



SECRETARY

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

March 4, 2015

COMMISSION VOTING RECORD

DECISION ITEM: SECY-14-0087

TITLE: QUALITATIVE CONSIDERATION OF FACTORS IN THE
DEVELOPMENT OF REGULATORY ANALYSES AND
BACKFIT ANALYSES

The Commission (with all Commissioners agreeing) approved the subject paper as recorded in the Staff Requirements Memorandum (SRM) of March 4, 2015.

This Record contains a summary of voting on this matter together with the individual vote sheets, views and comments of the Commission.

A handwritten signature in blue ink, reading "Annette Vietti-Cook", with a long, sweeping flourish extending to the right.

Annette L. Vietti-Cook
Secretary of the Commission

Attachments:

1. Voting Summary
2. Commissioner Vote Sheets

cc: Chairman Burns
Commissioner Svinicki
Commissioner Ostendorff
Commissioner Baran
OGC
EDO
PDR

VOTING SUMMARY - SECY-14-0087

RECORDED VOTES

	APRVD	DISAPRVD	ABSTAIN	NOT PARTICIP	COMMENTS	DATE
CHRM. BURNS	X					12/12/14
COMR. SVINICKI	X					1/30/15
COMR. OSTENDORFF	X					10/16/14
COMR. BARAN	X					12/8/14

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary
FROM: Commissioner Burns
SUBJECT: SECY-14-0087: QUALITATIVE CONSIDERATION OF FACTORS IN THE DEVELOPMENT OF REGULATORY ANALYSES AND BACKFIT ANALYSES

Approved X Disapproved _____ Abstain _____

Not Participating _____

COMMENTS: Below ___ Attached X None ___



SIGNATURE

12 December 2014

DATE


Entered on "STARS" Yes x No _____

Commissioner Burns' Comments on SECY-14-0087
Qualitative Consideration of Factors in the Development of Regulatory Analyses and
Backfit Analyses

I approve the staff's plans for updating guidance regarding the use of qualitative factors in regulatory analyses and backfit analyses for nuclear materials users, fuel facilities and nuclear power plants. Staff has assessed that the current regulatory framework for regulatory analyses and backfit analyses is sound and is consistent with existing NRC guidance and past Commission direction. Staff's plan to augment existing guidance on the use of qualitative evaluation factors could improve transparency, reliability and clarity of NRC decisions.

However, I am sensitive to the perspective that too much reliance by the NRC on qualitative factors or the use of such considerations without some degree of predictability in their application has led and could lead in the future to the perception that the NRC is acting arbitrarily. I agree with the staff when it says that "[r]eliance on a qualitative evaluation of factors should only be used after efforts to develop pertinent quantitative data have been unsuccessful." To ensure that qualitative considerations are used judiciously, the revised guidance should continue to encourage quantifying costs to the extent possible and use qualitative factors to inform decision making in limited cases. The NRC's regulatory decisions must be informed by sound regulatory and technical bases. As has been the case since the 1977, Commission direction to consider both qualitative and quantitative factors in assessing the value of propose alternatives, the use of qualitative factors to augment quantitative analyses is sometimes necessary to manage uncertainly in the data. I do not approve staff developing guidance that further expands the use of qualitative factors beyond what is currently performed by NRC staff.

I appreciate the staff engaging stakeholders and the Advisory Committee on Reactor Safeguards in putting this paper together. The staff should continue this stakeholder engagement as it updates the guidance documents. At a minimum, this should include a public opportunity to comment on proposed revisions to guidance, but the staff should also consider holding public workshops and other mechanisms to ensure meaningful stakeholder input.



Stephen G. Burns
12 December 2014

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary
FROM: COMMISSIONER SVINICKI
SUBJECT: SECY-14-0087: QUALITATIVE CONSIDERATION OF FACTORS IN THE DEVELOPMENT OF REGULATORY ANALYSES AND BACKFIT ANALYSES

Approved XX Disapproved _____ Abstain _____

Not Participating _____

COMMENTS: Below ___ Attached XX None ___



SIGNATURE

01/  /15

DATE

Entered on "STARS" Yes No _____

**Commissioner Svinicki's Comments on SECY-14-0087
Qualitative Consideration of Factors in the Development of
Regulatory Analyses and Backfit Analyses**

I approve the staff's recommendation that it update agency guidance regarding the consideration of qualitative factors.¹ Because the staff's planned set of actions is not clearly laid out in the paper, my approval is necessarily subject to the terms and limitations contained in this vote.

The use of qualitative factors in agency analyses is and should continue to be disciplined, transparently documented, and rare.

As expressly stated in NRC guidance [NUREG/BR-0058, "Regulatory Analysis Guidelines of the U.S. Nuclear Regulatory Commission," Revision 4]:

Estimated [costs] and [benefits] should be expressed in monetary terms whenever possible and expressed in constant dollars from the most recent year for which price adjustment data are available. Consequences that cannot be expressed in monetary terms should be described and quantified in appropriate units to the extent possible. . . . However, the staff needs to make every reasonable effort to apply alternative tools that can provide a quantitative perspective and useful trends concerning the value of the proposed action. Even inexact quantification with large uncertainties is preferable to no quantification, provided the uncertainties are appropriately considered.

Consistent with this, staff should, as a first priority, dedicate its staff resources and expertise to improving its capabilities in the conduct of quantitative cost-benefit analyses. Doing so will signal a clear and unequivocal commitment to implementing the improvements agreed to by NRC to the U.S. Government Accountability Office (GAO) and the Congress in response to report GAO-15-98, "Nuclear Regulatory Commission: NRC Needs to Improve its Cost Estimates by Incorporating More Best Practices."

In this report, GAO stated its conclusion that:

NRC states that these [cost estimating] analyses ensure that the agency bases its decision on adequate information, and that the staff arrives at its decisions by following a systematic and disciplined process that is also open and transparent. However, we [GAO] found that NRC's procedures for developing the cost estimates do not fully incorporate relevant cost estimating best practices. Without procedures that adhere to cost estimating best practices, NRC does not have assurance that it is producing reliable cost estimates. Thus, the Commissioners may not have adequate information on which to base their decisions. . . . [U]nless NRC revises its procedures . . . the process may continue to yield unreliable cost estimates that could negatively affect a decision-making process that is intended to ensure public safety.

As examples, I commend to my colleagues the proposed shutdown rule [SECY-97-168; more distant history] and the proposed filters order [SECY-12-0157; more recent history] as case studies demonstrating that determinations on the appropriate degree or weight of application of qualitative factors in regulatory decision making are, and must remain, the province of the

¹ The staff's insistence on the tortured syntax of "qualitative consideration of factors" is a confounding obfuscation and should, in this reader's opinion, be dropped from usage entirely. There is no apparent reason for the NRC to speak differently than the rest of the world.

Commission.² These are also cases where the qualitative factor of “improved defense in depth” became the hazy basis for action (to the detriment of transparent decision making) and where the Commission appropriately discredited the use of such an ill-defined catchall as a determinant of outcomes.

As a result of making a priority of activities to improve quantitative analyses, some work on qualitative factors guidance would inevitably be deferred. This is of lesser concern as the flexibility available to analysts under current guidance – to adjust and apply the right factors and the right assessment tools for the specific information available and the specific decision to be made – has served, and can continue to serve, the agency well, just as long as the agency principle of producing well-documented and transparent analysis continues to be honored. Under such principles, I continue to support the use of stylized calculations by NRC analysts as something appropriate to the agency’s needs. Further, I remain skeptical that one set of guidelines can be developed enveloping all types of analysis. That being said, I agree with the policy statement of the American Nuclear Society that “perhaps most importantly, qualitative factors must never be used to impose subjective judgments or allow political factors to override sound technical evaluations.”

I join Chairman Burns and Commissioner Ostendorff in specifically disapproving any expansion of the use of qualitative factors (for example, further work on the development and use of a decision matrix as described in Enclosure 3 of the paper is not approved) and in disapproving the staff developing any guidance that further expands the use of qualitative factors beyond what is currently performed by the staff.

I also agree with my colleagues that the staff should continue to strive to improve its methods for quantitative analyses, including the treatment of uncertainties. The staff should use the best (i.e., the most authoritative and realistic) information available to develop estimates of the cost of implementing proposed requirements. Consistent with past practice, qualitative considerations should be used to supplement quantitative analyses only when quantitative analyses are not possible or practical. To improve transparency and decision making, any revised guidance should outline how the staff will articulate its rationale for the selection of qualitative factors and describe with specificity how these factors were used in the analysis, including sensitivity analyses.

Any updated guidance resulting from the Commission’s decision in this matter should lie before the Commission, in draft form, for a period no shorter than 10 working days prior to its issuance by the staff. I join my colleagues in supporting direction to the staff that any revised guidance should continue to require quantifying costs to the maximum extent and using qualitative factors to inform decision making only in limited cases.

I appreciate the patience of my colleagues, as I took some time developing this vote. I reviewed a lot of material in the process. The topic poses many complexities, some quite philosophical and some which run up against my own bull-headed ideas about liberty and choice. These issues are best summed up in the following piece, which was included by my reactor advisor in the three large volumes of information compiled for me as reference material and history on the use of cost benefit analysis in government decision making. It is not strictly relevant to my vote, but I include it as dicta, for those interested.

² This is parallel to determinations of adequate protection, which are also the Commission’s domain.

In her essay entitled, "I'm an adult. Stop nudging me.", commentator and author Margaret Wentz observes the following.

The idea that public officials have a duty to help you do what's in your own interest has taken off with a vengeance, thanks in no small part to something known as "nudge" theory. Nudge theory, which was invented by two guys named Richard Thaler and Cass Sunstein, is on the face of it quite benign. It recognizes that we are flawed, irrational and occasionally foolish creatures, who, left to our own devices, cannot be relied on to save for retirement, eat our vegetables or floss. The idea behind nudge theory – also known as "soft paternalism" – is to design public policies that make the right choices much easier.

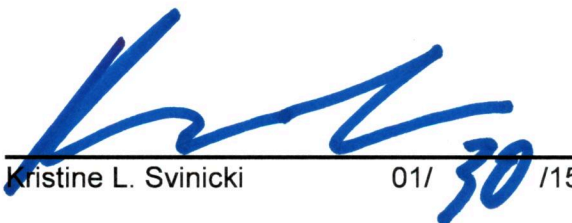
The most obvious problem with nudge theory . . . is that it divides the world into "we" and "they." "We" are the informed, the dispassionate, the rational ones who happen to be in charge. . . . "They," the poor schlubs, are myopic, lazy, poorly informed and poorly controlled. They need saving from themselves.

The other problem is that regulators and governments are people too. They have their own fallibilities.

A third problem . . . is that "soft paternalism" can morph pretty quickly into "soft authoritarianism," exemplified by people who are dogmatic, self-righteous and wrong.

That's the problem in a nutshell. It's a short step from nudging people to terrorizing them and pushing them around. Many fields – especially public health – are full of people who think they have a corner on the truth. These people often bemoan the fact that the public doesn't trust them. But the reason we don't trust them is quite often that they are simply imposing their own preference on the rest of us.

So stop nudging me already. I may be flawed, but I am an adult. . . . And I don't like bullies.


Kristine L. Svinicki 01/30/15

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary
FROM: COMMISSIONER OSTENDORFF
SUBJECT: SECY-14-0087: QUALITATIVE CONSIDERATION OF FACTORS IN THE DEVELOPMENT OF REGULATORY ANALYSES AND BACKFIT ANALYSES

Approved XX Disapproved _____ Abstain _____

Not Participating _____

COMMENTS: Below ___ Attached XX None ___

W. Ostendorff
SIGNATURE

10/16/14
DATE

Entered on "STARS" Yes X No ___

**Commissioner Ostendorff's Comments on SECY-14-0087,
"Qualitative Consideration of Factors in the Development of Regulatory Analyses and
Backfit Analyses"**

The matter before the Commission is not whether qualitative factors should be considered in regulatory decision-making. The consideration of qualitative factors has been a part of our regulatory framework since 1977¹. Rather, the matter before the Commission is whether or not the NRC's regulatory guidance should be revised to provide additional clarity on the use of these factors.

In SECY-14-0087 the staff stated that there is "significant precedent for qualitatively considering factors, both within the NRC and externally," and the staff concluded that the current regulatory framework is sound. I agree with the staff's conclusion that the current regulatory framework is sound and that our historical consideration of qualitative factors to complement quantitative analyses is well founded. Consistent with the principles of good regulation, I support efforts to ensure clarity in the consideration of qualitative factors. As the ultimate decision-makers, it is essential that the Commission have a clear and complete understanding of all of the factors used to develop the staff's proposals. Therefore, I approve the staff's recommendation, as supported by the Advisory Committee for Reactor Safeguards, to update guidance regarding qualitatively considering factors in regulatory analyses and backfit analyses. My approval is subject to the following high-level principles:

1. The staff should continue to quantify costs and benefits to the maximum extent possible.
2. The staff should continue to strive to improve its methods for quantitative analyses, including the treatment of uncertainties.
3. The staff should use the best information available to develop realistic estimates of the cost of implementing proposed requirements.
4. Consistent with past NRC practice, qualitative considerations should be used to supplement quantitative analyses only when quantitative analyses are not possible or practical (i.e., due to lack of methodologies or data).
5. To provide the best available information to support Commission decisions and to improve transparency, the revised guidance should provide expectations for how the staff will articulate its rationale for how and when qualitative factors have been considered in the formulation of staff recommendations.

This approval does not authorize any expansion of the consideration of qualitative factors in regulatory analyses or backfit analyses. Prior to finalization, the staff should provide a detailed plan and schedule and the draft revised guidance to the Commission for information.

¹ SECY-77-388A, "Value-Impact Guidelines," dated December 19, 1977, included instructions for the staff to consider both qualitative and quantitative factors in assessing the value of proposed alternatives. Guidance to consider qualitative factors was included in the 1983 issuance of NUREG/BR 0058, "Regulatory Analysis Guidelines of the U.S. Nuclear Regulatory Commission," and all subsequent revisions.

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary
FROM: Commissioner Baran
SUBJECT: SECY-14-0087: QUALITATIVE CONSIDERATION OF FACTORS IN THE DEVELOPMENT OF REGULATORY ANALYSES AND BACKFIT ANALYSES

Approved Disapproved Abstain

Not Participating

COMMENTS: Below Attached None



SIGNATURE

12/8/14

DATE

Entered on "STARS" Yes No

Commissioner Baran's Comments on SECY-14-0087, "Qualitative Consideration of Factors in the Development of Regulatory Analyses and Backfit Analyses"

It is well-established that regulatory analysis "must take into account benefits and costs, both quantitative and qualitative."¹ Executive Order 12866 explains, "Costs and benefits shall be understood to include both quantifiable measures (to the fullest extent that these can be usefully estimated) and qualitative measures of costs and benefits that are difficult to quantify, but nevertheless essential to consider."² Office of Management and Budget Circular A-4 reiterates that "[a] complete regulatory analysis includes a discussion of non-quantified, as well as quantified benefits and costs."³ As stated in the paper, NRC's regulatory and backfit analyses have been consistent with the approach described in Executive Order 12866 and Circular A-4 for decades.

The question before the Commission, therefore, is not whether staff should consider qualitative factors in its regulatory analysis or should do so with greater frequency, but simply whether the NRC staff should update the agency's cost-benefit guidance to assist the staff in articulating how it uses qualitative factors.

The staff is in the midst of a multi-year, two-phased effort to revise NRC's cost-benefit analysis guidance documents. Although the staff believes that "the current framework for the qualitative consideration of factors is satisfactory," the staff proposes to update the guidance's discussion of the qualitative consideration of factors as part of this broader effort.

I agree with the staff that updating the guidance on qualitative factors could be helpful to NRC's analysts and improve the clarity, transparency and consistency of the agency's regulatory and backfit analyses. I support the staff's recommendation to provide guidance to assist analysts in describing the qualitative evaluation of factors, the significance of each factor, and how such factors contribute to the integrated decisionmaking process. The focus of the update should be on capturing best practices for the qualitative consideration of factors. As the staff explained to the Advisory Committee on Reactor Safeguards (ACRS) subcommittee, the updated guidance should provide "a toolkit that is available to the analyst for helping them clarify their thinking with regard to how they considered qualitative factors."⁴ It should support regulatory analyses that clearly present the analyst's qualitative consideration of factors in a transparent way that decisionmakers, stakeholders, and the public can understand. The updated guidance should not be overly complicated or prescriptive in such a way that would hinder decisionmaking.

I also support the ACRS recommendation that NRC staff meet with the Committee periodically during the development of the updated guidance to enable ACRS to review and, if appropriate, to comment on the staff's work on portions of the guidance related to the consideration of qualitative factors.⁵


Jeff Baran

12/8/14

Date

¹ E.O. 13563 (2011).

² E.O. 12866 (1993).

³ Office of Management and Budget Circular A-4 (2003).

⁴ Advisory Committee in Reactor Safeguards, Regulatory Policies and Practices Subcommittee (Aug. 19, 2014).

⁵ ACRS September 11, 2014 letter to Chairman Macfarlane re: SECY-14-0087.