and Thistle. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed around 1975 and will be approximately 42 years old in 2017. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-19 in Exhibit CC-1 for the locations of the replacements.
S-20	333	service lines	34	¾" & 1"	Copper	$3,881	Mountainside	12/2017	n/a	$131,947	Replace 34 residential services (3/4" or 1") on Mountainside between Palisades and Thistle. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed in 1975 and will be 42 years old in 2017. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-20 in Exhibit CC-1 for the locations of the replacements.

S-21	333	service lines	31	¾" & 1"	Copper	$3,881	Echo Hill	12/2017	n/a	$120,305	Replace 31 residential services (3/4" or 1") on Echo Hill between El Lago and Mimosa. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed in 1979 and will be 38 years old in 2017. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-21 in Exhibit CC-1 for the locations of the replacements.
S-22	333	service lines	84	¾" & 1"	Copper	$3,881	El Pueblo	12/2017	n/a	$325,987	Replace 84 residential services (3/4" or 1") on El Pueblo between Fountain Hills Blvd and Caliente. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed in 1972 and will be 45 years old in 2017. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-22 in Exhibit CC-1 for the locations of the replacements.
S-23	333	service lines	55	¾" & 1"	Copper	$3,881	Oro Grande, Pampas	12/2017	n/a	$213,444	Replace 55 residential services (3/4" or 1") on Oro Grande and Pampas between Calle del Prado and Tejon. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed around 1974 and will be approximately 43 years old in 2017. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-23 in Exhibit CC-1 for the locations of the replacements.
Total			**260**							**$1,009,008**	

Chaparral City Water Company – PWS ID No. 07-017

SIB PLANT TABLE I, 1-5

2018 Service Line Replacements

Information to be included with SIB-Eligible Project Notification

	NARUC Acct No. (DSIC-eligible plant)	Replacement Plant Description (DSIC-eligible plant)					Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary - replacement of existing plant that has exceeded its designated useful life and has worn out or is in deteriorating condition due to no fault of the utility - replacement of existing plant to address excessive water loss (10% or more) - replacement of existing plant for other reasons supported by persuasive showing by utility 2. Provide narrative explaining why this segment of plant is a priority. 3. Provide narrative explaining how replacing this plant will benefit existing customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. 5. Provides reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Engineering Analysis shall also include narrative explaining the utility's systematic assessment, inspection, maintenance, and repair/replacement program.
Project No.	**309 Supply Mains** **331 T&D Mains** **333 Services** **334 Meters** **335 Hydrants**	Description	Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (Estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
S-24	333	service lines	39	¾" & 1"	Copper	$3,881	Alamosa	12/2018	n/a	$151,351	Replace 39 residential services (3/4" or 1") on Alamosa between El Pueblo and Del Cambre. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed in 1972 and will be 46 years old in 2018. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-24 in Exhibit CC-1 for the locations of the replacements.
S-25	333	service lines	41	¾" & 1"	Copper	$3,881	Caliente Bowstring	12/2018	n/a	$159,113	Replace 41 residential services (3/4" or 1") on Caliente and Bowstring between Tejon and El Pueblo. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed in 1973 and will be 45 years old in 2018. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-25 in Exhibit CC-1 for the locations of the replacements as well as the location of historical replacements in the area.

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S-26	333	service lines	24	¾" & 1"	Copper	$3,881	El Sobrante	12/2018	n/a	$93,139	Replace 24 residential services (3/4" or 1") on El Sobrante between Baca and Calvaras. The services are branched black poly lines (one service for two customers) that are failing at a high rate These services are a priority because they were installed in 1972 and will be 46 years old in 2018. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-26 in Exhibit CC-1 for the locations of the replacements.
S-27	333	service lines	22	¾" & 1"	Copper	$3,881	Mirage Crossing	12/2018	n/a	$85,378	Replace 22 residential services (3/4" or 1") on Mirage Crossing between El Pueblo and Alamosa. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services will be 27 years old in 2018. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-27 in Exhibit CC-1 for the locations of the replacements.
S-28	333	service lines	30	¾" & 1"	Copper	$3,881	Calle Del Prado	12/2018	n/a	$116,424	Replace 30 residential services (3/4" or 1") on Calle Del Prado between El Pueblo and Del Cambre. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed in 1973 and will be 45 years old in 2018. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-28 in Exhibit CC-1 for the locations of the replacements.
S-29	333	service lines	39	¾" & 1"	Copper	$3,881	Tejon, Buena Vida, Rica Vida, and Agave	12/2018	n/a	$151,351	Replace 39 residential services (3/4" or 1") on Tejon, Buena Vida, Rica Vida, and Agave between El Sobrante and El Pueblo. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed around 1977 and will be approximately 46 years old in 2018. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-29 in Exhibit CC-1 for the locations of the replacements.

S-30	333	service lines	36	¾" & 1"	Copper	$3,881	Deerskin	12/2018	n/a	$139,709	Replace 36 residential services (3/4" or 1") on Deerskin between Alamosa and Del Cambre. The services are branched black poly lines (one service for two customers) that are failing at a high rate. These services are a priority because they were installed in 1973 and will be 45 years old in 2018. Replacing the services will help reduce system water loss and improve customer pressure and flow with a single service for each customer. The service line replacements are for existing customers and not related to new growth. See Map No. S-30 for the locations of the replacements.
Total			**231**							**$896,465**	

Chaparral City Water Company – PWS ID No. 07-017

SIB PLANT TABLE I, 2-1

2014 Valve Replacements

Information to be included with SIB-Eligible Project Notification

	NARUC Acct No. (DSIC-eligible plant)	Replacement Plant Description (DSIC-eligible plant)					Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary - replacement of existing plant that has exceeded its designated useful life and has worn out or is in deteriorating condition due to no fault of the utility - replacement of existing plant to address excessive water loss (10% or more) - replacement of existing plant for other reasons supported by persuasive showing by utility 2. Provide narrative explaining why this segment of plant is a priority. 3. Provide narrative explaining how replacing this plant will benefit existing customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. 5. Provides reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Engineering Analysis shall also include narrative explaining the utility's systematic assessment, inspection, maintenance, and repair/replacement program.
Project No.	**309 Supply Mains** **331 T&D Mains** **333 Services** **334 Meters** **335 Hydrants**	Description	Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (Estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
V-1	331	gate valves	28	23-6" 1-8" 4-12"	cast iron with rubberized epoxy coating	6"-$4,651 8"-$5,201 12"-$6,173	Palomino	12/2014	n/a	$136,862	Replace 23-6", 1-8", 4-12" valves (28 total) on Palomino between Palisades and Fountain Hills Blvd. Distribution system valves that are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves are a priority because they were installed in 1976 and will be 38 years old in 2014. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-1 in Exhibit CC-1 shows the location of these valves.
V-2	331	gate valves	34	31-6" 1-4" 2-12"	cast iron with rubberized epoxy coating	4"-$4,431 6"-$4,651 12"-$6,173	Mustang	12/2014	n/a	$160,952	Replace 31-6", 1-4", and 2-12" valves (34 total) on Mustang between Palisades and Fountain Hills Blvd. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves are a priority because they were installed in 1977 and will be 37 years old in 2014. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-2 in Exhibit CC-1 shows the location of these valves.

V-3	331	gate valves	1	6"	cast iron with rubberized epoxy coating	$4,651	Spotted Horse	12/2014	n/a	$4,651	Replace 1-6" valve on Spotted Horse between Mustang and Westridge. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. This valve is a priority because it was installed in 1979 and will be 35 years and is needed in order to operate the only hydrants on this street. Replacing valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-3 in Exhibit CC-1 shows the location of this valve.
V-4	331	gate valves	10	6"	cast iron with rubberized epoxy coating	$4,651	Buffalo	12/2014	n/a	$46,508	Replace 10-6" valves on Buffalo between Mustang and Fountain Hills Blvd. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves are a priority because they were installed in 1976 and will be 38 years old in 2014. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-4 in Exhibit CC-1 shows the location of these valves.
V-5	331	gate valves	1	6"	cast iron with rubberized epoxy coating	$4,651	Garland	12/2014	n/a	$4,651	Replace 1-6" valve on Garland between Buffalo and Palatial. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. This valve is suffering from corrosion and is the only way to isolate Garland Circle. Replacing valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-5 in Exhibit CC-1 shows the location of this valve.
V-6	331	gate valves	10	6"	cast iron with rubberized epoxy coating	$4,651	Pinto	12/2014	n/a	$46,508	Replace 10-6" valves on Pinto between Palomino and Fountain Hills Blvd. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves are a priority because they were installed in 1976 and will be 38 years old in 2014. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-6 in Exhibit CC-1 shows the location of these valves.

V-7	331	gate valves	11	6-6" 4-8"	cast iron with rubberized epoxy coating	6"-$4,651 8"-$5,201	Ocotillo	12/2014	n/a	$53,359	Replace 6-6" and 4-8" valves (10 total) on Ocotillo between Mustang and Fountain Hills Blvd. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves are a priority because they were installed in 1974 and will be 40 years old in 2014. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-7 in Exhibit CC-1 shows the location of these valves.
Total			**95**							**$453,491**	

Chaparral City Water Company – PWS ID No. 07-017

SIB PLANT TABLE I, 2-2

2015 Valve Replacements

Information to be included with SIB-Eligible Project Notification

	NARUC Acct No. (DSIC-eligible plant)	Replacement Plant Description (DSIC-eligible plant)					Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary - replacement of existing plant that has exceeded its designated useful life and has worn out or is in deteriorating condition due to no fault of the utility - replacement of existing plant to address excessive water loss (10% or more) - replacement of existing plant for other reasons supported by persuasive showing by utility 2. Provide narrative explaining why this segment of plant is a priority. 3. Provide narrative explaining how replacing this plant will benefit existing customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. 5. Provides reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Engineering Analysis shall also include narrative explaining the utility's systematic assessment, inspection, maintenance, and repair/replacement program.
Project No.	**309 Supply Mains** **331 T&D Mains** **333 Services** **334 Meters** **335 Hydrants**	Description	Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (Estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
V-8	331	gate valves	14	1-4" 9-6" 4-12"	cast iron with rubberized epoxy coating	4"-$4,431 6"-$4,651 12"-$6,173	Sycamore	12/2015	n/a	$70,981	Replace 1-4", 9-6", 4-12" valves (14 total) on Sycamore between Thistle and Ocotillo. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed around 1976 and will be approximately 39 years old in 2015. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-8 in Exhibit CC-1 shows the location of these valves.
V-9	331	gate valves	6	6"	cast iron with rubberized epoxy coating	$4,651	Winchester	12/2015	n/a	$27,905	Replace 6-6" valves on Winchester between Sunburst and Palomino. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves will be 17-39 years old and are located in a high pressure area. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-9 in Exhibit CC-1 shows the location of these valves.

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V-10	331	gate valves	9	6"	cast iron with rubberized epoxy coating	$4,651	Ridgeway	12/2015	n/a	$41,857	Replace 9-6" valves on Ridgeway between Palisades and Winchester. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed around 1976 and will be approximately 39 years old in 2015. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-10 in Exhibit CC-1 shows the location of these valves.
V-11	331	gate valves	18	6"	cast iron with rubberized epoxy coating	$4,651	Sunburst	12/2015	n/a	$83,714	Replace 18-6" valves on Sunburst between Palisades and Sycamore. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves will be approximately 17-29 years old and are located in a high pressure area. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-11 in Exhibit CC-1 shows the location of these valves.
V-12	331	gate valves	15	6"	cast iron with rubberized epoxy coating	$4,651	Greystone	12/2015	n/a	$69,762	Replace 15-6" valve on Greystone between Sunburst and Sycamore. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves will be approximately 29 years old in 2015. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-12 in Exhibit CC-1 shows the location of these valves.
V-13	331	gate valves	8	6"	cast iron with rubberized epoxy coating	$4,651	Telegraph	12/2015	n/a	$37,206	Replace 8-6" valves on Telegraph between Greystone and Sunburst. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves will be approximately 29 years old in 2015. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-13 in Exhibit CC-1 shows the location of these valves.
V-14	331	gate valves	4	6"	cast iron with rubberized epoxy coating	$4,651	Tacony	12/2015	n/a	$18,603	Replace 4-6" valves on Tacony between Greystone and Telegraph. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves will be approximately 29 years old in 2015. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-14 in Exhibit CC-1 shows the location of these valves.

V-15	331	gate valves	11	5-6" 1-8" 5-12"	cast iron with rubberized epoxy coating	6"-$4,651 8"-$5,201 12"-$6,173	Mimosa	12/2015	n/a	$59,321	Replace 5-6", 1-8", and 5-12" (11 total) valves on Mimosa between Sunflower and Thistle. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed in 1976 and will be 39 years old in 2015. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-15 in Exhibit CC-1 shows the location of these valves.
V-16	331	gate valves	18	1-4" 13-6" 4-8"	cast iron with rubberized epoxy coating	4"-$4,431 6"-$4,651 8"-$5,201	Cholla	12/2015	n/a	$85,694	Replace 1-4", 13-6", and 4-8" (18 total) valves on Cholla between Chicory and Fountain Hills Blvd. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed around 1975 and will be approximately 40 years old in 2015. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-16 in Exhibit CC-1 shows the location of these valves.
Total			103							$495,043	

Chaparral City Water Company – PWS ID No. 07-017

SIB PLANT TABLE I, 2-3

2016 Valve Replacements

Information to be included with SIB-Eligible Project Notification

	NARUC Acct No. (DSIC-eligible plant)	Replacement Plant Description (DSIC-eligible plant)					Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary - replacement of existing plant that has exceeded its designated useful life and has worn out or is in deteriorating condition due to no fault of the utility - replacement of existing plant to address excessive water loss (10% or more) - replacement of existing plant for other reasons supported by persuasive showing by utility 2. Provide narrative explaining why this segment of plant is a priority. 3. Provide narrative explaining how replacing this plant will benefit existing customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. 5. Provides reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Engineering Analysis shall also include narrative explaining the utility's systematic assessment, inspection, maintenance, and repair/replacement program.
Project No.	**309 Supply Mains** **331 T&D Mains** **333 Services** **334 Meters** **335 Hydrants**	Description	Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (Estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
V-17	331	gate valves	8	5-6" 3-12"	cast iron with rubberized epoxy coating	6"-$4,651 12"-$6,173	Chicory	12/2016	n/a	$41,744	Replace 5-6" and 3-12" (8 total) valves on Chicory between Sycamore and Thistle. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed in 1974 and will be 42 years old in 2016. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-17 in Exhibit CC-1 shows the location of these valves.
V-18	331	gate valves	6	5-6" 1-8"	cast iron with rubberized epoxy coating	6"-$4,651 8"-$5,201	Verbena	12/2016	n/a	$28,433	Replace 5-6" and 1-8" (6 total) valves on Verbena between Sage and El Lago. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed around 1977 and will be approximately 39 years old in 2016. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-18 in Exhibit CC-1 shows the location of these valves.

V-19	331	gate valves	12	9-6" 3-12"	cast iron with rubberized epoxy coating	6"-$4,651 12"-$6,173	Sage	12/2016	n/a	$60,377	Replace 9-6" and 3-12" (12 total) valves on Sage between Palisades and Stardust. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed between 1975 and 1989 and will be approximately 27 to 41 years old in 2016. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-19 in Exhibit CC-1 shows the location of these valves.
V-20	331	gate valves	6	3-6" 3-12"	cast iron with rubberized epoxy coating	6"-$4,651 12"-$6,173	Ironwood	12/2016	n/a	$32,472	Replace 3-6" and 3-12" (6 total) valves on Ironwood between Thistle and Fountain Hills Blvd. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These were installed in 1973 and will be 43 years old in 2016. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-20 in Exhibit CC-1 shows the location of these valves.
V-21	331	gate valves	19	1-4" 11-6" 5-8" 2-12"	cast iron with rubberized epoxy coating	4"-$4,431 6"-$4,651 8"-$5,201 12"-$6,173	Thistle	12/2016	n/a	$93,940	Replace 1-4", 11-6", 5-8", and 2-12" (19 total) valves on Thistle between Palisades and Mountainside Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed around 1976 and will be approximately 40 years old in 2016. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-21 in Exhibit CC-1 shows the location of these valves.
V-22	331	gate valves	21	10-6" 11-8"	cast iron with rubberized epoxy coating	6"-$4,651 8"-$5,201	El Lago	12/2016	n/a	$103,717	Replace 10-6" and 11-8" (21 total) valves on El Lago between Palisades and Fountain Hills Blvd Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed around 1979 and will be approximately 37 years old in 2016. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-22 in Exhibit CC-1 shows the location of these valves.

V-23	331	gate valves	16	13-6" 3-8"	cast iron with rubberized epoxy coating	6"-$4,651 8"-$5,201	Sunflower	12/2016	n/a	$76,063	Replace 13-6" and 3-8" (16 total) valves on Sunflower between Cactus and Mountainside. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed between 1975 and 1995 and will be approximately 21 to 41 years old in 2016. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-23 in Exhibit CC-1 shows the location of these valves.
Total			**88**							**$436,776**	

Chaparral City Water Company – PWS ID No. 07-017

SIB PLANT TABLE I, 2-4

2017 Valve Replacements

Information to be included with SIB-Eligible Project Notification

	NARUC Acct No. (DSIC-eligible plant)	Replacement Plant Description (DSIC-eligible plant)					Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary - replacement of existing plant that has exceeded its designated useful life and has worn out or is in deteriorating condition due to no fault of the utility - replacement of existing plant to address excessive water loss (10% or more) - replacement of existing plant for other reasons supported by persuasive showing by utility 2. Provide narrative explaining why this segment of plant is a priority. 3. Provide narrative explaining how replacing this plant will benefit existing customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. 5. Provides reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Engineering Analysis shall also include narrative explaining the utility's systematic assessment, inspection, maintenance, and repair/replacement program.
Project No.	**309 Supply Mains** **331 T&D Mains** **333 Services** **334 Meters** **335 Hydrants**	Description	Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (Estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
V-24	331	gate valves	8	6"	cast iron with rubberized epoxy coating	$4,651	Cavern	12/2017	n/a	$37,206	Replace 8-6" valves on Cavern between Palisades and El Lago. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed in 1979 and will be 38 years old in 2017. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-24 in Exhibit CC-1 shows the location of these valves.
V-25	331	gate valves	7	4-6" 3-8"	cast iron with rubberized epoxy coating	6"-$4,651 8"-$5,201	Jackrabbit	12/2017	n/a	$34,206	Replace 4-6" and 3-8" (7 total) valves on Jackrabbit between Palisades and Sunflower. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed in 1997. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-25 in Exhibit CC-1 shows the location of these valves.

V-26	331	gate valves	16	9-6" 4-8" 3-12"	cast iron with rubberized epoxy coating	6"-$4,651 8"-$5,201 12"-$6,173	Mountain-side	12/2017	n/a	$81,180	Replace 9-6", 4-8", and 3-12" (16 total) valves on Mountainside between Palisades and Thistle Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed in 1978 and will be 39 years old in 2017. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-26 in Exhibit CC-1 shows the location of these valves.
V-27	331	gate valves	6	4-6" 2-8"	cast iron with rubberized epoxy coating	6"-$4,651 8"-$5,201	Echo Hill	12/2017	n/a	$29,005	Replace 4-6" and 2-8" (6 total) valves on Echo Hill between El Lago and Mimosa. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed in 1979 and will be 38 years old in 2017. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-27 in Exhibit CC-1 shows the location of these valves.
V-28	331	gate valves	14	6"	cast iron with rubberized epoxy coating	$4,651	Tumble-weed	12/2017	n/a	$65,111	Replace 14-6" valves on Tumbleweed between Cavern and Mountainside. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed between 1975 and 1990 and will be 27 to 42 years old in 2017. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-28 in Exhibit CC-1 shows the location of these valves.
V-29	331	gate valves	14	6"	cast iron with rubberized epoxy coating	$4,651	Ponderosa	12/2017	n/a	$65,111	Replace 14-6" valves on Pondersoa between Primrose and Mountainside Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed between 1975 and 1989 and will be 28 to 42 years old in 2017. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-29 in Exhibit CC-1 shows the location of these valves.

V-30	331	gate valves	9	6"	cast iron with rubberized epoxy coating	$4,651	Lantana, Jericho, Brodiea	12/2017	n/a	$41,857	Replace 9-6" valves on Lantana, Jericho, and Brodiea between El Lago and Mimosa. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed in 1979 and will be 38 years old in 2017. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-30 in Exhibit CC-1 shows the location of these valves.
Total			**74**							**$353,676**	

Chaparral City Water Company – PWS ID No. 07-017

SIB PLANT TABLE I, 2-5

2018 Valve Replacements

Information to be included with SIB-Eligible Project Notification

	NARUC Acct No. (DSIC-eligible plant)	Replacement Plant Description (DSIC-eligible plant)					Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary - replacement of existing plant that has exceeded its designated useful life and has worn out or is in deteriorating condition due to no fault of the utility - replacement of existing plant to address excessive water loss (10% or more) - replacement of existing plant for other reasons supported by persuasive showing by utility 2. Provide narrative explaining why this segment of plant is a priority. 3. Provide narrative explaining how replacing this plant will benefit existing customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. 5. Provides reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Engineering Analysis shall also include narrative explaining the utility's systematic assessment, inspection, maintenance, and repair/replacement program.
Project No.	**309 Supply Mains** **331 T&D Mains** **333 Services** **334 Meters** **335 Hydrants**	Description	Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (Estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
V-31	331	gate valves	33	1-4" 19-6" 5-8" 8-12"	cast iron with rubberized epoxy coating	4"-$4,431 6"-$4,651 8"-$5,201 12"-$6,173	El Pueblo	12/2018	n/a	$168,186	Replace 1-4", 19-6", 5-8", 8-12" (33 total) valves on El Pueblo between Fountain Hills Blvd and Escalante. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed in 1973 and will be 45 years old in 2018. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-31 in Exhibit CC-1 shows the location of these valves.
V-32	331	gate valves	13	1-4" 12-6"	cast iron with rubberized epoxy coating	4"-$4,431 6"-$4,651	Oro Grande	12/2018	n/a	$60,240	Replace 1-4" and 12-6" (13 total) valves on Oro Grande between Calle del Prado and Tejon. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed in 1974 and will be 44 years old in 2018. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-32 in Exhibit CC-1 shows the location of these valves.

V-33	331	gate valves	16	1-4" 14-6" 1-12"	cast iron with rubberized epoxy coating	4"-$4,431 6"-$4,651 12"-$6,173	Alamosa	12/2018	n/a	$75,715	Replace 1-4", 14-6", and 1-12" (16 total) valves on Alamosa between Del Cambre and El Pueblo. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed in 1972 and will be 46 years old in 2018. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-33 in Exhibit CC-1 shows the location of these valves.
V-34	331	gate valves	11	2-4" 9-6"	cast iron with rubberized epoxy coating	4"-$4,431 6"-$4,651	Caliente, Yuma Kiva	12/2018	n/a	$50,719	Replace 2-4" and 9-6" (11 total) valves on Caliente and Yuma Kiva between Tejon and El Pueblo. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed in 1973 and will be 45 years old in 2018. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-34 in Exhibit CC-1 shows the location of these valves.
V-35	331	gate valves	16	15-6" 1-12"	cast iron with rubberized epoxy coating	6"-$4,651 12"-$6,173	El Sobrante	12/2018	n/a	$75,935	Replace 15-6" and 1-12" (16 total) valves on El Sobrante between Baca and Calvaras. Distribution system valves are no longer functioning because they are primarily uncoated butterfly valves which are prone to tuberculation. These valves were installed in 1972 and will be 6 years old in 2018. Replacing the valves decreases time required to shutdown water main in the event of main break or other system maintenance which reduces customer service disruption and decreases water loss during a main breaks. The valve replacements are not related to new growth. Map V-35 in Exhibit CC-1 shows the location of these valves.
Total			**89**							**$430,795**	

Chaparral City Water Company – PWS ID No. 07-017

SIB PLANT TABLE I, 3-1

2014 Hydrant Replacements

Information to be included with DSIC-Eligible Project Notification

	NARUC Acct No. (DSIC-eligible plant)	Replacement Plant Description (new plant) (DSIC-eligible plant)					Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary - replacement of existing plant that has exceeded its designated useful life and has worn out or is in deteriorating condition due to no fault of the utility - replacement of existing plant to address excessive water loss (10% or more) - replacement of existing plant for other reasons supported by persuasive showing by utility 2. Provide narrative explaining why this segment of plant is a priority, 3. Provide narrative explaining how replacing this plant will benefit existing customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. 5. Provides reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Engineering Analysis shall also include narrative explaining the utility's systematic assessment, inspection, maintenance, and repair/replacement program.
Project No.	**309 Supply Mains** **331 T&D Mains** **333 Services** **334 Meters** **335 Hydrants**	Description	Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
H-1	335	hydrants	8	n/a	Cast Iron/ AVK Wet Barrel	$2,262	Palomino	12/2014	n/a	$18,093	Replace 8 fire hydrants on Palomino between Palisades and Fountain Hills Blvd. The fire hydrants are in deteriorating condition and are approximately 35 years old. These are Dresser hydrants, for which we can no longer obtain repair parts. Three hydrants on this street have already needed replacement within the last 6 years. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-1 in Exhibit CC-1 which shows the locations of the future replacements.
H-2	335	hydrants	10	n/a	Cast Iron/ AVK Wet Barrel	$2,262	Mustang	12/2014	n/a	$22,616	Replace 10 fire hydrants on Mustang between Palisades and Fountain Hills Blvd. The fire hydrants are in deteriorating condition and are 37 years old. These are Dresser hydrants, for which we can no longer obtain repair parts. One hydrant on this street has already needed replacement within the last 6 years. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-2 in Exhibit CC-1 which shows the locations of the future replacements.

H-3	335	hydrants	1	n/a	Cast Iron/ AVK Wet Barrel	$2,262	Spotted Horse	12/2014	n/a	$2,262	Replace 1 fire hydrant on Spotted Horse between Mustang and Westridge. The fire hydrant is in deteriorating condition and is 34 years old. This is a Dresser hydrant, for which we can no longer obtain repair parts. Replacing the hydrant will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacement is for existing customers and not related to new growth. See the map for Project H-3 in Exhibit CC-1 which shows the location of the future replacement.
H-4	335	hydrants	1	n/a	Cast Iron/ AVK Wet Barrel	$2,262	Buffalo	12/2014	n/a	$2,262	Replace 1 fire hydrant on Buffalo between Mustang and Puma. The fire hydrant is in deteriorating condition and is 37 years old. This is a Dresser hydrant, for which we can no longer obtain repair parts. The other 3 hydrants on this street have already needed replacement. Replacing the hydrant will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacement is for existing customers and not related to new growth. See the map for Project H-4 in Exhibit CC-1 which shows the location of the future replacement.
H-5	335	hydrants	10	n/a	Cast Iron/ AVK Wet Barrel	$2,262	Sunburst	12/2014	n/a	$22,616	Replace 10 fire hydrants on Sunburst between Palisades and Sycamore. The fire hydrants are in deteriorating condition and 2 hydrants on this street have already needed replacement. These are Dresser hydrants, for which we can no longer obtain repair parts. Two hydrants on this street have already needed replacement within the last 6 years. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-5 in Exhibit CC-1 which shows the locations of the future replacements.
H-6	335	hydrants	4	n/a	Cast Iron/ AVK Wet Barrel	$2,262	Burro, Pincushion	12/2014	n/a	$9,046	Replace 4 fire hydrants on Burro and Pincushion between Palomino and Ocotillo. The fire hydrants are in deteriorating condition and are approximately 37 years old. These are Dresser hydrants, for which we can no longer obtain repair parts. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-6 in Exhibit CC-1 which shows the locations of the future replacements.
H-7	335	hydrants	7	n/a	Cast Iron/ AVK Wet Barrel	$2,262	Ocotillo	12/2014	n/a	$15,831	Replace 7 fire hydrants on Ocotillo between Mustang and Fountain Hills Blvd. The fire hydrants are in deteriorating condition and are approximately 39 years old. These are Dresser hydrants, for which we can no longer obtain repair parts. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-7 in Exhibit CC-1 which shows the locations of the future replacements.
Total			41							$92,726	

Chaparral City Water Company – PWS ID No. 07-017

SIB PLANT TABLE I, 3-2

2015 Hydrant Replacements

Information to be included with DSIC-Eligible Project Notification

	NARUC Acct No. (DSIC-eligible plant)	Replacement Plant Description (new plant) (DSIC-eligible plant)					Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary - replacement of existing plant that has exceeded its designated useful life and has worn out or is in deteriorating condition due to no fault of the utility - replacement of existing plant to address excessive water loss (10% or more) - replacement of existing plant for other reasons supported by persuasive showing by utility 2. Provide narrative explaining why this segment of plant is a priority. 3. Provide narrative explaining how replacing this plant will benefit existing customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. 5. Provides reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Engineering Analysis shall also include narrative explaining the utility's systematic assessment, inspection, maintenance, and repair/replacement program.
Project No.	**309 Supply Mains** **331 T&D Mains** **333 Services** **334 Meters** **335 Hydrants**	Description	Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
H-8	335	hydrants	6	n/a	Cast Iron/ AVK Wet Barrel	$2,262	Sycamore	12/2015	n/a	$13,570	Replace 6 fire hydrants on Sycamore between Thistle and Ocotillo. The fire hydrants are in deteriorating condition and will be 41 years old in 2015. These are Dresser hydrants, for which we can no longer obtain repair parts. One hydrant on this street has already needed replacement within the last 6 years. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-8 in Exhibit CC-1 which shows the locations of the future replacements.
H-9	335	hydrants	6	n/a	Cast Iron/ AVK Wet Barrel	$2,262	Ridgeway	12/2015	n/a	$13,570	Replace 6 fire hydrants on Ridgeway between Palisades and Winchester. The fire hydrant is in deteriorating condition and will be 39 years old in 2015. These are Dresser hydrants, for which we can no longer obtain repair parts. One hydrant on this street has already needed replacement within the last 6 years. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-9 in Exhibit CC-1 which shows the locations of the future replacements.

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H-10	335	hydrants	6	n/a	Cast Iron/ AVK Wet Barrel	$2,262	Greystone	12/2014	n/a	$13,570	Replace 6 fire hydrants on Greystone between Sunburst and Sycamore. The fire hydrant is in deteriorating condition and will be 29 years old in 2015. These are Dresser hydrants, for which we can no longer obtain repair parts. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-10 in Exhibit CC-1 which shows the location of the future replacements.
H-11	335	hydrants	4	n/a	Cast Iron/ AVK Wet Barrel	$2,262	Telegraph	12/2014	n/a	$9,046	Replace 4 fire hydrants on Telegraph between Greystone and Sunburst. The fire hydrant is in deteriorating condition and will be 29 years old in 2015. These are Dresser hydrants, for which we can no longer obtain repair parts. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-11 in Exhibit CC-1 which shows the location of the future replacements.
H-12	335	hydrants	1	n/a	Cast Iron/ AVK Wet Barrel	$2,262	Tacony	12/2015	n/a	$2,262	Replace 1 fire hydrant on Tacony between Greystone and Telegraph. The fire hydrant is in deteriorating condition and will be 29 years old in 2015. This is a Dresser hydrant, for which we can no longer obtain repair parts. The other hydrant on this street has already needed replacement Replacing the hydrant will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacement is for existing customers and not related to new growth. See the map for Project H-12 in Exhibit CC-1 which shows the locations of the future replacement.
H-13	335	hydrants	8	n/a	Cast Iron/ AVK Wet Barrel	$2,262	Mimosa	12/2015	n/a	$18,093	Replace 8 fire hydrants on Mimosa between Sunflower and Thistle. The fire hydrants are in deteriorating condition and will be approximately 37 years old in 2015. These are Dresser hydrants, for which we can no longer obtain repair parts. One hydrant on this street has already needed replacement. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-13 in Exhibit CC-1 which shows the locations of the future replacements.

H-14	335	hydrants	4	n/a	Cast Iron/ AVK Wet Barrel	$2,262	Cholla	12/2015	n/a	$9,046	Replace 4 fire hydrants on Cholla between Chicory and Fountain Hills Blvd. The fire hydrants are in deteriorating condition and will be 42 years old in 2015. These are Dresser hydrants, for which we can no longer obtain repair parts. Four hydrants on this street have already needed replacement. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-14 in Exhibit CC-1 which shows the locations of the future replacements.
Total			**35**							**$79,157**	

Chaparral City Water Company – PWS ID No. 07-017

SIB PLANT TABLE I, 3-3

2016 Hydrant Replacements

Information to be included with DSIC-Eligible Project Notification

	NARUC Acct No. (DSIC-eligible plant)	Replacement Plant Description (new plant) (DSIC-eligible plant)					Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary - replacement of existing plant that has exceeded its designated useful life and has worn out or is in deteriorating condition due to no fault of the utility - replacement of existing plant to address excessive water loss (10% or more) - replacement of existing plant for other reasons supported by persuasive showing by utility 2. Provide narrative explaining why this segment of plant is a priority. 3. Provide narrative explaining how replacing this plant will benefit existing customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. 5. Provides reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Engineering Analysis shall also include narrative explaining the utility's systematic assessment, inspection, maintenance, and repair/replacement program.
Project No.	**309 Supply Mains** **331 T&D Mains** **333 Services** **334 Meters** **335 Hydrants**	Description	Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
H-15	335	hydrants	2	n/a	Cast Iron/ AVK Wet Barrel	$2,262	Chicory	12/2016	n/a	$4,523	Replace 2 fire hydrants on Chicory between Sycamore and Thistle. The fire hydrants are in deteriorating condition and will be 41 years old in 2016. These are Dresser hydrants, for which we can no longer obtain repair parts. One hydrant on this street has already needed replacement within the last 6 years. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-15 in Exhibit CC-1 which shows the locations of the future replacements.
H-16	335	hydrants	3	n/a	Cast Iron/ AVK Wet Barrel	$2,262	Verbena	12/2016	n/a	$6,785	Replace 3 fire hydrants on Verbena between Sage and El Lago. The fire hydrants are in deteriorating condition and will be 40 years old in 2016. These are Dresser hydrants, for which we can no longer obtain repair parts. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-16 in Exhibit CC-1 which shows the locations of the future replacements.

H-17	335	hydrants	5	n/a	Cast Iron/ AVK Wet Barrel	$2,262	Sage, Stardust	12/2016	n/a	$11,308	Replace 5 fire hydrants on Sage and Stardust between Palisades and Greystone. These are Dresser hydrants, for which we can no longer obtain repair parts. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-17 in Exhibit CC-1 which shows the locations of the future replacements.
H-18	335	hydrants	1	n/a	Cast Iron/ AVK Wet Barrel	$2,262	Sierra Norte	12/2016	n/a	$2,262	Replace 1 fire hydrant on Sierra Norte between Palisades and Sage. This is a Dresser hydrant, for which we can no longer obtain repair parts. Replacing the hydrant will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacement is for existing customers and not related to new growth. See the map for Project H-18 in Exhibit CC-1 which shows the location of the future replacement.
H-19	335	hydrants	3	n/a	Cast Iron/ AVK Wet Barrel	$2,262	Ironwood	12/2016	n/a	$6,785	Replace 3 fire hydrants on Ironwood between Thistle and Fountain Hills Blvd. The fire hydrants are in deteriorating condition and will be 43 years old in 2016. These are Dresser hydrants, for which we can no longer obtain repair parts. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-19 in Exhibit CC-1 which shows the location of the future replacements.
H-20	335	hydrants	5	n/a	Cast Iron/ AVK Wet Barrel	$2,262	Thistle	12/2016	n/a	$11,308	Replace 5 fire hydrants on Thistle between Palisades and Mountainside. The fire hydrants are in deteriorating condition and will be 40 years old in 2016. These are Dresser hydrants, for which we can no longer obtain repair parts. One hydrant on this street has already needed replacement within the last 6 years. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-20 in Exhibit CC-1 which shows the locations of the future replacements.
H-21	335	hydrants	10	n/a	Cast Iron/ AVK Wet Barrel	$2,262	El Lago	12/2016	n/a	$22,616	Replace 10 fire hydrants on El Lago between Palisades and Fountain Hills Blvd. The fire hydrants are in deteriorating condition and will be approximately 37 years old in 2016. These are Dresser hydrants, for which we can no longer obtain repair parts. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-21 in Exhibit CC-1 which shows the locations of the future replacements.

H-22	335	hydrants	1	n/a	Cast Iron/ AVK Wet Barrel	$2,262	Cavern	12/2016	n/a	$2,262	Replace 1 fire hydrant on Cavern between Palisades and El Lago. The fire hydrant is in deteriorating condition and will be 36 years old in 2016. This is a Dresser hydrant, for which we can no longer obtain repair parts. The other hydrant on this street already needed replacement. Replacing the hydrant will improve fire flow availability and response times in the event of fire at,a customer's home or business. The hydrant replacement is for existing customers and not related to new growth. See the map for Project H-22 in Exhibit CC-1 which shows the location of the future replacement.
H-23	335	hydrants	4	n/a	Cast Iron/ AVK Wet Barrel	$2,262	Mountain-side	12/2016	n/a	$9,046	Replace 4 fire hydrants on Mountainside between Palisades and Thistle. The fire hydrants are in deteriorating condition and will be 40 years old in 2016. These are Dresser hydrants, for which we can no longer obtain repair parts. One hydrant on this street has already needed replacement within the last 6 years. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-23 in Exhibit CC-1 which shows the locations of the future replacements.
H-24	335	hydrants	3	n/a	Cast Iron/ AVK Wet Barrel	$2,262	Echo Hill	12/2016	n/a	$6,785	Replace 3 fire hydrants on Echo Hill between El Lago and Mimosa. The fire hydrants are in deteriorating condition and will be approximately 37 years old in 2016. These are Dresser hydrants, for which we can no longer obtain repair parts. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-24 in Exhibit CC-1 which shows the locations of the future replacements.
Total			37							$83,680	

Chaparral City Water Company – PWS ID No. 07-017

SIB PLANT TABLE I, 3-4

2017 Hydrant Replacements

Information to be included with DSIC-Eligible Project Notification

	NARUC Acct No. (DSIC-eligible plant)	Replacement Plant Description (new plant) (DSIC-eligible plant)					Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary - replacement of existing plant that has exceeded its designated useful life and has worn out or is in deteriorating condition due to no fault of the utility - replacement of existing plant to address excessive water loss (10% or more) - replacement of existing plant for other reasons supported by persuasive showing by utility 2. Provide narrative explaining why this segment of plant is a priority. 3. Provide narrative explaining how replacing this plant will benefit existing customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. 5. Provides reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Engineering Analysis shall also include narrative explaining the utility's systematic assessment, inspection, maintenance, and repair/replacement program.
Project No.	309 Supply Mains 331 T&D Mains 333 Services 334 Meters 335 Hydrants	Description	Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
H-25	335	hydrants	7	n/a	Cast Iron/ AVK Wet Barrel	$2,262	Tumble-weed, Seminole	12/2017	n/a	$15,831	Replace 7 fire hydrants on Tumbleweed and Seminole between Cavern and Mountainside. The fire hydrants are in deteriorating condition and will be about 40 years old in 2017. These are Dresser hydrants, for which we can no longer obtain repair parts. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-25 in Exhibit CC-1 which shows the locations of the future replacements.
H-26	335	hydrants	9	n/a	Cast Iron/ AVK Wet Barrel	$2,262	Sunflower, Primrose	12/2017	n/a	$20,354	Replace 9 fire hydrants on Sunflower and Primrose between Cactus and Mountainside. The fire hydrants are in deteriorating condition and will be about 40 years old in 2017. These are Dresser hydrants, for which we can no longer obtain repair parts. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-26 in Exhibit CC-1 which shows the locations of the future replacements.

H-27	335	hydrants	4	n/a	Cast Iron/ AVK Wet Barrel	$2,262	Ponderosa	12/2017	n/a	$9,046	Replace 4 fire hydrants on Ponderosa between Primrose and Mountainside. The fire hydrants are in deteriorating condition and will be about 31 years old in 2017. These are Dresser hydrants, for which we can no longer obtain repair parts. Two hydrants have already needed replacement on this street. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-27 in Exhibit CC-1 which shows the locations of the future replacements.
H-28	335	hydrants	11	n/a	Cast Iron/ AVK Wet Barrel	$2,262	El Pueblo	12/2017	n/a	$24,878	Replace 11 fire hydrants on El Pueblo between Fountain Hills Blvd and Escalante. The fire hydrants are in deteriorating condition and will be about 42 years old in 2017. These are Dresser hydrants, for which we can no longer obtain repair parts. Four hydrants have already needed replacement on this street. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-28 in Exhibit CC-1 which shows the locations of the future replacements.
H-29	335	hydrants	6	n/a	Cast Iron/ AVK Wet Barrel	$2,262	Oro Grande	12/2017	n/a	$13,570	Replace 6 fire hydrants on Ironwood between Calle del Prado and Tejon. The fire hydrants are in deteriorating condition and will be 44 years old in 2017. These are Dresser hydrants, for which we can no longer obtain repair parts. Two hydrants have already needed replacement on this street. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-29 in Exhibit CC-1 which shows the location of the future replacements.
Total			37							$83,679	

Chaparral City Water Company – PWS ID No. 07-017

SIB PLANT TABLE I, 3-5

2018 Hydrant Replacements

Information to be included with DSIC-Eligible Project Notification

	NARUC Acct No. (DSIC-eligible plant)	Replacement Plant Description (new plant) (DSIC-eligible plant)					Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary - replacement of existing plant that has exceeded its designated useful life and has worn out or is in deteriorating condition due to no fault of the utility - replacement of existing plant to address excessive water loss (10% or more) - replacement of existing plant for other reasons supported by persuasive showing by utility 2. Provide narrative explaining why this segment of plant is a priority. 3. Provide narrative explaining how replacing this plant will benefit existing customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. 5. Provides reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Engineering Analysis shall also include narrative explaining the utility's systematic assessment, inspection, maintenance, and repair/replacement program.
Project No.	**309 Supply Mains** **331 T&D Mains** **333 Services** **334 Meters** **335 Hydrants**	Description	Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
H-30	335	hydrants	8	n/a	Cast Iron/ AVK Wet Barrel	$2,262	Alamosa	12/2018	n/a	$18,093	Replace 8 fire hydrants on Alamosa between Del Cambre and El Pueblo. The fire hydrants are in deteriorating condition and will be about 46 years old in 2018. These are Dresser hydrants, for which we can no longer obtain repair parts. One hydrants on this street already needed replacement. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-30 in Exhibit CC-1 which shows the locations of the future replacements.
H-31	335	hydrants	4	n/a	Cast Iron/ AVK Wet Barrel	$2,262	Caliente, Tejon	12/2018	n/a	$9,046	Replace 4 fire hydrants on Caliente and Tejon between El Sobrante and El Pueblo. The fire hydrants are in deteriorating condition and will be about 45 years old in 2018. These are Dresser hydrants, for which we can no longer obtain repair parts. Four hydrants on this street have already needed replacement. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-31 in Exhibit CC-1 which shows the locations of the future replacements.

H-32	335	hydrants	6	n/a	Cast Iron/ AVK Wet Barrel	$2,262	El Sobrante	12/2018	n/a	$13,570	Replace 6 fire hydrants on El Sobrante between Baca and Calvaras. The fire hydrants are in deteriorating condition and will be about 46 years old in 2018. These are Dresser hydrants, for which we can no longer obtain repair parts. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-32 in Exhibit CC-1 which shows the locations of the future replacements.
H-33	335	hydrants	13	n/a	Cast Iron/ AVK Wet Barrel	$2,262	Palisades	12/2018	n/a	$29,401	Replace 13 fire hydrants on Palisades between Sage and Fountain Hills Blvd. The fire hydrants are in deteriorating condition and will be about 40 years old in 2018. These are Dresser hydrants, for which we can no longer obtain repair parts. Three hydrants have already needed replacement on this street. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-33 in Exhibit CC-1 which shows the locations of the future replacements.
H-34	335	hydrants	5	n/a	Cast Iron/ AVK Wet Barrel	$2,262	Fountain Hills Blvd.	12/2018	n/a	$11,308	Replace 5 fire hydrants on Fountain Hills Blvd between Palomino and Inca. The fire hydrants are in deteriorating condition and will be 41 years old in 2017. These are Dresser hydrants, for which we can no longer obtain repair parts. Replacing the hydrants will improve fire flow availability and response times in the event of fire at a customer's home or business. The hydrant replacements are for existing customers and not related to new growth. See the map for Project H-34 in Exhibit CC-1 which shows the location of the future replacements.
Total			36							$81,418	

Chaparral City Water Company – PWS ID No. 07-017

SIB PLANT TABLE I, 4-1

2014 Meter Replacements

Information to be included with SIB-Eligible Project Notification

	NARUC Acct No. (DSIC-eligible plant)	Replacement Plant Description (new plant) (DSIC-eligible plant)					Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary - replacement of existing plant that has exceeded its designated useful life and has worn out or is in deteriorating condition due to no fault of the utility - replacement of existing plant to address excessive water loss (10% or more) - replacement of existing plant for other reasons supported by persuasive showing by utility 2. Provide narrative explaining why this segment of plant is a priority. 3. Provide narrative explaining how replacing this plant will benefit existing customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. 5. Provides reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Engineering Analysis shall also include narrative explaining the utility's systematic assessment, inspection, maintenance, and repair/replacement program.
Project No.	**309 Supply Mains** **331 T&D Mains** **333 Services** **334 Meters** **335 Hydrants**	Description	Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
M-1	334	meters	1,507	¾" to >2"	Copper/ Plastic	¾"-$195 1"-$234 1½"-$367 2"-$447 >2"-$1,223	Meter Routes 8, 9, and 87 (see map M-1 in Exhibit CC-1)	12/2014	n/a	$314,989	Replace 1,134 - ¾", 348 – 1", 16 – 1.5", 6 – 2", and 3 - >2" (1,507 total) meters in CCWC meter routes 8, 9, and 87. The existing meters are between 10 and 15 years old and are experiencing a rapid decline in meter accuracy. Route 8 was chosen for completion in 2014 because the meters are the oldest in the system. Routes 9 and 87 were chosen to complete in the same year due to their vicinity to Route 8. Prior to replacement, a 10% sample of the route meters will be tested for accuracy. The new meters will help reduce system water loss to below 10%. The meter replacements are for existing customers and not related to new growth. See Section 4 of the SIB Report (Exhibit CC-1) for more explanation. See map M-1 in Exhibit CC-1 for the location of the meter routes.
Total			**1,507**							**$314,989**	

Chaparral City Water Company – PWS ID No. 07-017

SIB PLANT TABLE I, 4-2

2015 Meter Replacements

Information to be included with SIB-Eligible Project Notification

	NARUC Acct No. (DSIC-eligible plant)	Replacement Plant Description (new plant) (DSIC-eligible plant)					Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary - replacement of existing plant that has exceeded its designated useful life and has worn out or is in deteriorating condition due to no fault of the utility - replacement of existing plant to address excessive water loss (10% or more) - replacement of existing plant for other reasons supported by persuasive showing by utility 2. Provide narrative explaining why this segment of plant is a priority. 3. Provide narrative explaining how replacing this plant will benefit existing customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. 5. Provides reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Engineering Analysis shall also include narrative explaining the utility's systematic assessment, inspection, maintenance, and repair/replacement program.
Project No.	**309 Supply Mains** **331 T&D Mains** **333 Services** **334 Meters** **335 Hydrants**	Description	Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
M-2	334	meters	1,357	¾" to >2"	Cooper/ Plastic	¾"-$195 1"-$234 1½"-$367 2"-$447 >2"-$1,223	Meter Routes 63 and 98 (see map M-2 in Exhibit CC-1)	12/2015	n/a	$317,509	Replace 141 - ¾", 1192 – 1", 10 – 1.5", 13 – 2", and 1 - >2" (1,357 total) meters in CCWC meter routes 63 and 98. The existing meters are about 13 years old, and will be 15 years old in their replacement year. They are experiencing a rapid decline in meter accuracy. Prior to replacement, a 10% sample of the route meters will be tested for accuracy. The new meters will help reduce system water loss to below 10%. The meter replacements are for existing customers and not related to new growth. See Section 4 of the SIB Report (Exhibit CC-1) for more explanation. See map M-2 in Exhibit CC-1 for the location of the meter routes.
Total			**1,357**							**$317,509**	

DECISION NO. _____

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Chaparral City Water Company – PWS ID No. 07-017

SIB PLANT TABLE I, 4-3

2016 Meter Replacements

Information to be included with SIB-Eligible Project Notification

	NARUC Acct No. (DSIC-eligible plant)	Replacement Plant Description (new plant) (DSIC-eligible plant)					Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary - replacement of existing plant that has exceeded its designated useful life and has worn out or is in deteriorating condition due to no fault of the utility - replacement of existing plant to address excessive water loss (10% or more) - replacement of existing plant for other reasons supported by persuasive showing by utility 2. Provide narrative explaining why this segment of plant is a priority. 3. Provide narrative explaining how replacing this plant will benefit existing customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. 5. Provides reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Engineering Analysis shall also include narrative explaining the utility's systematic assessment, inspection, maintenance, and repair/replacement program.
Project No.	**309 Supply Mains** **331 T&D Mains** **333 Services** **334 Meters** **335 Hydrants**	Description	Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
M-3	334	meters	1,327	¾" to 2"	Copper/ Plastic	¾"-$195 1"-$234 1½"-$367 2"-$447	Meter Routes 10, 23, 36, and 68 (see map M-3 in Exhibit CC-1)	12/2016	n/a	$277,493	Replace 1022 - ¾", 267 – 1", 24 – 1.5", and 14 – 2" (1,327 total) meters in CCWC meter routes 10, 23, 36, and 68. The existing meters are about 12-13 years old, and will be 15-16 years old in their replacement year. They are experiencing a rapid decline in meter accuracy. Prior to replacement, a 10% sample of the route meters will be tested for accuracy. The new meters will help reduce system water loss to below 10%. The meter replacements are for existing customers and not related to new growth. See Section 4 of the SIB Report (Exhibit CC-1) for more explanation. See map M-3 in Exhibit CC-1 for the location of the meter routes.
Total			**1,327**							**$277,493**	

DECISION NO. _____

DOCKET NO. W-02113A-15-0118

Chaparral City Water Company – PWS ID No. 07-017

SIB PLANT TABLE I, 4-4

2017 Meter Replacements

Information to be included with SIB-Eligible Project Notification

	NARUC Acct No. (DSIC-eligible plant)	Replacement Plant Description (new plant) (DSIC-eligible plant)					Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary - replacement of existing plant that has exceeded its designated useful life and has worn out or is in deteriorating condition due to no fault of the utility - replacement of existing plant to address excessive water loss (10% or more) - replacement of existing plant for other reasons supported by persuasive showing by utility 2. Provide narrative explaining why this segment of plant is a priority. 3. Provide narrative explaining how replacing this plant will benefit existing customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. 5. Provides reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Engineering Analysis shall also include narrative explaining the utility's systematic assessment, inspection, maintenance, and repair/replacement program.
Project No.	**309 Supply Mains** **331 T&D Mains** **333 Services** **334 Meters** **335 Hydrants**	Description	Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
M-4	334	meters	1,588	¾" to >2"	Copper/ Plastic	¾"-$195 1"-$234 1½"-$367 2"-$447 >2"-$1,223	Meter Routes 3, 4, 17, and 31 (see map M-4 in Exhibit CC-1)	12/2017	n/a	$328,953	Replace 1,335 - ¾", 215 – 1", 13 – 1.5", 23 – 2", and 2 - >2" (1,588 total) meters in CCWC meter routes 3, 4, 17, and 31. The existing meters are about 11-12 years old, and will be 15-16 years old in their replacement year. They are experiencing a rapid decline in meter accuracy. Prior to replacement, a 10% sample of the route meters will be tested for accuracy. The new meters will help reduce system water loss to below 10%. The meter replacements are for existing customers and not related to new growth. See Section 4 of the SIB Report (Exhibit CC-1) for more explanation. See map M-4 in Exhibit CC-1 for the location of the meter routes.
Total			**1,588**							**$328,953**	

Chaparral City Water Company – PWS ID No. 07-017

SIB PLANT TABLE I, 4-5

2018 Meter Replacements

Information to be included with SIB-Eligible Project Notification

	NARUC Acct No. (DSIC-eligible plant)	Replacement Plant Description (new plant) (DSIC-eligible plant)					Site (location description)	Replacement Plant			1. Provide narrative why Replacement Plant is necessary - replacement of existing plant that has exceeded its designated useful life and has worn out or is in deteriorating condition due to no fault of the utility - replacement of existing plant to address excessive water loss (10% or more) - replacement of existing plant for other reasons supported by persuasive showing by utility 2. Provide narrative explaining why this segment of plant is a priority. 3. Provide narrative explaining how replacing this plant will benefit existing customers. 4. Provide affirmation that Replacement Plant does not include the costs for extending or expanding facilities to serve new customers. 5. Provides reference to related page No. in the submitted detailed Engineering Analysis supporting the need for SIB. Engineering Analysis shall also include narrative explaining the utility's systematic assessment, inspection, maintenance, and repair/replacement program.
Project No.	**309 Supply Mains** **331 T&D Mains** **333 Services** **334 Meters** **335 Hydrants**	Description	Pipe length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (estimated)		Expected In-Service Date	Estimated Subtotal Cost (by NARUC Acct No)	Estimated Subtotal Cost (by project)	
M-5	334	meters	1,418	¾" to >2"	Copper/ Plastic	¾"-$195 1"-$234 1½"-$367 2"-$447 >2"-$1,223	Meter Routes 12, 13, 20, 44, and 96 (see map M-4 in Exhibit CC-1)	12/2018	n/a	$306,835	Replace 930 - ¾", 448 – 1", 22 – 1.5", 13 – 2", and 5 – >2" (1,418 total) meters in CCWC meter routes 12, 13, 20, 44, and 96. The existing meters are about 11-12 years old, and will be 16-17 years old in their replacement year. They are experiencing a rapid decline in meter accuracy. Prior to replacement, a 10% sample of the route meters will be tested for accuracy. The new meters will help reduce system water loss to below 10%. The meter replacements are for existing customers and not related to new growth. See Section 4 of the SIB Report (Exhibit CC-1) for more explanation. See map M-5 in Exhibit CC-1 for the location of the meter routes.
Total			**1,418**							**$306,835**	

SIB Table II Template

(Exhibit CC-3)

EPCOR Water (USA) Inc.

Chaparral City Water Company/Fountain Hills

PWS ID No. 07-017

December 6, 2013

Water System Name and PWS ID No. 07-017

SIB PLANT TABLE II (Page 1 of 2)

Information to be included with SIB-Eligible Completed Project Filings

	NARUC Acct No. (SIB-eligible plant)	Replacement Plant Description (new plant) (SIB-eligible plant)					Site (location description)	Replacement Plant			Original Plant (Plant Being Retired)			
Project No.	309 Supply Mains 331 T&D Mains 333 Services 334 Meters 335 Hydrants	Description	Installed Pipe/Plant Length/ Quantity	Diameter/ Size	Material	Installed Cost/Unit (actual cost)		In-Service Date (provide ADEQ AOC and other related approvals by state and/or federal agencies when applicable; pictures of installed plant)	Subtotal Actual Cost (by NARUC Acct No)	Subtotal Actual Cost (by project)	Actual Retirement Date	Original In-Service Date	Original Cost	Accumulated Depreciation Reserve (as of the actual retirement date)
										Total Actual Cost				

DECISION NO. _____

DOCKET NO. W-02113A-13-0118

Water System Name and PWS ID No. 07-017
SIB PLANT TABLE II (Page 2 of 2, Summary)

Information to be included with SIB-Eligible Completed Project Filings

Project No.	Project Description	Estimated Cost (from TABLE I)	Actual Cost	The project cost to be used in calculating the SIB Revenue Requirement shall be the lesser of the actual project cost listed in SIB Plant Table II or 110 percent of the estimated cost listed in SIB Plant Table I as approved in Decision No. _____. Unit costs shall be used if actual units constructed are less than estimated in SIB Plant Table I.
	Total Cost			

DECISION NO. _____

DOCKET NO. W-02113A-13-0118

Chaparral City Water Company
Docket No. W-02113A-13-0118
Test Year Ended December 31, 2012

SIB Schedule A

LINE NO.	CALCULATION OF OVERALL SIB REVENUE REQUIREMENT AND EFFICIENCY CREDIT		
1	Total Authorized Revenue Requirement , Per Decision xxxxx, See Attached Schedules	TBD	
2	SIB Revenue CAP percentage	5%	Per Year
3	SIB Revenue CAP	TBD	
4	SIB Eligible Plant - Per SIB Table II, net of retirements	TBD	
5	Total Revenue Requirement, (with pro forma SIB investments). See attached revenue requirements schedules as provided by Company.	TBD	
6	SIB Revenue Requirement (line 5 minus line 1)	TBD	
7	SIB Revenue Requirement Efficiency Credit	5%	
8	SIB True-Up Adjustment (from SIB Schedule B)	TBD	
9	SIB Authorized Revenue (line 6 plus line 7 plus line 8)	TBD	
10	Number of Equivalent Meters, below	TBD	
11	Charge per 5/8" meter	TBD	

	No. of Customers at Year End	Multipliers	5/8 x 3/4-inch Equivalent Meters	Fixed Surcharge	Annual Rev by Meter Size
5/8 x 3/4-inch	TBD	1	TBD	TBD	TBD
3/4-inch	TBD	1.5	TBD	TBD	TBD
1-inch	TBD	2.5	TBD	TBD	TBD
1 1/2-inch	TBD	5	TBD	TBD	TBD
2-inch	TBD	8	TBD	TBD	TBD
3-inch	TBD	16	TBD	TBD	TBD
4-inch	TBD	25	TBD	TBD	TBD
6 -inch	TBD	50	TBD	TBD	TBD
8 -inch	TBD	80	TBD	TBD	TBD
10-inch	TBD	115	TBD	TBD	TBD
Totals	TBD		TBD		TBD

DOCKET NO. W-02113A-13-0118

SIB Schedule B

Chaparral City Water Company
Docket No. W-02113A-13-0118
Test Year Ended December 31, 2012

CALCULATION OF SIB TRUE-UP REVENUE REQUIREMENTS ADJUSTMENT	YEARS 1	2	3	4	5
SIB Authorized Revenue , Per SIB Schedule A	TBD	TBD	TBD	TBD	TBD
Total SIB Surcharges collections for Period	TBD	TBD	TBD	TBD	TBD
SIB True-Up Adjustment	TBD	TBD	TBD	TBD	TBD

Note: The Company shall also provide an analysis of cumulative over or under collections and a net amount to be included in the SIB True-up Adjustment

EXHIBIT 5

Chaparral City Water Company
Docket No. W-02113A-13-0118
Test Year Ended December 31, 2012

SIB Schedule C

TYPICAL BILL IMPACTS
3/4 -Inch Customers

		Step 1			Step 2			Step 3			Step 4			Step 5		
Gallons	Per Dec. No. XXXXX(no SIB Surcharge)	Total Bill w/ SIB Year 1 *	SIB Inc.	Cumulative % Increase	Total Bill w/ SIB Year 2 *	SIB Inc.	Cumulative % Increase	Total Bill w/ SIB Year 3 *	SIB Inc.	Cumulative % Increase	Total Bill w/ SIB Year 4 *	SIB Inc.	Cumulative % Increase	Total Bill w/ SIB Year 5 *	SIB Inc.	Cumulative % Increase
0	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
1000	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
2000	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
3000	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
4000	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
5000	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
6000	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
7000	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
8000	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
9000	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
10000	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
11000	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
12000	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
13000	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
14000	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
15000	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
20000	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
25000	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Median (Cite Usage)	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Mean (Cite Usage)	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD

*: Bills in Years 1 -5 are net of Efficiency Credit

DECISION NO. _____

DOCKET NO. W-02113A-13-0118

Chaparral City Water Company
Docket No. W-02113A-13-0118
Test Year Ended December 31, 2012

SIB Schedule D

EARNINGS TEST

	Per Dec. No XXXXXX	SIB Step 1	SIB Step 2	SIB Step 3	SIB Step 4	SIB Step 5	Total Pro-forma with SIB
Total Operating Revenue *	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Operating Expenses	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Operations & Maintenance	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Depreciation & Amortizaiton	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Taxes Other than Income	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Income Taxes	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Total Operating Expenses	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Operating Income	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Rate Base	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Rate of Return on Rate Base	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Authorized Rate of Return on Rate Base	TBD	TBD	TBD	TBD	TBD	TBD	TBD

*: SIB Revenues in Years 1 -5 are net of 5% Efficiency Credit

DECISION NO. _____

DOCKET NO. W-02113A-13-0118

MONTHLY MINIMUM CHARGE (All Classes):

3/4" Meter	$	20.00
3/4" Meter Residential Low Income		12.50
1" Meter		33.25
1" Meter Residential Low Income		25.75
1 1/2" Meter		67.00
2" Meter		107.00
3" Meter		213.00
4" Meter		333.00
6" Meter		667.00
8" Meter		1,067.00
10" Meter		1,533.00
12" Meter		2,867.00
Fire Sprinkler Service - All Meter and Valve Sizes		*

* 2.00 percent of monthly minimum for a comparable size meter connection, but no less than $10.00 per month. The service charge for fire sprinklers is only applicable for service lines separate and distinct from the primary water service line.

COMMODITY CHARGE – Per 1,000 Gallons:

3/4-Inch Meter – All Classes		
0 gallons to 3,000 gallons	$	2.32
3,001 gallons to 9,000 gallons		3.50
Over 9,000 gallons		4.22
1-Inch Meter – All Classes		
0 gallons to 24,000 gallons	$	3.50
Over 24,000 gallons		4.22
1 1/2-Inch Meter – All Classes		
0 gallons to 60,000 gallons	$	3.50
Over 60,000 gallons		4.22
2-Inch Meter – All Classes		
0 gallons to 100,000 gallons	$	3.50
Over 100,000 gallons		4.22
3-Inch Meter – All Classes		
0 gallons to 225,000 gallons	$	3.50
Over 225,000 gallons		4.22
4-Inch Meter – All Classes		
0 gallons to 350,000 gallons	$	3.50
Over 350,000 gallons		4.22

6-Inch Meter – All Classes		
0 gallons to 725,000 gallons	$	3.50
Over 725,000 gallons		4.22
8-Inch Meter – All Classes		
0 gallons to 1,125,000 gallons	$	3.50
Over 1,125,000 gallons		4.22
10-Inch Meter – All Classes		
0 gallons to 1,500,000 gallons	$	3.50
Over 1,500,000 gallons		4.22
12-Inch Meter – All Classes		
0 gallons to 2,250,000 gallons	$	3.50
Over 2,250,000 gallons		4.22

SERVICE LINE AND METER INSTALLATION CHARGES:
(Refundable Pursuant to A.A.C. R14-2-405)

	Service Line	Meter Installation	Total
5/8" x 3/4" Meter	$385.00	$135.00	$520.00
3/4" Meter	385.00	195.00	580.00
1" Meter	435.00	234.00	669.00
1 1/2" Meter	570.00	367.00	837.00
2" Turbine Meter	At Cost	At Cost	At Cost
2" Compound Meter	At Cost	At Cost	At Cost
3" Turbine Meter	At Cost	At Cost	At Cost
3" Compound Meter	At Cost	At Cost	At Cost
4" Turbine Meter	At Cost	At Cost	At Cost
4" Compound Meter	At Cost	At Cost	At Cost
6" Turbine Meter	At Cost	At Cost	At Cost
6" Compound Meter	At Cost	At Cost	At Cost
8" & Larger Meters	At Cost	At Cost	At Cost
Fire Sprinkler Service - All Meter and Valve Sizes			At Cost

MISCELLANEOUS SERVICE CHARGES:		
Establishment	$	30.00
Re-Establishment (Within 12 Months)		(a)
Reconnection (Delinquent)	$	35.00
Meter Test (if correct)		35.00
Meter Re-read (if correct)		10.00
Moving Meter at Customer Request		At Cost
Deposit		(b)
Deposit Interest		6.00%

NSF Check	$	25.00
Late Payment Penalty, Per Month		1.50%
Deferred Payment, Per Month		1.50%
After Hours Service Charge, Per Hour*	$	40.00

(a) Number of full months off the system times the monthly minimum, per A.A.C. R14-2-403(D).

(b) Per A.A.C. R14-2-403(B). Residential - two times the average monthly bill. Non-residential - two and one half times the average monthly bill.

* For work performed on the customer's property after hours, at customer's request. In addition to the charge for any utility service provided.

IN ADDITION TO THE COLLECTION OF REGULAR RATES, THE UTILITY WILL COLLECT FROM ITS CUSTOMERS A PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES, USE, AND FRANCHISE TAX, PER A.A.C. R14-2-409(D)(5).