



Future Test Years: Evidence from State Utility Commissions

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Executive Summary

In July 2013, the National Regulatory Research Institute (NRRI) published a paper that identified factors for state utility commissions to consider in both deciding whether to allow a future test year (FTY) and executing it when deemed appropriate or required. From a theoretical and public-interest perspective, the paper discussed specific conditions that would mitigate problems with FTYs and help to establish “just and reasonable” rates.

In the course of that study, it was found that little empirical evidence exists on the operation of an FTY from the regulatory perspective: Have FTYs met the expectations of those commissions who strive to establish “just and reasonable” rates? Have commissions confronted serious problems causing them to shy away from using an FTY in their rate proceedings? Do commissions take common actions in reviewing utility forecasts and addressing problems that arise from an FTY? Are there “best practices” that commissions have deployed throughout the years to most effectively use FTYs in setting rates?

This survey paper tries to answer these questions as well as others. NRRI sent out 14 general questions to 21 state utility commissions that have used FTYs in setting utility rates. Fourteen commissions replied. Responses to some questions reflected commonalities across states while other responses were more heterogeneous, suggesting varying experiences and views on the part of those commissions that have applied FTYs in their ratemaking.

One general finding was that most commissions using an FTY have had an overall positive experience, with no thought to discard an FTY in subsequent rate cases. Although in some instances commissions endured initial difficulties, they were able eventually to overcome them. A few commissions reported continuing challenges with (1) evaluating utility forecasts and (2) addressing utility incentives for biasing their forecasts to favor a larger rate increase. Several commissions stressed the importance of auditing, thorough reviews, and reliance on evidence presented during a rate case to determine the appropriate test-year costs.

This paper should provide useful information to three groups of state commissions: (1) those that have used FTYs for a number of years; (2) those that have little or no experience with them but are planning on using FTYs more often in the future; and (3) those that are contemplating the use of FTYs but are under no mandate to do so. Learning from others is a crucial part of improving the effectiveness of any organization, including state utility commissions. By knowing how different states have handled the major challenges with FTYs, other states can benefit by avoiding pitfalls and implementing “best practices” or at least proven practices that can better serve the public.

The survey for this study addresses a broad range of regulatory topics related to FTYs. They include:

- Motivation behind FTYs
- Overall experience and impression

- Problems encountered and corrective actions
- Determination of reasonable costs and sales based on adjustments of utility forecasts or development of independent forecasts
- Responsible party for demonstrating the reasonableness of a utility's forecasts
- Use of a baseline to evaluate forecasts
- Utility methodologies for forecasting operation and maintenance expenses
- Adjustments to the authorized rate of return on equity (ROE) because of reduced regulatory lag
- Determination of costs reflecting prudent utility management
- Increased burden on commissions posed by use of an FTY in rate cases
- Retrospective comparison of forecasted costs (sales) and actual costs (sales)
- Reconciliation of the "used and useful" standard for new projects with an FTY
- True-up adjustments from forecasting errors
- Key factors for determining "just and reasonable" rates from use of an FTY

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Future Test Years: Evidence from State Utility Commissions

I. Purpose of Study

This study provides empirical evidence on the experiences of state utility commissions with future test years (FTYs). As far as the author knows, no other study contains similar information on this topic.

In July 2013, NRRI authored a paper that discussed the arguments for an FTY and why utilities have advocated it for ratemaking.¹ As its major objective, the paper examined the primary components of an FTY and the challenges they pose for state utility commissions. It suggested how commissions can best protect utility customers from the risks that underlie an FTY.² The paper identified information asymmetry as the most serious contributor to risk: It complicates a commission's ability to know whether a utility's forecasts are unbiased and reasonable.³ It enumerated several challenges surrounding an FTY. The major ones are: (1) evaluation of cost and sales forecasts, (2) a utility's incentive to bias its forecasts in support of a larger rate increase, (3) the "ratchet effect" causing distortive utility behavior,⁴ (4) added complexity in rate cases, (5) additional staff requirements, and (6) assurance of prudent utility management or cost efficiency.⁵

¹ Ken Costello, "Future Test Years: Challenges Posed for State Utility Commissions," Briefing Paper No. 13-08, July 2013 at <http://www.nrri.org/documents/317330/d9437527-da9d-4b27-be60-d0eb7f6c52ba>.

² Risks derived from three sources: (a) forecasts are susceptible to error, (b) some costs and sales elements are inherently difficult to predict, and (c) utilities would have incentives to present biased forecasts that are not always easy for commission staff and interveners to uncover.

³ Commissions are at a distinct disadvantage relative to the utility in interpreting and evaluating the utility's performance. Commissions generally lack the knowledge, for example, to detect when the utility is efficient or inefficient, as well as the opportunities for utilities to minimize their costs.

⁴ The "ratchet effect" involves the commission's adjustment of future forecasts based on past forecasting errors. The commission observes the utility's past actual costs to reset a future price. The "ratchet effect" reflects dynamic strategic behavior that could motivate a utility to intentionally inflate its costs to increase the price that a commission will allow in a future rate case.

⁵ Three theoretical reasons exist for why utilities may not achieve maximum cost efficiency. One reason is self-fulfilling predictions to avoid a "ratchet effect." (*See* the previous footnote.) Another possible reason lies with imputing in an FTY expected cost increases yet to be determined. A utility, for example, might have a weaker incentive to negotiate wage increases below the amount already included in rates. A third reason is the previously discussed information asymmetry, in which a commission would

This survey study focuses on “implementation” factors, problems, and techniques used by state utility commissions in setting utility rates based on FTY calculations. Two commissions responding to the survey indicated that they have approximately 35 years’ experience with FTYs. Although most other commissions have used FTYs for a far shorter time, they provided valuable information on how they mitigated problems with FTYs to ensure “just and reasonable” rates.

Specifically, this study addresses the following ten questions:

1. What commission oversight and other procedures seem to work best?
2. Why was use of an FTY instituted in the first place?
3. Was there a learning curve in which the commission had to acquire new skills and expertise?
4. Do utilities provide a baseline for their forecasts?⁶
5. What indices do utilities use to forecast operation and maintenance (O&M) expenses?⁷
6. How do commissions determine the accuracy of forecasts, which after all is the most important and difficult challenge they face with an FTY? Are the forecasts, for example, reasonably accurate and compatible with prudent utility management?
7. Do utilities have an incentive to misreport their costs and sales to justify a higher rate increase?⁸
8. Who has the burden of proof in determining reasonable forecasts?⁹

find it difficult to identify imprudent costs in a utility’s rate filing. As such, the threat of disallowed costs lessens, thereby removing an important tool for commissions to control a utility’s costs.

⁶ As part of standard reporting in rate cases, commissions may require a utility to provide a verifiable link or bridge between an historical and a future test year as a point of reference. Without this benchmark, parties reviewing a utility’s filing would find it more difficult to review the forecasts. As an example, the historical test year can represent the baseline.

⁷ Global Insight, for example, forecasts inflation rates for labor, materials, and services used by utilities; it also provides price indexes for detailed O&M expenses itemized in the Uniform System of Accounts. A utility might also use some macro inflation index, such as the GDP Implicit Price Index.

⁸ Although utilities would have a similar incentive under an HTY, their ability to avoid detection of misreported costs and sales would appear to be greater under an FTY. One reason is that utilities can more easily hide “inflated costs” when making forecasts rather than reporting their actual costs, which are subject to strict audits. When a utility makes a false report of its actual costs, it can suffer a severe sanction. No such penalty occurs when the utility makes an inaccurate forecast.

9. Do commissions take into account the lower risk to utilities, relative to an historical test year (HTY), in authorizing the rate of return on equity (ROE)?¹⁰
10. How do commissions treat costs for a new project that is not in service at the time of a rate case?¹¹
11. Do commissions allow for true-ups or post adjustments when forecasts turn out to be substantially in error?
12. What are the key factors in setting “just and reasonable” rates¹² when using an FTY?

II. Background on Future Test Years

State statutes, rules, and practices have laid out three distinct conditions for use of an FTY: (1) The commission must use an FTY under all circumstances, (2) the commission must use an FTY if the utility proposes one, and (3) the commission has the discretion to choose a test

⁹ One basic question centers on who has the burden of proof in providing information in support of its position. Assume that a utility proposes an FTY. Should the utility have the duty to show that its forecasts are reasonable, or do other parties have the duty to demonstrate that the utility’s forecasts are unreasonable? Who has the burden of proof could influence the commission’s decision.

¹⁰ To the extent that an FTY better forecasts, relative to an HTY, costs and sales for future periods (i.e., the rate periods), as argued by FTY proponents, it should improve a utility’s financial condition (e.g., interest coverage, credit rating) and lower its risk. (See, for example, Mark Newton Lowry et al., *Forward Test Years for U.S. Electric Utilities*, prepared for the Edison Electric Institute, August 2010, 49-52 at http://www.eei.org/whatwedo/PublicPolicyAdvocacy/StateRegulation/Documents/EEI_Report%20Final_2.pdf).

¹¹ FTYs may pose a special problem for commissions in dealing with unexpected delays, cost overruns, and even the cancellation of new capital projects. If the utility’s forecast turns out to be overly optimistic, customers may end up paying for new capital projects prior to in-service status. As an example, a commission may approve a 2014 test year that included costs for a new electric transmission facility expected to be in service by June of that year. Assume that the facility encounters delays that set a new expected completion date of late 2015. Customers are then paying for the facility without receiving any benefits from it. This prepayment might not pose a problem in states that allow, for example, CWIP in rate base, but for other states it could.

¹² Legal precedent dictates that commissions must set reasonable rates that allow a prudent utility to operate successfully, maintain its financial integrity, attract capital, and compensate its investors in line with actual risks. (The U.S. Supreme Court outlined these conditions in its 1944 order for *FPC v. Hope Natural Gas Co.*, 320 U.S. 591, 605 (1944).) The Court’s decision emphasized the results reached, not the methods used. One obvious implication is that the most appropriate test year would best produce “just and reasonable” rates.

year, including an historical, future, or hybrid year.¹³ The last condition allows the commission to weigh the evidence in deciding on what test year the utility should use.¹⁴

A recent study noted that:

Forward test years were adopted in many jurisdictions during the 1970s and 1980s when rapid price inflation and major plant additions coincided with slowing growth in average use...Several additional states have recently moved in the direction of FTYs. Many of these states are in the West, where comparatively rapid economic growth has required more rapid build out of utility infrastructure.¹⁵

A 2012 survey reported that 23 states allow or require commissions to use an FTY for ratemaking, at least for electric utilities.¹⁶ In addition to Indiana, which the survey did not include, the other most recent states passing legislation that allow an FTY are Pennsylvania and New Mexico.¹⁷ Over half of the states now allow the use of a test year other than historical, and this number has grown over time.¹⁸

¹³ The third condition is the most common of the three.

¹⁴ One example is Utah. *Section 54-4-4(3) of the Utah Code Annotated* states:

If in the commission's determination of just and reasonable rates the commission uses a test period, the commission shall select a test period that, on the basis of evidence, the commission finds best reflects the conditions that a public utility will encounter during the period when the rates determined by the commission will be in effect.

The Public Service Commission of Utah has identified eight factors for selecting a test year. They are: (a) the general inflation rate; (b) changes in the utility's investments, revenues, or expenses; (c) changes in utility services; (d) the availability of accurate data to non-utility parties; (e) the ability to match the utility's investments, revenues, and expenses; (f) whether the utility's costs are increasing or decreasing; (g) incentives to efficient management; and (h) the expected length of time for new rates. (Public Service Commission of Utah, *In the Matter of the Application of PacifiCorp for Approval of Its Proposed Electric Service Schedules and Electric Service Regulations, Order Approving Test Period Stipulation*, Docket No. 04-035-42, October 20, 2004.)

¹⁵ See Pacific Economics Group Research, *Alternative Regulation for Evolving Utility Challenges: An Updated Survey*, prepared for the Edison Electric Institute, January 2013, 29 at http://www.eei.org/whatwedo/PublicPolicyAdvocacy/StateRegulation/Documents/innovative_regulation_survey.pdf. Since this survey, Indiana has allowed utilities to use an FTY.

¹⁶ See Pacific Economics Group Research, *Alternative Regulation for Evolving Utility Challenges: An Updated Survey*.

¹⁷ As of the time of this writing, Pennsylvania has just completed a rate case using an FTY for the first time; a rate case is before the New Mexico Public Regulation Commission in which the

A. Test year as the base for ratemaking

A test year is the foundation for utility ratemaking: It forms the basis for computing the required revenue increases for a utility to have a reasonable opportunity to recover its costs plus earn a sufficient rate of return to attract new capital in serving the long-term interest of its customers.¹⁹ A test year represents a 12-month period over which the utility calculates its revenues and costs (i.e., revenue requirements) to determine the size of a rate increase. For example, in determining the required rate increase to overcome a revenue deficiency, the commission compares the revenue requirement and revenues under present rates. Specifically, revenue deficiency equals

$$RR_{ty} - GR_{pr}$$

RR_{ty} equals the test-year determined revenue requirement, and GR_{pr} equals the test-year determined gross revenues under present rates. At the core of a test year is the “matching principle” for achieving consistency between costs and revenues. The utility would thus consider jointly revenue requirements and billing determinants in setting new rates.

A commission would allow a rate increase when evidence shows that the utility would suffer a shortfall in revenues under present rates to meet its revenue requirement. If a commission approves, for example, a rate increase of 5 percent, it judges that rates must rise by this amount for the utility to cover its revenue requirements. The commission based its decision on test-year data. Using an FTY instead of an HTY, for example, would inevitably lead to a different commission ruling on the required rate increase.

B. Different test years

There are three general groupings of test years (*see* Figure 1). Assume that a utility files a rate case in February 2013. An HTY would be 2012, in which the utility would have actual data for the 12-month period. An HTY uses data for a 12-month period that ends prior to a rate filing. A partially future or hybrid test year could cover 2013.²⁰ An FTY could be the calendar

petitioning utility has proposed an FTY; and no utility has yet come forward in Indiana proposing an FTY.

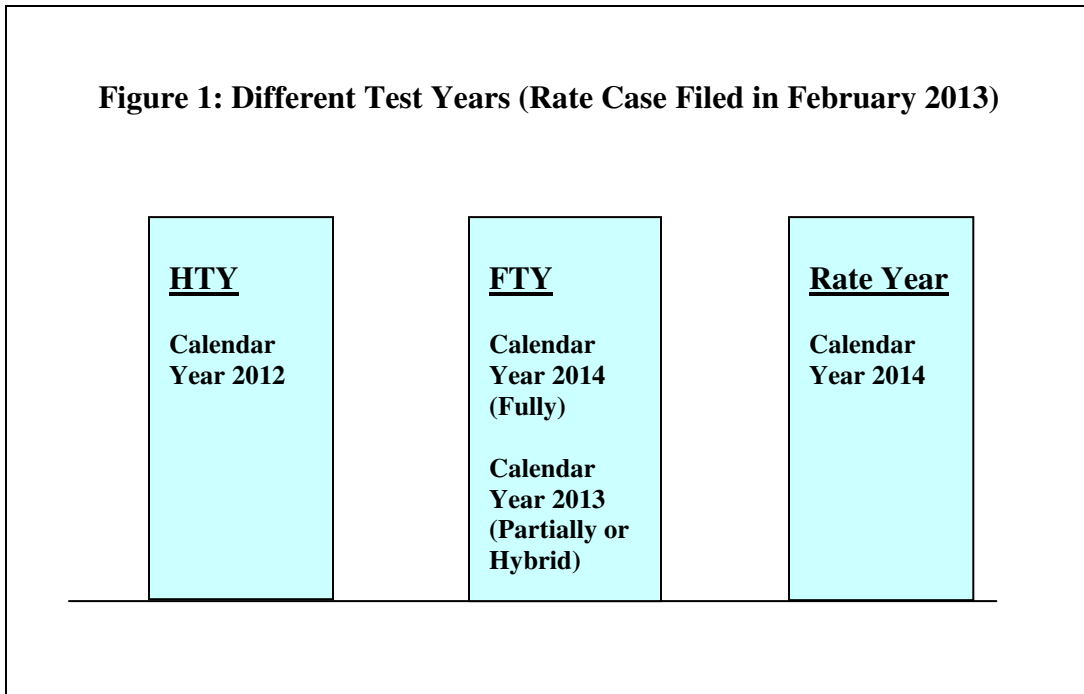
¹⁸ Both utilities and commissions would more likely favor an FTY when average cost increases. This condition occurs when the combined growth in input prices and levels exceeds the growth in sales. For example, with moderate to high inflation, large investments in new facilities, and slow sales growth, average cost would likely rise. Failure to account for the higher average cost in setting rates would likely lead to more frequent rate cases and revenue deficiencies.

¹⁹ To balance utility-customer and -investor interests, the revenue increases should be no more than are necessary to achieve financial health for the utility.

²⁰ The test year would then include actual data as well as forecasts. As the rate case proceeds, the utility could increasingly substitute actual data for forecasts.

year 2014. The FTY, in its purest form, forecasts all the costs and sales elements for the first 12 months of new rates. An FTY, therefore, begins after the completion of a rate case and normally at the time when new rates would go into effect.²¹

Using one kind of test year rather than another would inevitably lead to different calculations for revenue requirements and revenues under present rates. The selection of a test year, therefore, plays a pivotal role in determining new rates.



²¹ Generically, an FTY can begin after the period of the latest available actual data for costs and sales.

III. Survey Approach

NRRI sent out 14 general survey questions on August 7, 2013 to 21 state utility commissions that allow FTYs (*see* Appendix A).²² Some states did not respond, and two states (Louisiana and Maine) replied that they have never used a FTY in a rate case.²³ In total, NRRI received responses from 14 commissions. The vast majority of responding states answered all the questions.

Although 14 responses might at first glance seem low when compared with the total number of state utility commissions, they represent over 70 percent of the states that allow an FTY. Two of the states indicated that they have approximately 35 years of experience with FTYs; other commissions have used FTYs for several years. The survey responses as a whole should provide a fairly comprehensive and accurate picture of how state commissions have dealt with FTYs in rate cases. In particular, they show how commissions have addressed the challenges that FTYs pose in setting “just and reasonable” rates.

IV. Summary of Survey Responses

NRRI received 14 responses from state utility commissions (*see* Appendix B). The majority of responses for some questions were uniform; responses to other questions were more heterogeneous, reflecting the varying experiences and views of those commissions that have used FTYs.

One general finding was that most commissions using an FTY have had an overall positive experience. Although in some instances these commissions endured initial difficulties, they were able eventually to overcome or at least mitigate them. A few commissions reported that they were still struggling with certain problems, such as evaluating utility forecasts and

²² The author identified those states from reviewing different sources that listed states allowing an FTY. The author had to use some judgment, as these sources do not count the same number. NRRI decided not to send out the survey to three commissions—Indiana, New Mexico, and Pennsylvania—that presently allow an FTY but have either no or minimal experience with it.

²³ The Maine commission stated that:

There has been no specific action by the Maine Public Utilities Commission (MPUC) addressing the use of a future test year. In some circumstances, the MPUC has allowed the use of a test year end rate base but typically uses a historical test year with adjustments for known and measurable changes to determine the revenue requirement. Pursuant to Maine Law Court precedent, we also allow for attrition which involves projected sales via a sales forecast and generally trending expenses based upon an inflation factor. The use of these types of attrition adjustments to determine test year revenue and expenses has some characteristics similar to a future test year.

dealing with utility incentives for biasing their forecasts to favor a larger rate increase. Several commissions stressed the importance of auditing, thorough review, and reliance on evidence presented during a rate case to evaluate utility forecasts. These commissions ostensibly believe that a sufficient record with evidence provided by diverse interveners would allow them to make an informed decision.

A summary of the responses to the 14 questions follows:

1. Most state commissions initiated the decision to use an FTY.

They rationalized that under certain conditions, an FTY was appropriate, for example to reduce (a) regulatory lag,²⁴ (b) the discrepancy between actual and test-year costs, and (c) the frequency of rate cases. A number of commissions felt that an FTY offered these advantages, compared with an HTY. As summarized by one commission, “The propriety or impropriety of a test year depends upon how well it accomplishes the objective of determining a fair rate of return in the future.” In other states, such as Kentucky, Michigan, Mississippi, and Utah, the legislature authorized the commission to use an FTY.²⁵

2. Most reported commissions expressed confidence in using an FTY.

They have had overall positive experiences, with no thought to discard an FTY in subsequent rate cases. Two commissions felt that that an FTY posed no additional problems over an HTY.²⁶ One commission derives its confidence from the review of the forecasts by an independent certified public accountant. Some commissions did report, however, some initial transitional difficulties. One commission noted reduced problems after it hired a consultant to provide training to staff on FTYs. One problem reported by a few commissions was evaluating the reasonableness of budget data as forecasts. Some commissions also said it took some time for them to reach a comfort level with an FTY.²⁷ One commission stressed the difficulty of selecting the most appropriate test year in individual rate cases. Another commission identified the problem of approving capital expenditures for plant additions not yet incurred.

²⁴ “Regulatory lag” refers to the time gap between when a utility undergoes a change in cost or sales levels and when the utility can reflect these changes in new rates.

²⁵ The survey did not ask whether the commission has to use an FTY when a utility files one.

²⁶ Some of the respondents presumably have never worked with an HTY, so their answers were more speculative in nature than based on actual experiences.

²⁷ One commission expressed enough concern about utility forecasts that it plans to open an investigation in the near future.

3. Most commissions make adjustments to utility forecasts.

A few commissions (e.g., New York, Wisconsin) develop independent forecasts for utility sales. Most frequent, commission staff and interveners use utility forecasts as the starting point for determining reasonable forecasts. Forecasting requires substantial expertise and resources that several commissions presumably feel they lack.²⁸

4. Almost all of the commissions reported that the burden lies with a utility to demonstrate the reasonableness of its forecasts.

One commission mentioned that the burden lies with commission staff or interveners to show that the utility's forecasts were inappropriate. As another commission reported, some interveners simply attempt to discredit the utilities' forecasts, while others file their own testimony with independent forecasts. Another commission noted that interveners and staff provide information in addition to the utility's forecasts to build a complete record for the commission to make its determination of reasonableness. One commission identified several filing requirements for utilities to demonstrate the reasonableness of their forecasts. Most commissions presumably take the view that utilities possess superior expertise in accessing and interpreting relevant information to use in forecasts. In theory, efficiency and "fairness" considerations dictate that the party with the best access to information should have the burden of proof. Most commissions seem to concur with this belief.

5. Most commissions require or encourage a utility to present historical data along with its FTY forecasts.

In many instances, the historical data acts as a baseline to "bridge" the past with the future. As part of standard reporting in rate cases, several commissions indicated that they mandate or encourage utilities to provide a verifiable link or bridge between an historical and future test year as a point of reference.²⁹ Presumably, in the absence of this information, commission staff and interveners would find it more difficult to evaluate the validity of utility forecasts. One commission even requires utilities to file information on its five most recent calendar years' financial results.

²⁸ One interpretation is that some commissions may also feel that it is not their role to develop independent forecasts: Utilities have better information on market conditions and their operations than they do.

²⁹ The historical test year can represent the base year. One definition of the base year is the most recent calendar year for which the utility had information in preparing its rate case. One respondent defines the HTY as consisting of operating results, with normalizing adjustments, for a 12-month period expiring at the end of a calendar quarter no earlier in time than 150 days before the date of filing.

6. Utilities use different indices and methods to forecast operation and maintenance (O&M) expenses. Several commissions found problems with budget data for forecasting.

Some utilities use Global Insight indices,³⁰ while others use the GDP Implicit Price Index. One commission averages two different indices to arrive at a forecast. Another commission requires utilities to decompose an increase in forecasted O&M expenses (classified by function and cost element) caused by inflation and activity level.³¹ Other respondents did not indicate whether they evaluate a change in expenses from historical levels by reviewing the utility assumptions about the inflation rate and change in activity levels, with each quantified and properly supported. Six commissions noted problems with using budget data to derive forecasts. They included the difficulty of doing independent verification, the conversion of budget data to a regulatory cost-of-service format, and the interpretation of budget data; for example, are they a “wish list” or an actual forecast?

7. No commission reported adjusting downward a utility’s rate of return on equity (ROE) from use of an FTY.

One commission said that any reduction in utility risk would reveal itself in the estimated cost of capital. As another commission expressed, “Decisions about utility specific risk factors are embedded in the selection of a comparable group of utilities on which the ROR and ROE analysis is based.” One commission commented that the tradeoff between certainties within an HTY versus the forecasts of an FTY would dictate which has more risk. For those commissions that have no or little experience with an HTY over the last several years, it is understandable that they would not make any adjustments in the absence of a reference point.

8. A common response was that a commission can best determine that a utility’s cost forecasts reflect prudent management by auditing, thorough review, and reliance on evidence presented during a rate case.

Only a couple of commissions reported that utilities have an incentive to overstate their costs.³² One commission expressed that utilities seem to pad their cost forecasts

³⁰ Global Insight forecasts inflation rates for labor, materials, and services used by utilities; it also provides price indexes for detailed O&M expenses itemized in the Uniform System of Accounts.

³¹ For example, the change in cost function “i” (e.g., administration expenses) can equal $\Delta\text{Cost}_i = \Delta\text{Activity}_i \cdot \Delta\text{Cost per Activity}_i$, which depends on both the change in activities and the inflation rate for labor and other inputs. In evaluating a cost change, commission staff and interveners could review the utility’s assumptions about the inflation rate and change in activity levels.

³² Although not explicitly stated, the presumption may be that a utility would get caught if it attempted to inflate cost forecasts, either in a current rate case (e.g., via auditing or commission review) or afterwards, as the “ratchet effect” would adjust a utility’s cost forecasts downward based on past inflated forecasts (*see* footnote 4).

to increase the chances of meeting or exceeding their authorized rate of return. One reason might be that utilities expect the commission to lower their cost forecasts, so they would tend initially to file inflated costs. One commission noted that a one-year litigated rate plan limits the incentive to inflate cost forecasts, as the effect is short lived because actual rate-year costs become the basis for the next test year; the same commission remarked that multiyear rate plans that contain an earnings sharing component also limit any benefits from erroneous cost forecasts.

9. Most commissions made minimal adjustments in their internal operations when initially using an FTY.

Some commissions reported that they had to acquire new staff expertise. Almost all commissions replied that a FTY took little if any time away from addressing other rate case topics. Only one respondent mentioned that given the limited time for rate cases and the complexity of evaluating forecasts, parties may have insufficient time to assess a utility's forecasts.

10. Most commissions make adjustments, or consider making adjustments, to cost forecasts based on past forecasting errors.

They indicated that they use different methods to measure forecasting error, including simply calculating the variance between actual and forecasted costs. Most respondents factor the accuracy of past forecasts in evaluating current forecasts. Commissions can then compare the actual costs with what the utility forecasted in a previous rate case. One commission uses what it calls a budget-to-actual analysis to uncover any consistent variance in one direction or the other. Another commission attempts to reconcile test-year forecasts with actual costs. Although not accounting for past forecasting errors, one commission requires electric and gas utilities to submit an O&M benchmark analysis with their rate-case filings, in order to test the reasonableness of the forecasted O&M expenses. If the forecasted expenses are higher than those calculated under the benchmark methodology, the commission requires the utility to provide justification for the variance.

11. Several commissions review the accuracy of past sales forecasts.

Some commissions reported evidence of under-forecasting sales.³³ One commission, in contrast, noted that electric utilities have over-forecasted sales over the past few years. There seems to be less commission scrutiny of utility sales than costs in a rate case. This observation is somewhat puzzling, as sales and costs together determine new rates. One possible explanation is that the popularity of revenue decoupling has lessened the importance of accurate sales forecasts.

³³ Under-forecasts have the effect of justifying a higher rate increase, in the same way that over-forecasts of costs would.

12. Most FTY states subject to a “used and useful” standard include major capital projects as part of the revenue requirement, as long as (a) the commission found the costs prudent and (b) a project is scheduled for in-service during the test year.

One commission allows utilities to recover their costs outside of a general rate case, as long as the projected in-service date is within 18 months of the closing of a rate case. Two commissions allow for step increases to synchronize a rate change with the in-service date.³⁴ One commission that uses a multiyear rate plan remarked that projects scheduled for in-service would be included in the revenue requirements for the year of their completion.

13. A few commissions indicated that they make post-adjustments to rates when actual costs or revenues have deviated from their forecasted levels.

They focus on different components, with some making revenue true-ups (e.g., via revenue decoupling), one making power cost adjustments, and others making adjustments when the actual rate of return departs from the authorized level (e.g., via formula rates or rate-stabilization plans). These post-adjustments deviate from traditional ratemaking practices, which change rates only at the end of a general rate case.³⁵ One respondent noted that the commission can always call a utility in for a rate review if earnings are too high, with the option to make rates subject to refund from that time on, pending review of the financial information.

14. A major factor in setting “just and reasonable” rates by using an FTY is good auditing, a thorough review of a utility’s forecasts, and reliance on evidence presented during a rate case.

Having an expert staff is also a contributing factor. Good communications between parties and staff objectivity are a third group of factors identified by one commission. Some commissions noted that an open and transparent process is a key factor. Other commissions said that true-up mechanisms constrained a utility’s actual rate of return within a tolerable band to assure “just and reasonable” rates.

³⁴ For one of the states, when a large project receives certification, rates then increase.

³⁵ The exception is when a utility has a tracker or rider that allows recovery of specified costs outside of a rate case.

Appendix A: Survey Questions

1. What was the impetus behind your state allowing a future test year (FTY)?
 - a. Did your state pass legislation that would allow it?
 - b. Did your commission initialize action—for example, in an order or rulemaking?
 - c. What was the major reason for allowing an FTY in your state? Was there, for example, recognition that giving utilities an option to file an FTY would be appropriate under certain conditions?
2. What has been your commission's experience so far with FTYs?
 - a. What problems have arisen? For example, has your commission found it difficult to evaluate certain forecasts or found staff lacking sufficient time to evaluate a utility's forecasts?
 - b. Has your commission shied away from an FTY because of problems?
 - c. Does the commission feel confident in evaluating forecasts to determine new rates?
 - d. Was there a learning curve that your commission had to go through in gaining comfort with an FTY? What problems would you expect a commission to confront when first using an FTY?
 - e. What is your commission's overall experience with FTYs?
3. Does your staff make independent forecasts, or does it make adjustments to the utility's forecasts?
4. Does your commission require a utility to demonstrate the reasonableness of its forecasts, or do interveners and staff have the burden to demonstrate the unreasonableness of the utility's forecasts?
5. Does your commission require a baseline from which to evaluate a utility's forecasts?
 - a. If yes, how does it define the baseline?
 - b. Does the utility, for example, have to file an HTY as a baseline?

6. What methodologies or indices do utilities usually use to forecast operation and maintenance (O&M) expenses?
 - a. Is there a specific inflation index (e.g., Global Insights, GDP Implicit Price Index) that utilities used?
 - b. Do commission staff see any problems in a utility's using budget data to forecast O&M expenses?
7. Does your commission view an FTY relative to an HTY as reducing a utility's risk, thus justifying a lower authorized rate of return?
8. How does your commission determine that the cost forecasts reflect prudent utility management?
 - a. What actions has the commission taken in assuring that customers are not paying for unreasonable or imprudent costs?
 - b. Does your commission believe that utilities have an incentive to misreport their costs and sales to justify a higher rate?
9. What adaptations did your commission make when first allowing utilities to file an FTY?
 - a. Did the commission have to hire new staff and staff with different expertise?
 - b. Did the commission have to devote less time to other rate case matters?
10. Does your commission retrospectively compare the utility's forecasted costs allowed in rates with actual costs?
 - a. If it does, what methodology does it use to measure the difference?
 - b. Is there any evidence that a utility has consistently over-forecasted costs?
 - c. If so, has your commission made adjustments to subsequent cost forecasts reflecting past forecasting errors?
11. Does your commission retrospectively compare the utility's forecasted sales allowed in rates with actual sales?
 - a. If it does, what methodology does it use to measure the difference?
 - b. Is there any evidence that a utility has consistently under-forecasted sales?
 - c. If so, has your commission made adjustments to subsequent sales forecasts reflecting past forecasting errors?

12. If your commission requires a project to be “used and useful” before a utility can recover any of its costs from its customers, how does this mandate reconcile with an FTY?
 - a. Does your commission, for example, exclude the project cost as part of the revenue requirement in a general rate case?
 - b. Does your commission, as an alternative, add the project cost to rates only after (1) the project comes on line and (2) the commission has determined the cost to be prudent, in a separate proceeding?
13. Does your commission make any true-ups or post-adjustments to rates when a utility’s actual costs or sales depart from their forecasts? If it does, what are the necessary conditions?
14. From your experience, what would you identify as key factors in assuring utility customers that rates based on an FTY are “just and reasonable”?

Appendix B: State-by-State Survey Responses

State	<p>1. What was the impetus behind your state allowing a future test year (FTY)?</p> <p>a. Did your state pass legislation that would allow it?</p> <p>b. Did your commission initialize action—for example, in an order or rulemaking?</p> <p>c. What was the major reason for allowing an FTY in your state? Was there, for example, recognition that giving utilities an option to file an FTY would be appropriate under certain conditions?</p>
Alabama	<p>(FTYs apply only to major gas utilities) (a) No, (b) Yes, (c) The Alabama Public Service Commission employs a formulaic approach, Rate Stabilization and Equalization (Rate RSE), as opposed to traditional rate case methodology. Rate RSE had been in place for several years, but it was proving to be too cyclical. The quarterly test periods were leading to increases or decreases “pancaking” on each other before they affected the bottom line. Thus, a FTY was employed to stabilize rates and income.</p>
Connecticut	<p>Connecticut often approves multi-year rate plans where the starting point is the test year. Test year adjustments are made to arrive at the adjusted test year and additional pro forma adjustments are made to arrive at a Company’s rate year request. Subsequent years of a multi-year rate plan are additive to the forecast results of the Company’s rate year request. PURA reviews actual test year results as well as previous periods, generally 3-5 years as well as forecast/budgeted amounts and underlying assumptions. This is in keeping with PURA’s charge of maintaining just and reasonable rates; (a) No, (b) No, (c) Multi-year rate plans were seen as providing rate stability to customers while avoiding the costs associated with more frequent rate applications and to reduce regulatory lag for utilities.</p>
Florida	<p>(a) No. In an electric rate case from 1981 (Docket No. 810002-EU) a party had asserted that Section 366.06(1), F.S., which refers to “a current record of the net investment . . . in property “used and useful”” precluded the use of a projected test period. The Commission noted that it did not subscribe to such a narrow interpretation and that our statute did not specify that a particular type of test period must be used, and instead cited to a former court case that observed that “the propriety or impropriety of a test year depends upon how well it accomplishes the objective of determining a fair rate of return in the future.” The Commission concluded that it had “the lawful authority to approve, analyze and utilize for ratemaking purposes the projected data presented and supported by the Company in this case.” (b) Through orders, (c) See <i>Response 1(a)</i> above.</p>

State	<p>1. What was the impetus behind your state allowing a future test year (FTY)?</p> <p>a. Did your state pass legislation that would allow it?</p> <p>b. Did your commission initialize action—for example, in an order or rulemaking?</p> <p>c. What was the major reason for allowing an FTY in your state? Was there, for example, recognition that giving utilities an option to file an FTY would be appropriate under certain conditions?</p>
Illinois	<p>Illinois has allowed a future test year since before 1982; (a) No, (b) The use of a future test year was addressed in rulemaking and prescribed in 83 Ill. Adm. Code 285 and in General Order 210 prior to 1982. The use of a future test year is now codified in 83 Ill. Adm. Code 287, (c) Unknown.</p>
Kentucky	<p>(a) Yes, (b) Yes, however, on appeal by the Office of the Attorney General, the decision was overturned and the matter was ultimately addressed via legislation, (c) Utilities’ low actual returns compared to allowed returns.</p>
Michigan	<p>(a) Yes, (b) and (c) Unsure.</p>
Minnesota	<p>(a), (b) Yes - Minn. Rules, parts 7825.3800 through 7825.4600 allow the use of a projected fiscal year for the rate-case test year, (c) Don’t know; FTYs (i.e. projected fiscal years) have been allowed and used by most utilities for over 30 years.</p>
Mississippi	<p>(a) Yes, (b) Our Commission has approved formulary rate plans for one electric IOU and two natural gas utilities which provide for future test years; both electric IOUs in the state filed rate cases in early 2000s with projected test years, (c) FTYs were approved long ago in the state; I do not know the reasoning other than to more accurately calculate rates.</p>

<p>State</p>	<p>1. What was the impetus behind your state allowing a future test year (FTY)?</p> <p>a. Did your state pass legislation that would allow it?</p> <p>b. Did your commission initialize action—for example, in an order or rulemaking?</p> <p>c. What was the major reason for allowing an FTY in your state? Was there, for example, recognition that giving utilities an option to file an FTY would be appropriate under certain conditions?</p>
<p>New York</p>	<p>Periods of extraordinary capital expansion and rapid changes in operating conditions that occurred during the early 1970’s was the impetus behind New York State moving to a FTY; (a) No, (b) Yes, in a 1972 Con Edison rate case, the Commission urged utilities to submit, in addition to an historical test period, a projected test year consisting of the most recent 6-months’ actual experience and 6-months’ forecast data on the theory that the most recent results would be a better proxy for the future than a fully historic test period. Over the course of several years, the use of this data set, along with the associated updates of the partially forecast test periods, as actual results became known, led to a record that included eight different test periods, which the Commission viewed as unworkable. As a result, the Commission issued a <i>Statement of Policy on Test Periods in Major Rate Proceedings</i> on November 23, 1977 in Case 26821 that set a clear, specific policy on test years, designed to enhance the Commission’s ability to set rates properly for the future; (c) The major reason for allowing FTY was to better align cost recovery with incurred costs. The goal in setting rates is to accurately reflect what the utility’s revenues, operating expenses and conditions will be in the period for which rates are set (the “Rate Year”). The rates should then produce the required revenues in the period during which those rates will be in effect.</p>
<p>Oregon</p>	<p>The impetus of a future test year is the idea that the costs and revenues should be reflective of the time period that the rates will be in effect. The Oregon PUC has a long history of using future test periods.</p>

State	<p>1. What was the impetus behind your state allowing a future test year (FTY)?</p> <p>a. Did your state pass legislation that would allow it?</p> <p>b. Did your commission initialize action—for example, in an order or rulemaking?</p> <p>c. What was the major reason for allowing an FTY in your state? Was there, for example, recognition that giving utilities an option to file an FTY would be appropriate under certain conditions?</p>
Tennessee	<p>At least since 1986, the Authority has used a future test year, which has played a big part in rate cases. The premise was to set rates at a level that would be reasonable for the foreseeable future. The agency reasoned that a future period better reflected the foreseeable future; (a) No, (b) In an Authority order in addition to a Tennessee Court of Appeals Order: “The Commission (now authority) has the discretion to choose a historical test period, a forecasted period, a combination of the two, or any other accepted method in rate making.” [<i>American Association of Retired Persons v. Tennessee Public Service Commission</i>, 896, S.W.2d 127 (Tenn. Ct. App. 1994)]; (c) The agency chooses the test periods on which rates are set and historically the agency’s goal is simply to choose a period and/or amounts that best reflect the results of the utility in the foreseeable future.</p>
Utah	<p>(a) Yes, (b) No, (c) An FTY would be appropriate under certain conditions.</p>
Wisconsin	<p>The Commission has used a future test year approach for at least 35 years and there is no knowledge available regarding the transition to a future test year.</p>
Wyoming	<p>(a) No, (b) No.</p>

<p>State</p>	<p>2. What has been your commission’s experience so far with FTYs?</p> <ul style="list-style-type: none"> a. What problems have arisen? For example, has your commission found it difficult to evaluate certain forecasts or staff lacking sufficient time to evaluate a utility’s forecasts? b. Has your commission shied away from an FTY because of problems? c. Does the commission feel confident in evaluating forecasts to determine new rates? d. Was there a learning curve that your commission had to go through in gaining comfort with an FTY? What problems would you expect a commission to confront when first using an FTY? e. What is your commission’s overall experience with FTYs?
<p>Alabama</p>	<p>(a) There never seems to be enough time, but as RSE allows for continuous correction and monitoring, it works out, (b) No, (c) Yes, (d) Certainly, there were things that we had to learn. We had to delve heavily into the budget process, both on the revenue and expense side. We had to hone our expertise in comparing last year to this year, including “getting down into the weeds” occasionally to determine whether budget assumptions were correct or needed to be refined, (e) Good.</p>
<p>Connecticut</p>	<p>(a) Connecticut has one of the shortest review periods for rate cases in the country, which is 150 days extendable to 180 days pursuant to §16-19(b) of the General Statutes of Connecticut (Conn. Gen. Stat.); this short timeframe makes it challenging to evaluate forecasts, (b) No, Connecticut continues to evaluate rate years based on historical data with known changes and future years of rate plans using a combination of inflation adjusted accounts and testing budgeted assumptions, (c) Yes, however taking into consideration the short time frame mentioned above, it is a challenging task to accomplish, (d) Developing a comfort level with a particular utility’s forecasts and a willingness to except some uncertainty around the “used and useful” principle is part of the process. Part of the uncertainty can be managed through subsequent order compliance for assurance of expenditures, (e) Up to this point, it has been positive.</p>

State	<p>2. What has been your commission’s experience so far with FTYs?</p> <p>a. What problems have arisen? For example, has your commission found it difficult to evaluate certain forecasts or staff lacking sufficient time to evaluate a utility’s forecasts?</p> <p>b. Has your commission shied away from an FTY because of problems?</p> <p>c. Does the commission feel confident in evaluating forecasts to determine new rates?</p> <p>d. Was there a learning curve that your commission had to go through in gaining comfort with an FTY? What problems would you expect a commission to confront when first using an FTY?</p> <p>e. What is your commission’s overall experience with FTYs?</p>
Florida	<p>(a) Generally, no; the utilities proposing a projected test year have the burden of proof to adequately support the reasonableness of their projections, typically with prefiled testimony of individuals knowledgeable of various aspects of the projections; Staff evaluates the reasonableness and sufficiency of the record presented, (b) No, (c) Yes, (d) No, (e) See <i>Response 2(a)</i>.</p>
Illinois	<p>(a) A future test year is no more difficult than a HTY, (b) No, (c) the Commission relies heavily on the review of the forecasts by an independent certified public accountant that examines the preparation and presentation of the utility schedules supporting the future test year in terms of their compliance with the Guide for Prospective Financial Information by the American Institute of Public Accountants, (d) Yes, (e) Positive</p>
Kentucky	<p>(a) No major problems – time is no more an issue than in HTY cases; the legislation on FTYs extended the suspension period by one month, from 5 to 6, (b) No, (c) Generally yes, (d) There was a learning curve; however, this was somewhat mitigated by the Commission hiring a consultant to provide training to staff on FTYs, (e) Mixed, as some utilities do a better job in their forecasting than others and the majority of cases that have been filed using an FTY have been resolved via settlements between the utility and interveners.</p>
Michigan	<p>(a) Certain forecasts are more difficult than other to evaluate but we would not necessarily characterize this as a problem, (b) The law allows for it, but the Commission has not rejected a FTY to date, (c) Don’t know, (d) Don’t know, (e) The Commission have reviewed 20 cases that use an FTY.</p>

<p>State</p>	<p>2. What has been your commission’s experience so far with FTYs?</p> <ul style="list-style-type: none"> a. What problems have arisen? For example, has your commission found it difficult to evaluate certain forecasts or staff lacking sufficient time to evaluate a utility’s forecasts? b. Has your commission shied away from an FTY because of problems? c. Does the commission feel confident in evaluating forecasts to determine new rates? d. Was there a learning curve that your commission had to go through in gaining comfort with an FTY? What problems would you expect a commission to confront when first using an FTY? e. What is your commission’s overall experience with FTYs?
<p>Minnesota</p>	<p>(a) No more so than any other forecasts; the rules require baseline information grounded in actual, unadjusted numbers for the most recent fiscal year in addition to the projected fiscal year, (b) No, (c) Yes, however PUC staff’s role is advisory; as such, the PUC and its staff are primarily responsible for evaluating the utilities’ and the interveners’ evaluations rather than actually conducting its own evaluation, (d) Don’t know; FTYs (i.e. projected fiscal years) have been allowed and used by most utilities for over 30 years, (e) Probably very similar to what would be expected in states that allow normalized, historical test years adjusted for “known and measurable” changes; one, ongoing challenge has been how to deal with proposed updates to projected information.</p>
<p>Mississippi</p>	<p>Mixed; (a) We use two types of projections in FTYs: “historical figures adjusted for known and measurable changes and pure projections. Known and measurable changes can be objectively verified and we have few issues with these. Pure projections are difficult to verify due to lack of models, lack of time and, in some cases, lack of expertise; there is, however, a “look-back” on each projected filing following completion of the test year. If the utility over or under earns, there is provision for a refund or surcharge, (b) Our Commission has expressed concern about pure projections and will likely open an investigation at an undetermined future date (c) No, (d) Our Commission has expressed concern about pure projections and will likely open an investigation at an undetermined future date, (e) Mixed, as described above.</p>

<p>State</p>	<p>2. What has been your commission’s experience so far with FTYs?</p> <ul style="list-style-type: none"> a. What problems have arisen? For example, has your commission found it difficult to evaluate certain forecasts or staff lacking sufficient time to evaluate a utility’s forecasts? b. Has your commission shied away from an FTY because of problems? c. Does the commission feel confident in evaluating forecasts to determine new rates? d. Was there a learning curve that your commission had to go through in gaining comfort with an FTY? What problems would you expect a commission to confront when first using an FTY? e. What is your commission’s overall experience with FTYs?
<p>New York</p>	<p>The New York Commission has been employing the use of FTYs for over 35 years. The continued use of FTYs demonstrates its preference over the alternatives experimented with during the mid-1970s; (a) The experience, expertise, and academic diversity of the New York Commission Staff makes it well suited to evaluate sales, capital, O&M, and financial forecasts; the 11-month regulatory process that is employed in setting rates affords Staff and other parties sufficient time to evaluate a utility’s forecasts, as well as other issues presented in a major rate proceeding, (b) No, (c) Because it has been using FTYs over the last 35 years, the Commission has gained a level of familiarity and experience with evaluating forecasts that causes it to continue using FTYs over other alternative test periods, (d) As with any transition, there was a learning curve. The New York Commission went from using a HTY, to a projected test year consisting of the most recent 6-months’ actual experience and 6-month’s forecasted data, to a fully forecasted rate year. Expected problems with first using a FTY may include timing issues and differences in forecasting approaches. Uniform ratemaking practices should be established and various approaches should be tailored to meet the Commission’s needs. For example, major storm damage costs are volatile and unpredictable so over time the Commission has generally adopted a reserve ratemaking approach to address recovery of these specific costs, (e) Again, the New York Commission has over 35 years of experience using FTYs. While always challenging, the rate setting process employed in New York results in reasonable outcomes based on sound ratemaking principles.</p>
<p>Oregon</p>	<p>No significant problems have arisen from the use of future test periods.</p>

<p>State</p>	<p>2. What has been your commission’s experience so far with FTYs?</p> <p>a. What problems have arisen? For example, has your commission found it difficult to evaluate certain forecasts or staff lacking sufficient time to evaluate a utility’s forecasts?</p> <p>b. Has your commission shied away from an FTY because of problems?</p> <p>c. Does the commission feel confident in evaluating forecasts to determine new rates?</p> <p>d. Was there a learning curve that your commission had to go through in gaining comfort with an FTY? What problems would you expect a commission to confront when first using an FTY?</p> <p>e. What is your commission’s overall experience with FTYs?</p>
<p>Tennessee</p>	<p>(a) Forecasting is not an exact science, but we have several qualified employees with a great amount of experience in this filed. Forecasting is predicated to a large degree on utility provided data, so if the data is incorrect the conclusions drawn from that data may also be flawed. For example, the utility files its capital expenditures budget and it gets accepted, but the utility does not make all forecasted plant additions. This problem has arisen and now investment trackers may be used in future rate cases; we sometimes require quarterly reports of capital projects. Another example is the forecasted date that a large industrial customer will begin service. Fluctuations in this date can cause revenue forecasts to be flawed; (b) No, (c) Yes, the practice is common in most every rate case. An exception might be a very small utility, (d) the main problem that occurs is not gathering enough evidence from the utility to calculate growth/decline rates or not being familiar with how to properly conduct or analyze the utilities’ regression analysis, (e) Positive.</p>
<p>Utah</p>	<p>(a) No. This question may be better asked of the Utah Division of Public Utilities, which is the state investigative agency for public utility rate filings, (b) No; but the Commission has identified concerns with FTYs. (See, for example, Public Service Commission of Utah, <i>In the Matter of the Application of PacifiCorp for approval of its Proposed Electric Service Schedules and Electric Service Regulations, Order Approving Test Period Stipulation</i>, Docket No. 04-035-42 3, October 20, 2004), (c) Yes, (d) Yes, especially the problem of determining the most appropriate test year under the circumstances, (e) The Utah Commission has not undertaken an evaluation of this question.</p>

State	<p>2. What has been your commission’s experience so far with FTYs?</p> <p>a. What problems have arisen? For example, has your commission found it difficult to evaluate certain forecasts or staff lacking sufficient time to evaluate a utility’s forecasts?</p> <p>b. Has your commission shied away from an FTY because of problems?</p> <p>c. Does the commission feel confident in evaluating forecasts to determine new rates?</p> <p>d. Was there a learning curve that your commission had to go through in gaining comfort with an FTY? What problems would you expect a commission to confront when first using an FTY?</p> <p>e. What is your commission’s overall experience with FTYs?</p>
Wisconsin	<p>(a) The greatest difficulty is the inherent differences of opinion between staff-utility-intervenors as to forecasted revenues and expenses, (b) Not applicable, (c) The Commission has been using the method for many years so there is a demonstrated comfort with it, (d) Not applicable, (e) It has been a positive one.</p>
Wyoming	<p>(a) Verifying forecasts can be difficult and takes much more time than the traditional historical test year, (b) No, (c) Yes, (d) Yes; the biggest problems were verifying data, matching of rate base items and rates, and making certain that data used is accessible, (e) Overall, Wyoming’s experience has been positive; the utilities that have used FTYs provide data either through testimony or discovery; forecasting accuracy and accountability is a concern, along with accessibility of the data filed with an FTY, the reasons for the use of the forecast, the length of the forecast and why it is reasonable.</p>

State	3. Does your staff make independent forecasts, or does it make adjustments to the utility's forecasts?
Alabama	The starting point is the gas utility's budget, compared to the previous year's actual and budget. The staff then suggests changes. We do not have authority to make unilateral changes. We have a limited complaint process whereby we can formally challenge a provision if we see the need. It has recently been strengthened, in the staff's favor, for one gas utility and the other gas utility is pending.
Connecticut	We use a combination of both.
Florida	See <i>Response 2(a)</i> . Staff evaluates the appropriateness of the forecasts and recommends adjustments when warranted.
Illinois	Parties to the case make adjustments to the utility's forecasts.
Kentucky	Staff makes adjustments.
Michigan	Both, but most times staff makes adjustments to the utility's forecast.
Minnesota	PUC staff does not make independent forecasts. The Commission either adopts the utility's forecast, the Department of Commerce, Division of Energy Resource's forecast, another intervener's forecast, or adopts an adjusted version of one of the parties' forecasts.
Mississippi	We do not make independent forecasts; we conduct reasonableness tests, however, on the utility's forecasts.
New York	Both, depending on the circumstances and available data, Staff may make independent forecasts, which it often does with electric and gas sales and has done with property taxes. More commonly, Staff may make adjustments to the utility's forecasts, as it does with payroll expense, O&M, and capital expenditures.
Oregon	Staff makes adjustments to the company forecasts by either constructing new forecasts or adjusting the company's forecasts. The choice is issue/facts dependent.

State	3. Does your staff make independent forecasts, or does it make adjustments to the utility's forecasts?
Tennessee	In Tennessee, Staff acts as advisors and provides the Directors (Commissioners) with its own forecast based upon the record. That is why data gathering is so important. The utilities' forecasts are fairly supportable in most areas, but generally (in Staff's opinion) there are areas that may be not be reasonable or do not represent the best outcome. In this instance, Staff proposes adjustments to the forecasts.
Utah	This question might be better asked of the Utah Division of Public Utilities.
Wisconsin	Independent forecasts are often used for sales. The staff normally makes adjustments to the utility's forecasts in the areas of O&M expenses, net investment rate base, capital structure, working capital, and taxes.
Wyoming	Intervenors make adjustments to the utility forecasts.

State	4. Does your commission require a utility to demonstrate the reasonableness of its forecasts, or do interveners and staff have the burden to demonstrate the unreasonableness of the utility's forecasts?
Alabama	See <i>Response 3</i> above. Additionally, the burden is generally on the staff or the Attorney General (as consumer advocate) to demonstrate that the budget is inappropriate. See also <i>Response 8</i> below.
Connecticut	Utilities are required to demonstrate the reasonableness of their forecasts.
Florida	See <i>Response 2(a)</i> . The utility has the burden of proof.
Illinois	<i>83 Ill. Adm. Code 285</i> includes various requirements for the utility to demonstrate the reasonableness of its forecasts. These include the provision of the following information when the utility files a case: (1) Comparison of Prior Forecasts to Actual Data – Prior Three Years, (2) Statement from the Independent Certified Public Accountants, (3) Statement on Assumptions Used in the Forecast (that the forecast contains the same assumptions and methodologies used in forecasts prepared for management or other entities, such as the Securities Exchange Commission), (4) Inflation (identification of the rate of inflation used in forecast to various accounts), (5) Budgeted Non-Payroll Expense to Actual (for the last three years).
Kentucky	Utilities must demonstrate the reasonableness of their forecasts.
Michigan	A utility must support its request which includes its forecasts.
Minnesota	The utility carries the burden of proof in matters coming before the Commission. “The burden of proof to show that the rate change is just and reasonable shall be upon the public utility seeking the change.” Minn. Stat. § 216B.16, subd. 4.
Mississippi	If we question a forecast, the burden of proof lies with the utilities.
New York	The burden of proof is on the utility, as provided in <i>Part 61.1 of NYCRR16</i> .
Oregon	The utility has the burden of proof.

State	4. Does your commission require a utility to demonstrate the reasonableness of its forecasts, or do interveners and staff have the burden to demonstrate the unreasonableness of the utility's forecasts?
Tennessee	The burden rests with the utility to prove its case. Intervenors take different approaches. Some intervenors simply try to discredit the utilities' proposals while others (often the Consumer Advocate) file their own testimony with supporting information. Staff, as advisors, prepares its own recommendation based upon the evidence in the record, including the forecasts.
Utah	The Commission requires a utility to demonstrate the reasonableness of its forecasts.
Wisconsin	The utility must support its application. Intervenors and staff provide additional information to build a complete record for the Commission to make its determination of reasonableness.
Wyoming	The utilities have the burden to demonstrate the reasonableness of their forecasts.

State	<p>5. Does your commission require a baseline from which to evaluate a utility’s forecasts?</p> <p>a. If yes, how does it define the baseline?</p> <p>b. Does the utility, for example, have to file an HTY as a baseline?</p>
Alabama	No
Connecticut	The starting point is generally the test year.
Florida	(a) Utilities proposing a projected test year are required to file (1) an HTY, (2) one- year out projected test year and (3) second-year out projected test year, (b) See <i>Response 5(a)</i> .
Illinois	(a) A baseline is not defined; but the information that is identified in <i>Response 4</i> is used to evaluate forecasts, (b) The utility must provide historical information.
Kentucky	Yes; (a) It is a 12-month “base period” consisting of both historical and forecasted information; at the time an application is filed, the base period must include a minimum of 6 months of historical information and a maximum of 6 months of forecasted information; the utility must update the base period during the course of the case so that it is fully historical by the time the Commission must make a decision on the utility’s rate request, (b) In addition to the base period discussed above, the utility must file information on its 5 most recent calendar years’ financial results.
Michigan	No; a utility must file an HTY filing but it does not have to be the baseline.
Minnesota	(a), (b) The rules require baseline information defined as unadjusted numbers for the most recent fiscal year in addition to unadjusted numbers for the projected fiscal year.
Mississippi	(a) Yes, the baseline is historical figures, (b) Yes.
New York	Yes, the utility is required to file an HTY as the baseline (pursuant to the <i>Policy Statement</i>). The HTY consists of operating results, with normalizing adjustments, for a twelve-month period expiring at the end of a calendar quarter no earlier in time than 150 days before the date of filing. Utilities also present information on actual results that bridge the gap between the historical and forecast period (the linking period).

State	<p>5. Does your commission require a baseline from which to evaluate a utility's forecasts?</p> <p>a. If yes, how does it define the baseline?</p> <p>b. Does the utility, for example, have to file an HTY as a baseline?</p>
Oregon	For some issues, the utility may use a historical period as a baseline and then make known and measurable adjustments to derive the test year projections. In other issues, such as loads, it will construct a forecast.
Tennessee	(a) The Authority looks at a historical test period (chosen by the agency) and makes normalizing adjustments to get a baseline, (b) Yes, utilities have to file an HTY.
Utah	Yes; (a) It is defined in <i>Utah Administrative Code R746-700-20(A)</i> ; briefly, the utility must provide the unadjusted and adjusted actual results of operations for the historical 12-month period contained in the last reported results of operations report semi-annually filed with the Commission, (b) See <i>Response 5 (a)</i> above.
Wisconsin	Utilities must provide historical information for sales, O&M expenses, rate base (e.g., expenditures, timing of additions, etc.), and working capital balances.
Wyoming	Yes, (a) The historical test year have been used as a baseline, (b) Yes, in many cases the Commission has required utilities to do so.

State	<p>6. What methodologies or indices do utilities usually use to forecast operation and maintenance (O&M) expenses?</p> <p>a. Is there a specific inflation index (e.g., Global Insights, GDP Implicit Price Index) that utilities used?</p> <p>b. Do commission staff see any problems in a utility's using budget data to forecast O&M expenses?</p>
Alabama	<p>The budget process is a bottom up process that is reviewed at each level of management and then usually sent back down for rework. The first time is more of a wish list, and the second or third iteration gets to be more realistic. If staff requests, it can meet with department heads or lower to discuss the decisions and assumptions involved in developing the budget; (a) No, (b) There are always problems in any methodology, but using the budget is a workable solution, particularly with the safeguards (complaint proceeding) recently instituted.</p>
Connecticut	<p>(a) The most recent rate case uses the Gross Domestic Product Price Index, (b) No, budget data is essentially the pro forma adjustment from test year to rate year; previous years budgets and actual results have been used as a reasonableness of the budget process; assumptions going forward are tested, accounts are tested and outliers are analyzed.</p>
Florida	<p>(a) No, (b) See <i>Response 2(a)</i>; this would be determined on a case-by-case basis, based upon the record.</p>
Illinois	<p>(a) There is no specific inflation index that the utilities use, (b) No.</p>
Kentucky	<p>(a) No, (b) There have been some minor problems related to some utilities' internal budget processes.</p>
Michigan	<p>(a) Varies by utility; Blue Chip is common, (b) Many factors could influence this response; budget data can be useful but can also be problematic.</p>
Minnesota	<p>(a) No, (b) Budget data is commonly used by utilities to forecast future test-year O&M expenses.</p>
Mississippi	<p>(a) No, (b) Yes, in terms of doing an independent verification.</p>

State	<p>6. What methodologies or indices do utilities usually use to forecast operation and maintenance (O&M) expenses?</p> <p>a. Is there a specific inflation index (e.g., Global Insights, GDP Implicit Price Index) that utilities used?</p> <p>b. Do commission staff see any problems in a utility’s using budget data to forecast O&M expenses?</p>
New York	<p>(a) The Commission has relied on the gross domestic product implicit price deflator (GDP-IPD) as an inflation index per the attached Notice issued April 14, 1992 in Case 92-M-0184 (<i>Proposed Change in the Index Used to Measure Inflation for Use in Rate Making Proceedings</i>); this index is typically used to inflate historic O&M expenses into future rate year dollars,</p> <p>(b) Yes, as outlined in the <i>Policy Statement</i>, forecast material should be developed from the historical base. For O&M expenses, changes in prices and in activity levels should be fully and separately detailed by functional groups and elements of cost. All assumptions of changes in price inputs because of inflation or other factors or changes in activity levels due to modified work practices or other reasons should be separately developed. The format used in presenting utility budgets of future operations produced for a utility’s internal purposes will not meet these requirements without substantial modification.</p>
Oregon	<p>Well known price index forecasts such as Global Insights are used. Using budget data is not typically used as there is often a difference between budget and actual.</p>
Tennessee	<p>Utilities rely on growth rates, weather studies, regression analysis, inflation indices, and so forth; (a) Different utilities use different inflation factors, (b) As a starting point, no; staff examines any budgets, reviews historical invoices and makes known and reasonable changes; forecasts are then based upon all the information we gather.</p>
Utah	<p>(a) Sometimes, (b) Yes, rates must be tied to cost of service.</p>
Wisconsin	<p>(a) The Commission uses Global Insight and Blue Chip Economic Forecasts and averages the two to get our annual inflation forecasts. NYMEX is used for projecting gas prices when estimating electric fuel expense, (b) A utility can forecast its O&M expenses however it wants to; staff then reviews the forecast for reasonableness. Budget data is probably the most useful data for a utility to base its FTY costs.</p>
Wyoming	<p>(a) Global Insights are most frequently used, (b) Yes.</p>

State	7. Does your commission view an FTY relative to an HTY as reducing a utility's risk, thus justifying a lower authorized rate of return?
Alabama	Not necessarily, as an HTY implies a traditional rate case which in turn implies a chance to over-earn. There is no such opportunity with a Rate RSE.
Connecticut	Increases to such areas as plant, operations and maintenance in subsequent years of a rate plan should provide for a greater predictability in operational performance and should be reflected in a utility company's risk profile.
Florida	No
Illinois	The Commission has not made any exogenous adjustments to the cost of common equity estimates for utility sample companies when setting the authorized rate of return for FTYs.
Kentucky	The Commission has not authorized a lower rate of return due to utility using a FTY.
Michigan	The Commission has not commented on this relationship in isolation.
Minnesota	The Minnesota Commission normally does not make adjustments to the ROR or ROE adjustments for specific risk factors. Decisions about utility specific risk factors are embedded in the selection of a comparable group of utilities on which the ROR and ROE analysis is based.
Mississippi	The issue has been informally raised but not acted upon or investigated.
New York	It is widely held (by the financial community, industry analysts, and credit rating agencies) that use of a FTY improves earnings, improves credit ratings, and reduces risks. It follows logically that these factors all support a lower allowed ROE.
Oregon	Oregon has a long history of using future test periods. There is no adjustment to the cost of capital.
Tennessee	To my knowledge no adjustment has ever been made to ROE as a result of choosing a future test year over a HTY. I do not recall the issue coming up.
Utah	In the two litigated cases in the past decade on rate of return, the Commission has not tied the rate of return decision to use of an FTY.

State	7. Does your commission view an FTY relative to an HTY as reducing a utility's risk, thus justifying a lower authorized rate of return?
Wisconsin	Much would depend on the preparation of an HTY. Consideration of known and significant costs arising during the period when rates would be in effect is important. Not recognizing those changes would have a negative effect on earnings. What the trade-off is between certainties within an HTY vs. forecasts of an FTY would dictate which has more risk.
Wyoming	There has been no specific adjustment to a rate of return recognizing a decrease in utility risk.

State	<p>8. How does your commission determine that the cost forecasts reflect prudent utility management?</p> <p>a. What actions has the commission taken in assuring that customers are not paying for unreasonable or imprudent costs?</p> <p>b. Does your commission believe that utilities have an incentive to misreport their costs and sales to justify a higher rate?</p>
Alabama	The staff conducts an annual rate review plus smaller quarterly reviews that tend to identify any weaknesses in a budget. However, there has to be a certain amount of trust and rapport involved; (a) RSE provides for quarterly rate adjustments; these quarterly points of test can only yield no change or downward adjustments, (b) We have no evidence nor do we believe that gas utilities misreport costs or sales.
Connecticut	(a) Discovery through audit, interrogatories, cross-examination as well as orders to utilities for follow up reporting post the final Decision, (b) There are always differences of opinions regarding forecasts; all parties have different motivations as to how conservative or accurate any particular forecast may be.
Florida	(a) See <i>Response 2(a)</i> above, (b) No.
Illinois	(a) If the Commission finds that the cost forecast includes unreasonable or imprudent costs, the costs are excluded from the requested revenue requirement, (b) Unable to answer.
Kentucky	(a) See <i>Responses 3-5</i> , (b) Not just a result of using FTY.
Michigan	(a) Cannot speak for the Commission, but the objective (and process) of rate cases is to aid in determining what is reasonable, (b) Can't speak for the Commission.
Minnesota	(a) Rate cases are referred to the state's Office of Administrative Hearings for a contested case proceeding in which the reasonableness and prudence of the company's costs and proposed rates are evaluated and tested before being authorized by the Commission, (b) No more so than would normally be expected. The Commission believes its existing processes protect ratepayers.
Mississippi	(a) We require a look-back, (b) Yes.

State	<p>8. How does your commission determine that the cost forecasts reflect prudent utility management?</p> <p>a. What actions has the commission taken in assuring that customers are not paying for unreasonable or imprudent costs?</p> <p>b. Does your commission believe that utilities have an incentive to misreport their costs and sales to justify a higher rate?</p>
New York	<p>(a) Staff performs a full audit of the HTY and a thorough evaluation of the linking period and FTYs; moreover, staff analyzes the utility’s cost control, procurement, and contracting processes and procedures; staff reviews capital projects and programs, monitors construction of major projects, and performs routine site visits; the utilities and Staff support their positions with testimony and exhibits, (b) a one-year litigated rate plan limits the incentive to inflate cost forecasts, and the impact is short lived because actual rate-year costs become the basis for the next test year; multi-year rate plan agreements limit the impact on erroneous cost forecasts with the use of earnings sharing mechanisms (ESM).</p>
Oregon	<p>Utilities have the burden of proof that the forecasts are reasonable. Oregon also operates under a “used and useful” statute that does not allow major investments to be placed in rates until they are “used and useful”. Typically an audit is completed prior to costs being placed in rates.</p>
Tennessee	<p>Historical results provide great guidance and large variances indicate red flags. Still, management decisions are difficult and expensive to audit. One area that is of growing concern is the use of corporate service companies. Although one can audit the allocation methodology (between states), without auditing the underlying management decisions of the service company (staff levels, salaries....) that drive the costs, it is difficult to reach conclusions; (a) The Authority has ordered a few management audits resulting from rate cases; on the commodity side there are incentive plans for gas utilities to obtain the best commodity and transport rates or its consumers, (b) The reported costs are generally harder to misreport, but it happens; we hope it can be found; forecasts, however, can sometimes be extreme.</p>
Utah	<p>(a) The Commission relies on the record evidence in each general rate case or other rate setting proceeding and (b) The Commission has not undertaken a formal evaluation of this issue.</p>

State	<p>8. How does your commission determine that the cost forecasts reflect prudent utility management?</p> <p>a. What actions has the commission taken in assuring that customers are not paying for unreasonable or imprudent costs?</p> <p>b. Does your commission believe that utilities have an incentive to misreport their costs and sales to justify a higher rate?</p>
Wisconsin	<p>(a) Staff audit of the utility’s application is one important step in that process. In addition, for large construction projects, the Commission requires a construction authorization or a Certificate of Public Convenience and Necessity whereby the utility needs authorization from the Commission before it can begin construction. The reasonableness of the estimated costs and prudence of the project are addressed in these proceedings, (b) The utilities are subject to external financial audits of their financial statements. There is the consideration that a utility would forecast its costs and revenues conservatively in order to increase the likelihood of meeting or exceeding its authorized ROE. We have seen differing approaches in this regard among the state’s utilities. Some appear more prone than others to building in a cushion in their forecasts.</p>
Wyoming	<p>(a) Monitoring the earnings levels between rate cases (forecast versus actual) on an account-by-account basis, (b) Yes.</p>

State	<p>9. What adaptations did your commission make when first allowing utilities to file an FTY?</p> <p>a. Did the commission have to hire new staff and staff with different expertise?</p> <p>b. Did the commission have to devote less time to other rate-case matters?</p>
Alabama	(a) No, (b) No
Connecticut	(a) No, (b) No.
Florida	(a) Unknown, but over time the overall composition of staff with certain areas of expertise or specialization may have evolved, (b) No.
Illinois	(a) The Commission required new staff to review the costs included in the requested revenue requirements to be designated as Certified Public Accountants, (b) No.
Kentucky	No specific adaptations were made; (a) No, (b) No.
Michigan	(a) Not for the FTY law, (b) No.
Minnesota	(a) Don't know - current staff did not work for the Commission when FTYs were first allowed, (b) Don't know - current staff did not work for the Commission when FTYs were first allowed.
Mississippi	(a) and (b) No.
New York	Generally, the Commission made no significant adaptations to (1) staffing levels or (2) reviewing other rate case matters when moving to FTYs. Staff transitioned from the use of historical, partial historical and partial forecast, to fully forecasted test years over several years; (a) No, (b) No.
Oregon	No adjustments were made as far as we can recall.
Tennessee	(a) I think the existing staff was used, but I am not sure; I know presently that we train new employees, (b) Not sure, and, like most Commissions, we try to evaluate and review all aspects of a rate case, which can be overwhelming; our first approach is to focus on large categories, e.g., salaries and wages, management services, capital budgets taxes.... ; I would not go as far to say that forecasting takes away time from our evaluation.

State	<p>9. What adaptations did your commission make when first allowing utilities to file an FTY?</p> <p>a. Did the commission have to hire new staff and staff with different expertise?</p> <p>b. Did the commission have to devote less time to other rate-case matters?</p>
Utah	<p>The Commission established filing requirements through a rule for applications seeking use of an FTY, and required the electric utility to file variance reports in order to review forecasts after the fact; (a) No and (b) Yes.</p>
Wisconsin	<p>As stated above, the Commission has used a future test year approach for at least 35 years and there is no knowledge available regarding the transition to a future test year.</p>
Wyoming	<p>(a) No, (b) No.</p>

State	<p>10. Does your commission retrospectively compare the utility's forecasted costs allowed in rates with actual costs?</p> <p>a. If it does, what methodology does it use to measure the difference?</p> <p>b. Is there any evidence that a utility has consistently over-forecasted costs?</p> <p>c. If so, has your commission made adjustments to subsequent cost forecasts reflecting past forecasting errors?</p>
Alabama	Yes; (a) We use trend and comparative analysis to compare year to year; the real answer here, however, is the quarterly true-ups, (b) Consistent givebacks under Rate RSE could be interpreted that way, but the givebacks tend to negate the usefulness of such an overstatement, (c) Yes.
Connecticut	(a) In subsequent rate cases or as the result of a utility that is exceeding its allowed ROE by one percentage point for six consecutive months (<i>Conn. Gen. Statute §16-19g</i>), (b) Yes, the Authority rarely accepts a company's forecasts without adjustment, (c) Past experience with any particular company is instructive when determining the appropriateness of any forecast.
Florida	No; the Commission, however, requires electric and gas utilities to submit an O&M benchmark analysis with rate case filings. The purpose of the O&M analysis is to test the reasonableness of the forecasted O&M expenses. If the forecasted expenses are higher than calculated under the benchmark methodology, the Commission requires the utility to provide justification for the variance.
Illinois	(a) The comparison of budgeted costs to actual costs is done in subsequent rate cases to determine the accuracy of a utility's forecasting system, (b) If there is evidence that a utility has consistently over-forecasted costs, an adjustment to the forecast will be proposed in a subsequent rate case, (c) Yes.
Kentucky	No; (b) No
Michigan	The Commission does not do so in any procedural setting.
Minnesota	Not on a routine basis at this time, (a), (b) and (c) Not applicable.

State	<p>10. Does your commission retrospectively compare the utility’s forecasted costs allowed in rates with actual costs?</p> <p>a. If it does, what methodology does it use to measure the difference?</p> <p>b. Is there any evidence that a utility has consistently over-forecasted costs?</p> <p>c. If so, has your commission made adjustments to subsequent cost forecasts reflecting past forecasting errors?</p>
Mississippi	<p>Yes; (a) A recalculation of the revenue requirement using historical figures, (b) No, (c) Not applicable.</p>
New York	<p>Yes. Staff performs a reconciliation of the test year with the previous rate year and reconciles the rate year with the linking period and test year to identify drivers in the rate increase requested. In addition, most major utilities have earnings sharing mechanisms (ESM) as part of multi-year rate plans which provide for a partial sharing of the effects of variances between rate case forecasts and actual results. The ESMs are reviewed and analyzed by Staff to determine major drivers of differences. In those instances where a major utility does not have a multi-year rate plan, Staff will routinely perform an after the fact reconciliation of the rate year forecasts with actual results; (a) Staff uses the reconciliation method to measure the difference. The reconciliation is a line-by-line comparison of the revenue-requirement income statement to identify major drivers of the difference in allowed vs. actual return on equity, (b) There is no evidence, which Staff is aware, that a utility has consistently over-forecasted costs, (c) In its evaluation of forecasts, Staff routinely looks for derivations and adjusts subsequent forecasts based on previous results.</p>
Oregon	<p>Yes, staff reviews the historical accuracy of forecasts.</p>
Tennessee	<p>The Authority does not formally do this, but Staff, on its own, reviews its forecasts with actual results, (a) We do not use a formal methodology, (b) Yes, in many instances; in one recent case a utility forecasted a certain number of employees that the Authority accepted in forecasting salaries and wages expense (and benefits); The utility never came close to hiring the number of employees it forecasted, (c) Past utility actions and performance are reviewed and taken into account.</p>

State	<p>10. Does your commission retrospectively compare the utility's forecasted costs allowed in rates with actual costs?</p> <p>a. If it does, what methodology does it use to measure the difference?</p> <p>b. Is there any evidence that a utility has consistently over-forecasted costs?</p> <p>c. If so, has your commission made adjustments to subsequent cost forecasts reflecting past forecasting errors?</p>
Utah	<p>Yes, in balancing account rate proceedings; (a) The method varies depending on the type of balancing account, (b) The Commission has not undertaken a formal evaluation of this issue, (c) Yes, as the energy balancing account and renewable energy certificate revenue credit balancing account both measure the difference between forecast and actual costs or revenue.</p>
Wisconsin	<p>(a) We often employ budget-to-actual analyses to see if a utility is consistently under- or over-forecasting specific areas. We also get monthly ROE reports that show earnings for the most recent 12 months. Material variances can then be investigated as to origin, (b) As noted in <i>Response 8(b)</i>, sometimes there is, (c) Yes, usually in the form of budget to actual adjustments.</p>
Wyoming	<p>Yes, staff conducts these analyses; (a) Actual versus forecast, trended over time, (b) Staff analyzes the forecasts on an account by account basis; these analyses have shown so far no pattern of over-forecasting for those utilities that have used forecasted test years; for most utilities, however, an FTY has not been used for a long period of time; many have only used it once, so far.</p>

State	<p>11. Does your commission retrospectively compare the utility's forecasted sales allowed in rates with actual sales?</p> <p>a. If it does, what methodology does it use to measure the difference?</p> <p>b. Is there any evidence that a utility has consistently under-forecasted sales?</p> <p>c. If so, has your commission made adjustments to subsequent sales forecasts reflecting past forecasting errors?</p>
Alabama	Not as an isolated event, but sales are always a factor in what we are examining; (a) Not applicable, (b) No, (c) Not applicable.
Connecticut	(a) Infrequently in a rate increase application, a past forecast will be reviewed for accuracy to judge the reliability of projected forecasts, (b) No, (c) Not applicable.
Florida	Yes, but not to adjust rates for forecast inaccuracies; each year the utilities submit ten-year site plans (a type of integrated resource plan); as part of our evaluation, staff calculates historical forecast accuracies for the utilities, (a) A simple comparison of forecasted values for kWh, kW, and customers to actual values, (b) No; in fact in recent years, the trend across all Florida utilities has been to over-forecast, (c) No.
Illinois	The Commission does not typically compare forecasted sales allowed in rates with actual sales.
Kentucky	No; (b) No
Michigan	The Commission does not do so in any procedural setting.
Minnesota	Intervenors in utility rate cases often make this comparison in their pleadings; (a) Utilities in Minnesota are required to file Jurisdictional Annual Reports each year, pursuant to Minn. Rules, 7825.4700 - 7825.5400; intervenors often compare the data reported in these reports to the data filed in a rate case, (b) This is a case-by-case determination based on the merits of the forecast presented in the docket, (c) In one recent rate case, the Commission found that the forecasted sales data was unreliable and used the Company's actual sales data for the test year.
Mississippi	Yes; (a) Look-back and formulary rate plans, (b) No, (c) Not applicable.

State	<p>11. Does your commission retrospectively compare the utility’s forecasted sales allowed in rates with actual sales?</p> <p>a. If it does, what methodology does it use to measure the difference?</p> <p>b. Is there any evidence that a utility has consistently under-forecasted sales?</p> <p>c. If so, has your commission made adjustments to subsequent sales forecasts reflecting past forecasting errors?</p>
New York	<p>Yes, as part of the calculation of Revenue Decoupling Mechanism (RDM) billing adjustments; (a) Staff uses the reconciliation method to measure the difference, (b) There is no evidence, which Staff is aware, that a utility has consistently under-forecasted sales; regardless, under the RDM approaches adopted for the major utilities, sales forecast issues are largely moot, (c) In its evaluation of forecasts, Staff routinely looks for deviations between past actual and past forecasts and adjusts forecasts based on previous results.</p>
Oregon	<p>Yes, staff reviews the accuracy of past forecasts.</p>
Tennessee	<p>The Authority does not formally do this, but Staff, on its own, reviews its forecasts with actual results. We receive information from utilities via required monthly reports; (a) There is no formal methodology, (b) Generally yes, (c) The revenue side is easier to forecast because you have so much historical data (customers, usage...); this makes it more difficult for a utility to state that revenues will decline by a large amount when revenues have been increasing for the past ten years; expenses, however, are more difficult to forecast due to more unknowns such as inflation.</p>
Utah	<p>Yes, this comparison is provided in the electric utility’s energy balancing account proceeding; (a) The Commission relies on a simple comparison of actual sales to test year sales, (b) The Commission has not undertaken a formal evaluation of this issue, (c) Only with respect to the balancing account, as noted above.</p>
Wisconsin	<p>(a) Yes, it does. It compares actual weather-normalized sales to the utility’s filed forecast over several years, (b) Sometimes there is, (c) although staff normally prepares its own sales forecast, it is useful to know how the utility’s filed forecasts compare to actual results.</p>
Wyoming	<p>Yes; (a) Comparison analysis (forecast versus actual) over several years with comparisons of projections and assumptions to actual results, (b) No.</p>

State	<p>12. If your commission requires a project to be “used and useful” before a utility can recover any of its costs from its customers, how does this mandate reconcile with an FTY?</p> <p>a. Does your commission, for example, exclude the project cost as part of the revenue requirement in a general rate case?</p> <p>b. Does your commission, as an alternative, add the project cost to rates only after (1) the project comes on line and (2) the commission has determined the cost to be prudent, in a separate proceeding?</p>
Alabama	Projects that are not considered “used and useful” can be excluded from the budget; (a) Not applicable, (b) Not applicable.
Connecticut	(a) Projects scheduled for completion by the mid-point of the rate year would be part of the revenue requirements; for a multi-year rate plan, projects scheduled for completion would be included in revenue requirements for the year of the completion, (b) In the past, Connecticut has allowed for limited reopened proceedings to include projects that were not incorporated in single-year rate Decisions.
Florida	Electric utilities are required to file for a need determination for proposed power plants and transmission lines. If approved, construction of the facilities is deemed appropriate. The revenue requirement impact is based on the in-service date of the facilities. The Commission has approved the use of step increases to time the rate increase to the in-service date, (b) These decisions would usually be made independent of the decision to use an FTY. If the project was scheduled to be in service during the FTY, in whole or in part, it likely would be factored into test year revenue requirements. Such decisions would be highly case-specific, however.
Illinois	Only projects that would be “used and useful” when put into service in the test year are included in rate base; (a) No, (b) No.
Kentucky	The Commission does not require a project to be “used and useful”.
Michigan	(a) and (b) The Commission uses its discretion based on record evidence.

<p>State</p>	<p>12. If your commission requires a project to be “used and useful” before a utility can recover any of its costs from its customers, how does this mandate reconcile with an FTY?</p> <p>a. Does your commission, for example, exclude the project cost as part of the revenue requirement in a general rate case?</p> <p>b. Does your commission, as an alternative, add the project cost to rates only after (1) the project comes on line and (2) the commission has determined the cost to be prudent, in a separate proceeding?</p>
<p>Minnesota</p>	<p>(a) No; the Commission has allowed projects forecasted to be completed and in-service, for example, by the end of, the forecasted test year to be included in the test-year rate base; also, Minn. Stat. 216B.16, subd. 6a, Construction work in progress, authorizes the inclusion of construction work in progress (CWIP) with an offset for an allowance for funds used during construction (AFUDC) in determining a utilities’ revenue requirement, (b) Not applicable.</p>
<p>Mississippi</p>	<p>The project should become used and useful during the rate period; (a) It would be excluded only if it would not be used and useful during the rate period, (b) No, at least, not in every case; for example, there is a proposal currently before the Commission to implement rates for Mississippi Power Company’s Kemper Plant to begin recovery before the commercial operation date of the plant and before a final determination has been made; the Commission agreed in principle to such an approach in a Settlement Agreement, but the implementation is currently under review and could be rejected by the Commission.</p>

<p>State</p>	<p>12. If your commission requires a project to be “used and useful” before a utility can recover any of its costs from its customers, how does this mandate reconcile with an FTY?</p> <p>a. Does your commission, for example, exclude the project cost as part of the revenue requirement in a general rate case?</p> <p>b. Does your commission, as an alternative, add the project cost to rates only after (1) the project comes on line and (2) the commission has determined the cost to be prudent, in a separate proceeding?</p>
<p>New York</p>	<p>Capital projects must be in-service before the utility can place them in rate base. In general, this in-service requirement operates in the same way as a “used and useful” standard. In New York, projects which meet this “in-service” test are eligible to recover the associated return on and return of capital in rates. Because New York rate cases use FTYs, projections of capital project costs and in-service dates must be made by the utilities and evaluated by the Commission; (a) Not routinely, as noted above, typically projections of major (and minor) capital project costs and in-service dates are used to shape the FTY rate base; there are exceptions, however. Concerns about a major project based, for example, on its cost, need, justification, or schedule may prompt the Commission to undertake a prudence review. If a prudence review is done, some or all of the project costs may be excluded from rate base and, therefore, from the utility’s revenue requirement until the determination on prudence is made, (b) As noted in <i>Response 12 (a)</i>, if a project were carved out for a separate prudence review, some or all of the project’s costs may be excluded from rate base and revenue requirements while the prudence review is being completed.</p>
<p>Oregon</p>	<p>Yes, the “used and useful” statute is <i>ORS 757.355</i>.</p>
<p>Tennessee</p>	<p>Staff reviews all projects and seeks detailed explanations for their necessity. Staff also reviews cost projections, amounts capitalized and so forth; (a) If a project is found not to meet the “used and useful” test the Authority could exclude the project (of course circumstances as to why it became unusable would play a big part in that assessment), (b) Rates for projects are generally included in base rates established in rate cases. Amounts are recorded in plant in service accounts, CWIP and AFDUC. Recently, however, the use of trackers has been considered or the deferral of project costs for later recovery has been allowed. For example, utilities, upon request, have been allowed to defer costs associated with transmission and distribution integrity management programs and then later seek recovery when final amounts are known.</p>

<p>State</p>	<p>12. If your commission requires a project to be “used and useful” before a utility can recover any of its costs from its customers, how does this mandate reconcile with an FTY?</p> <p>a. Does your commission, for example, exclude the project cost as part of the revenue requirement in a general rate case?</p> <p>b. Does your commission, as an alternative, add the project cost to rates only after (1) the project comes on line and (2) the commission has determined the cost to be prudent, in a separate proceeding?</p>
<p>Utah</p>	<p>Rates must be “just and reasonable” for any cost recovery (see Utah Code Annotated (UCA) 54-4-4). The extent to which public utility plant is “used or to be used” (see <i>UCA 54-2-1(8)</i>) and the costs “just and reasonable” is the subject of rate recovery proceedings, regardless of test year. In addition to seeking cost recovery in a general rate case, Utah law allows public utilities to seek cost recovery of major plant additions outside of a general rate case, provided the projected in-service date of additions is within 18 months of the date of a final general rate case order (see <i>UCA 54-7-13.4</i>); (a) No, (b) No.</p>
<p>Wisconsin</p>	<p>(b) For large construction projects, the Commission requires a construction authorization or a Certificate of Public Convenience and Necessity whereby the utility needs authorization from the Commission before it can begin construction. The prudence determination is made during that authorization process.</p> <p>Regarding costs being included in rates, the Commission often provides a 50 percent current return on Construction Work in Progress (CWIP). Carrying costs on CWIP are either recovered currently or are recorded as an Allowance for Funds Used During Construction (AFUDC). If the timing of construction expenditures is particularly uncertain, the Commission may authorize the utility to record 100 percent AFUDC on the associated CWIP.</p> <p>Alternatively, if the utility is constructing a power plant or something that requires an unusually large amount of capital, the Commission may authorize a 100 percent current return on CWIP to improve the utility’s cash flow during construction. Also, the Commission has implemented two-step rate changes in a single proceeding. When the large project receives its certificate, rates then increase.</p>
<p>Wyoming</p>	<p>Through stipulations, rate basing of capital projects has been included at the time it was expected to go into service through phase-in rates.</p>

State	13. Does your commission make any true-ups or post-adjustments to rates when a utility's actual costs or sales depart from their forecasts? If it does, what are the necessary conditions?
Alabama	If the projected return at the following September 30 (end of the Fiscal Year) is above the allowed ROE, rates must be reduced to bring them to the adjusting point.
Connecticut	In the past, the Authority allowed tracking mechanisms for items such as pension expense. Recently, Connecticut enacted full decoupling for gas, water and electric utilities. While the mechanics slightly differs among utilities, they all employ annual revenue true-ups. There are no conditions for gas and water. Their over- or under-billings are trued-up to the revenue authorized in their last rate increase application. The mechanics for gas utilities are still being decided by the Authority, but ultimately gas also will include an annual true-up mechanism.
Florida	No
Illinois	No
Kentucky	No
Michigan	The Commission has, in certain instances, approved a revenue decoupling mechanism which would, to some degree, be impacted by sales.
Minnesota	No
Mississippi	Yes, the utility's actual earned ROI or ROE is compared to a range of no change calculated using the utility's approved ROE and ROI. If the actual return exceeds a certain level (e.g. 100 basis points above or below the approved ROI), an adjustment is made.
New York	Yes, for delivery revenues subject to an RDM, forecasted annual revenues are trued up with actual revenues. In a one-year litigated case, several expense categories can be subject to true-up, such as pension and OPEBs, environmental costs, storm costs, carrying costs associated with plant balances (downward only), and tree trimming (downward only). Multi-year rate plans may include additional true-ups, such as for property taxes and tax law changes. These reconciliations are done only if provided for in the Commission decision setting the rates.

State	13. Does your commission make any true-ups or post-adjustments to rates when a utility’s actual costs or sales depart from their forecasts? If it does, what are the necessary conditions?
Oregon	Power cost adjustments and decoupling adjustments are the main ways of making adjustments.
Tennessee	Although we generally do not, we do have an experimental program in place for Chattanooga Gas Company for the revenue side of business. It attempts to keep revenues per customer constant (recognizing the decline in usage per customer) by adjusting rates up or down to maintain a predetermined revenue benchmark per customer. The Authority is currently reviewing that mechanism in a contested case proceeding.
Utah	Yes, the energy balancing account and renewable energy certificate revenue credit balancing account proceedings provide a recovery mechanism for differences between certain forecasts and actual cost/revenue.
Wisconsin	The only time the Commission authorizes a true-up or post-adjustment to rates is when a utility has authority or the Commission issues an order to defer costs or revenues associated with a particular activity. Without such authority or order, such adjustments would be considered retroactive ratemaking, which is prohibited in Wisconsin. The Commission can always bring a utility in for a rate review if earnings are too high or low, with the option, when earnings appear too high, to make rates subject to refund from that time on, pending review of financial information. Conversely, a utility has the ability to file for rate review at any time.
Wyoming	No.

State	14. From your experience, what would you identify as key factors in assuring utility customers that rates based on an FTY are “just and reasonable”?
Alabama	The true-up mechanism assures that rates, revenue, and return are all within the allowed range.
Connecticut	<p>The discovery phase is obviously the most important factor in the process of deciding what is “just and reasonable”. Through audit, interrogatories, cross-examination and subsequent requests for information, the Company is held to a certain standard of proving its request and having the request withstand scrutiny.</p> <p>The authority monitors utility performance post final Decision through order compliance for project completion and overall capital spending, as well as utility reported ROEs throughout the in-between rate case period.</p>
Florida	See <i>Response 2(a)</i> above.
Illinois	The additional information (See <i>Response 4</i>) that is required when a future test year is used provides the assurances that rates based on a FTY are “just and reasonable”.
Kentucky	To a great extent, the key is the sophistication of a utility’s forecasting capabilities.
Michigan	A rate case with sufficient evidence and participation.
Minnesota	Reliability of the underlying sales and weather data and the methodology used to conduct the forecast.
Mississippi	I would allow an FTY only in general rate cases if pure projections are used in which the projections can be fully vetted by experts. I would also provide for regular earnings reviews.
New York	The key factors in assuring utility customers that rates based on a FTY are “just and reasonable” are Staff’s expertise and the rate setting process. Staff consists of experienced professionals with background in accounting, economics, engineering, and law. The rate setting process is a rigorous, comprehensive process that is presided over by an Administrative Law Judge.

State	14. From your experience, what would you identify as key factors in assuring utility customers that rates based on an FTY are “just and reasonable”?
Oregon	Using a sound and well reasoned record of evidence by which to base decisions, and using an open process with public input are keys to having rates that are just and reasonable.
Tennessee	In establishing rates on future test years, the Authority takes into account all known and measurable changes for the historical period, then ascertains from the utility all changes anticipated in the foreseeable future. Since rates will continue into the future, it makes sense to match those rates with future costs of service rather than historical costs.
Utah	The Commission has not undertaken a formal review of this issue.
Wisconsin	(1) Utility rate applications are audited by Commission staff, (2) Commission staff compares forecasts to historical experience, (3) Commission staff reviews the ongoing actual return on equity over time compared to authorized, (4) Good, professional communication between Commission staff, the utilities, and interveners and (5) Commission staff objectivity, both real and perceived, greatly enhances the process.
Wyoming	Analyses of the forecasts, including third party forecasts, assumptions, and so forth during rate cases, as well as actual versus forecast analyses after the rate-effective period.