

DOCKET NO. 49154
SOAH DOCKET NO. 473-19-5677.WS

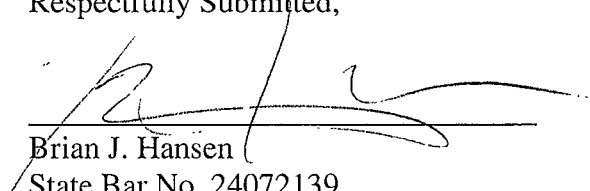
RECEIVED
2020 FEB 10 AM 9:50
PUBLIC UTILITY COMMISSION
FILING CLERK

RATEPAYERS' APPEAL OF THE	§	STATE OFFICE OF
DECISION BY LAGUNA MADRE	§	
WATER DISTRICT TO CHANGE	§	ADMINISTRATIVE HEARINGS
RATES	§	

**LAGUNA MADRE WATER DISTRICT'S RESPONSE TO
COMMISSION STAFF FOURTH SET OF REQUEST FOR INFORMATION
TO LAGUNA MADRE WATER DISTRICT
QUESTION NOS. STAFF 4-1 THROUGH 4-14**

COMES NOW, Laguna Madre Water District, Respondent in the above-referenced matter, and pursuant to the Tex. Admin. Code Ann. § 22.144 (TAC), makes and files this its Responses to Commission Staff's Fourth Set of Request for Information to Laguna Madre Water District, Question Nos. Staff 4-1 through 4-14.

Respectfully Submitted,


Brian J. Hansen
State Bar No. 24072139
Richard W. Fryer
State Bar No. 24085316

Fryer & Hansen, PLLC
1352 West Pecan Boulevard
McAllen, Texas 78501
Telephone: (956) 686-6606
Facsimile: (956) 686-6601
Email: Email@fryerandhansen.com

**ATTORNEYS FOR RESPONDENT
LAGUNA MADRE WATER DISTRICT**

CERTIFICATE OF SERVICE

A true and correct copy of the above and foregoing **Laguna Madre Water District's Responses to Commission Staff's Fourth Set of Request for Information to Laguna Madre Water District, Question Nos. Staff 4-1 Through 4-14** has been served on all parties of record on the 7th day of February, 2020 as follows:

Via U.S. Postal Service:

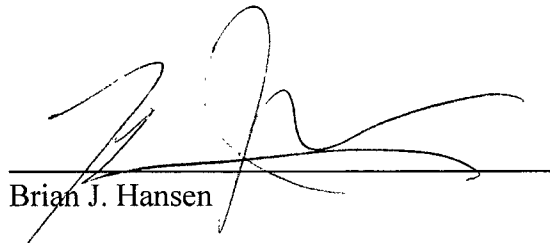
Kourtnee Jinks
Public Utilities Commission of Texas Legal Division
P.O. Box 13326
Austin, Texas 78711-3326
Attorney for Public Utilities Commission of Texas

Via U.S. Postal Service:

Liliana Elizondo
James H. Hunter, Jr.
Royston, Rayzor, Vickery & Williams, LLP
55 Cove Circle
Brownsville, Texas 78521
Attorney for South Padre Island Golf Course

Via U.S. Postal Service:

Stephen Journeay
Public Utilities Commission of Texas
P.O. Box 13326
Austin, Texas 78711-3326
Commission Counsel for Public Utilities Commission



Brian J. Hansen

**SOAH DOCKET NO. 473-19-5677.WS
PUC DOCKET NO. 49154**

**LAGUNA MADRE WATER DISTRICT'S RESPONSES TO
COMMISSION STAFF'S FOURTH SET OF REQUEST FOR INFORMATION
TO LAGUNA MADRE WATER DISTRICT
QUESTION NOS. STAFF 4-1 THROUGH 4-14**

STAFF 4-1. Please provide all workpapers supporting the derivation of the billing determinants used to set the November 2017 and the April 1, 2018 raw water rates, in native Excel format, with all formulas intact. Please include any adjustments made to billing determinates.

RESPONSE: In response to this question, the District attaches electronic versions of several files:

2015 02 27 LMWD Rate Model Alt 1
2015 02 27 LMWD Volume Model
Appendix F – 2019 09 Raw Water Sales Summary DVJ-13
2020 02 03 District Rate Increases

Because of the complexity of these spreadsheets, further analysis and explanation is necessary.

November 2017 and April 2018 Raw Water Rate Changes

The District's rate history is included in the file *2020 02 03 District Rate Increases*. The District's rate for raw water was set in 2000 at \$0.43/1,000 gallons and was unchanged for the 15-year period 2000 -- 2015.

In October 2015 the District set its rate at \$0.60, which was rounded from the rate recommended in the 2014 Water and Wastewater Rate Study. The raw water rate calculation is contained in the spreadsheet Forecast W8 in the workbook *2015 02 27 LMWD Rate Model Alt 1*.

In December 2015, resulting from a specific agreement with IBC, the then owner of the golf course, the District increased the rate to \$0.80. This rate was also derived from the total forecast in the rate study. However, it is important to note that both parties voluntarily agreed to this rate as fair, just and reasonable.

In November 2017 the District reached another agreement with IBC, reducing the rate to \$0.55, a 31% reduction. When this agreement expired in April 2018, the District's rate returned to the previously agreed-to \$0.80.

SPI Golf Course seeks to focus the Commission's attention only on the rate increases of 2017 and 2018. However, like many decisions made by an individual or business, it is important to evaluate these increases in the proper context. First, the District's November 2017 action reduced the raw water rate by 31%. The action of April 2018 merely returned the rate to what had been specifically accepted and agreed to by the prior owner of the golf course.

Further, it is highly unusual for a utility to not increase a rate for 15 years, but that is indeed the benefit SPI Golf's predecessor received from the District. During this period, 2000 – 2015, when the raw water rate was unchanged, the District increased its retail rate for its residential (5/8") customers by approximately 55-60%. For the period 2000 to 2018, the District increased its retail rate by 71-77%.

To show further evidence of the favorable rate treatment received by raw water customers from the District, during the same period raw water rates did not change at all, average water rates across the nation were increasing at rates significantly exceeding inflation. Such publications as *Water and Wastewater Rate Hikes Outpace CPI* (May 2016 – Lawrence Berkeley National Laboratory) and Black and Veatch's *2012-2013 Rate Survey* estimate a 5.6% annual increase in water bills for the 2001 – 2013 period. Documentation from these studies is contained within this RFI response. Extrapolating the 5.6% annual increase over the period 2000 – 2018 means that the average water bill in the USA has increased by 126% from 2000 to 2018. Applying the national average increase to the District's raw water rate would result in an increase from \$0.43 in 2000 to \$1.15 in 2018.

SPI studiously ignores the incredibly favorable treatment its predecessor received, with no rate increase at all for 15 years, and seeks only to complain about the recent rate increases, which still leave the magnitude of its increases below the national average.

The District has never sought to base its wholesale rate for raw water either on its own retail rate, national averages or the rates charged by other utilities. Mr. Jackson's prefiled testimony outlined the myriad issues involved with making such a comparison. The District seeks only to recover its own unique and significant cost of service for its complex 26-mile raw water conveyance system.

Ironically, it is SPI that has led us down this path through the testimony of Mr. Bradford, in both his criticisms of the District's rate increases and his comparison to other utilities. Many of these comparisons are inapplicable because the utilities are located next to or near the Rio Grande, and did not have to construct a \$15 million 26-mile raw water transportation system. And Mr. Bradford has never provided any evidence that the rates

charged by these other utilities actually reflect those utilities' cost of service, or if the utilities gave their raw water customers the same deal that SPI's predecessor got, a below cost rate for 15 years. Regardless, if the Commission chooses to set rates based on the actions and policies of other utilities, then it is appropriate to note that SPI golf's predecessor enjoyed no increases for 15 years, and during the same time national water rates increased 126% and the District increased its retail rates by 55-60%.

It is also notable that SPI's expert recommends a rate of \$0.40 per 1,000, which is actually lower than the \$0.43 rate their predecessor agreed was fair and reasonable in 2000.

Workpapers Supporting Billing Determinates

In response to this question, the District attaches electronic versions of several files:

2015 02 27 LMWD Rate Model Alt 1

This is the summary rate model prepared for the 2014 rate study. Volumes are shown on the following spreadsheets: *Volume Input* and *Forecast W8*.

2015 02 27 LMWD Volume Model

This model was prepared by Willdan/Economists.com from District billing records during the 2014 Rate Study. It shows raw water usage by year for the period 2010 – 2014. The date is listed in the spreadsheet *WTP Flows*. Remember, this is all the raw water transported by the District, not just the raw water sold to the golf course.

Appendix F – 2019 09 Raw Water Sales Summary DVJ-13

This spreadsheet shows all specific raw water sales for the period 1999-2019. It does not show all raw water transported and converted to treated water for retail use.

STAFF 4-2 How many raw water customers did the Laguna Madre Water District have during the test year used to set the November 2017 raw water rate, and the April 1, 2018 raw water rate?

RESPONSE: At the time the District's November 2017 and April 2018 raw water rates were set, the District had the following raw water customers:

Touchstone Golf/SPI Golf
City of Port Isabel

A new customer, Espiritu Santu, began purchasing water from the District in 2019.

STAFF 4-3 Please provide the test-year usage in gallons for the raw water class for the test year used to set the November 2017 and the April 1, 2018 raw water rates.

RESPONSE: This data is found in the spreadsheets provided in response to Staff 4-1, including:

2015 02 27 LMWD Volume Model
2015 02 27 LMWD Rate Model Alt 1

2015 02 27 LMWD Volume Model

This model was prepared by Willdan/Economists.com from District billing records for the 2014 rate study. It shows raw water usage by year for the period 2010 – 2014. The date is listed in the spreadsheet WTP Flows. Remember, this is all the raw water transported by the District.

For the 12-month period up to the completion of the 2014 rate study, the total gallons of raw water transported was as follows:

WTP #1 – 495,378,000
WTP #2 – 1,106,996,000
Total -- 1,602,374,000

2015 02 27 LMWD Rate Model Alt 1

The total of 1,602,374,000 gallons was the baseline for which raw water rates were forecast. This total was increased by the assumed water percentage increase each year (less than 1.0%). The calculations are presented on the spreadsheet labelled *Forecast W8*.

STAFF 4-4 Please provide SPI Golf Homeowners JV, Inc.’s test-year usage in gallons for the test year used to set the November 2017 and the April 1, 2018 raw water rates.

RESPONSE: This is found in the spreadsheet labeled:

Appendix F – 2019 09 Raw Water Sales Summary DVJ-13

It shows consumption and billings by month for all raw water specific customers for all years from 1996 to 2019.

STAFF 4-5 Does the Laguna Madre Water District have a reclaimed water system?

RESPONSE: Yes.

STAFF 4-6 If the answer to Staff 4-5 is yes, please provide all costs related to the reclaimed water system that have been directly assigned or allocated to the Supply/Transmission function. Please provide all workpapers supporting your response in native excel format with all formulas intact.

RESPONSE: Respondent LMWD will supplement its response to this request.

STAFF 4-7 Please refer to Laguna Madre Water District's response to Staff 2-4. Provide all workpapers supporting your response to the following questions in native Excel format, with all formulas intact:

- a) How many employees in the District's Water Plant Department perform raw water-related functions?
- b) What percentage of employees in the District's Water Plant Department perform raw water-related functions?
- c) For all the employees in the District's Water Plant Department that perform raw water-related functions, please estimate the proportion of time dedicated to raw water-related functions as opposed to all other functions.

RESPONSE: a) The District has 12-13 FTEs in its Water Plant Department. The total FTEs oscillates between 12.0 and 13.0. In 2018 the total was 12.0 FTEs, and the total may (through attrition or management decision) return to 12.0 FTEs in the future. All employees, including the water plant manager, take turns performing raw water-related tasks. LMWD is a small district, and all employees participate in the various tasks and responsibilities of the water plant department.

- b) 100% of water plant employees participate in water plant related activities.
- c) In its answer to Staff 2-4, the District presented a list of 6 specific tasks that are devoted to raw water related functions in maintaining the 26-mile conveyance system. To respond to this new 4th RFI, District senior staff, including Mr. Carlos Galvan, Mr. Robert Gomez, Mr. Charles Ortiz, and Mr. Eddie Salazar, met with Mr. Dan V. Jackson to go over the District's responses more thoroughly. The result is the following spreadsheet:

2020 01 28 Staff Raw Water Time Estimates

This spreadsheet presents the hours estimated and the number of personnel required for each of the 6 tasks outlined by the District. This spreadsheet is the result of several hours of effort and analysis by District senior management, and this spreadsheet is intended to clarify any confusion resulting from the depositions taken over the past few months. The senior staff listed above all reviewed and agree with the assumptions contained in this spreadsheet, and consider it to be the official position of the District.

The spreadsheet reveals that the District estimates that on an annual basis there is a total of 6,669 hours from Water Plant personnel devoted to raw water-related functions. Assuming 13.0 total FTEs, this is 25.7% of total hours. Assuming 12.0 FTEs, this total is 27.8% of total hours.

The District considers this to be a very conservative estimate of hours and effort. Travel times may be longer at certain times, particularly during spring break and the summer months when tourists flood the roads and traffic along Highway 48 and Highway 100 is frequently snarled. Unexpected and unforeseen tasks pop up frequently. Responsibilities such as ensuring there are sufficient tools, general training and education, servicing the vehicles used by personnel to travel to the pump stations, and weather delays are not even factored into this calculation.

SPI Analysis

In their *Response to LMWD's Objections to and Motion to Exclude Testimony of SPI Golf Course's Expert*, SPI raises the issue of the District's use of a general allocation factor, and of the District's specific use of 25% to allocate Water Plant costs to Raw Water. Their objections are without basis, for many reasons. Each of these topics will be addressed in turn.

The Use of General Allocation Factors

The use of general allocation factors for utility cost functionalization is common and accepted practice, not only in the development of cost of service rate studies, but in many different categories of financial analysis. Mr. Jackson, who has 35 years' experience preparing rate and cost of service studies for utilities all over the world, is not aware of a single rate study prepared either by his company or his competitors, that has not employed some form of general allocation factors to assign and functionalize department costs. While it is true that on occasion certain costs within a department are directly allocated, his experience is that this is much more the exception than the rule.

According to SPI, “Jackson’s attempt to justify a blanket allocation of 25% of 64 line items within the 01-Water Plant and 03-Distribution accounts defies logic and generally accepted accounting principles (p.6).” This is a statement of opinion, not fact, and further, it is manifestly not true. All of the major consulting firms, including Raftelis, NewGen, Black and Veatch, and Willdan, routinely employ general allocation methodologies to assign and functionalize costs in their cost of service studies. This methodology is employed by and endorsed in the *AWWA Manual M-1*, the definitive source of cost of service analysis and ratemaking methodology.

Further, SPI’s implication that a direct allocation of costs would be easy because there are “64” accounts in the Water Plant Department is disingenuous. If the District were to directly allocate raw water costs, then it would have to do so for all its functions, and for both the water and wastewater utility. The District’s budget currently has over 420 active accounts (with hundreds more inactive and blank), with more being added every year. The time, effort and cost required to maintain a direct allocation system would be extraordinary and would drain the resources of any utility, not to mention a small utility like the District. This is precisely why utilities all over the USA and the world use general allocation methodologies.

To cite just one of literally thousands of potential examples, Brownsville Public Utilities Board (BPUB), who employed SPI’s own expert, employs a policy for allocating all of its costs for non-personnel general and administration using the general allocation factors of 60% to its electric utility, 20% to its water utility and 20% to its wastewater utility. It further allocates all of its customer service costs 33% to each utility. Confirmation of this practice can be found on page 14 of BPUB’s most recent rate study, prepared by Black and Veatch, a copy of which is provided. BPUB has employed this general cost allocation methodology at least since the early 2000s, when Mr. Bradford was serving as its Chairman.

It makes perfect sense for BPUB to employ general allocation factors. Its budget contains almost 2,000 line items, so attempting to directly allocate every line item to each utility (not to mention allocating again to service functions) would require weeks of effort and thousands of subjective decisions. That is simply not a level of effort that is reasonable for any utility staff or employee/contractor, nor would it be prudent for ratepayers to fund such an effort. It is not surprising that Mr. Bradford does not acknowledge or endorse this common practice, since he has never been hired to prepare a single utility cost of service study. However, it is curious that he disputes a policy and practice employed by the very utility he used to oversee. Every complaint SPI makes about the inappropriateness of the District using general allocation factors can be equally applied to BPUB, yet this is precisely what BPUB did under Mr. Bradford’s leadership.

The District’s Use of 25% as a General Allocation of Raw Water Costs

The District chose the rounded total of 25% as a general allocation factor to allocate operating costs between its raw water and treatment functions. As outlined in the District's response to Staff 2-4, the District provides several justifications and support for this 25% allocation factor, including:

- 1) The duties, responsibilities and professional expertise of District staff regarding the raw water line result in approximately 25% of FTEs attributable to raw water.
- 2) The percentage of water plant and distribution asset values devoted to the raw water line are approximately 25%.
- 3) The percentage of inch-miles of the raw water line to the entire transportation and distribution system exceed 25%.
- 4) Raw-Water Related Electricity expenses, a key component of operating costs, are approximately 25% of total Electricity expenses.

In its *Response to LMWD's Objections*, SPI employs a series of mischaracterizations, a disturbing lack of awareness of ratemaking policies, and outright falsehoods about the District's numbers in an attempt to cast doubt on the District's use of a 25% general allocation factor. Let us examine each.

First, SPI's numbers mischaracterize the District's analysis and bear no resemblance to reality. They claim that LMWD expert Dan V. Jackson asserted that 25% of the District's 32 (?) employees (8) work full time attending to raw water (*Response to LMWD's Objections*, p. 6). This number 8 is false, and the assertion that there are 32 employees in Dept 01 and 03 is also false (the true number of FTEs is 21). There is nowhere in Mr. Jackson's testimony or in any responses that where he makes anything that even remotely resembles the assertion that 8 full time employees work on raw water line maintenance. This number is simply made up by SPI and should be disregarded. And the fact that SPI would make such a brazenly false statement about Mr. Jackson's analysis should cast serious doubt over the credibility of any other statements or analysis presented by SPI or its expert.

Then, SPI complains that LMWD's accounting does not segregate costs between treated water and raw water (p.5). The District agrees, which is why the District has been using Mr. Jackson for 30 years to prepare cost of service studies that segregate these costs!

Then, SPI argues that the use of asset values as a basis for general cost allocation factors is improper (*Response to LMWD's Objections*, p. 7). That is a curious position to take, since SPI's expert's former employer, Brownsville PUB, used the asset values of its electric, water and wastewater utilities as one of the justifications for developing its 60-20-20 cost allocation methodology referenced above. The use of asset values as a basis for operating cost allocation is common practice in utility ratemaking, and is endorsed in the *AWWA*

Manual M-1, page 303. A copy of the relevant pages of the *Manual M-1* is contained in this response. Mr. Bradford's only response is an assertion with no supporting evidence that this practice is somehow against generally accepted accounting principles. If that is the case, a lot of utilities and the American Water Works Association are violating generally accepted accounting principles on a routine basis.

Then, SPI claims that Mr. Jackson's use of inch-miles to support his cost allocation "defies logic". Perhaps they should tell that to the American Water Works Association's Rates and Charges Committee, who developed the *Manual M-1*, the definitive guide to water utility ratemaking. Page 303 of the *Manual M-1* states as follows:

"the proportionate shares of diameter-weighted lengths of pipelines may be used to estimate (and allocate costs to customer classes) the capital and O&M costs associated with the transmission main system."

Mr. Jackson has repeatedly provided backup and support from the industry's official ratemaking manual and scholarly publications for his assumptions and analysis, including the use of inch-miles to support general allocation factors. Mr. Bradford's only response is to proclaim that Mr. Jackson's analysis "defies logic" or is not in accordance with GAAP, while not providing any supporting evidence other than his opinion.

Then, SPI criticizes Mr. Jackson for showing that electric costs at the raw water pump stations are 23.2% of total water plant electricity costs. Here SPI misses the entire point of Mr. Jackson's example, which is meant to show that for such critical expenses as electricity, the use of a general allocation factor results in a total cost that is equivalent to that which would have been developed through the much more exhaustive and expensive effort of direct cost allocation.

Then SPI repeats the debunked figure that Mr. Jackson allocated 25% of **all** administration costs to raw water costs. The District will charitably assume that SPI's expert lacks a fundamental understanding of how Mr. Jackson's rate model works. Regardless, continually repeating a false number does not make that number true. Just to clarify, Mr. Jackson's rate model shows \$723,908 of water related administration costs in FY 2018 (Test Year W1) and \$602,986 of wastewater related administration costs (Test Year WW1). This is a total of \$1,326,894. Table DVJ-12 shows total administration costs of \$131,788 allocated to all raw water (not just the raw water purchased by SPI). This is 9.9% of the total, or \$0.08 per 1,000 gallons. The 25% number quoted by SPI is a complete fabrication, and should cast serious doubt on the credibility all of SPI's analysis and assertions.

Additionally, this administration total does NOT include separate customer billing costs of

\$495,242, none of which are allocated by the District to raw water. The District has continually sought to be fair and reasonable in its calculations of raw water costs, and its reward is to have its remaining numbers distorted and fabricated.

A final note -- this administration total at this time also does not include any of the approximately \$60,000 in legal and consulting fees the District has expended defending its raw water rate. It is standard ratemaking practice for utilities to directly allocate all rate case costs to the customer classes that compel these expenditures. This District has not done this, once again to the benefit of SPI.

Deposition Testimony

In its efforts to discredit Mr. Jackson, SPI points to deposition testimony from the District's General Manager and Director of Operations that claim that they never spoke with him about raw water allocation factors. Mr. Galvan acknowledges that he did discuss raw water with Mr. Jackson on several occasions, most notably August 29 2014, and that during this meeting they agreed on an allocation methodology using 25%.

The fact is that Mr. Jackson and Mr. Galvan have known each other for 30 years. They have had literally hundreds of conversations about many different matters relating to District operations. It is quite easy to understand how, under the stress of a deposition, he would not recall a specific conversation about a matter pertaining to less than 1% of the District's revenues that occurred 6 years earlier. In fact, Mr. Jackson himself did not recall the specific conversation until he located his meeting notes in an effort to respond to this round of Discovery. Likewise, Mr. Jackson has had dozens of conversations with Mr. Ortiz, Mr. Salazar and Mr. Gomez about a variety of topics. Raw water occasionally came up but it was never a prominent focus of either the 2014 or 2018 rate study.

To summarize, the use of a general allocation factor, in this case 25% of water plant and distribution costs, is reasonable, prudent, consistent with the opinions of District senior staff, and in line with ratemaking policy and practice. It is easy to understand and administer, and allows analysts, administrators and regulators to understand instantaneously the amount of cost being assigned to each function. It allows changes in policy to be quickly and easily implemented. The District acknowledges that one of the criticisms of this practice is that it might result in certain specific line items being overallocated to a function, but as long as the factor is reasonable, any overallocations would be offset by underallocations to other functions, resulting in an overall just and reasonable cost of service.

STAFF 4-8 Please refer to Laguna Madre Water District's response to Staff 2-4. Provide all workpapers supporting your response to the following questions in native Excel format, with all formulas intact:

- a) How many employees in the District's Water Distribution Department perform raw water-related functions?
- b) What percentage of employees in the District's Water Distribution Department perform raw water-related functions?
- c) For all employees in the District's Water Distribution Department that perform raw water-related functions, please estimate the proportion of time dedicated to raw water-related functions as opposed to all other functions.

RESPONSE:

- a) The District has 8 FTEs in its Water Distribution Department. In 2019 it added 5 employees on a temporary basis to complete a meter change out project; these employees will be let go at the conclusion of the project. When leaks or other emergencies affect the raw water line, every employee in the department assists in repair of that leak.
- b) 100% of water distribution employees participate in raw water related activities when it comes to servicing and fixing leaks.
- c) In its answer to Staff 2-4, the District detailed the nature of the water distribution department's assistance in raw water line maintenance. There are a total of 8 FTEs in the Water Distribution department. When a leak is discovered, virtually all distribution department employees cease other responsibilities and join water plant employees in devoting all resources to fixing the leak. This is because transmission line leaks risk crippling the District's entire system, and so any leak, no matter how small it may initially seem, is treated with the utmost gravity by District staff. It is important to note that for any given leak, District staff does not know what the level of effort will be until the line is uncovered. District staff estimates that there have been over 10 major leaks in the last several years, each of which will take several days of staff and senior personnel time. This number is difficult to definitively substantiate because the District does not keep precise records of leaks specific to the transmission line. Some District staff have estimated the number of leaks over the last decade as many as 15-20.

Also, in addition to the physical responsibility of fixing the leak, there must be permits obtained, the coordination of several personnel to fix the problem, the gathering of equipment and material needed to service the line, etc. The District's General Manager and Senior Staff often coordinate and participate in leak responses. Nowhere in this analysis is their time or effort recorded or added to these totals. Once again SPI benefits from generous assumptions made by District staff.

Additionally, the water distribution department supervisor personally contributes to monitoring the portion of the raw water line known as the “pipeline from Hell”. He drives this route at least once a week.

The District has produced a spreadsheet that estimates the time devoted by Distribution Department staff for raw water line maintenance and repair. The spreadsheet is:

2020 01 28 Staff Raw Water Time Estimates

This spreadsheet estimates a total of 928 hours, or 5.8% of the total hours in this department.

It must be kept in mind that the timing, seriousness, magnitude and effort associated with a given leak is extraordinarily difficult to predict or calculate. Leaks occur at random times, in random locations. But the District maintains a policy of “all hands on deck” when such a leak occurs.

In this sense, regarding the raw water line, Distribution Department staff should be considered to have a role similar to that of firemen or emergency workers. They are there when needed, in the hope that they are never needed. But the cost of an emergency worker is not just the cost of that worker on site, it is the infrastructure, training, routine upkeep and other costs that support that worker.

For this reason, the District argues that a 25% allocation factor remains appropriate for distribution department costs. The responsibilities of distribution employees are primarily reactive, not proactive, to fix leaks, solve problems and be on hand whenever there is a problem anywhere in the entire system. Workers must be available 24-7, on weekends and holidays, in case there is a problem with the raw water line that requires instantaneous response. Therefore the most appropriate cost allocation is that of the inch miles of the system.

As shown in the District’s response to Staff 2-6, the raw water line represents 38.7% of the total inch miles of the transmission and distribution system. The AWWA *Manual M-1* allows allocation of operating costs based on inch miles, as addressed in Response to Staff 4-7. The AWWA Manual does note that the diameter of the mains may not always have a direct relationship to cost, as smaller mains may be older, more depreciated and more costly to operate. Therefore, even though raw water inch miles are 38.7% of the total, the District considers it reasonable to allocate a percentage less than that, or 25%, of distribution costs to raw water. As the District has painstakingly described, there are several separate justifications for this 25%

general allocation factor.

The cost of retaining an EMS or fire department function is not just the cost of fighting the fire – it is the cost of having the infrastructure and personnel available when the fire occurs. Without these personnel being ready and being able to instantaneously respond to leaks, the District would literally not be able to function, and the golf course would not be able to receive raw water transported 26 miles through the District's complex transmission system.

If Water Distribution – 03 costs are allocated to the raw water line based only on the actual time personnel spend fixing a leak, then it means that any and all time not specifically devoted to the leak should be borne by the District's retail customers. This includes all the infrastructure, training, availability, upkeep, rental and other costs associated with maintaining the readiness of a distribution department. The raw water customers benefit from the skills, expertise, resources and availability of the distribution department; it is not too much to ask them to pay their fair share of these costs.

STAFF 4-9 Please refer to Laguna Madre Water District's response to Staff 2-6.

- a) Besides potassium permanganate, what other chemicals does the District use in the provision of raw water service?
- b) For all chemicals used in the provision of raw water service, please provide the test year value included in the cost of service used to set the November 2017 raw water rate, and the April 1, 2018 raw water rate.
- c) For all chemicals used in the provision of raw water service, what percentage of the test year value included in the cost of service used to set the November 2017 raw water rate, and the April 1, 2018 raw water rate, was used in the provision of raw water service?

RESPONSE:

- a) The District is aware of no chemicals other than potassium permanganate that was used in the provision of raw water service.
- b) The District estimates that the District expensed \$15,000 in potassium permanganate costs in FY 2018, the year of the November 2017 and April 2018 raw water rate adjustments.
- c) The District's budget as shown on the Operating Input page shows \$390,000 in total chemicals costs for FY 2018. Therefore potassium permanganate is approximately 3.85% of total chemicals.

NOTE: the District advises against using a direct allocation approach to assign chemicals costs to raw water. The purpose of a general allocation factor, in this case 25% of water plant and distribution costs, is that it is reasonable, prudent, consistent with the opinions of District senior staff, and in line with ratemaking policy and practice. It is easy to understand and administer, and allows analysts, administrators and regulators to understand instantaneously the amount of cost being assigned to each function. It allows changes in policy to be quickly and easily implemented. And while it may result in specific line items being overallocated to a function, but as long as the general factor is reasonable, any overallocations would be offset by underallocations to other functions, resulting in an overall just and reasonable cost of service.

If a direct factor that benefits SPI golf is substituted for one of the line items, then fairness requires that all line items be reviewed and that those costs that are greater than 25% to raw water be allocated accordingly. In other words, the integrity of the general allocation system is undermined when specific line items that benefit SPI are directly allocated. Again, if chemicals are determined to be overallocated and adjusted downwards, fairness dictates that all line items be reviewed to determine which costs are underallocated and must be adjusted upwards.

For example, the District's response to Staff 4-7 showed that the proper allocation of personnel costs should be 27.8% in 2018, not 25.0% (there were 12.0 FTEs in 2018). So if chemicals costs are reduced, at a minimum personnel costs should be increased to reflect this 27.8% factor.

The District strongly advises against travelling down this slippery slope. The District has shown that the 25% general allocation factor is reasonable, even conservative, and should be applied across the board to all operating expenses. It also avoids the functional equivalent of counting paper clips and the staff paralysis that results from attempting to directly allocate every penny of cost.

STAFF 4-10 Please refer to the spreadsheet entitled "Fixed Assets Raw Water" in the model titled *2020 01 02 LMWD Rate Model Staff RFI*. Please provide all workpapers supporting your response to the following questions in native excel format with all formulas intact:

- a) Please list all water plants for which a portion or all costs have been included in raw water.
- b) For each plant listed in response to a), provide all the costs assigned to raw water.
- c) For each plant listed in response to a), indicate the proportion of costs assigned to raw water.
- d) For each plant listed in response to a), please explain the function it performs.

RESPONSE: The District presents the following updated spreadsheet to answer this question:
2020 03 03 LMWD Rate Model RFI 4.

This spreadsheet identifies all assets used and useful to the calculation of depreciation expense, and provides an explanation of the function it performs. The percent of the asset included in raw water is also presented. All descriptions are contained in the spreadsheet *Fixed Assets Alloc Detail*.

The District notes the following about this spreadsheet:

- 1) Assets used and useful to Raw Water Transmission are primarily located in Department 1 – Water Treatment Plant and Department 3 – Distribution.
- 2) All line and pump station assets identified as related to raw water are allocated 100% to raw water.
- 3) Upon further review and consultation with District staff, the District agrees to remove certain assets from Raw Water. For many assets, some limited percentage can be logically assumed to be allocable to raw water. However, the District seeks to avoid the time, expense and tedious nature of arguing over specific line items.
- 4) Therefore, the District agrees to remove all non-line assets from Departments 4 and above. Trucks and property assets are removed.
- 5) However, certain transmission lines in departments 4, 7, 8 and 34 are confirmed to be raw water line assets. They have been improperly assigned to these departments, and should be reassigned to department 1. This does not materially impact the District's financial statements, and will not impact the calculation of the raw water rate. However the District will take steps to reassign these assets to improve its accounting system. Given that there are approximately 1,200 asset line items, and each requires entry of a complex series of account codes, it is inevitable that some would be improperly assigned to the incorrect department. These line items are specifically identified in the *Fixed Assets Alloc Detail* spreadsheet.
- 6) The District did discover in its subsequent review that one line item had been left out of the raw water depreciation calculation. District staff had initially assumed that was a duplicate entry; it was later confirmed that this was not a duplicate. It is a transmission line on row 35 connecting the Cuatas pump station to WTP #2 and it is now included in the asset total.

- 7) Row 1138, Beach Blvd. Line in Laguna Vista was miscoded as 100% to raw water in November 2019. That has been corrected to 0%.

Since the beginning of this litigation, the District and SPI have spent tens of thousands of dollars in litigation expenses, as well as countless hours of District staff time. There have been briefings, filings, prefiled testimony, depositions, dozens of RFI questions, etc. As just one example, a series of experts have had to examine 1,200 asset line items. The sum total of this exercise is to reduce depreciation from \$622,707 as calculated in November 2019 to \$492,729. This reduces the calculated rate from \$1.22 in FY 2018 to \$1.15 in 2019. This is \$0.07 per 1,000 gallons.

And furthermore, the revised total of \$1.15 remains above the rate of \$1.04 requested by the District.

STAFF 4-11 Please refer to the District's response to Staff 2-5. Please indicate what line item was "improperly assigned to raw water" and provide the total value associated with this line item.

RESPONSE: This pertains to Row 1138 on the spreadsheet labelled *Fixed Assets Alloc Detail* in the workbook *2020 02 03 LMWD Rate Model RFI 4*. It is for a Beach Blvd. Line. It was miscoded at 100% instead of 0%. Correcting this miscode reduces annual depreciation by \$8,215. The overall impact on the raw water rate is less than \$0.01 per 1,000 gallons.

STAFF 4-12 Please refer to District's response to Staff 2-5. Please provide the rationale for the direct assignment of each vehicles that was directly assigned to raw water.

RESPONSE: All vehicles in Department 01 and Department 03 are assigned 25% to raw water, in keeping with the District's employment of the 25% allocation factor. All vehicles outside of Department 01 and 03 have been removed entirely from the raw water calculation.

The District seeks only to have a fair, just and reasonable rate for raw water service established. The District also seeks to be as conservative as appropriate in its analysis. While it is arguable that some portion of the excluded vehicles may be used and useful to the provision of raw water service, the District agrees to remove all such costs, a decision that benefits SPI and other raw water customers.

STAFF 4-13 Please refer to the spreadsheet entitled "*Forecast 8*" in the model titled *2020 01 02 LMWD Rate Model Staff RFI*. Explain how the Line Replacement Fund amount assigned to raw water was calculated. Please provide all workpapers supporting your response to a) in native Excel format with all formulas intact.

RESPONSE: See Response to Staff 4-14.

STAFF 4-14 Please refer to the spreadsheet entitled “*Forecast 8*” in the model titled *2020 01 02 LMWD Rate Model Staff RFI*. Please provide all workpapers supporting your response to the following questions in native Excel format with all formulas intact:

- a) Please explain how the \$12,375,000 of original water line costs in cell F37 and the \$990,000 accumulated depreciation in cell F38 were calculated.
- b) Please explain how the \$12,375,000 of original water line costs and the \$990,000 of accumulated depreciation referenced above tie in with the raw water fixed costs and accumulated depreciation amounts listed in columns AC and AD in the spreadsheet titled “Fixed Assets Raw Water.”

RESPONSE: The District chooses to answer both of these questions together, because they reference the same spreadsheet calculations. This response references the following spreadsheets in the workbook *2020 02 03 LMWD Rate Model RFI 4*:

Forecast W8
Table DVJ-9
Fixed Assets
Asset Reconciliation

As Mr. Jackson outlined in his prefiled testimony, during the 2014 and 2018 rate studies, he used a series of assumptions to estimate the Raw Water Line Replacement Cost and Depreciation costs related to Raw Water. When compared to a more detailed, time consuming and expensive analysis, it turns out that Mr. Jackson’s initial assumptions in the rate studies were highly beneficial to SPI, and resulted in a lower rate to SPI than what the District is entitled to under ratemaking guidelines.

Proceeding through the spreadsheet labelled *Asset Reconciliation* as follows:

Line 1 –In the 2018 rate study, Mr. Jackson estimated \$12,375,000 in total assets. He started with the original bond amount for the line in 1988 which was \$8,250,000. He grossed this total up by 50% on the assumption that the Cuatas Improvement project and other projects having been undertaken since 1988 added 50% to the cost of the line. Once again this was based on Mr. Jackson’s general knowledge of the system and conversations with District personnel.

Because of this extensive and expensive litigation, which has cost the District more than the entire cost of the 2018 rate study, District senior staff and Mr. Jackson were authorized to review all 1,200 asset line items. The result of this showed that the actual total assets devoted to raw water is \$15,433,960.

Line 2 and 3 -- Mr. Jackson estimated accumulated depreciation based on a simple assumption that all raw water line costs had a 50 year lifespan. Further review undertaken as a result of this litigation revealed that several components of the raw water line, most notably the Cuatas improvement project, had a depreciable lifespan of less than 50 years (using depreciable lifespans reviewed and approved by the District's auditors). This meant that actual depreciation is higher than what was estimated in the 2014 and 2018 rate studies. Therefore Net assets as calculated in Forecast 8 were calculated to be \$11,385,000, but were \$9,799,311 in Mr. Jackson's November 2019 testimony.

Lines 4-13 – There are many components of rate base that are allowable under ratemaking methodology as described in the AWWA *Manual M-1* that were not included in Mr. Jackson's calculation of rate base in the 2014 and the 2018 rate studies. This includes Water Rights, Working Capital, and Inventories/Prepays. Despite SPI witness Bradford's claim without evidence that these expenses are not in accordance with Generally Accepted Accounting Standards, they are clearly allowed in the *Manual M-1*. In fact, with regards to Water Rights, it is remarkable to the District that SPI would make the argument that water rights should not be included in rate base. This means that although the District has to pay as much as \$3,000 an acre foot to acquire water rights, the Golf Course should be entitled to use these water rights at no cost whatsoever to them. In other words, SPI apparently believes that the families who reside in Port Isabel, Laguna Vista and other parts of the District should pay for the water rights SPI uses to maintain their golf course. The District asserts that since SPI uses a portion of the District's water rights, SPI should pay their fair share for them.

It was highly beneficial to SPI for the District to not initially include these assets in rate base in the 2014 and 2018 rate studies. In Forecast W8, total rate base is calculated to be \$11,385,000. However, when all components of rate base allowable under ratemaking standards are properly included, it results in a rate base of \$12,610,665. In other words, this expensive and time consuming litigation has resulted in a rate base that is 11% higher than what was estimated in the rate study.

Line 14 – These totals are calculated simply by multiplying rate base by 6.0%.

Line 15 – In Forecast W8, Mr. Jackson attempted to calculate a depreciation cost by grossing up the total line cost by an inflation factor of 3.0% per year for the 4 year period 2014 – 2018. Once again, it was a general estimate used to justify a revenue source that was less than 1% of the District's total revenues. Mr. Jackson also assumed in Forecast 8 that all assets in the raw water line had a 50 year depreciable lifespan. In reality, as has repeatedly been shown, many of the line assets have depreciable lifespans of less than 50 years. This means that while depreciation is estimated in Forecast 8 as \$278,563, in reality the total is \$492,729.

In summary, Mr. Jackson's approach in the 2018 rate study was to develop a series of broad estimates for the components of the utility basis calculation that SPI's predecessor agreed was an appropriate methodology to use to calculate the raw water rate per 1,000 gallons. Because of this litigation, the District has been compelled to spend tens of thousands of dollars conducting a detailed examination of these same factors. The detailed analysis is far beyond what would have been reasonable and appropriate for a rate that represents less than 1% of the District's total revenues.

Nonetheless, the results of this analysis clearly reveal that the broad estimates used by Mr. Jackson in Forecast W8 were beneficial to SPI, as it resulted in a lower rate base, a lower return on investment, and a lower depreciation expense than what the District was actually entitled to.

CD ATTACHED

TO VIEW PLEASE CONTACT
CENTRAL RECORDS
512-936-7180