Exhibit No.:	_______________
Issue(s):	Rate of Return (ROR)/ Capital Structure
Witness/Type of Exhibit:	Murray/Direct
Sponsoring Party:	Public Counsel
Case No.:	WR-2020-0275

DIRECT TESTIMONY

OF

DAVID MURRAY

Submitted on Behalf of the Office of the Public Counsel

ELM HILLS UTILITY OPERATING COMPANY

FILE NO. WR-2020-0275

** **

Denotes Confidential Information that has been Redacted

October 22, 2020

NON-PROPRIETARY

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

In the matter of the Application of Elm Hills Operating Company, Inc.'s Request for a Sewer And Water Increase	)))	Case Nos. WR-2020-0275

<u>VERIFICATION OF DAVID MURRAY</u>

David Murray, under penalty of perjury, states:

1. Attached hereto and made a part hereof for all purposes is my direct testimony in the above-captioned case.

2. My answer to each question in the attached direct testimony is true and correct to the best of my knowledge, information, and belief.

/s/David Murray
David Murray
Utility Regulatory Manager
Office of the Public Counsel

DIRECT TESTIMONY

OF

DAVID MURRAY

ELM HILLS UTILITY OPERATING COMPANY

FILE NOS. SR-2020-0274 AND WR-2020-0275

Q. Please state your name and business address.

A. My name is David Murray and my business address is P.O. Box 2230, Jefferson City, Missouri 65102.

Q. By whom are you employed and in what capacity?

A. I am employed by the Missouri Office of the Public Counsel ("OPC") as a Utility Regulatory Manager.

Q. **On whose behalf are you testifying?**

A. I am testifying on behalf of the OPC.

Q. What it the purpose of your testimony?

A. To recommend a fair and reasonable rate of return ("ROR") for purposes of setting Elm Hills Utility Operating Company's ("Elm Hills") revenue requirement.

Q. What experience, knowledge and education qualify you to sponsor ROR testimony in this case?

A. Please see the attached Schedule 1 for my qualifications as well as a summary of the cases in which I have sponsored testimony on ROR and other financial issues. Since I started my employment with the OPC, I have sponsored ROR testimony in the recent The Empire District Electric rate case, Case No. ER-2019-0374 and the Ameren Missouri rate case, Case No. ER-2019-0335.

Q. What aspects of ROR will you address?

A. I will provide testimony as it relates to evaluating Elm Hills' capital structure, a reasonable assumed cost of debt, and a fair and reasonable allowed return on common equity ("ROE") consistent with the risk of my recommended capital structure and Elm Hills' business risk.

Q. Are there additional complexities and uncertainties as it relates to determining a fair and reasonable allowed ROR for Elm Hills as compared to other Missouri utilities?

A. Yes. Typically, only the allowed ROE needs to be estimated for purposes of setting a utility company's allowed ROR. The cost of debt included in the allowed ROR is typically based on actual contractual costs charged by third-party debt investors. As determined by the Commission for Elm Hills' affiliate, Indian Hills Utility Operating Company in Case No. WR-2017-0259, the Fresh Start Venture LLC ("Fresh Start") debt contracts are not legitimate third-party debt. Consequently, determining a fair and reasonable ROR for Elm Hills and its affiliates also requires the Commission to determine a hypothetical cost of debt to apply to the assumed debt in the hypothetical capital structure. Therefore, all of the capital costs included in an authorized ROR for Elm Hills and its affiliates require judgment of the witnesses and ultimately the Commission.

Q. Does the investment and ownership structure in which Elm Hills resides add to this complexity and uncertainty?

A. Yes. Although Elm Hills is still an indirect wholly-owned subsidiary of CSWR LLC (see Schedule 2 for the attached corporate/entity family structure in which Elm Hills is held), the new investors, Sciens Capital Management LLC, formed a new holding company, US Water Systems LLC, for purposes of its acquisition of CSWR LLC ("CSWR") and Fresh Start from the previous owners, GWSD LLC and US Water Fund LLC. According to CSWR's 2019 Annual Audited Financial Statements (see Confidential Schedule 3), ** ____________________ ** manages "investment funds" that indirectly own CSWR through US Water Systems LLC.

Q. Why is the ownership and investment structure relevant to setting a fair and reasonable ROR for Elm Hills or any of its affiliates?

A. The relevance of the ownership and investment structure was clearly revealed in Case No. WR-2017-0259. In that case, the Commission heard facts that demonstrated that the owners of CSWR (the equity capital) were the same owners of Fresh Start (the debt capital). Consequently, the Commission rejected the Fresh Start interest rate for determining Indian Hills' authorized ROR because it was not the result of an arms-length negotiation. However, in that case, no party introduced evidence as to whether there may be loans at some other level other than CSWR and its subsidiaries. If this information had been disclosed and evaluated as to its structure, it could have formed a basis for a contractual debt rate to be considered in setting Indian Hills' allowed ROR.

Q. Has OPC been pursuing discovery of investment level information in order to allow the Commission the ability to determine whether this cost of capital information should be considered in setting Elm Hills' allowed ROR?

A. Yes. OPC has elevated its level of pursuit of this information to issuing subpoenas to Sciens' companies and Sciens' principals in order to achieve disclosure of such information.

Q. In the absence of the disclosure of such information, what had you recommended Elm Hills' allowed ROR be set at for purposes of the informal small rate case process?

A. I had recommended that Elm Hill's ROR be premised on a hypothetical capital structure containing 50% equity and 50% debt, which was consistent with the Commission's decision in Case No. WR-2017-0259. I recommended a proxy cost of debt of 4.46% based on two loans issued by a comparable Missouri based small water and wastewater company, Terre Du Lac Utilities Corporation ("TDL"), in 2016 and 2017 to fund improvements DNR required it to make to its system.[1] I consider TDL's cost of debt to be a good proxy for Elm Hills, because it is similarly situated. Despite TDL being subject to Notices of

[1] Terre Du Lac's Water and/or Sewer Annual Report (Small Company) To The Missouri Public Service Commission, January 1 – December 31, 2019, p. 9.

Violations, Letters of Warnings and a lawsuit against it by the Attorney General's office on behalf of DNR, it has been able to raise reasonably priced debt capital to fund all of the improvements it made in 2017. I recommended an ROE of 7.71% be applied to a hypothetical 50% equity ratio in the capital structure. This was based on simply applying a 4% risk premium to a recent average investment grade bond yield of 3.71%. A 3% to 4% risk premium applied to a company's cost of long-term debt is a reasonable approximation of a United States' company's cost of equity.[2]

Q. Did TDL raise any equity capital to fund its required investments in 2017?

A. No. Although Staff allowed TDL 25% equity capital in its capital structure during TDL's last rate case, TDL used all debt capital to fund improvements to its system. TDL borrowed approximately $900,000 from First State Community Bank through two loans, with approximately $800,000 initially borrowed under the larger of the two loans. The larger loan has a current interest rate of approximately 4.68%. Based on the publicly available loan terms of the smaller loan, it would appear that this loan has a current interest rate of approximately 4.18%, but this loan may still be priced based on higher short-term index levels before the targeted Federal Funds rate was reduced to a range of 0% to 0.25%. For the 25% of equity Staff included in its recommended ratemaking capital structure, it recommended a 9.67% ROE.

Q. Do you have any other support as to why a cost of debt below 5% is reasonable for Elm Hills?

A. Yes. I reviewed the financial results of Elm Hills' sister companies, Hillcrest Utility Operating Company ("Hillcrest"), Raccoon Creek Utility Operating Company ("Raccoon Creek") and Indian Hills Utility Operating Company ("Indian Hills"), as well as pro forma financial estimates for Elm Hills based on the Non-Unanimous Disposition Agreement filed on September 9, 2020, in the current case, in order to estimate the credit profile a

[2] Jerald E. Pinto, PhD, CFA, Elaine Henry, PhD, CFA, Thomas R. Robinson, PhD, CFA, and John D. Stowe, PhD, CFA, 2021 CFA Institute Refresher Reading 25, p. 35.

rating agency and/or debt investor may assign to Elm Hills. I have attached a summary of my analysis as Schedule 4 to my testimony.

Q. Has an adequate period of time elapsed to estimate Elm Hill's anticipated credit profile based on the financial experience of its affiliates?

A. Yes. Hillcrest and Raccoon Creek have had new rates in place since 2017 so there is at least three years of financial results for these companies. Indian Hills' rates were increased in the spring of 2018 so it has about two years of experience.

Q. For purposes of evaluating the financial performance of all three of these companies, did you treat the Fresh Start financing agreement as a legitimate third-party debt contract?

A. No.

Q. Why not?

A. Because according to the November 2018 Unit Purchase Agreement ("UPA")[3] and Elm Hills' responses to OPC data requests,[4] US Water Systems was created for the purposes of purchasing CSWR and Fresh Start. If this is correct, then the equity investors are not subordinated by the contract because they wholly-own all of the entities. Therefore, this contract serves no legitimate economic purpose. In fact, I would argue that Fresh Start should be dissolved so Hillcrest, Raccoon Creek, Indian Hills and Elm Hills can pursue more cost efficient capital, which could allow for more affordable utility rates for customers of these systems.

Q. What proportion of debt did you assume for purposes of your recommended ratemaking capital structure for Elm Hills?

A. 50%.

[3] Response to DR 3004 in Confluence Rate Case, Case No. WR-2020-0053 (Confidential Schedule 5).
[4] Response to DRs 3016 and 3017 (Confidential Schedule 6).

Q. Why?

A. The Commission deemed this ratio reasonable for purposes of setting Indian Hills' allowed ROR. Additionally, based on my experience with loan conditions for other smaller utilities, such as Summit Natural Gas of Missouri (SNGMO), this is an amount of debt that lenders would consider acceptable for a company making significant capital expenditures. However, it should be noted that a distinguishing factor related to SNGMO's capital expenditures as compared to Elm Hills' capital expenditures is that SNGMO added plant with the goal of expansion by converting electric and propane customers to natural gas, whereas Elm Hills construction was for an existing customer base. As experience has proven with Elm Hills' affiliates, the recovery of investment and costs from existing customers has been fairly certain. The same cannot be said for SNGMO. Despite SNGMO being authorized a 10.8% allowed ROE, it has earned an ROE of no higher than 2% over the last several years.

Q. What credit metrics did you evaluate to determine the probable credit quality of Elm Hill's affiliate companies?

A. I evaluated the credit metrics Standard & Poor's (S&P's) typically analyzes in assessing the credit quality of utility companies. These credit metrics are as follows: funds-from-operations to total debt (FFO/Debt), debt to earnings before interest, taxes, depreciation and amortization (Debt/EBITDA), and FFO-to-interest expense (FFO/interest).

Q. Are these the same credit metrics that Staff typically analyzes when estimating a company's credit rating?

A. Yes. It is my understanding that Staff is still using the 2016 Small Water and Sewer rate case methodology that the Financial Analysis Department had used when I was still employed by the Missouri Public Service Commission. The estimation of credit ratings using this methodology are guided by S&P's ratings methodology.

Q. What interest rate did you assume for purposes of your analysis?

A. I assumed an interest rate of 4.62%. This interest rate is still premised on the weighted average cost of debt TDL procured in 2016 and 2017 from First State Community Bank, but I updated the cost of debt based on changes to the underlying index rate charged on these loans. Although I updated the changes to the cost of debt based on the loan agreements filed in Case Nos. WF-2017-0143 and WF-2018-0061, I have reason to believe that the weighted cost of these two loans is actually closer to approximately 4.5%.

Q. What did your analysis of these companies' financials show?

A. Hillcrest's credit metrics are consistent with an "intermediate" financial risk profile (FRP), which when compared against the "Medial Volatility" benchmarks typically used for most utility companies,[5] results in an estimated credit rating of as high as a 'BBB+' to 'A-' rating, which is considered a very strong credit profile.

Raccoon Creek's credit metrics are consistent with a "significant" FRP, which when compared against the "Medial Volatility" benchmarks, results in an estimated 'BBB' rating, which is an investment grade credit rating.

Indian Hill's rate increases became effective on March 17, 2018. Therefore, the 2018 financial statements do not include a full year of revenues related to these rate increases. However, 2019 does provide a full year of results under the increased rates. Based on the 2019 results, Indian Hills FRP is consistent with the "significant" category, albeit toward the weaker end of the range of metrics for this category. Therefore, although Indian Hills' may still have a credit profile consistent with an investment grade credit rating (no lower than a 'BBB-'), it would be rated the lowest of all the companies.

[5] S&P typically uses the "Medial Volatility" benchmarks for integrated electric utility companies, some local gas distribution companies ("LDC") and some transmission and distribution utilities. However, S&P often uses the "Low Volatility" benchmarks for the water and sewer industry and some LDC's such as Spire Missouri. The use of "Low Volatility" benchmarks means the company can use more leverage than a company measured against the "Medial Volatility" benchmarks and still have a similar credit rating (i.e. lower cost of capital because of less business risk).

Elm Hills' pro forma financial statements, based on parameters from the Non-Unanimous Disposition Agreement, indicates that Elm Hills' financial risk will be consistent with the "intermediate" category. Combining Elm Hills' FRP with an assumed "strong" business risk profile (BRP), results in an indicated credit rating of 'BBB+' to 'A-'.

Q. Have you reviewed more recent financial results for Hillcrest, Raccoon Creek and Indian Hills?

A. I did. I analyzed the updated financial performance of Hillcrest, Raccoon Creek and Indian Hills for the last twelve months ("LTM") through June 30, 2020. The credit metrics assuming a 50/50 capital structure for all of the companies support at least an investment grade credit rating.

Q. What do you conclude from your analysis?

A. Assuming the Commission continues to allow a 50/50 hypothetical capital structure for setting the allowed ROR for CSWR's subsidiaries, the cost of debt imputed in this capital structure should be consistent with an investment grade credit rating, which is **lower** than the cost of debt I recommended in this case. However, because my recommendation is based on actual debt transactions for a similarly situated small water and sewer company, absent disclosure of potential debt issued at the Sciens investment level, I consider it to be a reasonable proxy as to what should be used to set Elm Hills' allowed ROR.

Q. What credit profile is implied for the combined financial results of Hillcrest, Raccoon Creek and Indian Hills?

A. At least a 'BBB' credit rating based on 2019 financial results and financial results for the last-twelve-months through June 30, 2020. Consequently, based on the regulatory treatment Elm Hills' sister companies have received from the Missouri Public Service Commission, it is implausible to conclude that Sciens is not able to raise reasonably priced debt capital to fund its equity investments in CSWR's regulated utility subsidiaries. As I indicated in footnote five above, because I compared the credit metrics to the "Medial Volatility" benchmarks rather than the "Low Volatility" benchmarks S&P typically uses for the water and sewer industry, my estimated credit rating is conservative (could be considered an 'A' rated profile based on a 50/50 capital structure).

Q. Is it practical to consolidate the entities under a separate holding company in order to allow for the issuance of more cost efficient debt?

A. Yes. While I was employed with Staff, I directly sponsored a recommendation addressing Summit Natural Gas of Missouri's (SNGMO) Application to reorganize, Case No. GO-2019-0216. In that application, Summit Utilities Inc. (SNGMO's parent company) created an intermediate holding company for purposes of raising debt on behalf of its more established subsidiaries, which included SNGMO. Although SNGMO had already been able to issue debt while it was making significant investments in its system to expand in Branson and the Lake of the Ozarks, this was shorter-term debt with variable interest rates and more restrictive covenants. Summit indicated it could obtain longer-term debt with fixed interest rates if it combined the more established subsidiaries under a separate, intermediate holding company.

Q. Based on the 50/50 capital structure assumption, how do CSWR's subsidiaries' FFO/debt ratios compare to Missouri's larger utilities FFO/debt ratios?

A. Hillcrest has FFO/debt ratios that are significantly stronger (less financial risk) than Missouri's larger utilities. Raccoon Creek has FFO/debt ratios that are consistent with the stronger FFO/debt ratios achieved by most of Missouri's utilities. Indian Hill's FFO/debt ratios are consistent with the lower FFO/debt ratios experienced by Spire Missouri and Evergy Metro (f/k/a Kansas City Power & Light Company). Schedule 7 attached to my testimony shows my complete breakdown of all of the companies' FFO/debt ratios since 2017 to the extent they are available or relevant.

Q. Considering Spire Missouri has lower FFO/debt ratios, which are more consistent with Indian Hills' recent FFO/debt ratios, why is it still rated 'A-' by S&P?

A. S&P allows for less stringent credit metrics for Spire Missouri because of the low operational risk associated with its local gas distribution operations. Consequently, Spire

Missouri's credit metrics are compared to the "Low Volatility" benchmark tables for purposes of assigning a credit rating to Spire Missouri.

Q. How did the volatility of CSWR's companies' financial results compare to Missouri's other major utilities?

A. Based on the financial metric earnings before interest, taxes, depreciation and amortization ("EBITDA") for the last three years, they were fairly consistent with Missouri's other large utilities. However, they were not as volatile as Summit Natural Gas of Missouri (see Schedule 8).

Q. Do you think Sciens is capitalizing its investment in CSWR and its utilities based on the 50/50 capital structure assumed for ratemaking?

A. No. I believe it is likely that they are using a greater proportion of leverage (*i.e.* debt financing) to capitalize their investment in CSWR.

Q. Although Sciens has not provided OPC information as to how it funded its acquisition of CSWR and its continued investment in CSWR, how do you think it is funding its investment?

A. I think it is likely a combination of investment capital received from private equity investors making equity contributions into the Sciens Water Opportunity Fund[6] and debt capital issued in attempt to enhance the equity returns for the private equity fund.

Q. Is this a typical private equity strategy?

A. Yes.

[6] The Sciens Water Opportunity Fund appears to be the main vehicle in which high net-worth and/or institutional investors commit to provide equity capital. Sciens Water Opportunity Fund currently owns three companies through direct and active investments with CSWR LLC being one of these companies. For more information, see the following website: https://scienswater.com/

Q. When was the Sciens Water Opportunity Fund formed?

A. On February 16, 2018.

Q. When did Sciens purchase CSWR and Fresh Start?

A. In November 2018.

Q. Do you know how much Sciens paid for CSWR and Fresh Start?

A. Yes. They paid the previous investors ** ________ **. This purchase price exceeded the previous investors' investment by approximately ** ________ **.

Q. Do you know how Sciens funded its acquisition of CSWR and Fresh Start?

A. No, but considering the significant purchase price over book value and the certainty of the cash flows generated by the utility investments, it would be consistent with a private equity fund's strategy to use a considerable amount of leverage to fund the acquisition.

Q. Have you been able to determine the potential amount of equity Sciens raised in private equity issuances?

A. To some extent. OPC found several Form D, Notice of Exempt Offering of Securities, filings with the Securities and Exchange Commission ("SEC") that shows some rounds of funding associated directly with the Sciens Water Opportunities Fund ("Water Fund") or affiliates of the Water Fund. The first round of funding occurred on July 31, 2018, with a fund raise of $14,080,000 (Schedules 9 and 10). A second round of funding for an affiliate fund, Sciens Water Opportunities Fund LP, a Series of Green Square Private Investment Partners, LLC, in the amount of $9,941,048, occurred on May 10, 2020 (Schedule 11).

Q. Based on the available public information, what does this imply about the amount of leverage Sciens used when it purchased CSWR and Fresh Start?

A. This implies that Sciens funded the purchase of CSWR and Fresh Start with at least 70% debt financing. However, considering Water Fund also owns two other companies, Integrated Water Services Inc. and CROM LLC, it is reasonable to conclude that a portion of the equity raised by Water Fund supports these two companies as well.

Q. How do private equity investors typically determine the amount of debt they will use to leverage their equity investment?

A. In private equity investing, a frequently used metric to determine debt capacity is to analyze current EBITDA amounts and expected EBITDA amounts. In a leveraged buyout, lenders may be willing to provide an initial amount of debt that results in a multiple of up to 6 to 8 times EBITDA.[7] This multiple of EBITDA is consistent with other terms I have reviewed during my employment in the field of utility regulation. However, lenders typically expect the debt to EBTIDA ratios to decline to more reasonable levels, such as 5x EBITDA, over time.

Q. How much leverage could Hillcrest, Raccoon Creek, and Indian Hills support at 7x current EBITDA?

A. Approximately 100% of the capital structure could be supported by debt (see Schedule 12).

Q. On a pro forma basis, how much leverage could Elm Hills support at 7x EBITDA?

A. Over 100% of its capital structure, which could potentially allow for capital to be used for other early-stage companies (see Schedule 12).

Q. Have any other prospective capital groups communicated to you in the past that this was their intended strategy as it related to the CSWR proposed investments?

A. Yes. Millstone Capital Group ("Millstone") evaluated potentially providing capital for CSWR's proposed investments. As part of its due diligence, Millstone met with me and Mark Oligschlaeger of Staff in 2014. During that meeting, Millstone inquired as to whether regulators would "look through" to the investment group to determine how they raised their capital and recommend that this cost of this capital be used to set rates. Because I had

[7] Yves Courtois, CMT, MRICS, CFA, and Tim Jenkinson, PhD, 2021 CFA Refresher Reading 41, p. 7.

indicated that Staff would take this potential financing strategy into consideration in determining a fair and reasonable ROR recommendation, Millstone did not commit to providing capital to CSWR.[8]

Q. Has Mr. Josiah Cox, Elm Hills' President, indicated that the use of significant leverage was the preferred financing strategy as it relates to the CSWR investments?

A. Yes. Most of the feasibility studies Mr. Cox submitted for past applications to acquire and invest in other systems assumed that up to 90% of the capital funding the development and construction costs would be funded by debt capital.

Q. Based on the various information you have reviewed and considered, what do you think is a likely capitalization situation for Sciens investment in CSWR?

A. I believe it reasonable to assume it is capitalized with at least 80% debt.

Q. Can you estimate Sciens' potential equity returns on the Elm Hills' improvements if they are capitalized with 80% debt and 20% equity?

A. Yes. A common financial function used to estimate a potential return is the internal rate of return ("IRR"). The IRR reflects the discount rate required to cause the present value of future expected cash flows to be equivalent to the amount of capital invested. The IRR function allows the user to estimate an unlevered IRR, which provides the overall return as if no leverage is used. However, if leverage is used, then the cash flows are netted for the amount of the borrowing and the debt service required for the borrowing. This allows for an estimation of the levered IRR, which provides an estimate of the compound periodic return to the equity investor when utilizing debt. A summary of the IRR analysis I performed is attached as Schedule 14 to my testimony.

[8] Response to Staff DR No. 35 in Hillcrest Utility Operating Company Case No. WO-2014-0340 (Schedule 13).

Q. When did Elm Hills acquire the systems in which it has made the improvements that are the subject of this rate case?

A. Elm Hills closed on its acquisition of State Park Village and Elm Hills on October 16, 2017.[9] Elm Hills closed on its acquisition of Rainbow Acres and Twin Oaks on December 14, 2018.[10]

Q. What are some of the key assumptions you had to make to estimate the potential IRR to Sciens?

A. Due to the limited availability of detailed financial information on the exact timing of cash flows, I used year-end construction work in progress balances since December 31, 2017 to determine the amount of investment made during the prior year (I assumed all of the capital expenditures occurred mid-year since this allows consideration for both capex that occurred earlier and later in the year). I also assumed that Elm Hills' rate increases will take effect on January 1, 2021 (again, I assumed the annual cash flows to the investor occur at mid-year since they are received throughout the year). Although the debt Sciens may have potentially raised at the investment level may not be an amortizing loan, I assumed the loan would amortize over a 20-year period. I assumed the cost of the loan would be 4.62%, consistent with the current cost of debt issued by TDL. I also used the composite depreciation rate of 4.82% provided in Staff's EMS run in this case to determine the amount of cash flows Elm Hills would receive from depreciation expense.

Q. What return did your analysis indicate equity investors could achieve if Sciens only contributed 20% equity to the total investment in Elm Hills?

A. Around 20% if I assume Elm Hill's pays income taxes. Around 25% if Elm Hills does not have to pay income taxes, which has been the case for Hillcrest, Raccoon Creek and Indian Hills.

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[9] Elm Hills Notice of Closing, Case No. SM-2017-0150, October 20, 2017.
[10] Elm Hills Notice of Closing, Case No. SA-2018-0313, December 18, 2018.

Q. How would returns to the equity investors be impacted if customers' rates were decreased every year to take into consideration the fact that investors are receiving a return of their capital through depreciation cash flows?

A. They would be about 5% lower.

Q. Is the recognition of a constantly declining rate base a likely scenario for purposes of estimating cash flows?

A. No.

Q. Have Hillcrest and Raccoon Creek had declining plant balances, which would translate into a declining rate base?

A. Raccoon Creek has had a declining plant balance, but Hillcrest has not. A refined analysis of potential replacement plant would necessitate a reduction to the cash flows investors would receive from depreciation expense. This would lower the return to investors.

Q. Was the objective of your analysis to determine a precise expected return for each scenario?

A. No. The objective of my analysis was to show how the use of leverage at the investment level allows equity investors to achieve much higher returns than that which is implied on the utility operating company's books.

Q. Do or will Elm Hills' financial statements provide an accurate representation of the returns achieved by its investors?

A. No. Although Elm Hills' has yet to realize better financial performance because it has yet to adjust its rates, even after its rates are increased, the income to its equity investors will be understated due to the fact that Elm Hills' income is reduced by the interest expense paid to Fresh Start. Because Fresh Start is now owned by the same company that owns CSWR, US Water Systems, all returns, whether debt or equity on Elm Hills' books, flow to the owners of CSWR and Fresh Start.

Q. According to DR responses provided by Elm Hills, how would these returns be reported by the company that owns CSWR and Fresh Start?

A. I am not sure, but because US Water Systems wholly-owns CSWR and Fresh Start, the distributions from each company should be reported as income to the equity capital on US Water Systems' books.

Q. Does this mean that this income would flow all the way through to Sciens Water Opportunities Fund?

A. No. As OPC has indicated in attempts to perform discovery, it is likely that part of this cash flow would be used to service debt at some level between Sciens' Water Fund and CSWR.

Q. Do you think it is possible that Sciens is raising debt capital at an even cheaper cost that the approximate 4.5% rate you assumed?

A. Yes. Based on the likely scenario that Sciens is using the leveraged loan market, which usually involves loans with variable interest rates, it is likely that they are paying a much lower interest rate. Based on my understanding of the leveraged loan markets, it is likely that Sciens is issuing shorter tenor debt (approximately 5 to 7 years) at variable interest rates (LIBOR + a spread of 250 to 350 basis points, depending on the loan's credit profile). Additionally, the loan is not likely an amortizing loan, but a balloon payment loan with the principal due at maturity. If this is in fact the case, then Sciens can achieve an even higher return on its equity investment due to the increased margin achieved by this lower cost of capital. Based on recent 3-month LIBOR rates of approximately 0.22% to 0.25%, a potential all-in yield on a term loan issued by some company between Sciens and CSWR may be in the range of 2.75% to 3.75%.

Q. If Sciens is able to issue interest-only term loans at a 3.25% cost, how high of an equity return could it generate based on the ratemaking parameters allowed in the non-unanimous disposition agreement?

A. Sciens could be generating a return on its equity investment of 25% to 30%. For purposes of this estimate, I assumed that the 5-year loans can be refinanced at the same rate. I also assumed that Sciens would reduce the amount of debt outstanding every five years to ensure that no more than 80% of rate base is supported by debt.

Q. The CSWR investment opportunities appear to be fairly lucrative. Do you believe this was part of the reason Sciens was willing to pay such a high price to acquire CSWR and Fresh Start?

A. Yes. As indicated earlier, the previous investors contributed approximately ** ** of capital through CSWR and Fresh Start, but were able to sell for approximately ** **. Considering the previous investors provided this capital over approximately the last 3.5 years, this translates into a compound annual return on total capital of 35%. Because I assumed that the previous investors invested all of the capital at the beginning of the period rather than periodically over the 3.5 years, the actual total return would be higher.

Q. Do you know if the previous investors funded all of their investment with equity?

A. No. If they used debt to fund investment in CSWR and Fresh Start, then their return would have been much higher.

Q. What does the fact that Sciens was willing to pay almost 3 times the amount of capital invested by the previous investors demonstrate?

A. It demonstrates that CSWR's strategy of acquiring systems at or near book value simply for the opportunity to invest capital into improvements and then be allowed to increase rates on utility customers has resulted in the ability to attract capital. The ability to increase rates on captive utility customers with little to no risk of losing these customers because it is an essential service, allows for the attraction of capital at lower costs than that which has been built into the rates allowed for CSWR's companies. As I demonstrated with Elm Hills' sister companies, allowing a debt cost any higher than an assumed investment grade credit results in a highly unreasonable allowed ROR. An allowed ROR based on an assumed debt cost of 7.5% to 8.0% and an ROE of 11.5% to 12.0% is even more egregious if it is determined that Sciens is raising large amounts of debt at the investment level and not sharing the lower cost of debt with ratepayers.

Q. Did Mr. Cox realize any gains on the sale of CSWR to Sciens?

A. Yes. Mr. Cox received approximately ** ____________ ** upon the sale of CSWR to Sciens.

Q. Has Mr. Cox's ability to manage the utility ratemaking process allowed him to create more value for him and his investors?

A. Yes. Although Mr. Cox's assigned economic interest was the only one subordinated by the Fresh Start 14% interest rate, he still testified that this interest rate was legitimate for ratemaking purposes when, in fact, this was an affiliate transaction developed to ensure Mr. Cox delivered on his proposed business plan.

Q. Does Mr. Cox still maintain ownership interest in CSWR?

A. ** ____

** Therefore, Mr. Cox still has a personal financial interest in ensuring he achieves the maximum value for the CSWR investments.

Q. Mr. Murray, why are these secondary private market transactions relevant to determining a fair and reasonable ROR for the Elm Hills' rate case?

A. This information demonstrates that real financial transactions involving CSWR's assets prove that these investment opportunities have resulted in returns to investors that are much higher than those that would be considered reasonable under the *Hope* and *Bluefield* standards. The U.S. Supreme Court specifically stated the following in the *Bluefield* decision:

> A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; **but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures.** The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties. A rate of return may be reasonable at one time and become too high or too low by changes affecting opportunities for investment, the money market and business conditions generally. [11] (emphasis added)

Q. Although you have primarily focused on the fact that the overall ROR allowed by the Commission in past CSWR rate cases was more than sufficient to attract capital, how do past allowed ROR's compare to the Staff's and Company's ROR recommendation in this case?

A. Staff and the Company recommend a higher cost of debt (7.5% to 8.0%) than the Commission allowed (6.75%) in the Indian Hills rate case. Staff and the Company recommend an ROE range of (11.5% to 12.0%), which is similar to what the Commission allowed (12.0%) in that case. The Commission's adoption of a 6.75% debt cost in the Indian Hills' rate case was based on Mr. Michael Gorman (OPC's ROR witness in that case) estimate of a junk bond yield. The Commission's adoption of a 12% ROE was based on the Company's ROR witness, Dylan D' Ascendis, base recommendation of 10.35% and an adjustment of 1.65%. This higher allowed ROE was also based on the assumption that Indian Hills had a similar risk profile as to its affiliates, Hillcrest and Raccoon Creek, which as I explained above, has proven not to be as risky as believed at the time those decisions were made.

[11] ***Bluefield Water Works & Improv. Co. v. Pub. Serv. Comm'n of West Virginia,*** 262 U.S. 679, 43 S.Ct. 675, 67 L.Ed. 1176 (1923); ***Fed. Power Comm'n v. Hope Nat. Gas Co.,*** 320 U.S. 591, 64 S.Ct. 281, 88 L.Ed. 333 (1943).

Q. For purposes of the informal small rate case process, what ROR did you recommend?

A. I recommended the use of a hypothetical capital structure consisting of 50% equity and 50% debt. My cost of debt recommendation was based on TDL's cost of debt it raised in 2016 and 2017 to fund its required improvements (4.46% based on information provided in TDL's 2019 Annual Report, but now 4.62% based on updated information) as a proxy. I considered TDL's cost of debt to be a reasonable proxy because it is a system that has had current and past violations with the DNR as it relates to safe drinking water and environmental issues, but was still able to raise reasonably priced debt capital. My ROE recommendation of 7.71% was based on Staff's methodology of applying a 4% risk premium to a recent average yield of bonds with a credit rating similar to that which I estimated would be consistent with Elm Hills on a going-forward basis. I estimated this credit rating to be at least 'BBB'.

Q. Is this your final recommendation for purposes of your testimony in this case?

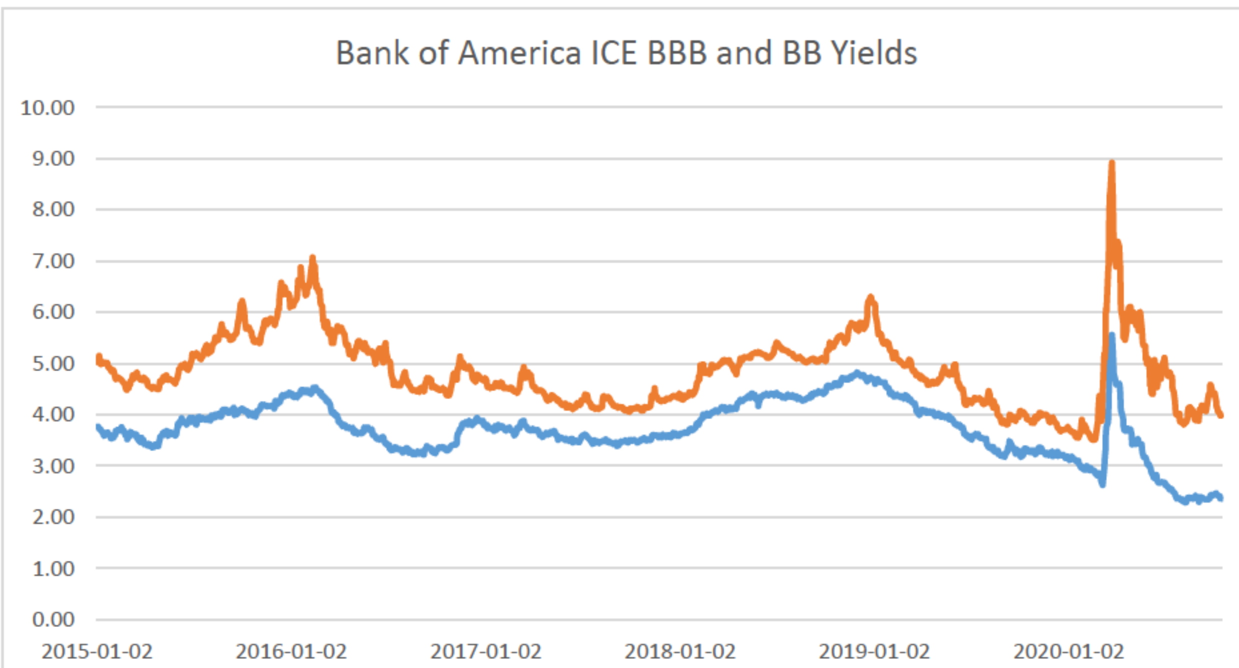
A. No. As the Commission is aware, OPC is attempting to perform discovery of financing activities at the investment level. I may change my recommendation if and when OPC is able to obtain disclosure of such information.

Q. Do you think the Commission would award a 7.71% ROE given the fact that it just awarded Empire a 9.25% ROE in Case No. ER-2019-0374?

A. No. But given the fact that I estimate Elm Hills' credit profile would be consistent with the 'BBB' rating assigned to Empire, I do not consider a 9.25% ROE unreasonable for Elm Hills if the Commission adopts a 50/50 capital structure. Granted, I do recognize that Elm Hills is a small system that doesn't have an identifiable credit profile other than through estimates provided in this case. Therefore, some consideration could be given to consider such. My credit analysis demonstrates CSWR's subsidiaries' financial performance is consistent with an investment grade credit rating, but if one were to give some consideration for the possibility of a weaker investment grade credit rating, then I would suggest half of recent spreads between 'BBB' and 'BB' bond yields to be appropriate, which is approximately 100 basis points. This would suggest a 9.25% to 10.25% allowed ROE for Elm Hills would be reasonable.

Q. Although you provide evidence that demonstrates that the CSWR operating companies have investment grade credit profiles, even if the Commission were to allow for a higher ROR consideration, does the current macro-economic environment support a higher debt cost?

A. No. As can be seen in the below chart, but for the brief dislocation in debt markets during the onset of the pandemic, investment grade and junk bond yields have declined since 2015. BBB bond yields are at all-time lows. Because my analysis of the credit metrics for a hypothetical capital structure of 50% equity and 50% debt demonstrates Elm Hills and its affiliates would have strong credit profiles at this level of leverage, it would be unfair for ratepayers to pay a hypothetical debt cost that is over twice the cost of investment grade debt.



Q. Are you aware of any Missouri Commission decisions on an allowed ROR and capital structure for a smaller utility owned by a private equity fund?

A. Yes. I encourage the Commission to review the circumstances involving Summit Natural Gas of Missouri in Case No. GR-2014-0086. In that case, the Commission decided an allowed ROE of 10.8% was reasonable, but this ROE was accompanied by a cost of debt of 3.21% that SNGMO was able to raise with the support of its equity sponsor, JP Morgan Infrastructure Investment Fund ("IIF").

Q. What did IIF do to allow SNGMO to have a more reasonable cost of capital?

A. IIF provided an equity pledge agreement to support the debt issued by SNGMO. If SNGMO's debt/EBITDA thresholds exceeded levels identified in the loan agreement, IIF agreed to buy down debt through additional equity contributions to SNGMO through Summit Utilities.[12]

Q. Has Sciens met with Staff and OPC since it acquired CSWR and Fresh Start?

A. Yes. Tom Rooney, Chairman-Operating Committee, of Sciens Water Opportunities Fund, met with Staff and OPC on May 2, 2019. At that meeting, Mr. Rooney indicated he had been brought onto the Sciens Capital team specifically to manage its investment in CSWR. Mr. Rooney, along with two other Sciens representatives, serves on Central States Water Company Inc. board of directors (the fourth board member is Josiah Cox). Mr. Rooney indicated that Sciens would be directly and actively involved with the CSWR investments and strategies. Mr. Rooney also indicated that Sciens would be seeking out more cost efficient forms of capital to capitalize the CSWR utilities.

Q. Has Tom Rooney or any representative of Sciens provided OPC and Staff an update on its potential progress in seeking out more efficient forms of capital?

A. No. OPC has not been updated as to Sciens' progress in seeking out more cost efficient forms of capital since this meeting. I attempted to contact Mr. Rooney during this case and

[12] Summit Natural Gas of Missouri, Case No. GR-2014-0086, Rick Lawler Rebuttal, p. 8, ll. 6-12 (Schedule 15).

he did not return my call. In fact, Elm Hills' attorney, Dean Cooper, directed OPC to not attempt to contact Mr. Rooney again. Therefore, at this point, OPC does not know the status of Sciens attempts to raise more cost efficient forms of capital for the CSWR utilities.

SUMMARY AND CONCLUSIONS

Q. Can you summarize your main conclusions and views as it relates to an authorized ROR in this case?

A. Yes. Unfortunately, due to CSWR's owners' lack of disclosure of investment level financial information, I and the Commission cannot determine how CSWR is being capitalized. While Elm Hills claims that all of the investment that has occurred since Sciens acquired CSWR has been in the form of equity capital, this is a function of Sciens ownership structure which allows for capital to be provided to US Water Systems and CSWR by contributing capital as equity infusions regardless of whether this capital is raised from institutional equity investors or through debt. The OPC would not necessarily recommend a capital structure and cost of debt based on this undisclosed information, but the OPC and the Commission should be able to review this information in order to determine if these activities are preventing real and reasonable debt costs to be shared with Elm Hills' ratepayers. Until this full disclosure is required, OPC and the ratepayers it represents are not being treated fairly in the ratemaking process. Considering that the rate of return charged to ratepayers is supposed to be set based on actual costs to the extent they can be determined, in my opinion, cost of service ratemaking demands such disclosure. Ratepayers that are being asked to pay for an increase to the water revenue requirement of 271% and an increase in the sewer revenue requirement of 308%, have a right to know how a Wall Street Firm, such as Sciens Capital, is raising its capital and potentially leveraging its returns to create very high returns on investment. This is especially the case considering the fact that Elm Hills' ratepayers are being asked to pay a debt cost of 7.5% to 8.0% by Staff and the Company. The overwhelming amount of information supports that Elm Hills' ratepayers should not be charged a debt cost any higher than that which is consistent with an investment grade credit rating, which currently yields below 4%. Consequently, Staff and the Company are asking Elm Hills' customers to pay for a hypothetical cost of debt that is over twice as high as a real debt cost that would typically be charged utility ratepayers.

In absence of Sciens being transparent about its financing strategies, I recommend the Commission be conservative in its decision on a fair and reasonable authorized ROR charged to ratepayers. I recommend that the Commission authorize Elm Hills a ROR based on a 50/50 capital structure, a 4.62% cost of debt and a 9.25% ROE (Schedule 16).

Q. Does this conclude your testimony?

A. Yes.