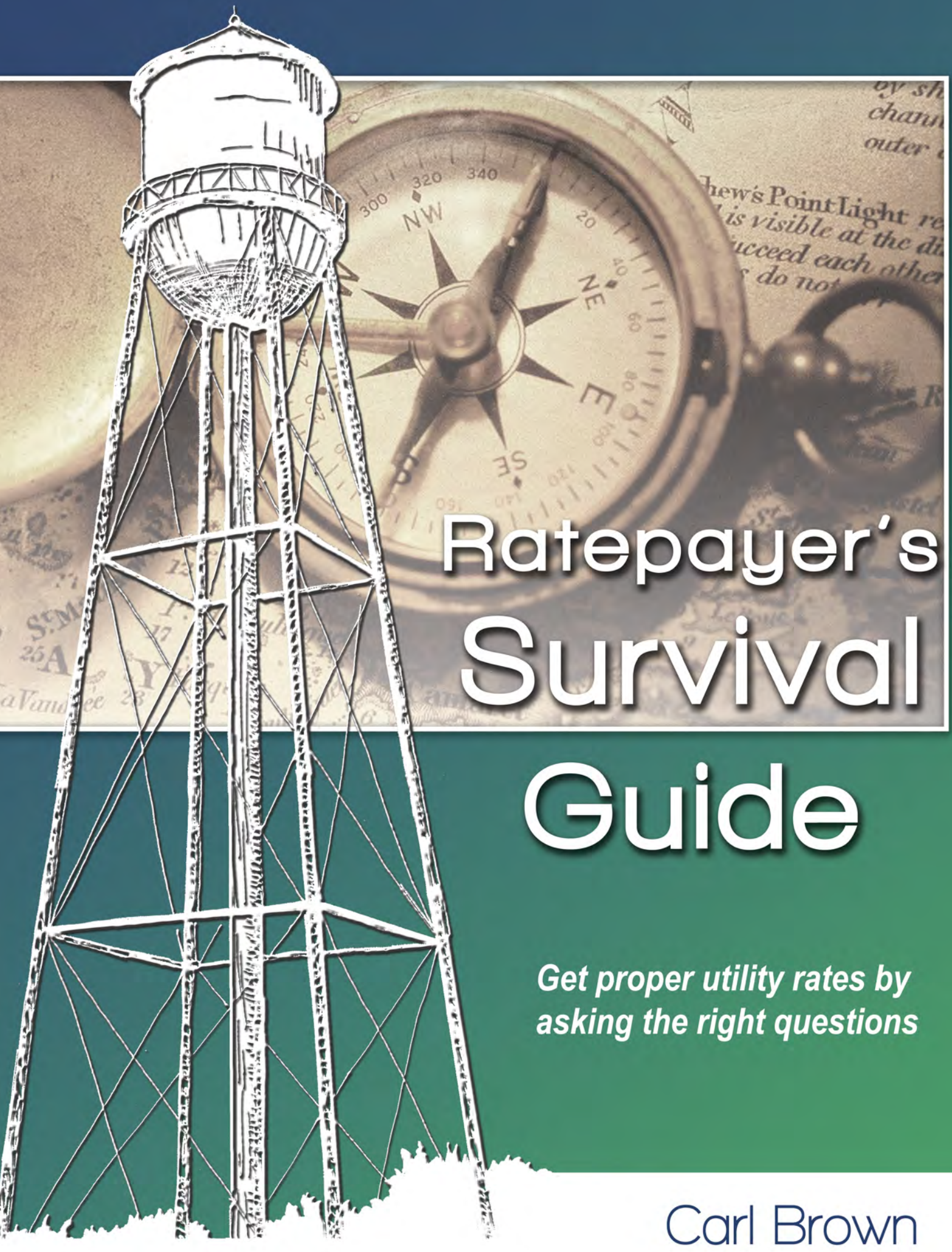

Ratepayer's Survival Guide

Get proper utility rates by asking the right questions

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Target audience for this guide:

- Customers of water, sewer, storm water, electric, gas and other utilities
- City, district and private utility elected officials and staff

Secondary audience:

- Agency and association-employed assistance providers
- Advocacy groups and professionals who assist customers and utilities

Contents

Introduction

In the Appendix at the end of this guide you will find a list of questions you should ask your board or council and staff about how they intend to set your utility rates. Be brave and ask these questions.

The rest of this guide will give you an idea of what good answers from your system's decision-makers and management should sound like. Few ratepayers[1] need to understand all that is in this guide or do all that it recommends. Pick and choose what you need. Don't get bogged down in the details. If you are so inclined, you can save the Appendix with the questions and toss the rest of this guide so long as you really will ask those questions.

In the Appendix are two kinds of questions:

1. Leading questions – you ask these before the rate setting process gets started in earnest.
2. Follow up questions – you ask these after the rate setting process is already underway.

"Great rates" are rates that are adequate to fill all the short and longer-term needs of the system and they are structured fairly for the ratepayers. ADEQUATE and FAIR are the key words.

You are probably reading this guide because you think your current rates are too high. Or, maybe the proposed rates are going to be too high. You think your rates should actually be slashed, not raised.

Here's the good news. In many systems some users' rates actually are too high, maybe yours. They should go down. The bad news is that other users' rates are probably too low and on average, rates are too low to fund most systems properly. If your rates don't need to go up right now give it a year or two and they will.

If, after reading this guide and working with your utility decision-makers[2], there is still a problem that you cannot solve, call the author[3]. If you're just a

[1] Ratepayers or sometimes their properties are also called customers, users, and connections.

[2] Decision-makers are generally the elected officials of cities, districts and utilities who have the final say in decisions and policy-making. In the case of private systems, utility commissions are also decision-makers. Senior managers in large systems have substantial decision-making power, as well. However, this guide generally refers to elected officials when it uses the term "decision-maker."

[3] Carl Brown, (573) 619-3411

hothead looking to blow off steam you won't get any sympathy from Mr. Brown. But if there really is a problem that can be solved with rate setting expertise, he will be glad to help you.

Some utilities are public[4] and some are private[5], but rate adequacy and fairness are important issues for all utilities. Don't be afraid to question your system's decision-makers. Make them "prove up their case" for raising your rates. You do them no favors by staying silent. On-point questioning from you just might improve the quality of their decisions about rate setting and about lots of other decisions they make on your behalf.

There is the occasional board or council that you cannot talk to or reason with. Sometimes you must get on the board or council yourself to make the fix. Be brave and run if that is what it will take.

Many ratepayers have a bad attitude about letting utilities amass reserves. Put yourself in the place of the utility manager and picture this:

There you are, in the spotlight, up on the high-wire, over the center ring, under the big top, in your tie-dyed spandex tights. The calliope starts to play. The crowd catches its breath.

You pick up your balance pole, take one quick look at the floor far below, no safety net to break your fall. You slide your foot out onto the wire. Simultaneously all of your ratepayers, clutching your waist, slide one foot forward. Your journey to the other landing has commenced.

This is precisely what running a utility without adequate reserves is like.

There are many ways that rate setting can go wrong but there are a few things that you can do to assure that it goes right:

- Make sure utility decision-makers use a sound calculation methodology or a good rate analyst to do the rate calculations. That should lead to proposed rates that will be adequate and fair,
- Make sure they adopt rates that closely conform to those calculations, or they have good reasons for not doing so, and
- Make sure they do all of this in conformance with your state's laws concerning open meetings and open records.

This guide will teach you how to get rates that are adequate and fair. It is NOT intended to teach you how to beat down your decision-makers and get the cheapest rates possible. We all love cheap rates. But, rates that are too low won't adequately fund the utility and that will not serve you well. You don't want your utility to fail so erase the "cheap rates" goal from your agenda.

Now, if your utility is already charging unfairly low rates to certain users, and some do that, you have reason to jump on their case. Go get 'em.

All systems are subject to the same basic forces. However, how each system should set its rates depends a lot on the system's complexity and size. Big and medium sized systems should hire rate setting specialists when needed. Small ones can only afford specialists on rare occasions. If yours is a small system, don't force it to spend a few thousand dollars for a specialist if it is not warranted right now. (You will find alternatives later in this guide.) Fortunately, most small systems' rate setting needs are pretty simple so "do-it-yourself" rate calculations using a good tool and guidance will get the job done during most years.

The bottom line is this. However and by whomever your utility gets a user charge analysis or rate calculation done, they should do it quickly, regularly and right.

[4] Public utilities are those owned by cities, districts and similar local governments and, with the exception of a few states, they are not regulated by utility commissions. Such utilities are regulated by ratepayers and voters in that elected boards and councils set their rates. This guide directly addresses public utilities.

[5] Private utilities are those regulated for rate setting and other purposes by a utility commission, public service commission or similar state agency. Except for the fact that a utility commission is involved in private system goverance, rate setting issues are substantially the same for private systems, so this guide applies to them except for a few technical issues.

To get rates that are fair and adequate, your utility needs to cover the four basic phases of rate setting. This guide will just touch on that. However, the phases and many other rate setting issues are covered thoroughly in the book, "How to Get Great Rates[6]." That book and other tools[7] show utilities how to handle all the important aspects of rate setting.

You have some work ahead of you. But, once you understand a few basics, fair and adequate rates shouldn't be hard to get.

Chapter 1 – Why and How You Need to Ask Questions

Everyone has heard the phrase, "Ask and you shall receive." The flipside of that idea is, "If you don't ask, you probably won't receive." You need to ask questions and make suggestions because you are your own best watch dog when it comes to getting proper utility rates.

If you do nothing else, ask your board or council and staff the questions in the Appendix. Your board or council, or staff for some of these issues, should provide the right answers along with evidence that proves they are right. You or someone else should assess whether their answers are right or not. Keep asking questions until it is clear that everything adds up.

To read what the right answers should be like, chapter numbers of topics in the guide are listed after some of the questions (in parentheses) for quick reference. Unreferenced questions concern issues that are covered in many chapters of the guide and sometimes elsewhere.

Utilities are always in one of two modes – They are actively working on a rate adjustment, or they are in the run up period that will lead to the next rate adjustment. The best time for you to ask questions is during the run up period. **It is never too early to start asking questions about how rates will be adjusted.**

By getting active during the run up period you will sometimes be able to make suggestions rather than just ask questions. In that way, instead of quizzing people in what will probably end up as an "us versus them" relationship, you will offer suggestions as an "auxillary" member of the utility team. Team members work together. Opponents try to defeat each other. You want to be on the team. Being accepted as a team member may sound like a farce but if you have the right attitude it actually can work this way.

To work with the utility before the rate setting process gets well underway you will likely start out talking with utility staff – the city or district clerk or the manager. Just call the city or district and ask the person who answers the phone who you should talk to about the next rate adjustment. It is likely that person will say, "We are not working on any rate increases right now so don't worry about it." If that happens just ask who is normally involved in preparation of rate adjustments and start talking with them.

This may seem like a lot of work. There are a few ways to cut this workload down to size:

1. Better than nothing – Just give a copy of this guide to your city or district and say, "Hey, can you go through the questions in the Appendix and tell me the answers?" Unfortunately, the utility might give you a written reply with detailed answers that may be confusing and lots of work to study. That response still may not make you feel reassured that all is well.

[6] The book, "How to Get Great Rates" is available by visiting http://www.gettinggreatrates.com/ and clicking on the "Products" link. Several other rate related tools can also be found there. Most are free downloads.

[7] Articles, a model request for proposals, and other materials including links to sources other than the author's can be found by visiting http://carlbrownconsulting.com/ and signing up for the "ToolShed."

2. Better – Suggest to your board or council and staff that they get some good rate setting tools and encourage them to study up before pulling the rate setting trigger. You still should call your utility contact now and then to "see how the rate setting thing is going." However, that will be pretty low-key contact work. If they are energetic they will do well on their own so you will just need to do a little follow up to make sure things are on track.
3. Very good – Follow up Action 2. above by getting fellow ratepayers to join you in asking the questions in the Appendix. After you have made the first calls or contacts with the city or district, hand it off to the next person, tag-teaming the event or working as a group. In this way you won't have to carry the whole load and the city or district will recognize that several people care enough to get involved.

Staff do the background work and make recommendations to the board or council about how to proceed with rate adjustments. You want to be involved in the leading, not just the follow up so you need to give your input before and as staff is forming their recommendations. Don't be surprised if staff and decision-makers, especially for small systems, are fuzzy on what financial ratios are, how calculation of the replacement fund annuity is done (almost no one knows how to do this math) and the like. If your system has not done rate setting in a comprehensive way in the past, it can start, with your encouragement.

Some time has now passed since you started asking the questions above and making suggestions. Staff has now made recommendations to the board or council about how to proceed with the rate adjustment issue. It is now time for you to transition into asking the "follow up" set of questions in the Appendix to make sure the utility will adopt proper rates.

Finally, there are a few things you should consider before going off to "grill" staff, the council or the board:

- DON'T GRILL THEM. Keep in mind that nearly 100 percent of local board and council members and staff are in it to serve everyone they can as well as they can. They mean you no harm so don't put them on the defensive.
- In questioning and talking with them, be respectful. Demonstrate to them, maybe even tell them right up front that you are not looking for "gotcha" moments. Instead, you really are trying to understand what is going on and how you will be affected.
- Make it clear you are ready to support them in all the good work they are doing.
- Keep things in perspective. Is the board or council proposing to raises your rates from the current $30 per month to $35? Is that extra $5 per month (a value meal at McDonald's) really worth a lot of work, worry and cross words?
- Know your rights. Laws vary around the U.S. but there are several common threads concerning public meetings and records:
    - Local governments must make most meetings, records and documents, including rate setting issues, accessible to the public. If they try to tell you that you are not allowed to have a copy of the rate analysis or listen to their discussions about rates, it is time to remind them the state has an open meetings and records policy. However, be nice. If they are holding back it is probably because they don't know they are not supposed to.
- Go "nuclear" (legal) only as a last resort and only under these conditions:
    - It seems clear they are breaking the law,
    - You have no other way of getting at the truth,
    - You are nearly CERTAIN the truth is on your side and getting it will SUBSTANTIALLY benefit you and others, and
    - You are ready to devote your life and money to correcting this injustice.

Going nuclear is war. It creates at least one big loser, at least one even bigger loser, no real winner and lots of collateral damage to others. The utility gets its funds from the ratepayers, including you. Therefore, you, your neighbors and friends will have to pay the utility's legal fees and fines, and maybe your legal fees, too, if you win. If you lose, you will have to pay your own legal fees. Even if you win you still may not get the result you sought – lower rates. Litigation is almost never the best answer. Working and cooperating with your board or council is hands down the best way to go.

Now you're ready to head off to that meeting or make that call, ask questions to secure great rates quickly and get on with your life. But, if you want to learn more about the rate setting process, read on.

Chapter 2 – Getting into the Right Frame of Mind

Wake-up call – most user rates are too low, they need to go up. Granted, YOUR rates might actually need to go down while other rates need to go up. That issue is called rate structure fairness[8].

Why are most rates too low and poorly structured? That is simple, really. Back when most of our utilities were born or their basic structures built, several decades ago, operations were pretty simple and regulatory requirements were simple. That means operating costs were low. The federal and some state governments kicked in massive sums of money to pay for some capital construction costs. That kept debt costs low by transferring those costs to your federal and state taxes or the national debt. Rates simply didn't need to be very high because the bills were low. When rates are low rate fairness is not much of an issue. Besides that, there is the practical matter of not having cheap computers and software programs in the early days for quick crunching of large amounts of data to calculate fair rates.

Times have changed! Costs are now high and rising. Grants are nearly gone. However, for awhile "bail-outs" and economic stimulus programs may change that for a few systems. And computers and software programs are not only available; they are cheap.

To view rates correctly you need some context. You need to get your mind right about rate setting, starting with some truths.

Truths concerning utilities

There is a set of principles and truths that frame utility rate setting. All are rooted in the logic of business. They can be described like this:

1. Water, sewer and all other utilities are businesses, regardless of who owns them. Businesses must cash flow properly if they wish to survive, much less thrive. Consider this adage: "If there is not enough money to run the business, the business won't run."
2. A utility has a responsibility to its customers to nearly guarantee its long-term prosperity for their benefit. Thus, a utility must err on the conservative side by maintaining strong reserves that will enable it to weather financial storms. Most reserves should be built with utility (rate) revenues unless the ratepayers and tax payers are aware of and generally approve of doing otherwise. For example, using tax receipts to subsidize the utility.

[8] The most common way that rates are unfairly structured is this. Rates to the low volume users are too high and rates to the high volume users are too low. In essence, low volume users are subsidizing the high volume users. Coincidentally, low volume users are commonly the least able to pay, and vice versa. Low volume users are commonly residents and high volume users are commonly industries and businesses.

3. If a service costs the utility money, the utility should recover that cost from those who use the service if that makes good business and community administration sense. For example, generally "growth should pay for growth." Developers should fairly pay for their consumption of utility services during the construction process and for the promise of capacity to serve their construction project once it is done.
4. If adjusting a rate, fee or policy will turn currently "good" customers into "bad" customers[9], decision-makers should consider the necessity of the change carefully before making it. Otherwise, the utility may actually bring in less net revenue and make lots of people mad in the process.

Truths 3 and 4 don't always get along.

Truths concerning ratepayers

Just as there are truths about utilities, there are some nearly universal truths about ratepayers, too. Steel yourself because some of these may hurt.

1. Ratepayers want their service.
2. Ratepayers want their service cheap.
3. Almost 100 percent of ratepayers don't want to think about the utility at all, ever.
4. A persistent, tiny minority of ratepayers, "CAVE" people, want to think about the utility all the time, and not in a good way.

Citizens
Against
Virtually
Everything

To put it courteously, we ratepayers tend to be emotional about rates. Utilities are more logical. That's understandable. We ratepayers don't have the inside scoop on how rates are set and the utility wants to take more of OUR money. To us it's personal. To the utility it's just business.

The solution is for you to allow the utility to collect enough money to run the business well. At the same time the utility needs to allow you to pay a fairly structured rate. It sounds easy but it's not.

Chapter 3 – Rate Setting Phases

While rate setting can't be reduced to going down a checklist, it still needs to happen in a controlled, phased fashion. Watch your utility decision-makers and staff to make sure they calculate and then set rates adhering to these four basic phases.

Phase 1 – Set goals
Phase 2 – Analyze rates
Phase 3 – Adjust rates, big
Phase 4 – Adjust again, small

Phase 1 – Set goals

BEFORE analyzing and adjusting rates and fees, your board or council should adopt a resolution with a goal that reads something like this.

> *"The (council/board) of _____ resolves to set and maintain utility rates and fees that are fairly structured for the ratepayers and high enough to adequately fund the system on a sustainable basis."*

Then, the council or board should seek to satisfy that goal. If your council or board does not have a written goal, all the members should still be able to describe it to you consistently.

[9] As far as the utility is concerned, "good" customers pay their bills on time and they don't complain, "bad" customers don't and do, respectively.

Phase 2 – Analyze rates

A comprehensive rate analysis will calculate rates that:

- Are adequate to cover all current costs and those that can be predicted for about 10 years;
- Will enable the system to build reserves as a hedge against future known, predictable and some unpredictable cost increases and revenue shortfalls; and
- Will be fair to ratepayers.

Such an analysis will probably be communicated to your board or council verbally at a meeting where you will get the chance to ask the questions in the Appendix, and in a written report. The report should cover the rate setting recommendations of the analyst; the assumptions made; tables, charts and other media that depict the actual analysis done; and other useful information. If system staff does this work there may be no report, per se, or perhaps there will be just a few pages. If the analysis is complex the report might run 200 pages[10].

Were money no object each utility could hire a comprehensive rate analysis done every six months or so and rates would be great all the time. However, money IS the issue here so it is proper that your system only do or get a comprehensive rate analysis when circumstances require it.

Your utility needs a comprehensive rate analysis if:

- It has been three to five years since the last one,
- A big event, like a large capital improvement, is coming,
- It is not KNOWN that the current rate structure and fees are fair to the ratepayers, or at least fair enough for the time being,
- Financial indicators and certain reserves[11] have dropped below safe levels, and
- The utility is big enough[12] to afford getting a comprehensive analysis.

Phase 3 – Adjust rates, initially

This is, necessarily, a political process. However, not all of it is political. The analysis that the political decisions should be based upon is largely a mathematics exercise. Therefore, it works best for all if the utility will keep the politics and the math separated by having a third party, like a rate analyst or possibly the finance director or clerk, do the math and provide advice to the board or council. Then the board or council, taking that analysis and advice into consideration, can set the rates.

Why the separation? Perhaps your mayor or a councilperson owns the biggest, or the only, car wash in town. Being a successful business person they are also good with balance sheets, income and expense projection and such. They would seem to be a logical choice for calculating rates. However, if they calculate the rates and then participate in passing a rate ordinance that gives high-volume users cheap water rates, it might look like they had a bias in arriving at those rates. That might actually be the case. Separate the two functions and you will avoid such conflicts and appearances of conflict.

The analysis and rate setting being discussed here is for the initial[13] rate adjustment. If rates have not been adequately adjusted all along, this rate adjustment (increase) may be big; perhaps 50 percent or more and the rate

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[10] A reasonable report package should include material such as that included in the rate analysis example at http://carlbrownconsulting.com/.

[11] Useful indicators and reserves will be described later.

[12] A utility is usually "big enough" to get a rate analysis if there are 400 or more connections on the system except when capital improvements are involved. In that case, all systems should get a comprehensive rate analysis to guard against making costly investment errors that will last for decades.

[13] "Initial" just means the first adjustment made after the rate analysis is complete. This is the rate adjustment that both enables the system to bring in enough money and set rates so they are fairly structured for the ratepayers.

structure may need to be dramatically adjusted, too. That means that some users' rates might go up much more and others may actually go down. For these reasons the calculations should usually be done by a specialist or at least by a trained staff person using a good rate calculation program. When you raise rates 50 percent and you only make a "small" error in the rate structure, that error will still cost some users dearly.

Initial rate adjustments should be followed in subsequent years by incremental rate increases.

Phase 4 – Adjust rates again and again, incrementally

Generally, incremental rate increases[14] are small (three to five percent) across the board inflationary increases made to allow revenues to stay on track with costs as they rise with inflation. These increases usually do not take rate structure fairness into account. However, since they are generally small increases done following soon after a rate restructuring, rates will remain fair enough for several years to come.

In working with your utility, if you find out the current rates are structured fairly and they only need an inflationary increase this year to keep revenues on track with costs, your work just got easy. You can forget about asking all of the questions in the Appendix except for those concerning the financial health of the system. Fairness is not at issue right now, only revenue adequacy, and that is an easy fix.

Usually by the fifth year it will serve the ratepayers well to have the utility analyze and restructure rates again. As the following table shows, if rates are increased five percent each year, by the fifth year the compounded increase in rates is more than 20 percent. Your rate structure can become very unfair after several years of across the board rate increases.

	Annual Increase	Compounded Increases
This Year	N.A.	0.00%
Next Year	5.00%	5.00%
3rd Year	5.00%	10.25%
4th Year	5.00%	15.76%
5th Year	5.00%	21.55%
6th Year	5.00%	27.63%
7th Year	5.00%	34.01%

Your involvement in the phases

As a ratepayer you should give input to phases 1, 3 and 4. Study what is going on. Figure out, as best you can, what SHOULD be going on. Call staff and attend public meetings. Ask the questions in the Appendix. Be your own watchdog.

Although you won't actually be involved in the calculations, you still should care about how initial rate adjustment calculations (Phase 2) are done. However, you can back check those calculations if you want to. That will be described in the next chapter.

[14] Incremental rate increases are those done during the years in-between comprehensive rate analyses and major adjustments.

Chapter 4 – Rate Structures

For you to judge whether the rates your system is proposing are fair and reasonable you need to know a bit about minimum and unit charges. “How to Get Great Rates” covers this thoroughly but the following will probably satisfy your needs.

The minimum charge concept applies to all utilities. Some services, especially storm water and trash, commonly go so far as to consider all costs as fixed costs and then assess a minimum charge only.

The simplest goal of the minimum charge is to enable the system to recover fixed costs from all users on an even basis. Easy examples of fixed costs include:

- Postage and paper for each bill,
- Computer, software and staff time needed to generate each bill,
- General administration time and expenses, and
- Utilities to run the office where administration and billing occur.

In the ideal world all users would reimburse the utility, through a minimum charge, for all the fixed costs they cause the utility to incur. The following simplified example will show you how a basic minimum charge is calculated.

If budget projections say the fixed costs for a small system will be $12,000 next year, there will be 100 customers during that year and bills will be sent out monthly, the minimum charge should be $10.00 per month. The following formula shows how the calculation is done.

$12,000 in fixed costs / 100 customers / 12 months billed
= $10.00 monthly minimum charge

While larger, more complex systems can’t do the minimum charge calculation this simply and keep their rates fair to the ratepayers, the principles still apply to them, as well.

The simplest goal of the unit charge is to recover the variable costs of the system from users based upon the units of service they use. Easy examples of variable costs:

- Electricity to run pumps,
- Chemicals to treat water,
- Staff time to operate and maintain pumps, motors, chemical feed systems and other moving (wear-out) parts, and
- Replacement of worn out equipment, not equipment that just got old.

Following is how a basic unit charge is calculated. If the variable costs in next year’s budget for a modest sized water system will be $150,000, the system will sell 60,000,000 gallons of water and the system will bill for each 1,000 gallons sold, the unit charge would be $2.50/1,000 gallons. The following formula shows how the calculation is done.

$150,000 variable costs / 60,000,000 gallons * 1,000 gallon units
= $2.50 / 1,000 gallons unit charge

To see if the rates your system is proposing to adopt are reasonable, do this:

- Get the program called "SimpleRates©[15]." If you only want to run one scenario, which will be fine for your needs, the program is free.
- Request a copy of next year's projected budget from your system's clerk or other staff person. This is public information so they should give it to you without hesitation. You might have to pay the cost of copying, but probably not. More will be said about this later. The budget may be included in the system's income and expense statement[16].
- Enter the expense data for the system into SimpleRates©. It will tell you where the minimum and unit charges need to be set to be structured as proportional to use[17] based upon flow. (Proportional rates are considered by many to be the fairest of the simple rate structures. Other rate structures are shown in a separate table of the program.)

Wise saying, "You can't beat an expert at his own game."

Big caution: If your system needs to consider inclining or declining rates, a usage allowance, winter averaging, volume or time of demand charges, significant connection fees, impact fees, impending capital improvements, rate restructuring, "snowbirds" or a host of other special circumstances, do-it-yourself rate calculations for the initial rate adjustments are a bad idea. Systems dealing with these issues should get help from a rate setting specialist.

If the rate calculations described above do not include a usage allowance, the structure is most commonly called **proportional to use**. There are three other rate structures you should be familiar with.

Declining rates go down as volume usage goes up. Declining rates encourage use and some think they encourage economic development. No system should establish declining rates unless it first determines what its cost to produce[18] is. Otherwise, the system could end up selling high volumes of service for less than the cost to produce. In other words, the utility would lose money on those sales.

Inclining or conservation rates are the opposite of declining rates. Inclining rates go up as use goes up. Inclining rates tend to encourage conservation.

Flat rates are the same for all users regardless of how much they use. Flat rates are inherently unfair to all users who use less than the average customer uses. However, if the system is small and serves very uniform users, such as a subdivision that houses families of about the same ages and size, the savings from not having to meter use and calculate bills may be well worth a bit of inequity in bill amounts.

In most systems, minimum and unit charges produce the lion's share of total revenues and they are the charges that most affect existing customers. All systems need to deal with these charges so you should focus on them. If your system will have substantial special fees and issues, you should pay close attention to the next chapter. Otherwise, skip it.

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[15] SimpleRates© is a program for calculating fairly small water and sewer system rates or estimating a large system's rates. It is available by visiting http://www.gettinggreatrates.com/ and clicking on the "Products" link. There is a subscription fee for SimpleRates© if you want to save multiple scenarios.

[16] The income and expense statement is an accounting record that shows the incomes and expenses for a particular time period, usually the previous fiscal year plus the current fiscal year. It may also show the budgeted (projected) incomes and expenses for the next fiscal year.

[17] Proportional to use rates are rates where the minimum charge recovers all fixed costs, the unit charge recovers all variable costs, the unit charge is the same for all volume sold, and there is no usage allowance in the minimum charge.

[18] There are several ways to define cost to produce. Each is acceptable for different purposes. Generally, cost to produce is the total of all variable costs required to get service to a utility's customers during one year divided by the total units of service delivered during that year. In a proportional to use rate structure, this will be the unit charge.

Chapter 5 – Special Fees, Policies and Issues

Systems should get help with special issues from a rate setting specialist. But, decision-makers are used to going it alone so oftentimes they don't get help. If that is happening with your utility you should pay close attention to how these issues are resolved because it can seriously impact your rates and the utility's finances. Three of the most common issues are briefly discussed in this chapter but the book, "How to Get Great Rates" is more inclusive.

Usage allowance

Some systems provide a usage allowance or "give away" volume with the minimum charge. That volume can be either constant for all users or vary depending on user classes. If the true value of the give away volume is included in the minimum charge, this can be a useful revenue generating and revenue smoothing tactic. However, it will not be fair to those customers using less than the give-away volume because they will pay for volume they do not use. The higher the allowance, the more users it will treat unfairly.

The costs associated with the volume given away must be paid by someone so the system will end up assessing those costs, knowingly or not, to users in a different way. This is cost shifting. Costs are shifted to the minimum charge or to unit charges, or some combination of those charges or maybe even others.

The fairest rate structure will include no usage allowance. A low allowance, such as 1,000 to 2,000 gallons per month for water or sewer is the next best thing.

A usage allowance calculator is included in the "SimpleRates©" program. This calculator will show you how much the minimum or the unit charges should be increased to recover the costs incurred to give away whatever volume your system proposes to give away.

Late payment penalties, disconnections and related issues

Some people just don't like to pay their bills. When that happens the system has to get the missing money from someone else. That may be you, in the form of higher rates.

In normal economic times, if your system's bad debt[19] rate is greater than two percent, it's a problem. Other users pay their bills, but they pay them late. If your system's slow pay rate is five percent, it's a problem.

Your system's staff will probably tell you the same thing that most systems have told the author concerning slow pays. It is the same small group of people who pay late, but they do eventually pay when hassled enough. Some must have their meter shut off before that happens. Some come around and pay their bill late, plus the late fees charged, on a regular basis. These folks just can't focus on paying until the system makes it a priority for them. They need motivation.

Systems charge penalties for slow pays and they take bill collection actions to prevent slow pays from becoming bad debt. In some systems bill collection is a major time and money sink. If you are served by such a system it is costing you extra money in higher rates to pay for these bill collection costs.

Penalty fees are often subject to the laws of the states so your system needs to make sure it doesn't get cross-wise with the law. That said, encourage your utility to consider adopting the following measures to help reduce the number of slow pays:

- Assess a late payment penalty of 10 percent of the outstanding bill or $10.00 per month, which ever is greater (these penalties compound each month the bill is unpaid),
- Set a deadline for payment that is as short as your state laws allow,

[19] Bad debt refers to uncollectible bills.

- Assess a disconnection charge that fully pays the system's costs to disconnect the user (including legal costs, processing costs, staff time, a factor for charges and fees that simply are uncollectible and any other cost that is involved),
- Assess a reconnection charge that, like the disconnection charge, fully pays the costs to reconnect the user. This will probably be the same as the disconnection charge. This fee would be charged to any property being reconnected, such as reconnection after repairing a service line, property transfers or change in renters, but not reconnection as a result of disconnection for non-payment. In that case, the reconnection charge should be higher, on the order of double the normal reconnection charge. This penalizes the customer for letting it go this far, and
- Require ALL penalties and fees to be paid before reconnection is made, no exception. If a customer wants to work out a payment plan your utility should tell them they can do that with their banker, friends or relatives because the utility is not in the lending business.

This is hardball but it works pretty well.

Non-payers are a bit different. There are a couple of special categories of non-payers.

In cities that have water and sewer service, sometimes a customer will pay their water bill but not their sewer bill. Their reasoning is, "If they can't shut off my water, they can't do a thing about the sewer." They're generally right about that. Cities can solve that problem this way. They can write the sewer and water user charge ordinances so payment received from a customer will first be applied to the sewer bill. Any amount remaining will then be applied to the water bill. In this way if someone doesn't pay enough, they are in arrears on their water bill, which the system can more quickly and cheaply address.

A similar situation is the customer of sewer service provided by one entity, like a city, and water service provided by a different entity, like a water district. The customer pays their water bill, so the water district is happy, but they neglect the sewer bill. It is not usually feasible or advantageous for the city to disconnect (dig up) the sewer line so the city is stuck. To prevent this kind of problem the city should work out a deal with the water district to shut off water service to such customers until they are paid up on their sewer bill. Most water providers do not want to be involved in such actions. However, in the long term it is in their best interest because a customer who will not pay their sewer bill for a long time is likely to eventually stop paying their water bill, too.

The second category of non-payers is especially found in resort, recreational and vacation home areas, and in the north and south where "snowbirds" reside for part of the year. Some property owners will disconnect their water and sewer service when they go to their other home so they won't have to pay utility bills in both places. Their reasoning is good, "If I'm not there using the service, why should I have to pay?"

The problem with that reasoning is this. Utilities must be built with the capacity to serve even if some choose not to use the service at times. Some of those costs, notably debt service, go on regardless of use or non-use. Therefore, each customer should at least pay their fair share of these costs, even during the months they are gone. Otherwise, these costs will just get passed on to the full-year residents. Systems can address this issue with two payment options:

- Charge the full-cost disconnection charge when the customer disconnects. When they come back and want to reconnect, charge the full-cost reconnection charge plus the debt service and other appropriate fixed costs that accrued during the time they were disconnected. Or,
- When snowbirds go away keep charging them the usual minimum charge (if it's not very high) or a lesser "maintenance" charge that covers selected fixed costs, notably debt. In this case the customer would not actually disconnect their service (have the water meter shut off). Without a physical disconnection, they don't have to pay disconnection and reconnection charges.

The second option will usually be cheaper for the user and simpler for the system to handle. The first option is more work for the system but at least the utility will be compensated for it. Of course, if your system has very few snowbirds, the cost shift is negligible so your utility should not even worry about billing them for those costs. In rate setting, the importance of most issues is based on scale and that boils down to dollars. Is the cost high enough to be worth trying to reduce it or avoid it? Is the potential revenue high enough to make it worth the effort to collect it?

Helping the disadvantaged

Some users will truly be financially hurt by markedly higher rates, especially high minimum charges. Recall Truth #4 concerning utilities. Even if those who have the means must help those who are disadvantaged there are benefits to all for doing it. For example, having at least minimal water and sewer service available to all will help to protect public health because everyone will have the opportunity to practice basic sanitation. And, there will be less temptation to tamper with meters and steal water.

In a perfect world everyone would pay their own bills and no one would have to subsidize anyone else. This is not a perfect world.

Your system would need to consider the possible legal ramifications of helping the disadvantaged, but following are several strategies that your utility may want to consider:

Truth #4: If adjusting a rate, fee or policy will turn currently "good" customers into "bad" customers, decision-makers should consider the necessity of the change carefully before making it.

First, in the rate calculation, the system would plug its estimated bad debt into the rate analysis as an operating cost. In other words, bad debt would be calculated into the bills of all the customers who DO pay their bills.

Now the utility can consider bill assistance options.

Option 1 – In the future, after attempting to collect all bills, the system would write off uncollectible bills and take no further action. This option can become a slippery slope if the utility doesn't have a consistent bill collection policy and consistently use it. Non-payers will proliferate if they are allowed.

Option 2 – The utility could set up a bill assistance program whereby the utility would forgive the amount of any bill that goes over some threshold under certain conditions. Generally, bill forgiveness should be based on affordability criteria. This example should make it clearer.

When applying for the assistance program, the disadvantaged ratepayers would bring their tax return or some other acceptable proof of income. The utility would set the affordability threshold at say, four percent of household income. Then it is a simple matter of calculating four percent of each applicant's household income and capping their bill at that amount. If there are very many customers that qualify for assistance staff can probably enter the threshold for each in the utility's billing program and adjusted billing will happen automatically. If there are just a few such customers, staff could keep a list of them on hand and each month before sending out bills staff would check those bills for need of capping. During a month when such a customer's bill went over the threshold amount, the bill would be capped. During a month when the bill stayed under the cap, the customer would be charged the actual bill amount. Again, without a strong policy and consistent adherence, this could become a slippery slope.

A variation of Option 2 is to use qualification for some federal or state assistance program that is means tested as the qualifier for the bill assistance program. In that way, utility staff need only ask to see the customer's I.D. card for that program. Unfortunately, the utility could only apply an across the board bill relief amount to those who qualify in this way because the I.D. card will not tell staff what the customer's income level is. However, on a positive note, this option is not a slippery slope. The customer either qualifies for the pre-determined bill relief or they don't.

All systems should pursue Option 1. At some point you just have to let bad debt go. Some may find a variation of Option 2 useful, as well.

Finally, with either of the above options, the utility could set up a "dollar more" program or a similar donation program whereby ratepayers would be encouraged to donate to a fund that will help the needy pay their utility bills. (Electric coops already do this.) The utility would use this fund to subsidize the utility bill of those who need help.

Financial health is important for ratepayers and the utility, as well. Several criteria are used by utility managers to gauge financial health. You can do that, too.

Chapter 6 – Financial Indicators

Utility decision-makers and staff need a good understanding of how several financial indicators are calculated and used to assess the financial soundness of the utility and its rates. They also should know what the indicators are for the system so they can continually judge if things are going well or not.

Financial indicators are the thermometers and stethoscopes of business.

You, on the other hand, need to know nothing about indicator calculations. You just need to know what range of values would be reasonable for your system. Then you can ask utility staff what the indicator values are under the rates they are proposing, compare them to the ranges in this chapter, and you and they will know if the proposed rates are fair and adequate.

Operating ratio

This is an indicator of a system's ability to pay its operating costs. A ratio of 1.0 means income and operating reserves are just high enough to pay expenses. Therefore, 1.0 is break even. Higher is better.

If you set your rates to break even, you will go broke.

Coverage ratio

Coverage ratio is like the operating ratio except this ratio measures the utility's ability to pay debt and debt-related expenses. As with the operating ratio, higher is better.

Affordability index

Operating and coverage ratios measure the utility's ability to pay its bills. The affordability index measures the ratepayer's ability to pay their bills. In other words, this one is for you so you should pay close attention to this index. As compared to the operating and coverage ratios, lower is better when it comes to the affordability index.

An affordability index of one percent means that a family earning the median household income for the area served by the utility must pay one percent of their income to pay their utility bill. For water or sewer service, an affordability index of one percent is fairly normal around the U.S. Affordability indices of less than 0.5 percent are fairly common. That means that those systems' rates are cheap. To give you a comparison, most of the federal grant programs now require an affordability index of two percent or higher before they will give a grant to a water or sewer system. Few systems qualify because, on that basis, their rates are too low.

For electric and gas services an affordability index of three percent or more would not be unusual. The affordability index for most storm water systems is remarkably cheap, a few tenths of a percent or less.

Common indicator ranges for water and sewer services are listed in the following table.

Common and Generalized Goal Ranges for Financial Health Indicators, in %

		Operating Ratio	Coverage Ratio	Affordability Index
Small Systems	Common Ranges	0.9 to 1.5	0.75 to 2.0	0.5 to 1.5
	Goals	1.25 to 3.0	1.25 to 3.0	Below 2.0
Medium and Large Systems	Common Ranges	1.0 to 1.5	1.0 to 2.0	0.2 to 0.6
	Goals	1.1 to 2.0	1.25 to 2.0	Below 1.0

Current position

Current position is simply the sum of all current-year revenues and cash reserves held for paying current expenses, minus all expenses incurred during that year. Current position is not a ratio, it is a dollar figure. Current position is essentially the same as the balance in your personal checking account after you have paid all your bills for that year.

Current position is included in a standard balance sheet and you can get this from your utility. The higher a system's current position, the more financially stable it will be. A current position that amounts to 35 percent of a large system's annual operating costs may be considered strong. That same current position for a small system should be considered weak because the dollar amount for the small system would end up being fairly close to zero. (Thirty-five percent of an annual budget of $50,000 is only $17,500. One broken pump and one electric motor could use that up in one month.) A current position that is equal to the annual operating costs of a small system should be considered reasonable.

Usually such reserves should be split into several sub-reserves, such as those for equipment replacement and capital improvements, which are covered next.

Chapter 7 – Equipment Replacement Scheduling and Capital Improvement Planning

Equipment replacement scheduling involves estimating when each important piece of equipment will need replacement or refurbishment and what that would cost in today's dollars. Capital improvement planning is similar except this plan covers the big ticket items and the funding stream to pay those costs will probably be different – loans and possibly grants.

This is what you need to know about equipment replacement and capital improvement planning:

- Your utility needs to have plans for this work.
- Those plans need to be reasonable.
- What this work will cost and where those funds will come from need to be included in the rate calculations.
- Funds collected need to actually be put into reserve accounts that, under normal circumstances, will only be used for their stated purposes.

This planning is complex work. Most utilities hire consulting engineers or analysts to do one or both of these planning tasks so you will not be able to back check their work very well. However, you should ask your board or council about the points above so they can show you they have this well in hand, or not. Any comprehensive rate analysis will include the costs of capital improvement and equipment replacement. Concerning equipment replacement scheduling in particular, you can help your utility to do this well. Tell them about the free program called ReplacementScheduler©[20].

Openness is important for rate setting. State laws cover this issue and that is covered in the next chapter.

[20] ReplacementScheduler©, a fill-in-the-blanks program, is available for downloading by visiting http://www.gettinggreatrates.com/ and clicking on the "Products" link.

Chapter 8 – Open Meetings and Open Records

First, the author is not an attorney and the following should not be construed as legal advice. If you need a legal interpretation, get an attorney who specializes in open meetings/open records law in your state. State laws vary considering which meetings and records of local governments[21] are open to the public, but there are many common threads. This chapter covers the common threads that most frequently impact utility rate setting.

- Do the following to learn more about your state's open meetings/open records law:
- Go on-line to a search engine like Google. In the search box enter this search string – "(your state's name) open meetings open records law." Probably the first link will go to your state's guide on open meetings and open records. If that guide is on-line, download it. Otherwise, order it. It is probably free.
- If the previous search did not also give you the link to the "Open Government Guide," enter that name and search. As the opening page states, "The Open Government Guide is a complete compendium of information on every state's open records and open meetings laws." From a link on that page you can go to a site that clearly interprets YOUR state's open meetings, open records law. This is a great summary of your state's law.
- If you want to read your state's law, the state guide will tell you how to get it. Most are on-line.

This is generally what the open meetings/open records laws do:

- The laws generally decree that public records are presumed to be open to the public unless there is a specific reason, as allowed in the law, to close them. The local government must claim such a reason to keep the record closed. (The clerk or the mayor can't simply tell you, "I don't want to give it to you." They have to tell you why and it needs to be a reason allowed in the law.)
- The same basic presumption is made for public meetings of local government bodies, such as the city council or a water or sewer district board. They may close parts of their meetings for allowed purposes such as personnel actions and discussion of lawsuits. However, all subjects not covered by an allowed reason to exclude must be discussed in public.
- Even most issues that may be closed to the public while the issue has not been resolved must usually be disclosed to the public soon after it is resolved. For example, a local government may close a meeting to discuss a possible real estate purchase because discussing such a thing in public could run up the price. However, once the purchase has been made, the body will have to disclose the purchase to the public.
- The local government has time allowances for how quickly it must respond to a records request and how much it may charge for things like a records search and copies. Almost all local governments want to serve you well. If you are asking for something simple and your request won't seriously impact staff work time, they will probably find the documents for you right away and even give you a limited number of copies at no charge. But if you throw your weight around and generally make their life difficult, you can expect some push back. As they see it, you are just trying to make their job of serving you harder.

The bottom line is this. Don't storm into your water district's board meeting and start threatening them with an open meetings violation if they don't cooperate with you. They may cooperate when threatened, but only marginally.

Don't get short with the city clerk because he doesn't immediately turn over some document that you think should be a public record. The law will give the city some time to determine if the record may and should be closed and the clerk won't want to mistakenly give you something he shouldn't have. This is not war and the cities and districts are not your enemies. Treat them as allies and almost every one of them will do the same.

[21] Concerning private utilities, state agencies, such as your state's utility commission, are also subject to the open meetings, open records laws. Therefore, while you may not be able to get some rate related records directly from a private utility, you can often get those records or other records that pertain to them from your utility commission.

Chapter 9 – Getting the Right Rate Analyst

First, you should know that during most years your utility does not need a rate setting specialist. If the system currently has well structured rates and it just needs four percent more revenue next year to cover inflation (a Phase 4 increase described in Chapter 3), utility staff can figure that out quickly and accurately as a part of their regular budgeting process.

However, when it's time for a rate analysis (Phase 2), it's time to get a specialist. Rate setting specialists come from various fields; engineering, accounting, state environmental finance (as is the case for the author), investment banking and others. The key is this: the person's or firm's area of specialization needs to be rate analysis, not something else.

Thorough coverage of how to get a rate specialist can be found in the book "How to Get Great Rates." If your utility needs a comprehensive rate analysis, you should ask them if their service provider can be described as follows:

- They make at least 50 percent of their revenues from rate analysis, 75 to 90 percent is much more conclusive that they specialize in rate analysis.
- Their experience in this field enables them to scope the system's needs in advance. This enables them to work by the project, not by the hour because they know what to expect. (Rate analysis clients should pay for results, not hours.)
- They fully guarantee the client's satisfaction to the point of not requiring payment at all if the client is not satisfied. (Very seldom if ever have they not been paid for a project, and they probably told your utility that with a fair amount of pride.)
- They provide complete, voluminous references, which the system should check thoroughly and verify that past clients have been satisfied.

Oftentimes rate analysis services are acquired using the process required by law for engineers called "Quality Based Selection" (QBS). That is all well and good but rate analysis is not engineering. Systems should use a similar but simpler process that may include a request for qualifications and proposals such as the "RFQ Model" available for free download from the "ToolShed" at http://carlbrownconsulting.com/. Click the "Examples" tab to find it. This process will more surely result in hiring a true rate setting specialist at reasonable cost and getting rates adjusted quickly and properly.

Conclusion

From getting your mind right to getting the right rate analyst, you have now covered the spectrum of what needs to be done to get proper rates. All that is left now is to actually do it.

Your goal is to get fair rates that are also adequate to keep your utilities serving you well for a very long time. If you can do that using only the questions in the Appendix, that is wonderful. If you need to go back and mine this guide more thoroughly, do it. Between what is in this guide and what is referenced elsewhere, you should have all that you need to get fair rates.

Treat the decision-makers and staff of your utilities gently. As a practical matter, if you will treat them with respect, even a bit of deference, they will almost certainly do the same for you, giving you what you need. And, it's just the right thing to do.

Now, go get great rates.

Appendix: Questions to Ask Your Board or Council and Staff

Questions to ask of, and suggestions to make to your board or council and staff before they start the rate examination process (numbers in parentheses indicate the chapters in the guide where these issues are discussed):

1. What are the utility's goals in adjusting our rates? **I think the council/board should adopt this goal statement …** (3)

2. Is the utility well funded right now?
   - What are the values for the system's operating ratio, coverage ratio, affordability index and current position? (6)
   - What are they projected to be in one year? Two years?
   - Does the utility have an equipment replacement plan and reserves? Are they adequate? **I suggest using the program called "ReplacementScheduler©" that is available at _____ or something similar to do that planning.** (7)
   - What capital improvements are coming up and how will those be paid for? What might the rate effects be?
   - Does the utility need more rate revenue now, or will it soon need more?

3. Will a rate analysis or "rate study" be done to calculate the rates and fees needed in the future? **If rates will need to go up much, I suggest doing or getting a rate analysis so the rates will be fairly structured.**
   - If utility staff will do that analysis, what training did or will they get to do it?
   - What special tools or programs will they use to do that analysis? **Might I suggest…** (Introduction, 4, 7)
   - If the utility will hire a third party to analyze rates, how will you select them? (9)
   - What qualifications are you looking for? **Might I suggest you do it this way…** (9)

4. If the utility does not plan to do a study or hire a specialist, how will you arrive at the proposed rates? **If the next rate increase is just going to be a small, inflationary type increase, I think it's OK to not do a rate study. Otherwise, I think a rate study should be done.**

5. Are there any special circumstances or issues that need to be considered, such as a usage allowance, connection or impact fees, surcharges, late payment penalties, subsidies to low-income users and the like? (5)
   - If there are such issues, how will these be dealt with? **Again, I think a rate study should be done so these issues are covered well.**

Questions to ask your board or council and staff after they have proposed rate adjustments:

6. What are the utility's goals in adjusting our rates? (3)

7. What are the proposed rates?
   - How will MY rates be affected? (6)
   - May I have a copy of the rate analysis report or calculations to review? (3)

8. Did utility staff analyze the rates, or do what is often called a "rate study?"
   - What training did they get to do rate studies?
   - What special tools or programs did they use to do that analysis? (Introduction, 4, 7)

9. If the utility hired a third party to analyze rates:
   - How did you select them? (9)
   - What qualifies them as a rate specialist? (9)

10. If the utility did not do a study or hire a specialist, how did you arrive at the proposed rates?

11. Were there any special circumstances or issues that needed to be considered, such as a usage allowance, connection or impact fees, surcharges, late payment penalties, subsidies to low-income users and the like? (5)
    - How were these dealt with?

12. What financial indicators did the analysis calculate for the new rates, such as the operating ratio, coverage ratio, affordability index and projected current position? (6)
    - What values did you come up with for these or other indicators?
    - Based on these indicators, what financial shape are we in now?
    - What shape will we be in in the future?

About the Author

Carl Brown is President of Carl Brown Consulting, LLC and GettingGreatRates.com. Mr. Brown has been analyzing water and sewer rates and performing related work since 1991. He trains and speaks to a thousand or so people each year around the U.S. on rate setting and related issues.

Mr. Brown is the creator of several rate analysis do-it-yourself applications that systems use to analyze their own rates, plan equipment replacement and annuity payment amounts and the like. He writes numerous articles for various publications. He wrote the book, "How to Get Great Rates."

Mr. Brown likes to say, "I eat, drink and breathe this stuff." He's not kidding. His mission statement is simple: "Spread Great Rates Everywhere." That statement fairly describes his work.

Mr. Brown has more rate setting tools are under development. New and old tools are (or will be) available, most at no charge, at http://carlbrownconsulting.com and http://gettinggreatrates.com.

Target audience for this guide:

- Customers of water, sewer, storm water, electric, gas and other utilities
- City, district and private utility elected officials and staff

Secondary audience:

- Agency and association-employed assistance providers
- Advocacy groups and professionals who assist customers and utilities

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