

Our conscience teaches us it is right,
our reason teaches us it is useful,
that men should live according to
the Golden Rule.

W. Winwood Reade

Forelaws on Board



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*THE FOUR LAWS OF ECOLOGY

1. Everything is connected to everything else.
2. Everything must go somewhere.
3. Nature knows best.
4. There is no such thing as a free lunch.

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UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)

Puget Sound Power & Light)
Company, et al.)

(Skagit Nuclear Power)
Project, Units 1 and 2))

DOCKET NOS. 50-522
50-523

October 12, 1979

CERTIFICATE OF SERVICE



I hereby certify that the following
INTERVENOR FOB/CFSP PROPOSED FINDINGS OF FACT AND CONCLUSIONS
OF LAW ON ALTERNATIVE SITES AND EFFECTS OF POSTULATED ACCIDENTS
has been served upon the parties on the attached list by affixing
first class postage and depositing thereof in the U.S. mail.

Eric Stachon

Eric Stachon
FOB/CFSP

A REVERENCE FOR ALL LIFE

THE GOLDEN RULE

THE FOUR LAWS OF ECOLOGY

GUIDELINES OF CREATIVE ENVIRONMENTALISM

FORELAYS ON BOARD



1384 155
7911210 269

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October 12, 1979

Valentine B. Deale, Chairman
Atomic Safety & Licensing Board
1001 Connecticut Ave NW
Washington, DC 20036

Mr. Chairman :

Please find enclosed a copy of FOB's Exceptions to Volume 1 of the Proposed Order dated 9-12-79. These exceptions will help bring the need for power issue into perspective. As a matter of fact, we feel that they support reopening the need for power record in the Skagit proceeding.

This enclosure should not be construed as a formal response to the proposal outlined in Applicant's letter of September 21, 1979, and FOB reserves the right to respond to any submittal brought forth by the Applicants.

Respectfully,

Eric Stachon

Eric Stachon
FOB/ CFSP

A REVERENCE FOR ALL LIFE

— THE GOLDEN RULE —

THE FOUR LAWS OF ECOLOGY

GUIDELINES OF CREATIVE ENVIRONMENTALISM

FORELAWS ON BOARD



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BEFORE THE ENERGY FACILITY SITING COUNCIL OF OREGON

In the Matter of the Application)
for Portland General Electric)
Company for a Site Certificate)
for the Pebble Springs Nuclear)
Power Plants)

Forelaws on Board Exceptions
to Volume I of the Proposed
Order dated 10/17/79



Need for Power

OAR 345-75-025 (1) a

This standard requires an affirmative ultimate finding that "There will be a need for the proposed energy facility, based upon evidence that: there will be a demand for the energy to be supplied by the proposed energy facility," and requires that this finding be supported by forecasting evidence which "identifies" and "explains" various factors regarding demand.

The substance of the exceptions noted in this section of this brief regard two aspects of the standard and the proposed order:

(1) What is the meaning of the word "explains?" Does a forecast merely have to mention a certain factor somewhere in its text or offer any explanation, however cursory or obtuse, in order to meet the criteria set forth by the standard, or contrarily, must the merits of the forecasting evidence be evaluated to determine whether the predicted levels of demand result from evidence that does in fact take the various factors into account?

(2) The standard is silent regarding how an ultimate finding of demand is to be deduced from the results of forecasting evidence. Forecasting evidence alone is not a sufficient basis from which to deduce that there will be a demand for the energy from the proposed facility. The availability of energy from other facilities must also be assessed. There are significant policy questions which must be confronted in making this ultimate determination: What is the scope of the definition of "demand"? What assumptions about availability of resources to applicants will be made? Can an affirmative finding regarding need for the facility be based upon evidence that there "might" be a demand for the energy from the facility?

I. SUFFICIENCY OF THE NEED FOR POWER STANDARD

Before discussing the merits of the proposed order Forelaws on Board (FOB) must state its position regarding the sufficiency of the need for power standard. This is necessary in order to properly understand our exceptions to the proposed order.

The standard does not provide parties with sufficient guidance to know how a final determination is to be made by the council or how to support or oppose the site certificate application.

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"The demand of ORS 469.470 for standards that 'applicants for site certificates must meet,' indicates that these standards will be available to applicants and to persons opposing applications in sufficiently meaningful terms to guide them in deciding whether and how to submit or oppose an application." Supreme Court of Oregon, Marbet vs. PGE, (1977).

The standard requires that findings must be based upon forecasting evidence but does not provide any information regarding how an ultimate finding of demand is to be deduced from that evidence. During the course of the proceedings this became a source of considerable confusion and some dispute. One issue regarding the admissibility of evidence pertaining to this aspect of the standard was ultimately appealed to the council. (see responses to and appeal regarding Motions to Exclude Certain Evidence, dated 9/5/78 regarding over/under building testimony.)

Despite explicit requests to the council for clarity regarding ambiguities in the interpretation of the standard, no guidance was offered by the council to aid parties in executing their arguments.

The standard and the order adopting the standard leave a perfect vacuum regarding what methodology and assumptions are to be used regarding determinations of the availability of projected resources and the definition and scope of demand. This leaves substantial policy issues unaddressed which must be decided by some form of rule-making process.

The standard does not specify whether "will be a demand" means that:

there will undoubtedly be a demand for the energy, or
there might be a demand for the energy if adverse drought conditions develop, or
there will probably be a demand under normal circumstances.

The standard does not define whether the scope of "demand" includes anticipated customer response to adverse drought conditions or whether it includes loads in California.

The standard does not specify what assumptions are to be made regarding resources that will probably be available to applicants that are not owned or contractually committed to applicants at the present time.

These are all policy determinations which are supposed to be decided by rulemaking procedures and are supposed to be reviewed by the Energy Policy Review Committee and assessed for consistency with the state's energy policies stated in ORS 469.010. These particular policy issues are not addressed in the council's standards or stated policy, yet are the key issues upon which an ultimate finding under the need for power standard hinges. The Supreme Court of Oregon stresses these principles in discussing "Power needs."

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II. PROPOSED ORDER

A. Specific Findings vs. Preponderance

The order adopting the council's rule, OAR 345-75-020 states:

"The evidentiary test is not a preponderance test. The council is not required to weigh the evidence on each particular standard and determine which party has prevailed. The council is required to review the whole record and base each of its findings as to whether a standard has been met on reliable probative and substantial evidence."

The Supreme Court of Oregon addresses this issue further, stating that ultimate findings must be based upon underlying findings of fact:

"The council found as an ultimate fact that PGE's customers will need the power from the project by 1984-86. When the council determines that a factual predicate is important to its conclusion on one of the issues entrusted to it, as the council apparently did with respect to power needs, the issue must be identifiable and the finding of ultimate fact supported by underlying facts." Supreme Court of Oregon, Marbet vs. PGE.

The underlying facts upon which the council bases its ultimate findings must be expressed explicitly in the council's order.

It is not sufficient to merely state that this policy is accepted and then fail to proceed without following its directives consistently throughout the order. The proposed order fails this requirement in its findings pertaining to the need for power standard in both form and in substance.

The council's order must state the specific findings of fact upon which the council relies in its determination of any ultimate finding, and it must state these findings as "proper findings of fact by the council itself." If a reviewing court cannot find this information in the council's order, it has no basis on which to find that the council has met its burden to base its decision upon proper evidence and must reverse the order.

B. "Explains"

The proposed order examines the various forecasts submitted in the proceeding only to determine whether or not they meet the criteria listed in sub-parts (A) and (B) of the standard. The reasonableness of the assumptions is never considered. It is never even determined whether the numbers that "pop out" of the demand forecasts in fact reflect the assumptions that are found to be "explained" by the forecasts. The word "explains" is given the most minimal definition conceivable.

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This interpretation is not the only one possible and is not the one understood by most parties during the proceeding or even by the council when the rule was adopted.

The present standard was adopted by the council at their regular monthly meeting on July 18, 1978, following rulemaking hearings. After hearing the recommendations of the hearings officer the council adopted the present standard, worded as was suggested by the Oregon Department of Energy (DOE). Immediately before the council voted, Mr. Sandvik, representing the DOE, in response to a question from the council answered that the DOE's version of the rule was essentially the same as the rule offered by FOB. This was affirmed by Mr. Freedman of FOB. The council adopted the presently existing rule with the understanding that it had the same meaning as FOB's proposed rule which read:

"Evidence shall account for the effects upon demand that can be demonstrated by"(various factors.)

This is significantly more demanding than the interpretation of "explains" that is made in the proposed order. This wording would require that the merits of forecasting evidence be considered in the council's decision.

FOB does not believe that it was ever the intent of the council that the merits of the forecasting evidence not be addressed by the standard. This seems also to be the understanding of other parties as well. Throughout the proceedings evidence was filed, rebutted and examined on the basis that the merits of the forecasting evidence were of primary importance, not just a listing of the contents of the forecasts. The reasonableness of the forecasting assumptions was the focus of considerations.

Regardless of the interpretation given to the word "explains" in subpart (B) of the standard, it is necessary for the council to go much further than does the proposed order in its examination of forecasting evidence. The standard requires an ultimate finding of fact that "there will be a demand" for energy. This factual predicate requires the council to make its own ultimate finding of fact based upon its own specific underlying findings of fact based upon reliable probative and substantial evidence in the record.

The proposed order falls far short of meeting this burden and relies instead upon what can only be interpreted as preponderance of evidence:

"The preferred matchings of loads and resources produce similar demand dates for the proposed plants. Those dates are reasonable and are accepted. It therefore, is unnecessary to make individual decisions about various factors influencing future demand, e.g., rates of growth of population and energy prices. It also is unnecessary

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to decide how the costs of overbuilding and underbuilding the system should influence the demand dates." Proposed Order, Vol. 1, pp.33-34.

In other words, the proposed order states that the bulk of evidence is in mutual agreement, so there is no reason to examine the bases of that evidence and make specific findings underlying the conclusion ultimately drawn.

Preponderance is still preponderance even if the bulk of evidence comprises 100% of the evidence on record. Even if all parties did agree quite literally with one another on the issue, it is still necessary for the council to determine that evidence exists that is probative reliable and substantial and to state this in the form of its own findings of fact.

The proposed order states very little by means of explicit affirmative findings. The only findings properly stated as the council's own findings of fact regarding the forecasting evidence are of the following form:

"The forecast of party X identifies the contribution of major customer classes and explains how assumptions about the factors listed in General Standard 345-75-025 (1)(a)(B) affect total demand." and,

"Party X forecasts that demand will grow at y% per annum between now and then."

But what findings does the council ever adopt as its own? What level of demand does the council find will exist in future years and upon what basis in factual evidence does it make this finding? What will be the effect of energy prices upon demand?

How can the council adopt a number of forecasts which determine that electricity price increases will have a negative impact upon load growth and also adopt a forecast which by a ludicrous act of doubletalk claims that it won't. How can the council find that it has considered any of the factors influencing demand if its only examination of forecasting evidence determines only that certain factors are "explained" textually but not necessarily reflected in the numbers quoted? How can the council make its own ultimate finding if it never adopts as its own any of the numbers quoted?

C. Loads and WHAT?

After the forecasting evidence is reviewed in the proposed order, various methodologies and assumptions regarding the assessment of anticipated available resources are examined. The methodologies are not specified by the standard or the order adopting the standard but rather are suggested by evidence submitted by parties during the proceedings. Seven analyses are offered by five parties using six different loads and resources methodologies.

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The proposed order arrives at an ultimate need date for the proposed facilities by selecting a "preferred matchings of loads and resources" from the selection offered. The matchings of applicant, the PUC, NEPP, and Mr. McHugh are found to yield similar results in contrast to the analyses of the ECC and DOE. The proposed order adopts the former analyses in preference to the latter. Regarding this determination the order is insufficient or is in error in at least three fundamental respects:

(1) The policies adopted by the council in determining a need date for the proposed facility are not stated explicitly. The specific findings of fact underlying the council's ultimate finding are not properly noted. The evidence underlying the analyses proposed by applicants is not examined or adopted as the council's own arguments. The decision instead is stated as a matter of preponderance, weighing bodies of evidence to assess which has prevailed.

(2) Evidence is misunderstood and misrepresented by the proposed order in the evaluation of the loads and resources matchings.

(3) The policy implicitly adopted by the proposed order is not reasonable in certain respects and is not consistent with the state's energy policies outlined in ORS 469.010.

These issues are outlined below:

1. The policies and underlying findings assumed in arriving at an underlying finding of demand for energy have not been explicitly adopted in the proposed order.

The proposed order never adopts any findings specifying the future level of demand for energy. The forecasting evidence is never examined to the extent that such a finding could be adopted from the information in the order. The order contains findings that certain forecasts do address certain criteria and predict certain levels of demand growth, but there is no examination of the reasonableness of the assumptions addressing the standard's criteria, no statement of findings by the council responsive to these criteria and no forecast or level of demand ultimately adopted by the council.

The council must go beyond mere recitals of procedure regarding the forecasts and state substantive findings supported by proper evidence in the record if it is to use the conclusions of forecasting evidence to support its ultimate finding. The council must address the questions: What will the levels of future demand be?, and, What is the basis for such a determination?

The proposed order does not state its policies regarding the availability of resources to the applicants. What is the basis for assuming critical water conditions and what assumptions regarding resource availability are appropriate under these circumstances? What resources are ultimately considered to be available to the applicants and what are the bases for these determinations?

Judgements regarding these policy issues are necessary in the council's ultimate finding. They have not been made explicitly and noted in the order with the bases for their determination.

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(2) Evidence is misunderstood and misrepresented in the evaluations of the loads and resources matchings.

Energy Conservation Coalition Loads and Resources Matching

The loads and resources analysis offered by the Energy Conservation Coalition (ECC) is rejected in the proposed order because the forecast upon which relied was later updated and because delays in certain planned resources were not noted. The first criteria misrepresents the intent of the proposed analysis. The second criteria is pertinent to all of the other loads and resources analyses offered.

Exhibit I - 35 which presents the ECC analysis states that it uses the original published version of the NEPP forecast and particularly states that even if the forecast is subsequently modified it is intended that the original version still be used. (I-35, p.11) This forecast was offered and received into evidence along with all of the forecasts used in the loads and resources analyses. It is curious why this analysis should be singled out for this sort of criticism. This is the only place in the entire order where any distinction at all is made regarding the quality of forecasting evidence. Other forecasts have been given extensive criticism in evidence submitted by various parties that speaks to the accuracy of predicted loads, but no examination of any forecasting assumptions is considered by the order in evaluating loads and resources analyses. The DOE for example suggests numerous alterations in the applicants' forecasts based upon evidentiary findings and analyzes how these changes do impact the applicants' loads and resources matching, but no such alterations are considered in the proposed order.

Slipping of the timing of construction of projected facilities is a contingency pertinent to all of the loads and resources schedules. Beyond what limited possibilities are actually considered by each analysis, it can only be inferred from the evidence or with a small amount of effort be calculated from the evidence what the ultimate impacts might be. Will the council reject the entire loads and resources analysis proffered by applicants because some of the forecasts are not adjusted for conservation or price effects? Some provisions for making adjustments must be made by the council.

The proposed order has not really stated any grounds for the rejection of ECC's analysis that cannot be applied to the other analyses on record.

DOE Loads and Resources Matching

The proposed order rejects the loads and resources analysis offered by the DOE in preference to the applicants' and other matchings, based upon findings of certain shortcomings. DOE takes exception to the substance of these findings.

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The proposed order finds that a provision in the DOE analysis that allows emergency purchases of power across the interties from other regions of up to 4000 MW to meet short term peak loads, makes the analysis unreasonable.

"It is reasonable to assume some electricity could be purchased in many emergencies. But to build a system that relies on obtaining a substantial amount of electricity from outside the region is risky." --Proposed order p. 30

The DOE analysis, however, does not rely on 4000 MW of emergency purchases even though this provision is written into the program specifications of its analysis. The maximum amount of energy used in any one year of the DOE's analyses by such emergency purchases was .1585E+09KWH, which works out to 18.1 average megawatts. (Exh. S-46 Sch. 15H (Revised 11-4-78), Plant No. 41 on p. 1.). This is the amount of energy called upon in the very worst drought conditions on historical record with hydro reservoirs drafted to their minimum. This is a miniscule reliance upon inter-regional interties which are designed to serve exactly this sort of reliability service.

Peaking reliability is not the reason for which these facilities are being proposed. The proposed order seems to misinterpret the evidence in the record in this regard. The finding on p. 26 that:

"Excluding the oil-fired generation, applicant is deficient in peak capacity most years between 1985-86 and 1995-96. The largest peak deficiency is 966 megawatts in 1985-86, and the largest peak deficiency after the Pebble Springs Project starts producing electricity is 568 megawatts in 1992-93."

is in error. This finding is from a reading of SCA Tables 5-3a which does not include all of the resources upon which applicants rely for peaking purposes. (See SCA, p. 5-17; SCA, p. D.1-1; and SCA, p. D. 2-1). The appropriate reference is supplied by applicants in SCA Table D. 2-1 where it is demonstrated that there is consistently a peaking capacity surplus that exceeds 2000 MW for every month of the forecast period.

The applicants will not be peaking deficient regardless of when Pebble Springs is or is not built. The provision in the DOE analysis for emergency peaking purchases is not a deciding factor in the need dates predicted by the DOE's loads and resources matchings.

Another provision in the DOE analysis found by the proposed order to be not reasonable was the adjustment of loads to represent voluntary curtailment during critical water conditions. A strictly inclusive definition of demand is cited here and, similarly, regarding interruptible loads. The order argues that since the reduction in loads is responsive to a shortage of electricity, it is really

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a demand for electricity.

The problem here is that all conservation measures are in fact a response to a shortage of energy. Consumer response to energy price increases also is a response to a shortage of electricity. This argument can be chased all the way back throughout the forecasting evidence to sort out what the "real" demand of energy would be if there were no constraints on its usage.

Conservation measures will in fact reduce demand even though it may be in response to energy shortage. It is the duty of the council to encourage this process since it is a fundamental principle of the state's energy policy to which the council is bound. Conservation is to be encouraged. Conservation responses should not be excluded from energy forecasts simply because they can be interpreted as unrealized demand. The inclusion of voluntary curtailment is made in the DOE's analysis to represent the amount of conservation that would occur in the region due to critical water conditions that is not already accounted in the forecasts that it uses. This is reasonable.

The council must realize that at some point it must limit the scope of the definition of "demand" within reasonable guidelines. Does demand include California loads? BPA interruptible customers during periods when they are by contract interrupted? Loads which might occur if electricity supply were unlimited?

NEPP Loads & Resources Matching

The NEPP loads and resources analysis has its plant on-line date sequence out of order. When WNP-5 is properly located in sequence the on-line date predicted by the NEPP moderate scenario for Pebble Springs I is 1991-1995. This was affirmed by the NEPP witnesses during cross-examination. (TR 6977-79).

This is an important distinction to be made in the context of the treatment of this evidence in the proposed order. The NEPP analysis supports the DOE's predicted on-line dates as much as it supports the applicant's. Examine the first three paragraphs of section E. Analysis of Demand Dates beginning on page 29 of the proposed order.

Comparison of Loads & Resources Matchings

Examine the table on the following page. The table shows for purposes of comparison some of the assumptions made in the various loads and resources matchings examined in the order.

There is a very strong correlation between forecasted load growth rate and predicted on-line date. This observation does not support the argument made by the proposed order that forecasting evidence does not have to be evaluated in arriving at an ultimate

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COMPARISON OF LOADS AND RESOURCES MATCHING ANALYSES

	<u>Aplicants</u>	<u>PUC</u>	<u>McHugh Moderate</u>	<u>NEPP Moderate</u>	<u>DOE</u>	<u>ECC</u>
Forecasted growth rate -	5.4%	4.53%	3.98%	2.94%	2.6%	2.93% ⁽¹⁾
Critical water assumed? -	Yes	Yes	Yes	Yes	Yes	Yes
Access to regional surplus?	No	No	Yes	Yes	Yes	No
Interruptible loads curtailed?	-	-	No ⁽²⁾	No ⁽²⁾	Yes	-
Voluntary curtailment?	No	No	No	No	Yes	(3)
Projected on-line date ⁽⁴⁾	1985-86	1987	1986-90	1991-95	1994-95	2000+

notes: (1) Further adjustments for conservation measures were made to this statistic.

(2) The NEPP witnesses stated on the record that these loads were assumed to be curtailed, however, the same witnesses subsequently corrected this statement on the record. (TR 6980 & 11,548-50) These loads were not in fact assumed to be curtailed. Compare Exh.C-5, Table VII-15 (corrected for transmission and distribution losses) with Exh. C-1, Table V-25.

(3) Voluntary conservation measures are assumed but not particularly due to critical water conditions

(4) The on-line dates only of Pebble Springs unit 1 are listed here.

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need date for the proposed facility. This table demonstrates exactly the opposite implication, that the rate of load growth is a fundamental factor in determining future power needs.

One of the most important factors in determining a need date for the proposed facilities is whether or not applicants will have access to the surplus thermal generation projected for the region. Future load growth in the Pacific Northwest is already being accommodated by extensive construction programs including five large nuclear facilities now under construction in Washington. Will the output of these plants be considered by the council in their decision?

The loads and resources matchings that include these resources by considering the regional availability of energy yield later need dates for the Pebble plants than do the forecasts for applicant-specific loads and resources which assume that applicants should serve their own loads entirely with their own resources.

The proposed order states a preference for the applicant-specific analyses because applicants rely to a greater extent upon their own resources. This may be a reasonable goal or criteria under normal circumstances, but the scenario in which the analyses are assumed to take place is essentially an emergency worst-case drought condition. The availability of resources and assumptions regarding the level of demand must appropriately reflect the particular scenario being considered.

(3) The policy implicitly adopted by the proposed order is not reasonable and is not consistent with the state's energy policy.

The proposed order makes an ultimate finding that there will be a demand for the energy from the proposed facilities based upon the implicit and explicit assumptions that critical water conditions will exist, applicants will not have access to the surplus thermal generation forecasted to exist in the region, and that demand level will not be responsive to critical water situations.

The standard is silent regarding these issues. Although the proposed order attempts to shed light on these issues by reading a very literal and inclusive definition of the word "demand" from the standard, the precise interpretation of the term is not given by the standard or the order adopting the standard. If the unspoken implications of the standard are to be ascertained by a very close scrutiny of the exact literal meaning of the standard's wording, then what will become of the meaning of the words "will be." There "will be" a demand, when examined with the same degree of scrutiny and literal interpretation would mean that a showing of need could leave no grounds for uncertainty. "Will be" is definite and affirmative.

Note the difference between the following two statements:

(a) There will be a need for the facility because there might be a demand for its energy output.

(b) There will be a need for the facility because there will be a demand for its energy output.

These statements represent very different policies. Somehow the council must reconcile the evidence with the standard and state its policy explicitly when doing so.

The proposed order is basing a conclusion that there "will be" a demand based upon the low probability assumption of the occurrence of critical water conditions. It is reasonable also to make assumptions about the availability of energy resources and the meaning of "demand" that are in fact consistent with this interpretation.

In reality, critical water conditions are very unlikely to occur. The regional hydro system operates according to the critical rule curve only one year out of ten. The high probability that regional thermal generation will be available to applicants is part of the policy anticipated to exist throughout the forecast period. Consumers are very likely to and should be encouraged to continue to show extra prudence regarding energy usage in exceptional circumstances.

To assume the worst case conditions regarding all of these factors simultaneously and conclude that there "will be a demand" is an absurdity. In numerical terms the probability of the scenario is miniscule. For example:

Assuming the following probabilities of occurrence:

operation of system according to critical rule curve	-	-	-	-	.1
availability of regional surplus to applicants	-	-	-	-	.9
voluntary customer response	-	-	-	-	.8

the probability of the scenario considered in the proposed order is:

$$.1 \times (1 - .9) \times (1 - .8) = .002, \text{ or one chance in 500.}$$

Is it the policy of the council that enough generation should be built so that each individual utility has enough generation facilities to supply its own energy needs in the worst conditions ever experienced without any assistance from available regional resources or any conservation response from customers? Should this assessment be made based upon forecasts that show only questionable or partial accounting for price and policy driven conservation measures? Are these policies consistent with the state's energy policies stated in CRS 469.010?

ECONOMIC PRUDENCE

OAR 345-75-025(1)b
OAR 345-76-025
OAR 345-76-026
OAR 345-76-027

A. SCOPE

The scope of this section of the order is insufficient. To be consistent with the order adopting OAR 345-76-027 findings should be drafted determining the reasonable availability of the various alternatives pursuant to the definition given in 345-76-027(1). The council has stated that such determinations will be made.

These determinations may be necessary for judicial review of the council's final order.

FINANCIAL ABILITY

OAR 345-76-045

A. Ability to finance decommissioning

There is not sufficient evidence in the record to find affirmatively that the applicant has demonstrated that it has the ability to finance the decommissioning of the proposed facilities. There is not sufficient information upon which to base a condition upon the site certificate as is suggested by the order.

Forelawn On Board has attempted consistently throughout these proceedings to ascertain the basis for the projected costs of decommissioning and the methods proposed to finance those costs. Applicants presented testimony that gave projected decommissioning costs in 1977 dollars based upon 1977 conditions. These witnesses were unwilling to state how these funds should be applied to future circumstances. Questions regarding such financial projections were not permitted upon objections from applicant that they were purely speculative.

The financial ability witnesses of the applicant also could not answer questions regarding the bases for their estimate that decommissioning could be financed by the -5% salvage depreciation method proposed. None of the witnesses was familiar with how this rate was calculated or could answer any questions regarding the assumptions implicit in it. These witnesses erroneously assumed that the study providing decommissioning costs had present worth future decommissioning costs back to 1977 dollars. This was not the case.

At no point are the questions that are raised on the record regarding escalation of costs of decommissioning to their actual dates of expenditure answered. At no point is the 5% depreciation method substantiated. At no point is the applicability of the Hope decision upon which the applicants rely evaluated in light of the conflicting legislation that prohibits funds from entering the utilities'

ratebase for facilities that are not concurrently operated to produce electricity.

The only place where applicant has made any attempt to show how it intends to finance decommissioning using concrete numbers or assumptions is in its final reply brief in response to FOB's proposed findings of fact. This does not comprise proper evidence upon which the council can base findings of fact. After months of unsuccessful attempt to obtain some substantial testimony for the record it is most aggravating to see these issues addressed after the fact in a reply brief where the information and assumptions made are not accessible for scrutiny or examination.

Forelaws On Board here adopts all of the arguments made in its findings of fact filed 2/4/79 as exceptions to this finding of the proposed order.

There is not probative reliable and substantial evidence in the record to support a finding that applicant has demonstrated its ability to finance decommissioning. The questions posed on the record remain unaddressed.

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Safety

OAR 345-75-025 (2)

Judge Bergen correctly suggests that in Volume II of his Proposed Order, "decommissioning of the proposed facility will be addressed, including the environmental impacts of decommissioning." This of course is in response to the accident at Three Mile Island where the hazards, environmental impacts, and feasibility of decommissioning after an accident have become serious questions yet to be resolved.

Judge Bergen in his finding attempts to bypass these questions by automatically assuming they will be overcome and thus he offers an analysis of the impacts on land use after the facility ceases producing electricity.

There is nothing presently in the record showing whether or not it is possible or even likely that a reactor can be decommissioned after sustaining a severe accident on a level equal to or greater than Three Mile Island. Without any evidence to demonstrate the environmental implications of decommissioning after an accident, the proposed finding is premature.

Until the questions regarding decommissioning are resolved no ultimate conclusions can be reached on OAR 345-75-025(3) relating to "retirement of the Facility."

Miscellaneous Environmental Impacts

OAR 345-75-025 (3)

Judge Bergen uses a curious method to analyze the applicants' demonstration of meeting this standard as it relates to gaseous and iodine particulate effluents. He states:

"In the narrative portion of the SCA, applicant does not state the quantities of gaseous and iodine/particulate effluents the proposed facility is expected to discharge, only saying the dose level limits will not be exceeded. Applicant relies on SCA Table 15-7 to show compliance with the quantitative limits in the standard. Unfortunately, the table is not self-explanatory and no one explained it during cross-examination."

Yet he proceeds to adopt quantitative numbers for gaseous and iodine discharges from both the applicants' and the DOE's briefs, which are not proper evidence and are not in agreement. This does not meet the policy quoted in the proposed order regarding interpretation of standards:

"A standard is not met unless there is reliable, probative, and substantial evidence in the record on which specific findings of fact can be made."