



Office of the Public Counsel
Harry S Truman Building - Ste. 250
P.O. Box 7800
Jefferson City, Missouri 65102
Telephone: 314-751-4857
Facsimile: 314-751-5562

Martha S. Hogerty
Public Counsel

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AUG - 3 1992

August 3, 1992

PUBLIC SERVICE COMMISSION

Mr. C. Brent Stewart
Executive Secretary
Missouri Public Service Commission
P. O. Box 360
Jefferson City, Missouri 65102

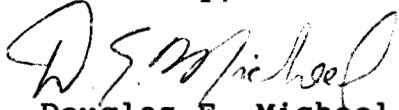
Re: IRP Rulemaking (Electric Utility Resource Planning)
Case No. EX-92-299

Dear Mr. Stewart:

Enclosed for filing in the above-referenced case please find the original and fourteen copies of Public Counsel's Initial Verified Statement with attached Appendix A and Affidavit of Ryan Kind. Please "file" stamp the extra-enclosed copy and return it to this office.

Thank you for your attention to this matter.

Sincerely,


Douglas E. Micheel, Esq.
Assistant Public Counsel

DEM:bjr

Enclosures

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

FILED

AUG - 3 1992

PUBLIC SERVICE COMMISSION

In the matter of the proposed)
Commission Rules 4 CSR 240-22.010)
through 22.080 (Electric Utility) Case No. EX-92-299
Resource Planning))

PUBLIC COUNSEL'S INITIAL VERIFIED STATEMENT

The Office of the Public Counsel welcomes the opportunity to present its views on the proposed Chapter 22 (Electric Utility Resource Planning) of 4 CSR 240. We have participated actively in the series of workshops in which parties were able to comment on earlier versions of this Chapter, and we found this approach, though painful at times, very productive. Everyone attending those workshops should be thanked for his or her hard work and contributions to the sessions. The members of the Staff should especially be singled out for thanks, since they produced and provided drafts and listened very carefully to all of the comments made in the workshops.

We will address broad policy issues as well as narrower technical matters. While our comments will be generally supportive of the proposed rules, we will constructively criticize parts of them. Since we will not comment on each individual paragraph of the proposed rules, we should point out that our failure to address particular proposals can generally be taken as an indication of our support for them. Our comments will be presented in the order in

15.

which the relevant sections appear, and a set of the portions of the proposed rules that are affected by our suggested changes is attached as Appendix A. Public Counsel's suggested additions to those rules are shown shaded, and Public Counsel's suggested deletions are shown lined through. Finally, we look forward to appearing before the Commission to answer any questions regarding these comments.

4 CSR 240-22.010 Policy Objectives

Public Counsel is largely in agreement with the tone of the objectives set out in the proposed rule. Public Counsel strongly supports the use of the present worth of long-run utility costs as the primary selection criteria. This should be the explicit goal of utility planning since it is the best proxy for the cost of providing energy services, and we are encouraged to see it in these proposed rules. We believe, however, that this section could be strengthened by making a few modifications.

Public Counsel believes that the second sentence in paragraph (1), that currently reads:

Compliance with these rules shall not be construed to result in Commission approval of the utility's resource plans, resource acquisition strategies or investment decisions

is too strong a disclaimer. We contend that Commission approval of resource plans (even though it would not be approval for ratemaking purposes) is necessary for the utilities to pursue the proper resource acquisition strategies. Without Commission approval, utilities will be inclined to pursue plans that entail the least

regulatory risk, rather than plans that entail the least cost. Public Counsel therefore suggests that the above quoted sentence should be replaced with a sentence that reads:

Commission approval of a utility's resource plan shall not be construed as an acceptance by the Commission of the assumptions or estimates involved therein, nor as a finding as to the prudence of actions taken pursuant to the plan.

Public Counsel believes that the first sentence in paragraph (2) is unnecessarily qualified by the use of the adverb "adequately" to modify the phrase "serves the public interest." We contend that the inclusion of the word "adequately" would allow a utility to choose a plan that does not best serve the public interest, but merely serves the public interest in an adequate manner. Therefore, Public Counsel recommends striking the word "adequately" from the first sentence of paragraph (2).

Public Counsel believes that subparagraph (C) of paragraph (2) allows utilities too much discretion to choose plans that do not meet the primary selection criteria. Subparagraph (C) allows a utility to choose a plan based on what it believes to be an appropriate balance, and merely document that choice. This subparagraph gives sole discretion to the utility regarding the determination of what constitutes an "appropriate balance." The problem with granting such discretion is that a utility's interests can diverge from those of the public, and the Commission should be the sole arbiter of what is or is not in the public interest. Public Counsel therefore suggests the following two sentences, which will replace the second sentence in subparagraph (C):

The utility shall document the process and rationale used by decision makers to assess the tradeoffs between minimization of expected utility costs and these other considerations in selecting the preferred resource plan and developing contingency options. Resource plans shall strike an appropriate balance between minimization of expected utility costs and these other considerations.

4 CSR 240-22.020 Definitions

Public Counsel believes that fuel substitution (i.e., end use of energy sources other than electricity) is a legitimate and valuable means of providing energy services to end users at the least cost. Public Counsel therefore believes that fuel substitution should be considered a demand side resource in Section 050 (see our later discussion), and that certain definitions should be modified or added.

Definition (15) ("end use measure") should be changed to add fuel substitution, and to clarify that measures can be used in combination. That definition should read:

(15) End Use Measure means an energy efficiency measure, an energy management measure, a fuel substitution measure, or any of these collectively.

In addition, Public Counsel believes that two new definitions should be added:

(xx) Fuel substitution means the future use of an energy source to provide an end-use energy service that is currently provided by a different energy source.

(xx) Fuel-substitution measure (or program) means the use of an alternative fuel source to provide an end-use energy service currently provided by electricity.

Definition (16) ("energy") should be changed by inserting the words "generated or" between "is" and "used" to account for the

fact that energy is both used and generated. Energy is used in the generation sense in other parts of the rule (see 22.050 (3)(D), for example).

Definition (25) ("inefficient price") should be made less vague, by modifying this definition or by adding a definition of "long run marginal cost," or it should be dropped altogether. Under a too-strict definition of the latter term, nearly all prices in the economy would be declared inefficient. Furthermore, if utility cost structures exhibit economies of scale it is impossible to simultaneously price at long run marginal cost and satisfy the revenue requirement. Finally, it is important to remember that the long run marginal cost of providing energy services is dependent on, among other things, the cost of demand side measures. It does not appear that a definition of "inefficient price" is necessary, and Public Counsel would therefore recommend dropping it.

Public Counsel believes that two important types of load building activities, which were included in definition (29) in earlier drafts, should be restored in the final rule. These are efforts by utilities to expand their service territories or to attract new customers. While we understand that utilities believe that there is some benefit to the economic development that may be brought about by these activities, Public Counsel believes that these activities should be evaluated like any other load building, and if shown to be beneficial, then the utility should include them in its planning. Public Counsel suggests that the first sentence in this definition should be modified to read:

Load building program means an organized promotional effort by the utility to: 1) persuade energy-related decision makers to choose electricity instead of other forms of energy for the provision of energy service; 2) to expand its service territory; 3) to attract new customers to its service territory; or 4) to persuade existing customers to increase their use of electricity, either by substituting electricity for other forms of energy or by increasing the level or variety of energy services used.

Definition (56) describes the "utility discount rate." While we do not disagree with the definition given, we must emphasize the importance of expressing the cost and benefit streams being discounted in nominal terms. Since the utility discount rate, as defined, is a nominal rate, consistency requires that the dollar amounts be expressed similarly. This means that cost and benefit projections must be made to account for future expected inflation by expressing them in "future" or "then-current" dollars.

4 CSR 240-22.030 Load Analysis and Forecasting

In paragraph (1)(C)2.C, the phrase "and tests of statistical significance" should be changed to "and all relevant test statistics." This change is needed because there are other important statistical tests that should be made in addition to significance tests. This change would not cause any material change in utilities' forecasting methods. Indeed, we are confident that any forecasting software would allow for the calculation of important diagnostic statistics, and that relevant utility personnel would understand the importance of such tests. We do not believe it is necessary to provide in this rule a specific list of

tests that must be performed, since the tests will vary with the data being analyzed and with the questions being asked.

In the second sentence of (8)(H), the phrase "an explanation" should be replaced by "a satisfactory explanation". This change will require a utility to base its decision not to use end-use forecasting methods on solid reasoning.

4 CSR 240-22.040 Supply Side Resource Analysis

In (2)(B), the phrase "additional environmental laws or regulations that are likely to be imposed" should be changed to "additional environmental laws or regulations that may be imposed." The use of the word "likely" makes it appear as though only those costs that have a greater than 50 percent chance of being imposed on the utility need be considered. However, subparagraph (2)(B)(1) makes it clear that utilities should be considering those laws or regulations that have a nonzero probability of being imposed. Public Counsel's suggested change simply squares the language in (2)(B) with that in (2)(B)1.

Public Counsel suggests changing the sentence that appears in paragraph (9)(C) to clarify its meaning. This sentence would be made clearer by moving the phrase "described in Section 8" to an earlier part of the sentence. It would then read: "A summary of the results of the uncertainty analysis described in Section 8 that has been completed for candidate resource options."

4 CSR 240-22.050 Demand-Side Resource Analysis

Public Counsel believes that fuel substitution should be considered a demand-side resource. We therefore suggest replacing the word "renewable" with "alternative" in paragraph (2)(D), which would then read: "Alternative energy sources and energy technologies that substitute for electricity at the point of use."

These changes have the effect of retaining the language regarding fuel substitution that was included in an earlier draft of the rule. This language was removed largely in response to concerns expressed by utility companies that it would require electric utilities to consider the cost effectiveness of having their customers switch some of their end uses from electricity to other energy sources. The utilities claimed this requirement would be unfair since the gas utilities are not subject to similar regulations at this time. Public Counsel understands that a rulemaking is likely to be initiated in the near future that would apply resource planning to gas utilities. We believe that the electric utilities would be justified in seeking a waiver from provisions that require them to consider fuel switching to natural gas until the gas utilities are subject to similar rules.

Other workshop participants indicated that they would like to see fuel substitution provisions added to the electric resource planning rule once the gas resource planning rule is in effect. Public Counsel believes it would be better to have the fuel substitution provisions retained in the electric resource planning

rule that is currently under consideration than to try and add these in a future electric resource planning rulemaking.

We agree wholeheartedly with the requirement in (3)(A)3 that probable environmental costs be expressed on a per kilowatt-hour basis. The production of pollution and, therefore, the cost of its control are directly related to energy generation, not peak demands.

References to the discounting at the utility discount rate appear in (4)(B)1 and (4)(C)2. We again state that we agree that this rate is reasonable to use for discounting, but only when the cost and benefit streams being discounted are expressed in nominal terms. See our previous comment regarding Definition (56).

Public Counsel believes that (4)(C)2 should be revised to add "incremental" as the first word in this subparagraph to clarify that only operation and maintenance cost differences (both positive and negative) from those of existing end-use fixtures should be included in annualized costs per installation.

Public Counsel believes that the utility benefits test discussed in subparagraph (4)(G) should not include probable environmental costs since these are excluded from the benefits (avoided costs) side of this test, and therefore suggests that the last sentence should refer to subsections (4)(C)1 and (4)(C)2, rather than to all of (4)(C).

To ensure that programs are evaluated properly for cost effectively and that lost opportunities are minimized, Public Counsel suggests this addition following (6)(D):

(E) Cream skimming, lost opportunities, and free riders shall be considered when programs are designed. Cream skimming is that instance in which some, but not all, cost-effective demand-side measures are installed or otherwise implemented at a customer's facility, and it then becomes uneconomical to return at a later time to that facility to obtain the next incremental demand-side resource. Lost opportunities are those energy efficiency options which offer long-lived, cost-effective savings and that, if not exploited promptly, are rendered impossible or much more costly to achieve. Free riders are those customers who would have implemented a demand-side measure regardless of the utility demand-side program.

A new paragraph, which with renumbering would be paragraph (7), should be added to encourage utilities to consider a wide range of demand-side programs. Following the above proposed section (6)(E), we recommend adding:

(xx) In developing a full menu of demand-side programs, each utility shall consider the applicability of different types of utility actions to achieve optimum market penetration for each cost effective demand-side program. Actions that shall be considered include at least the following:

(A) Customer incentives for demand-side measure adoption, including:

1. Rebates to customers or demand-side measure vendors;
2. Customer bill credits and shared savings;
3. Loans at no interest or below market interest;
4. Payments to customers or third parties based on estimated or measured energy and/or demand savings;
5. Leasing of energy efficient end use equipment.

(B) Installation of demand-side measures in customer premises at varying levels of cost to the customer, including no cost to the customer.

(C) Information and education, including:

1. Educational literature, videotapes, advertising, and public service messages;
2. On-site energy audits or surveys of customer premises;
3. Design or other technical assistance to architects, contractors, builders, developers, and purchasing agents.

(D) Building and equipment efficiency standards as tariff conditions for the determination of hook-up fees (including sliding scale hook-up fees) for new service or for customers changing rate classes.

(E) Identification of demand-side program related contracts, including scope, type, contractor, cost estimate, contractor selection process and criteria.

(F) Other promising marketing strategies and delivery mechanisms, even if as yet unproven.

We recommend replacing "Screening" with "Analysis" in the title of paragraph (7) and "evaluate" with "analyze," to avoid any confusion regarding which cost tests are to be used for screening demand-side programs. In Section .020, screening test is defined as the probable environmental benefits test, but this section uses two different tests. This section as modified should read:

(7) Cost-Effectiveness Analysis of Demand-Side Programs. The utility shall analyze the cost-effectiveness of each potential demand-side program developed pursuant to section (6) using the utility cost test and the total resource cost test. The following procedure shall be used to perform these tests:

4 CSR 240-22.060 Integrated Resource Analysis

We strongly agree with the requirement in paragraph (1) that utility plans meet, at a minimum, the objectives stated in 4 CSR 240-22.010(2). It is important that plans be designed "to provide the public with energy services that are....efficient, at just and reasonable rates,..." (Emphasis added) The focus on energy services is most appropriate, since consumers are really buying cooling, heating, lighting, etc., not kilowatt-hours of electricity or therms of gas. We would interpret "just and reasonable" to mean, in light of 4 CSR 240-22.010 (2) (B) and (C), rates that are

consistent with minimizing revenue requirements subject to constraints on risk levels, rate impacts, and other secondary considerations.

Another reference to the utility discount rate appears in paragraph (2). Our previous comments regarding the need to use nominal cost and benefit figures apply here as well.

Public Counsel recommends replacing the word "goals" in the last sentence of paragraph (2) with "objectives" since there are no goals specified in .010(2) and all other references to .020 refer to the objectives contained therein. The last sentence would then read:

(2) Utility decision makers may also specify other measures that they believe are appropriate for assessing the performance of resource plans relative to the planning objectives identified in 4 CSR 240-22.010(2).

In paragraph (5), we suggest replacing "one (1) or more of the alternative plans developed pursuant to section (3) of this rule" with "the preferred resource plan." This paragraph would then read:

(5) Analysis of Load-Building Programs. If the utility intends to continue existing load-building programs or implement new ones, it shall analyze these programs in the context of the preferred resource plan and using the same modeling procedure and assumptions described in section (4). This analysis shall include the following elements. . . .

This change will ensure that proposed load building programs do not interfere with the fundamental objective of the resource planning process.

4 CSR 240-22.070 Risk Analysis and Strategy Selection

Paragraph (7)(A) contains a reference to striking an appropriate balance between the objectives specified in 4 CSR 240-22.010 (2). As we discussed earlier, we believe that the language of Section 010 makes it clear that the primary goal is revenue requirement minimization. "Striking an appropriate balance" therefore means moving away from this primary objective only if doing so would mean violating a constraint on risk levels, rate impacts, etc.

Public Counsel therefore believes that the phrase "In the judgment of utility decision makers" should be deleted from (7)(A) since its inclusion allows utilities too much discretion to choose plans that do not meet the primary selection criteria. The problem with granting such discretion is that a utility's interests can diverge from those of the public, and the Commission should be the sole arbiter of what is or is not in the public interest. Public Counsel's suggested language would read:

(7)(A) The preferred plan shall strike an appropriate balance between the various planning objectives specified in 4 CSR 240-22.010(2)

4 CSR 240-22.080 Filing Schedule and Requirements

In order to make the material filed by utilities in planning dockets more accessible to the public, Public Counsel believes that paragraph (1) should require each utility to submit an executive summary when filing its resource plan. Therefore, Public Counsel suggests that a subparagraph (G) should be added to paragraph (1). This subparagraph would read as follows:

(G) Executive Summary. Each utility shall prepare an Executive Summary, separately bound and suitable for distribution to the public, which shall be a non-technical description of the plan. This document shall summarize information referred to in subsection (1)(C). The summary shall include:

1. A brief introduction describing the utility, its existing generation and transmission facilities, its existing demand-side management programs, and the purpose of the plan.

2. The forecast of low, high and base growth of peak demand and energy for at least the next twenty (20) years with and without utility demand-side programs, and an explanation of the economic and demographic assumptions associated with each.

3. A summary of the utility's proposed integrated resource plan to meet expected energy service requirements, clearly showing the demand-side and supply-side resources. The summary shall list:

(a) the timing, size, and cost effectiveness of each demand-side program;

(b) the anticipated capacity, costs, and in service date for each supply-side option; and

(c) the anticipated additions to the transmission system, including capacity and in service date.

4. A summary of the activities, acquisitions and costs included in the utility's three-year implementation plan. The portion pertaining to demand-side programs shall spell out the savings goals, budget committed, and customer opportunities to participate.

5. Such other information as the Commission may determine appropriate.

Since the information required in Public Counsel's suggested subparagraph (G) would be duplicative of some of the information required in the proposed subparagraph (D), Public Counsel suggests modifying subparagraph (D) in the proposed rules by deleting the first sentence and requiring that the further information required in subparagraph (D) be submitted by a sworn statement. Subparagraph (D) would thus read as follows:

(D) A sworn statement that the resource acquisition strategy contained in the filing has been officially approved by the utility, and that the methods used and

the procedures followed by the utility in formulating the resource acquisition strategy comply with the provisions of this chapter of rules;

Public Counsel believes that the resource planning process can be both enhanced and streamlined by adding a requirement for utilities to schedule sessions where interested parties may preview resource acquisition strategies before they are formally filed with the Commission. Therefore, Public Counsel recommends inserting a new paragraph between (2) and (3) which would read as follows:

(xx) The utility shall schedule sessions for previewing its resource acquisition strategy prior to filing it with the Commission and provide an opportunity for interested parties to:

- (A) Learn of progress by the utility in developing plans and amendments to plans;
- (B) Determine whether key assumptions are being applied in a consistent and acceptable manner;
- (C) Determine whether key results are reasonable;
and
- (D) Offer suggestions on other matters as appropriate.

These sessions would allow utilities to benefit from outside input regarding key assumptions and results. Sessions that facilitate input from interested parties before plans are filed will decrease the time required to review plans and may decrease post filing disagreements regarding plan assumptions, methodologies, and results.

Public Counsel believes that the major purpose of Section 080 should be to ensure that the Commission has as much information as necessary, including input from the public and interested parties, to make a reasoned decision about a utility's plan. This decision should primarily be based on how well the utility's plan meets the objectives of this chapter of rules. Thus the parties' reviews of

a utility plan should not be limited (as in the proposed rule) to whether or not those plans meet "the planning objectives identified in 4 CSR 240-22.010(2)(A)-(C)." The reviews should instead attempt to determine whether the plans meet the fundamental objective stated in 4 CSR 240-22.010(2) taken as a whole. In order to accomplish this, Public Counsel believes that paragraphs (5) and (6) should be modified to delete the word "planning", which modifies "objectives," to delete the reference limiting the review to only subparagraphs (A) through (C), and to delete the word "limited."

As paragraphs (5) and (6) are proposed, Staff, Public Counsel, and any intervenors are limited in the report that they may submit to the Commission to simply assessing whether plans comply with subparagraphs (A) through (C) of Section 010(2). Public Counsel does not believe that it should be so limited, nor should any intervenors. In addition, Public Counsel believes that Staff should be required to perform a review to determine whether or not a utility's plan conforms with the overall objectives of Section 010(2). If proposed plans do not satisfy the fundamental objective of the resource planning process, as set forth in Section 010 of this chapter of rules, then Staff, Public Counsel, or any other intervenors should have standing to point out deficiencies.

Furthermore, Public Counsel believes that the Commission's order in a planning docket should determine whether or not the utility's plan meets the overall objectives of Section 010(2),

rather than simply the planning objectives of subparagraphs (A) through (C).

These references to 4 CSR 240-22.010(2)(A)-(C) are especially troublesome in light of problems which we have previously discussed, with the wording in 010(2)(C), which gives the utility complete discretion in determining the appropriate balance between the primary selection criterion and other considerations. Changing the wording in 010(2)(C) as suggested by Public Counsel will reduce our concern in this area, but Staff, Public Counsel, and other parties may still not be able to question whether a resource acquisition strategy satisfies the fundamental objective of the planning process. Therefore, Public Counsel suggests changing paragraph (13) of Section 080 by deleting the reference to subparagraphs (A) through (C) of 010(2).

Public Counsel believes that the Commission, in order to develop a full record, should convene a hearing if any party requests one. Public Counsel therefore suggests that the last sentence of paragraph (9) should be replaced with a sentence that reads: "If one or more parties requests a hearing of one or more issues, the Commission will issue an order granting the hearing and establishing a procedural schedule."

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

In the matter of the proposed)	
Commission Rules 4 CSR 240-22.010)	Case No. EX-92-299
through 22.080 (Electric Utility)	
Resource Planning.)	

AFFIDAVIT OF RYAN KIND

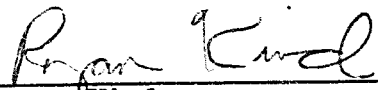
STATE OF MISSOURI)
) ss
COUNTY OF COLE)

Ryan Kind of lawful age, being first duly sworn, deposes and states:

1. My name is Ryan Kind. I am a Public Utility Economist for the Office of the Public Counsel.

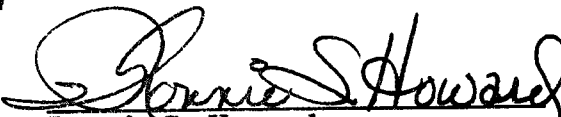
2. Attached hereto and made part hereof for all purposes is Public Counsel's Initial Verified Statement consisting of pages 1 through 17 and Appendix A consisting of pages 1 through 7.

3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.



Ryan Kind

Subscribed and sworn to me this 3rd day of August, 1992.



Bonnie S. Howard
Notary Public

My commission expires May 3, 1993.

APPENDIX A

EX-92-299 ELECTRIC UTILITY RESOURCE PLANNING

4 CSR 240-22.010 Policy Objectives

(1) The commission's policy goal in promulgating this chapter of rules is to set minimum standards to govern the scope and objectives of the resource planning process that is required of electric utilities subject to its jurisdiction in order to ensure that the public interest is adequately served. ~~Compliance with these rules shall not be construed to result in commission approval of the utility's resource plans, resource acquisition strategies or investment decisions.~~ Commission approval of a utility's resource plan shall not be construed as an acceptance by the commission of the assumptions or estimates involved therein, nor as a finding as to the prudence of actions taken pursuant to the plan.

(2) The fundamental objective of the resource planning process at electric utilities shall be to provide the public with energy services that are safe, reliable and efficient, at just and reasonable rates, in a manner that ~~adequately~~ serves the public interest. This objective requires that the utility shall -

(A) Consider and analyze demand-side efficiency and energy management measures on an equivalent basis with supply-side alternatives in the resource planning process;

(B) Use minimization of the present worth of long-run utility costs as the primary selection criterion in choosing the preferred resource plan; and

(C) Explicitly identify and, where possible, quantitatively analyze any secondary criteria or considerations which are critical to meeting the fundamental objective of the resource planning process, but which may constrain or limit the minimization of the present worth of expected utility costs. The utility shall document the process and rationale used by decision makers to assess the tradeoffs ~~and determine the appropriate balance~~ between minimization of expected utility costs and these other considerations in selecting the preferred resource plan and developing contingency options. Resource plans shall strike an appropriate balance between minimization of expected utility costs and these other considerations. These considerations shall include, but are not necessarily limited to -

1. Mitigation of risks associated with critical uncertain factors that will affect the actual costs associated with alternative resource plans;

2. Mitigation of risks associated with new or more stringent environmental laws or regulations that may be imposed at some point within the planning horizon; and

3. Mitigation of rate increases associated with alternative resource plans.

4 CSR 240-22.020 Definitions

(15) End-use measure means an energy-efficiency measure, ~~or~~ an energy-management measure, a fuel substitution measure, or any of these collectively.

(16) Energy means the total amount of electric power that is generated or used over a specified interval of time measured in kilowatt-hours (kWh).

(xx) Fuel substitution means the future use of an energy source to provide an end-use energy service that is currently provided by a different energy source.

(xx) Fuel-substitution measure (or program) means the use of an alternative fuel source to provide an end-use energy service currently provided by electricity.

~~(25) Inefficient price means a price that is not equal to the long-run marginal cost of providing a good or service.~~

(29) Load-building program means an organized promotional effort by the utility to: 1) persuade energy-related decision makers to choose electricity instead of other forms of energy for the provision of energy service; 2) to expand its service territory; 3) to attract new customers to its service territory; or 4) to persuade existing customers to increase their use of electricity, either by substituting electricity for other forms of energy or by increasing the level or variety of energy services used. This term is not intended to include the provision of technical or engineering assistance, information about filed rates and tariffs, or other forms of routine customer service.

4 CSR 240-22.030 Load Analysis and Forecasting

(1)(C)2.C. The utility shall document the methods used to develop weather measures and the methods used to estimate the effect of weather on electric loads. If statistical models are used, the documentation shall include at least: the functional form of the models; the estimation techniques employed; the data used to estimate the models, including the development of model input data from basic data; and the statistical results of the models, including parameter estimates ~~and tests of statistical significance~~ and all relevant test statistics; and

(8)(H) The utility shall provide a description of the methods used to develop all forecasts required by this rule, including an annotated summary that shows how these methods comply with the specific provisions of this rule. If end-use methods have not been used in forecasting, ~~an explanation~~ a satisfactory explanation as

to why they have not been used shall be included. Also included shall be the utility's schedule to acquire end-use information and to develop end-use forecasting techniques, or a discussion as to why the acquisition of end-use information and the development of end-use forecasting techniques are either impractical or not cost-effective.

4 CSR 240-22.040 Supply-Side Resource Analysis

(2)(B) The probable environmental costs of each supply-side resource option shall be quantified by estimating the cost to the utility of mitigating the environmental impacts of the resource to comply with additional environmental laws or regulations that ~~are likely to~~ may be imposed at some point within the planning horizon.

(9)(C) A summary of the results of the uncertainty analysis described in Section (8) that has been completed for candidate resource options ~~described in section (8)~~; and

4 CSR 240-22.050 Demand-Side Resource Analysis

(2)(D) Alternative ~~renewable~~ energy sources and energy technologies that substitute for electricity at the point of use.

(4)(C) Annualized costs per installation for each end-use measure shall be calculated as the sum of the following components:

1. Incremental costs of implementing the measure (regardless of who pays these costs), levelized over the life of the measure using the utility discount rate;

2. Incremental Annual operation and maintenance costs (regardless of who pays these costs) levelized over the life of the measure using the utility discount rate; and

(4)(G) For each end-use measure that passes the probable environmental benefits test, the utility shall also perform the utility benefits test for informational purposes. This calculation shall include the cost components identified in subsection ~~(4)(C)~~ (4)(C)1 and (4)(C)2.

(6)(E) Cream skimming, lost revenues, and free riders shall be considered when programs are designed. Cream skimming is that instance in which some, but not all, cost-effective demand-side measures are installed or otherwise implemented at a customer's facility, and it then becomes uneconomical to return at a later time to that facility to obtain the next incremental demand-side resource. Free riders are those customers who would have implemented a demand-side measure regardless of the utility demand-side program. Lost opportunities are those energy efficiency options which offer long-lived, cost-effective savings and that, if

not exploited promptly, are rendered impossible or much more costly to achieve.

(xx) In developing a full menu of demand-side programs, each utility shall consider the applicability of different types of utility actions to achieve optimum market penetration for each cost effective demand-side program. Types of utility action shall include at least the following:

(A) Customer incentives for demand-side measure adoption, including:

1. Rebates to customers or demand-side measure vendors;
2. Customer bill credits and shared savings;
3. Loans at no interest or below market interest;
4. Payments to customers or third parties based on estimated or measured energy and/or demand savings;
5. Leasing of energy efficient end use equipment.

(B) Installation of demand-side measures in customer premises at varying levels of cost to the customer, including no cost to the customer.

(C) Information and education, including:

1. Educational literature, videotapes, advertising, and public service messages;
2. On-site energy audits or surveys of customer premises;
3. Design or other technical assistance to architects, contractors, builders, developers, and purchasing agents.

(D) Building and equipment efficiency standards as tariff conditions for the determination of hook-up fees (including sliding scale hook-up fees) for new service or for customers changing rate classes.

(E) Identification of demand-side program related contracts, including scope, type, contractor, cost estimate, contractor selection process and criteria.

(F) Other promising marketing strategies and delivery mechanisms, even if as yet unproven.

(7) Cost-Effectiveness Screening Analysis of Demand-Side Programs. The utility shall evaluate analyze the cost-effectiveness of each potential demand-side program developed pursuant to section (6) using the utility cost test and the total resource cost test. The following procedure shall be used to perform these tests:

4 CSR 240-22.060 Integrated Resource Analysis

(2) Specification of Performance Measures. The utility shall specify a set of quantitative measures for assessing the performance of alternative resource plans with respect to identified planning objectives. These measures shall include at least the following: present worth of utility revenue

requirements; present worth of probable environmental costs; present worth of out-of-pocket costs to participants in demand-side programs; levelized annual average rates; and maximum single-year increase in annual average rates. All present worth and levelization calculations shall use the utility discount rate. Utility decision makers may also specify other measures that they believe are appropriate for assessing the performance of resource plans relative to the planning goals objectives identified in 4 CSR 240-22.010(2).

(5) Analysis of Load-Building Programs. If the utility intends to continue existing load-building programs or implement new ones, it shall analyze these programs in the context of ~~one (1) or more of the alternative plans developed pursuant to section (3) of this rule,~~ the preferred resource plan and using the same modeling procedure and assumptions described in section (4). This analysis shall include the following elements:

4 CSR 240-22.070 Risk Analysis and Strategy Selection

(7)(A) ~~In the judgment of utility decision makers,~~ The preferred plan shall strike an appropriate balance between the various planning objectives specified in 4 CSR 240-22.010(2); and

4 CSR 240-22.080 Filing Schedule and Requirements

(1)(D) ~~A narrative description and summary of the reports and information referred to in subsection (1)(C). The narrative shall specifically show that the resource acquisition strategy contained in the filing has been officially approved by the utility, and that the methods used and the procedures followed by the utility in formulating the resource acquisition strategy comply with the provisions of this chapter of rules; A sworn statement that the resource acquisition strategy contained in the filing has been officially approved by the utility, and that the methods used and the procedures followed by the utility in formulating the resource acquisition strategy comply with the provisions of this chapter of rules;~~

(G) Executive Summary. Each utility shall prepare an Executive Summary, separately bound and suitable for distribution to the public, which shall be a non-technical description of the plan. This document shall summarize information referred to in subsection (1)(C). The summary shall include:

1. A brief introduction describing the utility, its existing generation and transmission facilities, its existing demand-side management programs, and the purpose of the plan.
2. The forecast of low, high and base growth of peak demand and energy for at least the next twenty (20) years with and without utility demand-side programs, and an explanation

of the economic and demographic assumptions associated with each.

3. A summary of the utility's proposed integrated resource plan to meet expected energy service requirements, clearly showing the demand-side and supply-side resources. The summary shall list:

- (a) the timing, size, and cost effectiveness of each demand-side program;
- (b) the anticipated capacity, costs, and in service date for each supply-side option; and
- (c) the anticipated additions to the transmission system, including capacity and in service date.

4. A summary of the activities, acquisitions and costs included in the utility's three-year implementation plan. The portion pertaining to demand-side programs shall spell out the savings goals, budget committed, and customer opportunities to participate.

5. Such other information as the commission may determine appropriate.

(xx) The utility shall schedule sessions for previewing its resource acquisition strategy prior to filing it with the commission and provide an opportunity for interested parties to:

- (A) Learn of progress by the utility in developing plans and amendments to plans;
- (B) Determine whether key assumptions are being applied in a consistent and acceptable manner;
- (C) Determine whether key results are reasonable; and
- (D) Offer suggestions on other matters as appropriate.

(5) The staff shall review each compliance filing required by this rule and shall file a report not later than one hundred twenty (120) days after each utility's scheduled filing date that identifies any deficiencies in the electric utility's compliance with the provisions of this chapter of rules, any major deficiencies in the methodologies or analyses required to be performed by this chapter of rules, and any other deficiencies which the staff in its ~~limited~~ review determines would cause the electric utility's resource acquisition strategy to fail to meet the ~~planning~~ objectives identified in 4 CSR 240-22.010(2)(A) -- (C). If the staff's limited review finds no deficiencies, the staff report shall so state. A staff report that finds that an electric utility's filing is in compliance with this chapter of rules shall not be construed as acceptance or agreement with the substantive findings, determinations or analysis contained in the electric utility's filing.

(6) Also within one hundred twenty (120) days after an electric utility's compliance filing pursuant to this rule, the office of public counsel and any intervenor may file a report or comments based on a ~~limited~~ review that identify any deficiencies in the electric utility's compliance with the provisions of this chapter

of rules, any deficiencies in the methodologies or analyses required to be performed by this chapter of rules, and any other deficiencies which the public counsel or intervenor believes would cause the utility's resource acquisition strategy to fail to meet the planning objectives identified in 4 CSR 240-22.010(2)(A) -- (C).

(9) If full agreement on remedying deficiencies is not reached, then within sixty (60) days from the date on which the staff, public counsel or any intervenor submitted a report or comments relating to the electric utility's compliance filing, the electric utility may file a response and the staff, public counsel and any intervenor may file comments in response to each other. ~~The commission will issue an order which indicates on what items, if any, a hearing will be held and which establishes a procedural schedule.~~ If one or more parties requests a hearing of one or more issues, the commission will issue an order granting the hearing and establishing a procedural schedule.

(13) The commission will issue an order which contains findings that the electric utility's filing pursuant to this rule either does or does not demonstrate compliance with the requirements of this chapter of rules, and that the utility's resource acquisition strategy either does or does not meet the planning objectives stated in 4 CSR 240-22.010(2)(A) - (C), and which addresses any utility requests pursuant to section (2) for authorization or reauthorization of nontraditional accounting procedures for demand-side resource costs.