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                      UNITED STATES OF AMERICA
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                     NUCLEAR REGULATORY COMMISSION
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                         PUBLIC MEETING ON
                        STAKEHOLDERS' CONCERNS
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                             Nuclear Regulatory Commission
                             Room 2B-3
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                              White Flint 2
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                             11555 Rockville Pike
                             Rockville, Maryland
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                             Friday, July 17, 1998
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               The Commission met in open session, pursuant to
     notice, at 10:00 a.m., the Honorable SHIRLEY A. JACKSON,
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     Chairman, presiding.
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     COMMISSIONERS PRESENT:
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               SHIRLEY A. JACKSON, Chairman of the Commission
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               NILS J. DIAZ, Member of the Commission
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               EDWARD McGAFFIGAN, JR., Member of the Commission
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     STAFF AND PRESENTERS SEATED AT COMMISSION TABLE:
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               SAMUEL COLLINS, Director, NRR
               HAROLD RAY, Southern Edison Co.
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              JOE COLVIN, NEI
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               DAVID A. LOCHBAUM, Union of Concerned Scientists
              EARLE NYE, Texas Utilities Company
              ZACK PATE, World Association of Nuclear Operators
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              LEONARD J. CALLAN, NRC
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               CORBIN McNEILL, PECO Energy Company
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              FORREST REMICK, Consultant (former Chairman, ACRS)
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              JOHN C. HOYLE, Secretary
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              KAREN D. CYR, General Counsel
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                        PROCEEDINGS
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                                                    [9:33 a.m.]
              CHAIRMAN JACKSON: Well, good morning, ladies and
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     gentlemen. This meeting this morning has been scheduled to
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     discuss concerns about the NRC's regulatory program.
              In recent months the NRC has been the subject of a
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     number of critiques, some of them sharply critical, from
    Congressional committees, the General Accounting Office, the
    nuclear industry and others. Whether or not one agrees with
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    all or most of these criticisms, the NRC is evaluating all
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consideration.
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               I have tasked the NRC's Executive Director for
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      Operations, Joe Callan, to prepare information to respond to
      these critiques, to prepare the agency first to assess
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      objectively both the strengths and the weaknesses of the
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      NRC's regulatory programs and policies; second, to better
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      understand the impact of NRC's policies and programs on
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      those we regulate; third, to consider how effectively we are
      responding to changes in the regulatory environment; and
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      fourth, to give open-minded and objective consideration of
      the views and interests of NRC's various stakeholders.
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               The Commission is fully aware that those
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      individuals present at the table this morning are not our
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      only stakeholders. However, the Commission has invited
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      these participants to continue a discussion of NRC's
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      regulatory program. I say "continue" because these
      individuals present at the table have interfaced with the
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      Commission in a variety of ways over the years and have been
      actively involved in the issues the Commission has chosen to
      highlight this morning, and we have chosen the ACRS meeting
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      room today -- and there was a lot of discussion about
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      that -- to foster the atmosphere of a roundtable,
      notwithstanding the geometry, discussion of the issues
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      before us.
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               As to the conduct of this meeting, we have
      proposed the following areas for discussion: (1)
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      risk-informed regulations and regulatory policies; (2) the
      reactor inspection program; (3) the NRC enforcement program;
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      (4) the use of performance indicators in the NRC's nuclear
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      plant performance assessment process; and (5) the timeliness
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      of NRC's processes -- that is, if we have time -- I'm
      kidding.
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               [Laughter.]
               CHAIRMAN JACKSON: Notwithstanding this proposal
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      of topics, the Commission is interested in having a
      comprehensive dialogue with the invitees on the nuclear
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      reactor and spent fuel programs in general and will
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      entertain any topic that anyone would care to discuss.
              We will begin by inviting opening statements from
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      each invitee. We would ask that speakers limit their
      opening remarks to five minutes and that questions and
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      comments be withheld until we begin our open discussions.
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               We will of course in the course of the discussions
      be able to return to cover any information that speakers are
      unable to present as a result of the five minute
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      introduction.
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               Following the opening comments we will begin an
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      open discussion.
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               Now this meeting was originally scheduled to end
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      at 11:30 a.m., but we will continue our discussions as long
      as we all feel is necessary. Therefore, if our discussions
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      are still proceeding, and I expect they may be, at 11:30
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      a.m., we will recess for approximately 20 minutes, both to
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      allow for collective leg stretching and to allow the
      Commission to proceed with a scheduled public affirmation
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      session.
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               We will then reconvene and continue our
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      discussions.
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               That said, the Commission welcomes, and I am not
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     introducing them necessarily in the order in which they are
      seated at the table, the Commission welcomes Mr. Earle Nye,
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of these critiques as input worthy of our serious

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     Chairman of the Board and Chief Executive of Texas Utilities
     Company. He also is Chairman of the Board for the Nuclear
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      Energy Institute, which represents over 250 organizations in
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      the nuclear industry.
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               Mr. Joe Colvin, the President and Chief Executive
      Officer of the Nuclear Energy Institute -- he has been
      active in the nuclear associations for over 15 years
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      including a stint at INPO, and his understanding of the
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      industry and the NRC will contribute greatly to our
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      discussion.
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               Mr. Corbin McNeill -- President and Chief
      Executive Officer of PECO Energy Company -- he has had
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      experience ranging from being a plant manager to being CEO
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      and that will be very beneficial to our discussion.
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               To my left, Dr. Zack Pate, Chairman of the World
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      Association of Nuclear Operators. He recently retired from
      the Institute of Nuclear Power Operations, where he was the
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     Chairman and CEO. Dr. Pate brings to this table a very
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     broad view of the nuclear industry from a plant operations
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      as well as a performance measurement perspective.
               Mr. Harold Ray, Executive Vice President of
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     Southern California Edison Company -- in addition to being
      an NRC licensee, he has been very active in the Nuclear
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      Energy Institute's Working Group on Regulatory Issues.
2.2
               Mr. David Lochbaum, Nuclear Safety Engineer with
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      the Union of Concerned Scientists -- UCS, as it is called,
     is dedicated to advancing responsible public policies in
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      areas where science and technology play a critical role.
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      UCS always has provided thoughtful input to the NRC and we
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     look forward to Mr. Lochbaum's comments.
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               Dr. Forrest Remick, the former Chair of the NRC
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      Advisory Committee on Reactor Safeguards, of course a former
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      Commissioner of the NRC and now an engineering consultant
      involved with the nuclear industry, will give us a unique
      perspective on the operation of the agency.
               On behalf of the Commission, I thank not only
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      those of you here at the table, but also members of the NRC
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      Staff, Congressional staff members, and those of you in the
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      public and the press present today or reading this
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     transcript at a later date for your interest and
     participation in ensuring that the NRC has processes that
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      maintain safety in a fair and a consistent manner.
               The Commission is interested in comments,
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      evaluations, and proposed solutions from all participants,
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      and we look forward to an informative meeting.
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               We have made available the room adjacent to this
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      conference room which is to the right as you exit and the
      Commission meeting room in 1 White Flint as overflow rooms
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      where you can observe the meeting if you so desire.
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               Additionally, this meeting is being broadcast to
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     both buildings here at White Flint and our regional offices.
     and at this time we will hear opening statements from our
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     invited guests.
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               I would like to call on Mr. Earle Nve to begin.
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               MR. NYE: Thank you, Chairman Jackson.
               We appreciate your invitation to be with you this
      morning and to be a part of this dialogue to consider
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      possible changes in regulatory structure and process.
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               On behalf of the Nuclear Energy Institute and the
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nuclear energy industry, I want to comment you, Chairman

Jackson, and each of the Commissioners for your progressive approach in undertaking this review and in calling this 9 meeting. Because there is much ground to cover today and it 10 11 is most important that we have the opportunity to fully define some of the key issues. I will limit my remarks to a 12 few brief points with which I hope we can all agree. 13 14 First, the electric utility industry is undergoing 15 a period of profound change, not unlike many other elements of our economy. Competition is here and the fundamentals of 17 the business have been irreversibly changed. Nuclear fuel 18 generating units are being subjected to a different and more 19 challenging form of economic standard. In many instances the availability and the viability of this potentially 20 21 low-cost non-emitting, highly reliable technology is being 22 challenged. 23 Second, the nuclear industry is performing at the 2.4 highest levels of safety, reliability and effectiveness in its history. I am not unmindful that the Commission has sought to be constructive in this regard and I am pleased 1 that much of what has been accomplished has been through the industry's initiatives, and despite this enviable record an 3 even better record of economic performance will be required in the future. A financial analyst with Lehman Brothers, Mr. Jim 6 Asseltine, a name not unfamiliar to many of you, said 8 recently that in the future nuclear units may have to perform consistently at economic levels now being achieved 9 10 only by the top quartile of performers. At the NEI 11 conference in May, Jim spoke to the impact of regulation in 12 this matrix, indicating that the challenge will be to make 13 sure that the Commission can discharge its responsibilities in a way that provides the industry the flexibility to make 14 15 adjustments in organizational structure and in operating philosophies -- which brings me to my third and final point. 16 17 Strong, effective, and credible regulatory 18 oversight is essentially and not subject to compromise, but safety is not inconsistent with efficiency, nor is 19 regulatory assurance inconsistent with innovation and 20 21 flexibility. The industry's current level of performance 22 provides, I think, a sound basis for the NRC to make 23 significant improvement in regulatory processes. The 24 Commission has been working hard to incorporate risk-informed and performance-based approaches into the 1 regulatory process, and the industry has invested heavily in this work to make safety regulation more efficient, but I think we all would agree that the potential benefits have 3 4 largely eluded us as yet. 5 Accordingly, I am very appreciative of the efforts and willingness of Chairman Jackson and the Commissioners to 6 7 open this dialogue with stakeholders and to undertake to make significant and meaningful improvement in the 8 regulatory process of the NRC. 9 For this meeting and the subsequent deliberations 10 11 and initiatives, I commit that the industry will be 12 responsive and will be forthright, that we will be candid and constructive. With you we commit every effort to 13 achieve meaningful enhancement of the regulatory process, 14 15 and I would thank you very much. CHAIRMAN JACKSON: Thank you very much, Mr. Nye. 16 Let me call, if I may, on Dr. Pate. Zack? 17 18 DR. PATE: I would like to add my commendation to the Commission for putting together this forum for

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discussion of the issues the Chairman outlined. In the
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     not-too-distant future we will reach the 20th anniversary of
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      the Three Mile Island accident, and I think that gives us
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      good thought -- a good opportunity to pause and to think
      about putting the post-TMI era behind us, not to forget the
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     lessons learned but to move forward to a new era that Earle
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      Nve has described.
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               My view of the plants in the U.S. are an order of
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     magnitude safer than they were at the time of Three Mile
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      Island, or orders of magnitude safer, and that gives us a
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      chance for taking a fresh approach.
               My comments this morning will focus on what I
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     describe as a longstanding disconnect between the
      expectations of the Commission or the EDO or other senior
      officials at NRC and what actually happens in the field at
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     the utility and plant interface.
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               Headquarters and regional personnel routinely,
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      every day, indeed every hour, impose requirements on the
     plants that the Commission or the EDO or other senior
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      managers would not support if in each instance you knew what
      was happening. Time and time again over these past 18 years
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     that I have been observing, when such examples are brought
      to the attention of an individual Commissioner or the EDO,
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     you find the situation to be just as unreasonable as I do,
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     but this continues.
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               The Tyler Sperrin study, conducted some four years
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      ago, illustrates this problem quite clearly, even
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      dramatically. More on this in a minute.
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              I am now in my third career. My first career of
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     over 20 years was in the Navy. In the Navy we had an
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      expression called "watch your whites" or "cover your
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      whites " -- if you weren't careful on board a ship or in a
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      shipyard you could get grease or oil on your sparkling white
      uniform, but over time this expression came to have a second
     meaning. It came to mean to keep out of trouble, to keep
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      out of the line of fire, to cover your own hide. NRC staff
      has been very much in a cover-your-whites mode since the
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      Millstone situation developed, and the application of
      unreasonable requirements has become even worse.
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              I will give you just one example of a recent
      occurrence at Virginia Power. At the Surry Station and the
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      North Anna Station, two of the best performing stations in
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     the U.S. by most measures. They wanted to change the name
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     of the site director or site manager to site VP. That took
     100 pages of documentation, and already there were many
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     other stations in the U.S. that had site VPs, so it was not
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      a new issue.
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               Coming back to the Towers Perrin study, the NRC
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      chairman at the time the report was issued objected strongly
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     to the wording of the Towers Perrin report, so \ensuremath{\mbox{I}}\xspace^* not even
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     going to refer to the words in the report, just to the
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     survey data presented in Appendix E.
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               Appendix E conveys some powerful messages, and
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     based on extensive recent feedback, these messages apply
      today as well. I would like to now show a few slides that
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      are taken from Appendix E of the Towers Perrin report, and
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      these have been provided as a handout.
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               Could I have the first slide?
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CHAIRMAN JACKSON: May we have the first slide? 3

Thank you.

if you're close to the screen. I'm not going to dwell on 6 these slides; I'll just point out a brief highlight of each. This is a survey of the industry and its site 8 executives and plant managers, and the question is your 9 assessment of regulatory activities, and the tall column in 10 11 each of the two graphs is frequently going beyond 12 regulation, 59 percent of the site executives in one case 13 and 63 percent of the plant managers in the other case. Could I have the next slide. 14 15 This slide is NRC non-statutory initiatives such as bulletins, generic letters, confirmatory action letters, 16 17 result in utility requirements that go well beyond 18 regulatory requirements, and in those cases, the tall bars 19 for both the site executives and plant managers are the strongly agree or agree. 2.0 21 Next slide, please. 22 This survey question is NRC inspectors have used 23 inspection reports as a way to exert pressure to follow 24 suggestions that have little or no safety value, and once 25 again, the tall bars are the site executives strongly 1 agreeing or agreeing, and the plant managers strongly 2 agreeing or agreeing. Next slide, please. 3 This is the NRC, particularly at the region level, 5 has gone well beyond existing regulations to influence plant actions based on a subjective view of what constitutes 6 proper management, and here the results aren't quite as dramatic, but still the strongly agree and agree bars are by 8 9 far the tallest 10 Now, copies of these have been provided in the 11 back of the room and to the members of the roundtable 12 discussion, so I'm now going to go to the last slide. I do encourage you to look through each of these. 13 The last slide is really a test. It says, 14 15 regarding plant safety, check one answer for technical specifications. In this case, the vast majority of both 16 site executives and plant managers consider the technical 17 18 specifications very important to safety. 19 I put this slide in because it does show a balance 20 in integrity in answering these survey questions, and I 21 think it gives even more relevance to the earlier slides. 22 Once again, because of the time constraints, I 23 won't take time to show all of these to the audience, but 24 they are all available. They were selected from the Towers 25 Perrin appendix to illustrate this disconnect between the 1 expectations at the top management level for the NRC and 2 what all too often happens at the working level, and when it comes my turn to speak again, Chairman, I would like to make 3 4 a recommendation that may be helpful in this regard. 5 CHAIRMAN JACKSON: Okay. Very good. Thank you. I would like to ask -- Mr. Lochbaum. 6 MR. LOCHBAUM: Good morning. Prior to joining UCS, I worked for 17 years in the 8 9 nuclear power industry, most of that time as a consultant. I had assignments at utilities or plants with very good 10 11 management and very good performance results, and also had assignments at plants that didn't fall into that category. 12 13 One of the things I observed from that experience was that nuclear plant performance is a function of 14 15 management effectiveness more than it is a function of plant age, reactor type or other factors.

DR. PATE: I think that's probably only readable

I found that all plants can develop comprehensive
correction plans. Good management ensures these plans are
effectively implemented and are revised as necessary such
that the objectives are obtained. Bad management allows the
plan to get waylaid by emerging issues such that schedule or
quality or both suffer.

Good management uses yardsticks to measure the effectiveness of changes, physical or administrative, implemented at their plants. Bad management does not.

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Good management establishes objective standards which are clearly and consistently communicated to plant workers. Bad management sends unclear or mixed messages, either standards that are vague or ill-defined or very esoteric, like excellence, and objectives which cannot be obtained with the resources that are devoted to the projects.

Good management establishes clear accountability or ownership for issues. Bad management does not, leading to confusion, frustration, ineffectiveness and delays in getting things sorted out.

Good management provides workers with effective procedures and policies such that most items can be processed through normal channels. Bad management does not, which forces the majority of items to be hand-carried throughout the process.

NRC regulatory performance is also a function of management effectiveness more than it is a function of staff size, structure, or other factors. Unfortunately, the NRC staff more closely resembles bad management than good management.

The examples I choose to cite are, the NRC staff often develops corrective action plans but then fails to adequately monitor them to ensure that the stated objectives are obtained.

For example, the enforcement policy, the 2.206 policy program, the allegation process has been revised in recent years, but they are no better than they were a decade ago.

NRC staff does not consistently enforce criteria, whether they are 10 CFR 50 regulations or their own policies. For example. DC Cook was shut down last September due to LOCA concerns under certain postulated conditions, yet suction strainer issues at boiling water reactors, which actually did happen at two plants in this country and had virtually the same consequences, did not result in the shutdown of any of those affected plants.

The NRC staff seems to lack clearly-defined accountability for its action. For example, a recent UCS allegation involving Millstone Unit 3 was handled by NRR until the week after the restart vote, and then it was passed back to Region I with no action having been taken.

The NRC staff suffers from a lack of continuity. For example, allegations, 2.206 petitions and other issues raised by UCS routinely get reassigned from one interim or transient individual to another without much action being taken.

In summary, if the NRC measures itself against the same high standards it requires and expects of its licensees, we might not be here this morning.

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CHAIRMAN JACKSON: Thank you very much.
               I realize that I have been somewhat presumptuous
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      in assuming that most people in the room would know who all
     of the members of the Commission are and the senior managers
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      at the table, and so I should not have made that assumption
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      and I apologize to them, and so I would like to introduce my
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     colleagues on the Commissioner.
               Commissioner Nils Diaz. Nils has had many years
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      of experience in the nuclear arena and came to the NRC from
      the University of Florida.
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               Commissioner Edward McGaffigan on my left had a
     distinguished career in the Foreign Service and many years
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     on Capitol Hill, and so he knows the ins and outs of
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      Washington better than I do.
               I would like to introduce Joe Callan, a.k.a.
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     Leonard J. Callan, who is our executive director for
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      operations, and Joe I think will bring an interesting
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     perspective, having come to his current position formerly
     having been the regional administrator in our Region IV
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               I would also like to introduce Sam Collins, who is
     our director of the Office of Nuclear Reactor Regulation.
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     and people think that we raided Region IV because Sam was
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     the deputy regional administrator of Region IV before he
      came to his present position.
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               Also seated at the table at a right angle to me,
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     or to the right, is Karen Cyr, our general counsel, and to
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     her right, my left, is Mr. John Hoyle, who is our secretary.
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              So with that, I would like to continue and call on
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     Mr Joe Colvin
               MR. COLVIN: Thank you, Chairman. Good morning.
               I also thank you very much for this opportunity.
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     I think it's an excellent opportunity for us to have a
     candid discussion, and I thank the Commission and appreciate
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     yours and the Commission's leadership in providing this
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      opportunity.
               In your discussions that you have had and your
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     memos that you've sent out regarding this meeting, you have
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      asked for specifics, and I wanted to tell you that we are
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     going to talk some specifics, and I'm ready to do that, but
     first I would like to speak to a few -- what I would
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      consider some over-arching issues, and with that, perhaps I
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      could have my first slide, please.
               CHAIRMAN JACKSON: Mr. Colvin's slide. Thank you.
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      No, it's not -- is that?
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               MR. COLVIN: No, that is not my slide, Madame
     Chairman. It's entitled, "Industry Goals for the Regulatory
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     Environment." Great.
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               What I wanted to do was to speak for a minute, as
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     I said, on these over-arching issues. And I think that we,
     as the industry, share similar goals with you, as the
      regulator, on what we need to ensure that we have a proper
      regulatory process in place. And I think these points
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      illustrate that.
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               We do need a credible regulatory agency as viewed
      by the public, by the Congress, by the industry. We need to
     have mutual trust and confidence in the regulatory process,
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      and I think we need to work -- our goal is to have a
      non-adversarial relationship. We certainly need
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      consistency, predictability and stability in the process.
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             We desire full recognition of the industry
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      improvement activities by the agencies and I think a clear
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14 definition of the roles between NRC and the industry where 15 we have a common mission, which in fact is the safety 16 mission of the agency and the industry. 17 Next slide, please. 18 There are some perceptions I did want to just take 19 a moment on to share with the Commission, and with the 20 participants, from the industry as the regulatory process exists today. An increased number of rules and regulatory 21 22 actions. Some regulatory actions we believe circumvent the 23 rulemaking processes. We see that the advice of experts and 2.4 other advisory bodies is not fully utilized. We see the 25 acceptable regulatory standard as a changing target above what is compliance with the rules. The basis of many 1 actions appears to be opinion or re-interpretation or interpretation of what is required. 3 We see some examples of bulletins and Generic 4 Letters misused. We see that a lot of the requests that 5 take place really have little regard for some of the real 6 impact on management, people or costs. 8 We see the -- I'm sorry, the next slide, please. 9 Inconsistency between headquarters and regions. An increase 1.0 in inspection efforts and in resulting impact on the plants. Some injection into management decisions and the management 11 12 issues. 13 And, basically, the last issue is not responsive 14 to some of the changes that are needed in the industry. Now, I show these slides really because they 15 16 depict -- these last two slides, I think, in my view, depict 17 at a high level some of the problems that have continued to 18 exist in the regulatory process over many years, and I would 19 be remiss if I didn't tell you that these were the slides 20 that I used before the Advisory Committee on Reactor Safeguards and later with the Commission in August of 1989. 21 22 And I think they are illustrative of the nature of the 23 problems that we need to address and I think we have the opportunity to address with this forum. 24 I have participated in five previous initiatives 25 1 of similar nature with five previous Commissions, and, unfortunately, although we have made quite a bit of change, 2 we really have not made the change needed, or what I would 3 4 characterize as the real change needed to move forward in 5 this regulatory environment. I am optimistic that today that we have a new 6 7 opportunity, and that comes about from the leadership of this Commission and the dedication, and we are ready to support that. 9 10 I think there are two other issues which are 11 really factors which add to that which give me the confidence that we will be able to make these changes. And 12 13 that first issue, Mr. Nye has talked about, and that is the 14 issue that there is a change needed to be ready to regulate this mature industry through the transition to competition 15 16 and into the 21st Century. I mean that change is absolutely 17 necessary because we cannot continue going -- regulating the 18 business that -- the business is changing and we need to 19 change the way we regulate it and still maintain public 20 health and safety. And I think the second point, which is also very 21 22 important, is that we have today an increased recognition of 23 the important role that nuclear energy plays in the United 24 States, that is coming about in the policy arena, policy

5 makers and certainly with the United States Congress. And

there is an increasing amount of Congressional interest in
these activities, and I think that is very constructive, and
we have a good opportunity to take advantage of both of
those factors, along with the Commission's leadership, and
we look forward to participating in this discussion.

Thank you, Chairman.

CHAIRMAN JACKSON: Thank you very much.

8 Dr. Remick.

DR. REMICK: Thank you very much, and I want to join in congratulating the Commissioners on holding a stakeholders meeting, and I appreciate having been invited.

I have had a wide variety of interactions with the NRC and its predecessor agency, the AEC, over a period of about 42 years, so I do feel I bring a somewhat unique perception to this meeting.

I have seen the agency extensively from the inside and from the outside, and I feel very much at home in this agency and with its people. I have the highest respect for the NRC, its important mission and its people.

But I also have some differences and concern about
the agency's direction and its future. There are a number
of things that I considered saying to you today, but I
believe there are others at this table who might best
address many of those points. But there are some things
that maybe I am in a best position to say. Therefore, I

 $\,$ wish to share with you some perceptions of the NRC today.

To conserve time, I'll go to the bottom line in a direct and perhaps blunt manner, sharing with you what I see from my perspective, and when I say "you," I mean the agency in general. However, because of my past relationship with the NRC, it gives me some discomfort and pain to be so blunt in a public forum, but I take your interest in hearing from your stakeholders as sincere.

Further, to the best of my knowledge I have no ox that might be gored. My comments are meant to be constructive and are provided with respect for you and your various positions.

Much of what I read that you say as a collegial Commission, I can agree with. But to be blunt, the Commission does not know in detail how the agency's programs are being performed in the field. And after all it is said that performance is what performance does. As a result, you have lost some credibility and are losing credibility on the Hill. You are being seen more and more as an agency with problems, thus, you are being seen as a problem agency.

The over-emphasis on blind adherence to strict compliance, with very confusing regulations, and strict compliance with documents never intended for that purpose, is in some cases diverting plan personnel's attention from more safety-related activities.

Direction to the staff to write up anything they
see that appears to be wrong, whether or not it falls under
the regulations, is not only questionable, but wasteful.

It is my fear that rather than maintaining or
increasing nuclear power plant safety, this trend may be
resulting in reduced attention to safety. As a result, you
are losing credibility with many of your licensees, who, in
return, are losing respect for the agency and its regulatory
process. You are seen as having lost focus and perspective

on what constitutes safety and adequate protection of the

11 public, and are striving instead to duplicate industry's initiative of seeking excellence in plant operation. 12 13 You speak of striving to be risk-informed, and you 14 speak of the need for performance-based regulatory implementation, but little impact is seen in the field. In 15 16 fact, there appears to be great reluctance to accept 17 risk-informed insights as justification for considering 18 change. Further, you are seen as neither being fully 19 committed to the various pilot programs that have been 20 undertaken or underway, nor implementing or taking advantage 21 of the results. 22 The Commission is seen as a highly bifurcated 23 body, not a unified, collegial body. Rumors of in-fighting are rampart, both internal and external to the agency. As a 24 result, many of the staff are perceived as being hunkered 25 1 down and afraid to make decisions, and reviews and decisions are seen to languish with numerous further requests for 2 additional information seen as delaying tactics. This, I believe, is the basis for industry's concern over timely 4 license renewal reviews. The morale of some staff is low and a number are seen as biding their time to retire or wait 6 7 for change. The agency has lost much technical expertise and regulatory knowledge and memory, and I can also say that 9 for the national laboratories that you use extensively. 10 The agency is highly intrusive into the day to day 11 activities of licensees. Little, if any, change or relief is seen based on improved plant safety and operation. For 12 13 better, but also for worse, this intrusiveness in large part 14 drives what goes on at the plants on a day to day basis. 15 The intrusiveness is largely based upon highly subjective 16 criteria which NRC residents, and regional and headquarters 17 personnel would like to see done at the plants and frequently with the best intent. But finding the 18 19 relationship to public safety, or to the Commission's 20 regulations is frequently difficult to see. The influence of and the discipline prescribed by the Backfit Rule is not 21 evident in this subjective ratcheting. 22 23 The influence of subjective SALP ratings, or of 24 subjectively being placed on a Watch List play a large part 25 in what drives many day to day activities at plants whether 1 or not the activities have a safety nexus. The subtle 2 threat or fear or adverse SALP scores or being placed on the Watch List are an effective means of getting licensees to 3 4 make changes that the staff wants. Many such changes would not meet the criteria of the Backfit Rule or be solidly anchored in the Commission's regulations. 6 For example, the use of Confirmatory Action Letters has grown by leaps and bounds recently, and these are viewed as convenient techniques to obtain changes that 10 the staff wants done, while getting around the Backfit Rule, 11 the regulations and the Commission. And if you doubt this, I urge that you read all the CALs issued in recent months 12 13 and ask the following about the actions being, quote, 14 "confirmed." 15 What is the relative safety significance of the 16 individual actions being, quote, "confirmed"? Are the 17 actions, in effect, new requirements? Where are the actions specified in the regulations? Do the actions meet the 18 criteria of the Backfit Rule? Is the letter truly, quote, 19 20 "confirmatory," or has it been previously written and is 21 being imposed?

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22
               If the actions being confirmed are not safety
     significant or not specified in the regulations, what place
23
      do they have in a Confirmatory Action Letter? And I can say
24
25
     the same thing about some of the Confirmatory Orders of
     recent date. It would also be an interesting exercise to
1
     read a large sampling of Inspection Reports or sit in on
 3
      inspection exits and ask some of the same questions about
      matters being addressed.
 5
               Now, I think I have said more than enough to help
 6
     kickoff this discussion. Much of what I have said, I am
      sure you have heard before. But what you as an agency do
     about it is what is important. And I thank you very much.
8
               CHAIRMAN JACKSON: Thank you.
9
10
               Mr. McNeill.
               MR. McNEILL: Thank you very much, Madame
11
12
     Chairman. I really do appreciate the opportunity to
13
     participate in this forum and really commend the Commission
14
     for providing such a forum for discussion.
15
               Although I didn't plan it this way, I think some
      of you in the room know that just this morning we, as PECO
16
      Energy, and our partner, British Energy, made an
17
18
      announcement that Amergen, which is our partnership company,
19
     has signed a Letter of Intent to purchase Three Mile Island
     Unit 1, which after about 90 days of due diligence review.
20
      we would then expect to file the appropriate regulatory
21
22
     filings for the license transfers.
23
               I believe that this event really does signal the
24
      beginning of a major restructuring of our nuclear power
25
     industry and that is reinforced by the fact that, as we have
1
      gone out and discussed our concept with other owners,
      clearly, there is an expectation that there will be
 3
     significant consolidation within the industry. And don't
      underestimate the strength of this movement. I think the
 4
      economics that Earl Nye has described in terms of
5
 6
     competition are a very, very strong force that will begin to
      move the industry along and, although that course can be
      shaped somewhat, I don't think that there will be a reversal
8
     of it
9
10
               I personally believe that a lot of these changes
11
      are good, that they will in fact continue to improve safety.
12
      Many people think that these kinds of deregulations are in
13
     fact going to detract from safety, but I frequently point to
14
      the airline industry, which has now been deregulated some 20
15
      years or so, where, in fact, there has been improved airline
16
      safety. Almost every year we have seen significant
      improvements over that full 20 years.
17
18
               We are also going to eliminate inefficiencies
19
     through improved processes and performance, which I believe,
     and I will discuss a little later, in fact, produce better
2.0
21
     results. The pressures for speed, time, profit, in fact, if
22
     done correctly, will improve the overall efficiency and
     performance of our industry.
2.3
24
               However, full success will only come through an
25
      efficiently integrated industry, which includes the
      regulator. We are an industry that has already changed
1
2
     appreciably as we have moved from a design, construction
3
      based industry to an operations based industry, and where
     the regulator's role has shifted more toward monitoring of
      operation.
5
 6
              But many of the existing practices that we utilize
      in the field today were derived from processes that had
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licensing and review. And it is not clear to me that that
9
10
      is an appropriate basis for an ongoing operating regime that
11
      we see, in fact, in the industry today. We now have nearly
     40 years of experience and I think that it is time that we
12
13
      consider revamping the regulatory scheme.
14
               Revamping should include consideration of new
15
      methodologies such as risk-informed, performance-based
16
     regulation, as embodied in the maintenance rule. But it
17
      must also include consideration of the elimination of
18
      methodologies that are ineffective, inefficient or produce
19
      unintended negative behaviors such as those highlighted by
20
     Dr. Pate.
               In addition to introducing methodologies, as I
21
22
      have mentioned before, we also need to increase our speed.
23
      And this may seen counter-intuitive, but I think it is
24
      necessary to recognize the fact that concentration on speed.
      in fact, provides an impetus to create processes that have
25
1
      little room for error, that demand a discipline.
2
               For example, one of the elements of improved
3
     performance in our industry over the last several years has
4
      been shortened outage lengths, and we have done that,
      accomplished that by improving the quality of our work, by
 5
      improving the coordination of our work groups, and driving
 6
      for speed and accomplishment. We have actually done that, I
      think, by continuing to concentrate on safety and
      maintaining safe plant configurations. Speed and safety are
9
10
     not mutually exclusive. We know that it can be done from
11
     our experience.
12
               While our industry must continue to demonstrate
13
     high levels of performance and safety, we need to make sure
14
      that the same kind of performance exists in our regulatory
      regimes. We have seen success in adopting the maintenance
15
     rule, and Joe Colvin has just briefly outlined, and Harold
16
17
      Ray will continue to expand on the framework of a revised
     regulatory oversight process. And I believe that the
18
      industry, from its regulators through its suppliers and
19
20
      OEMs, through to our operators, and whether they are going
21
      to be utilities, true utilities, or generating companies,
22
      through to our customers and on to the environment, will be
23
     well served by consideration of some regulatory regime.
24
               Thank vou.
25
               CHAIRMAN JACKSON: Thank you very much.
                                                            32
1
               Mr. Ray.
               MR. RAY: Thank you, Chairman Jackson, for this
 2
      opportunity. I hope I can represent my fellow chief nuclear
 3
      officers, distinguished member, of which General Hanlon, I
      see is in the audience, and he can certainly speak for
 6
     himself at the appropriate time.
7
               If I could start with overhead 1, please. Let me
      see if we've got into the right set here before I begin.
               Yeah. First I'd like to talk about the need for
9
10
      objective priorities throughout the regulatory process. I
11
     perceive that there's a widespread of not universal
      agreement on all sides that nuclear safety would be enhanced
12
13
      by more objective prioritization of available resources.
14
               I say this notwithstanding that I also believe
      that the level of safety achieved in the industry today is
15
16
      entirely acceptable, but we all know that while we may be
17
      able to do anything well, none of us can do everything well.
18
               Because we cannot yet consistently discriminate in
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their genesis in the design licensing, construction

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importance among the things which are subject to regulatory
     interest, we too often dissipate our resources on what is
20
21
      easy, but frequently unimportant, and fail to address what
22
      is difficult, but frequently far more important to safety.
               On the subject of dissipation of resources, at the
23
     risk of tempting fate and recognizing that anything I say
24
     about my plant will, by definition, be self-serving, let me
25
     nevertheless give a concrete example, if I may.
               As the Commissioners may know, San Onofre is one
3
      of those licensees which manage plant risks to a real time
      all mode plant safety monitor. We use this in addition to
5
     programs which comply with regulatory requirements.
 6
              Management bonuses are tied in part to the
     computed core damage frequency. By contrast, neither SALP
8
     nor INPO rating figure into the management bonus program.
9
               We believe this promotes a strong safety culture
10
      at San Onofre which is based on good understanding of what
11
      contributes to risk.
12
               We also believe this is reflected in conservative
13
      operating practices from a compliance viewpoint. It has
     been over six years since any of the three units received a
14
15
     civil penalty.
16
               However, in seeming contrast to this, San Onofre
     has often been either the highest or among the highest
17
      plants in the country for the number of non-compliances
18
19
      issued, including plants on the watch list.
              Why is this? I believe the record is clear,
20
21
     including as described in the SALP reports and meeting
22
     discussions.
23
               I'm a long -- lifelong believer in the use of
24
      detailed, prescriptive procedures for the conduct of work
     where the probability of error may be small, but the
25
      consequences may be large.
1
               I also believe in the value of programs which,
2
3
      although they may be complex, have the virtue of making it
      more difficult to propagate an error, once made.
4
               A natural result of this is that it is easy to
5
6
     assert on any given day that someone somewhere failed to
      literally comply with a program or procedure.
               Since January, 1997, San Onofre has receive 21
9
      cited and 22 non-cited violations for failure to strictly
10
      follow procedures. In only a few cases did these
11
      non-compliances have any safety significance whatever in our
12
13
               Now do I approve or even passively tolerate
     procedure non-compliances? No. I do not.
14
15
               Is it a violation of regulatory requirements?
16
     Yes, it is.
17
               Do I think the NRC should ignore any violation of
18
     requirements? No, I do not.
19
              But, finally, was it an appropriate use of
     licensee and regulatory resources to process a total of 43
2.0
21
      violations including identification and verification of
22
      correction action to prevent occurrence?
2.3
               No. I certainly do not.
               Instead, I believe we should be able to address
24
25
     procedure non-compliances ourselves, unless some objective
      measure were to demonstrate that it was a reflection of
      fundamental deficiency in the safety culture which
3
      threatened to result in deficiencies in plant operation and
     significant safety risk.
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This is an example of valuable resources being dissipated on the easy regulatory intervention and issues of 6 procedure compliance, with little or no safety significance instead of coming to grips with how to implement the available technology, to focus on real safety issues, 9 10 namely, the quantification and minimization of the risk of 11 core damage, oiling in the core, large early release or 12 whatever. 13 Now I'd like to also touch on the importance of 14 consistence policy direction to change. We conclude this 15 overhead by observing something I'm sure we all know. In any large institution, mine included, 16 17 successful achievement of change demands consistent policy direction, applied over what seems at least to be a long 18 time. And it is the inability to maintain this consistent 19 direction and the need to capture quick rewards whenever you 20 21 can. It is the reason the staff always wins in the end, or 22 23 The Commission must adopt a policy direction and 24 maintain it over a significant period or the spring rebound 25 as soon as the force is removed or redirected by some new 1 crisis The change required to implement risk informed 2 3 regulation, as you Commissioners know all too well, is a prime example of the difficult challenge which will never be met so long as we continue to dissipate resources on what is 6 easy. 7 May I have my second overhead, please? My fourth point is that safety and compliance can be demonstrated to be congruent. It's the objective, 9 10 determination and priorities, which we indicate, can 11 demonstrate congruence between what is done in the name of compliance and what is required to efficiently achieve an 12 13 acceptable assurance of safety. 14 But the quest for perfection in the process is the enemy of the assurance of adequate safety, would be my 15 16 hypothesis. Thus far, I can only say that the normal 17 bureaucratic incentive to seek perfection in the process is 18 indeed proving to be the enemy of our ability to assure 19 adequate safety with acceptable efficiency. 20 Without attempting to provide examples at this 21 point, owing to the lack of time, this problem is manifest 22 in the seeming impracticality of agreeing on a reasonable 23 path for implementing probability models and regulatory 2.4 space. We see it also in what the industry experiences as 25 37 1 the excessive time required thus far to implement individual risk-informed incentives for regulatory changes. The kind of explicit policy direction that the 3 4 Commission has provided with respect to 10 CFR 50.59 is going to continue to be required if we are to be able to move ahead in developing objective tools for assuring 6 7 nuclear safety. 8 And, finally, on the point of latent regulatory ambiguity that I feel must be addressed. 10 CFR 50.59 is an 9 10 example of where regulatory ambiguity was allowed to exist 11 for a long period to the point that when the Staff moved to enforce its interpretation, it was clearly viewed with 12 13 justification as a significant change by the industry. The true purpose and function of the FSAR and the definition of 14 15 design bases with respect to safety margin are other

16 examples. As you know, the buck stops here, with you, on 17 18 these matters, and licensees should be able to depend on 19 consistency of interpretation by the agency as revealed in its practice until and unless a formal change process is 20 followed. But I want to hasten to acknowledge that the 21 22 Commission has recognized situations where perceived 23 ambiguity exists, has undertaken to provide clarification, 24 meanwhile granting the industry a period to adjust. 25 Nevertheless, as I think Mr. Colvin mentioned, the 1 industry does feel that changes are occurring without, in all cases, following the Commission's own process for 2 3 change. 4 My third and last overhead, please. 5 Again, quite coincidentally, and without knowing 6 what Corbin was going to say at all, I want to end on the new challenge for regulatory process which he so well illustrated. 8 I would maintain the majority of licensed power 10 reactors will not be in cost-of-service rates within five years. My company is licensed at two sites, San Onofre and 11 12 Palo Verde. There are four owners at one and six at the 13 In the case of Palo Verde, there are six separate 14 15 rate-setting jurisdictions in four states, and this is not 16 unique. I could go on, but looking at time, let me just --17 18 and given, as I say, that Corbin has already made the point 19 much better than I can, in any event, let me just say my 20 last two points. 21 The sale or transfer of ownership to non-electric 22 owners will accelerate, and the point has been well made 2.3 already. Finally, NRC actions to prepare for this change 24 need to continue to expand, and let me conclude with what I 25 mean by that. I want to acknowledge that the Commission has 1 2 moved in response to this change, and the industry has 3 responded, we hope, in support. Thus far, we have addressed financial 5 qualification, both for decommissioning and now for operations. The Commission has also considered related issues such as grid reliability, but I would urge you to 8 continue to give attention to this important area and 9 determine if there are other issues which need to be 10 addressed. I was recently at an energy forum in which a 11 12 former Commissioner, not present in this room, opined that 13 the fundamental precepts of reactor regulation may be inconsistent with the concept of a merchant nuclear plant. 14 15 I don't think they are, but I would hate to find out after 16 the fact. 17 Rather than repeatedly remind ourselves that we do not know how restructuring will turn out in detail in every 18 19 location, I suggest the Commission simply create a straw man 2.0 merchant plant, and ask themselves if they are fully 21 prepared to grant a license for operation. 22 Thank you. 2.3

CHAIRMAN JACKSON: Thank you very much.

What we decided was that those of us internal to 24 the Commission would not necessarily make opening statements 25

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primarily here to listen and to have our dialogue through
     the back-and-forth we hope to have, but I do want to offer
 4
      my Commission colleagues the opportunity to make any initial
      remarks they may wish to make. Otherwise, we can launch
6
      into our discussions.
               Commissioner?
               COMMISSIONER DIAZ: Thank you. I was not ready
      for any prepared remarks, but I do want to go back to
9
10
      something that is kind of overriding theme, and that is the
11
      issue of how do we regulate versus how should we regulate,
12
     and I think that is the bottom line.
13
               There is an issue that keeps coming up, and I
14
      think Mr. Ray referred to it. It's the issue of risk
      information and then I think Mr. McNeill called it risk
15
      information performance base. I want to repeat myself, that
16
      it is important that we understand that these things are not
17
18
     tied together all the time; that the issue of tving
      risk-informed with performance base makes it difficult,
19
20
     makes it expensive to implement, and that there are benefits
     in becoming risk-informed that are beyond what the use of
21
22
      the tool in itself means.
23
               Let me take a minute on that. Risk information,
24
     more than actually a tool to determine when something should
      happen or not, can and maybe should become a regulatory
25
1
      philosophy in which an envelope of safe and adequate
      operation can be bound by risk information and what we know
      today. If we try at the present time to add
 3
 4
     performance-based like we did in the maintenance rule or
      Appendix J, that is very resource-intensive, and the
      industry, I know, is resistant to anything that is very
6
      resource-intensive, maybe for the reasons that we don't know
8
      what the economics of the industry are.
               However, the issue of how is risk information used
9
10
      needs to come between the industry and the NRC to some
11
     resolution in a reasonable period of time, and I suggest
     that the first step is to just really separate what
12
      performance-based regulation is from what risk information
13
      is, because as long as you tie them together, you are making
14
15
      it more difficult, more resource-intensive. It is vital
16
      that this point, as we go forth, be brought to some
17
     conclusion in a reasonable period of time because if not, we
18
     keep spending resources and talking about it without getting
19
      it to conclusion.
20
               CHAIRMAN JACKSON: Commissioner McGaffigan?
               COMMISSIONER McGAFFIGAN: My first comment will be
21
22
      I hope we let Joe --
23
               CHAIRMAN JACKSON: I plan to.
               COMMISSIONER McGAFFIGAN: -- in the second talk,
24
      because I think there are several things that have been said
25
1
      that they need to talk about.
2
               The second point is I do think that one of the
      themes that comes across about the need for greater speed on
3
      the part of the regulator in a decommissioned, regulated
      industry is on the mark. I think in an all-hands meeting,
6
      in my second month on the job, an internal all-hands meeting
      we have on the green out here, I made the point that the old
     model of a ponderous industry dealing with ponderous state
     utility commissions and a ponderous regulator was not going
10
      to be viable for very much longer, and yet what we need is
11
      -- probably mostly us, but we need some help in figuring out
12
      to speed up our various processes, our processing of license
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14 items that come before us. The one case that Mr. Pate, I do want to comment 15 on, because you did say at one point that we oftentimes, 16 17 when things come to our attention, we disagree with the 18 Staff, that the famous or infamous license amendment request 19 to change the titles unfortunately at North Anna or Surrey -- I'm not sure which -- the trouble there was, as I 20 21 understand it, and the Staff can expand, they had not 22 removed from the administrative section of the tech specs 23 these titles, and so a tech spec amendment was required under the current rules. Should a tech spec amendment be 24 required in order to change the titles? I think the 25 1 Commission and the Staff would be unanimous in saying no, we have got to figure out how to change the rules so that 2 3 something like that isn't required. But, unfortunately, the plain English of the rules in that circumstance requires it. Apparently the Staff, several years ago, had -- and as 5 people implement and approve standard tech specs, they are getting all that stuff out of the tech specs, but you end up with this old framework, this old prescriptive deterministic 8 framework hanging around, driving us to do some things that 10 are trivial, and we don't know, in all honesty, how to get to this risk-informed-performance-based-as- we-can-get-it 11 framework that's perhaps epitomized in the maintenance rule. 12 13 So I'd be interested -- examples like that point 14 out the problems with the old framework, and yet do we say 15 despite the rule, that you don't have to apply for a tech spec change here, or do we -- I mean I don't know what the 16 17 answer is there, but we ran it down -- Joe Callan and Sam 18 can talk more about it -- but it isn't worth a lot of talk. It is a good example of the old framework requiring 19 2.0 something that is silly and requiring Staff review that shouldn't -- it should be secretarial, processing that 21 amendment. But yet we have this framework on the books, and 22 2.3 I don't know how to get it off the books without a massive rulemaking procedure following the Administrative Procedure 24 Act that gets it off the books. So that's my --25 CHAIRMAN JACKSON: I'm going to come back to that, 1 2 but let me let Joe and then Sam make a few comments, if you would care to. 3 MR. CALLAN: With the same disclaimer that Commissioner Diaz made, that we didn't prepare any opening 5 6 comments. I'll just say -- I'll make three quick points. One is -- and this may surprise you all -- but I would say the vast majority of the issues raised today, as 8 well as the issues that we have read about, resonate very 10 strongly with the Staff in a positive way. Certainly all the senior Staff and mid-level managers. The Staff is ready 11 12 for change. The Staff is receptive. 13 Having said that, I think it's important to remember that myself and all the senior Staff in the NRC 14 served our apprenticeship, as most of you did, during a 15 period that was quite a bit different than today. And many 16 17 of the senior Staff, myself, for example, made a career out of going from one problem situation to another problem 18 19 situation to another problem situation. So our life 2.0 experience has shaped us in a way to be somewhat jaundiced, skeptical in our view, and we recognize that the industry 21 has changed dramatically since that period, and our views 22 23 are changing, but indulge us a little bit in the fact that we are who we are because of our life's experience.

amendments, our processing of rules, our processing of other

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25
               And finally, this is a point that Dr. Pate made,
      and several others touched on it, I am acutely aware of the
      fact that much, much of the mischief occurs at the level of
      the 180 or so residents we have out in the field and the
 4
     70-plus plant managers, operations superintendents,
      maintenance managers, every day, every week, at the
 6
     implementation level.
               So what's elegant with us in this room, an elegant
8
      solution here or an elegant solution in a Commission
9
     meeting, may not be elegant if it can't be implemented
10
11
               So we have to be mindful of that. I think that's
      a very critical issue. We have to come up with processes
12
      that are robust and, again, to play off Dr. Pate's approach
13
      to using a Navy metaphor, we also had a Navy metaphor in my
14
15
      experience where we talked about processes or activities
16
      being sailor-proof. Processes that are robust enough to be
17
      implemented at the lowest level consistently day in and day
18
      Out
19
               So I think we need to always be aware of that.
               CHAIRMAN JACKSON: Mr. Collins?
20
21
               MR. COLLINS: Thank you. I am going to be very
22
      brief.
23
               My view is that the Office of NRR is receptive to
24
      these issues, as has previously been stated. Some of them
25
     perhaps have a history, historical in context, but still
1
      pertinent as we do business today. I think it's a
2
      beneficial dialogue, self-examination is good at any point,
     not only for the industry, but also for the NRC and its
3
      offices.
5
               I would make acomment that a lot of the
      conversation is directed for various reasons and perhaps not
6
7
      inappropriately in all cases to the individuals in the
      field. I'd just like to make a comment that I can't
     disclaim knowledge of what goes on the field. I was a
9
10
      resident inspector, I was a senior resident inspector, I
11
      have managed all three divisions in one region office and
12
      assisted Bill Kane in Region I. I feel like I have a good
13
     handle on what goes on in the field. It's easy for us to
     cast down to the implementers. In fact, if you read an LER,
14
     most LERS indicate personnel error. They don't talk about
15
16
      management systems; they don't talk about senior managers at
17
      the plants, or senior vice presidents and their involvement
18
      in the processes. We point to the people who do the work.
               I would like to acknowledge that most, if not all,
19
      individuals that I have been associated with in the field do
20
21
      their work honorably; they do it based on good intentions
      for guidance; and it's our managers' job to provide that
22
      guidance and provide the oversight. And I would just like
23
2.4
      to acknowledge that.
               With that, I would echo what Joe indicated and
25
1
     that is there is a lot of work going on presently; some in
      the areas we have mentioned; some in other areas. Work in
      progress is a promise, but I'm here to tell you that our
3
 4
     office is expending a lot of time on these areas. More
     recently, perhaps, but also historically, since Joe and I
     have been here, we have been self-examining not only how we
     do work, but what the products are and if they are
      serviceable for the industry and what their impact is.
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I see this effort as a good dialogue to continue that, and I

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10
      look forward to what comes out of it.
11
               That's all.
               CHAIRMAN JACKSON: Thank you.
12
13
               There is always a challenge in a discussion like
      this. We all have our lists of -- litany of items that have
14
15
      particularly bugged us over the years and/or formed examples
16
      of what is fundamentally wrong with the regulatory process.
17
      The challenge becomes how does one begin to create some
18
      order out of the chaos, and move forward in good faith, and
      in that regard, I thought that it would be useful in terms
19
20
      of how we proceed for us to try to give some structure to
      our discussions, along the lines that I discussed. But
21
22
      there is a fundamental question on the table having to do
2.3
      with how we manage our programs that I think we have to
24
      discuss. Perhaps it's threaded through all of the other
      topical areas, but I would like to ask you to just kind of
2.5
 1
      keep the following overarching questions in mind, and that
      is, what are the key opportunities for change for the NRC.
 2
      to see if we can be solutions-oriented. Has the industry
      availed itself of opportunities for change, and are there
      others, either on its own or working in partnership with the
 5
      NRC, that make sense. What commitments then from the NRC \,
 6
      make sense, and what commitments are needed from the
      industry in order for our commitments to make sense.
 8
               I will give you an example, two examples that lead
10
     me to ask those questions. The first was the one having to
11
      do with the example that was raised by Dr. Pate and that
12
      Commissioner McGaffigan spoke to, namely the issue about the
13
     name change for an officer in a plant requiring a tech spec
14
      amendment, and whether or not there is a need for rule
15
      change or some such in order to be able to sweep that kind
      of thing away.
16
17
               Now my understanding was that the tech spec
      improvement program, namely the adoption of improved
18
      standard tech specs, was supposed to be a mechanism for
19
2.0
      addressing that kind of issue and to have in one fell swoop
      an opportunity for a plant to have a tech spec, set of tech
21
      specs that would not have this kind of trivia, and then the
22
23
      question becomes, what happened then if in fact we are still
24
      left with a situation where this kind of situation occurs.
      And is the difficulty there having to do with the scrub not
25
      having been complete enough at the time, if that's been
 2
      done, for the particular plant in mind, or is it some
 3
      failing on our part. So that's what I mean when I say have
      we all availed ourselves of the opportunities, because
      things that are short of having to in fact have rule changes
 5
      or even statutory change in order to make -- because if
 6
 7
      that's where we are, then I think we are in tough shape.
               And the second question about what kind of
 8
 9
      commitments make sense from us and what kind of commitments
10
      make sense from the industry, that question is spurred by
      the following two linked issues, and that is:
11
               Does risk-informed purely mean burden relief, or
12
13
      are we willing to let the chips fall where they may in terms
14
      of focusing where the risk significance is greatest. And
      the second, because I know that there's been some
15
      skittishness about using certain quantitative assessment
16
17
      methods -- and I think risk-informed means we are not going
      to use them strictly and alone, but there's been some
18
19
      skittishness because there's a feeling that the state of the
20
      art has not advanced far enough with respect to, say,
      probabilistic risk assessment, Mr. Ray's robust use of it in
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managing his facility notwithstanding.
23
               So a question which my colleague, Commissioner
24
     Diaz, in fact has raised in the past, and that is what kind
      of commitment to PRA quality or certification is the
1
     industry willing to make, but concomitant with that, what
2
     does that mean in terms of what we think is necessary and
     how do you get to some place that makes sense.
3
               So that's why those questions occur to me, and
5
     that is have we all availed ourselves, whether we are
 6
      talking about the NRC or the industry, of the opportunities
      for change, short of massive or new programs, if there
      already is a question of pushing to completion some of what
8
      already has been underway.
9
10
               And then what kind of commitments are necessary or
11
     make sense, from us, and from the industry, the ones that
12
     have to match in order for us to move ahead?
               So with that statement, I was thinking, why don't
13
14
     we begin with discussing risk-informed, performance-based
     regulations and regulatory processes. We all know that the
15
16
      early regulations were prescriptive, they were established
17
      on a deterministic basis, they had conservatisms built in,
18
      some in the light of current day being perhaps too
      conservative. We have the defense-in-depth philosophy which
19
20
      is a cornerstone of the way the industry grew and the way we
21
      regulate in this country, but the Commission, at least in
22
      theory, has made a commitment to incorporate the use of risk
      insights as much as it can and as broadly as it can in its
23
2.4
      regulatory processes. At the same time, there does seem to
      be some differences of opinion vis-a-vis performance-based
1
     regulation, both what it means and how much sense it makes
      for the industry today. Does it merely mean a results
     focus, or does it mean some more involved requirements or
3
      set of activities? And I think we need to try to come out
 6
               And so I am going to begin by asking Mr. Ray, who
      talked about managing his facility, and then ask Joe Colvin,
      if he would, to start us off with that. But as we talk
9
      about issues. I am interested in solutions, and I think if
10
     we could do that.
11
               MR. RAY: Thank you, Chairman Jackson, and I will
     try and keep it brief. There were a lot of things there to
12
13
      possibly invite comment, and I will try and keep on a narrow
     track.
14
15
               Although I think I did use risk in my comments, I
      tried to avoid the tension that Commissioner Diaz raised by
16
17
     talking about an objective basis for allocating resources.
18
               I think Sam Collins' point was one I'd like to tee
      off from, and that is do we have the resources -- you used
19
      the word massive, Commissioner Diaz talked about it being
20
21
     resource-intensive work -- to change the basis upon which we
22
     regulate. But Sam mentioned how he had been out in the
     field, and was now here in the headquarters office, and I
23
24
      happen to be acquainted with quite a lot of people, as long
25
      as I've been around, who have made that same change.
1
               I would say the agency does have the resources
```

I would say the agency does have the resources
necessary to undertake the kind of change that can only be
produced by rigorous, objective methodologies, risk-informed
being the way that we describe it.
It isn't a trivial thing. I had the experience of going

J Te Ibii e a criviar ching. I had the experience or going

6 down and getting all my chief nuclear officer -- colleagues

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together in Florida a couple of years ago to get a
      commitment to the industry's substantial effort to require
 8
      -- to produce that.
10
               I think in times past, you and I have talked about
11
      a paper that we produced, got endorsed by everybody raising
      their hand and supporting it, and in that paper, it speaks
12
13
      to this issue of the substantial commitment that would be
14
      required by the industry in order to undertake this task.
               After that, though -- and this goes to the
16
      comments I made about the perfection being the enemy of the
17
      good. We got an indication of what, simply put, I'd say is
18
      we'd have to relicense every plant in the country to
      incorporate a PRA model that met a very rigorous set of
19
2.0
      standards.
21
               And I understand why the staff comes out at that
22
     point. That is a natural result of asking, "What are the
23
      requirements that should apply if you are going to use risk
      in regulation of these plants."
               Well, the answer is going to be that is probably
25
      impractical.
               I'll conclude by simply saying, Jim Jackson, I
 2
      believe -- I'm convinced the high capability that this
 3
      Commission has to deal with that tension, that balance
      between what is an acceptable model upon which to base a
 5
      risk informed regulation.
               The guidance can be provided to the staff that
      will overcome this dilemma that we face today. It also
 8
 9
      manifests itself, as I said, in when people bring forward an
10
      initiative, a very narrow initiative on ISI or diesel
      testing or whatever. It runs into this same phenomenon.
11
12
               And, again, I don't mean to sound critical of the
13
      staff. I understand how the staff operates. Even many
14
      years, I was part of the staff.
               So I think that the solution lies largely in the
15
      policies that are within your ability to adopt. The
16
      industry has pledged to support that. It will take
17
      resources that I think exist today, but will have to be
      redirected to do that, and it will take a consistent
19
20
      position being maintained by the Commission for a
21
      considerable period to get it done.
              It's not an easy task, and I don't mean to suggest
22
23
      that it is. It does have to be sailor proof, as Joe said.
24
      I think it can be made so. And if I say anything more, I'm
      going to get down into too much detail, so I'll just -- I'll
25
 1
      stop right there, which is giving you my conviction that it
      can be done. The resources exist in the agency. The
 2
      industry has committed itself to do it, and it -- it is
 3
 4
      possible, I think, for us to make that -- reaffirm that
 5
      commitment here now, and go forward on that basis.
              CHAIRMAN JACKSON: Well, let me ask you a
 6
      question. I mean the Commission has a PRA implementation
      plan, and there were the various industry pilots, braided,
 8
      QA, tech spec'd changes, ISI, IST. And then the regulatory
10
      guidance documents that have come out.
11
               Are any of the initiatives that the Commission
      currently has underway or had underway moving down a line to
12
13
     help us in this regard, or is it a question that it's not an
      -- that it needs to be accelerated, or there are different
14
15
      things that need to be done?
               I mean this is what I'm interested in trying to
16
17
      get some understanding of.
               MR. RAY: The plan, I believe, is appropriate and
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will achieve success. It is going to take involvement by
     the Commission. It is going to make -- it is going to
20
21
      require you all to make the kind of decision I referred to
      when I said, "Look, 10 CFR 5059 does not mean there can be
22
23
      zero increase in risk."
24
              Only you could make that decision. Nobody else
25
      here in this agency could make that decision.
1
               You've made it. I applaud you for it. It is
2
      self-revealing what "minimal" means. I understand that.
3
      But the important thing was that you said it isn't zero.
              And you're going to have to be engaged in this
      process, too, the structure and outline of it is, as you
5
      say, before you. It's been adopted, and I think it can be
6
      successful, but it will not happen by itself.
               Frankly, having participated in code writing
8
9
      groups and so on in the years past, as Colvin mentioned, we
     built these plants. We put them into operation in a
10
11
     different era, but it was an era in which the agency and the
      industry worked together to produce standards that were
12
13
      acceptable to both parties.
               I think that is needed here. This current process
14
15
     is less than efficient that we have, because I don't think
      it produces enough engagement on operational issues that are
16
17
     the drivers of what should be our focus, and, again, I don't
18
      want to monopolize the time.
19
               CHAIRMAN JACKSON: Well, I'm going to help you to
20
      monopolize it before I get to Mr. Colvin.
21
              When you say the current processes are not
22
      efficient, what do you mean by that?
23
              I mean what needs to change?
24
               MR. RAY: I don't think that we have the kind of
25
      engagement between the industry and the staff that we've had
     in the past.
1
               We do not have a code-writing group, for example,
     that would produce a deliverable product that addresses this
3
      issue. What we have is an exchange of positions back and
     forth. And it is very -- each of us tends to react to the
 6
     other. We don't work together to produce something that is
     acceptable and then stands the scrutiny of public
     examination, as, for example, the SME code does.
8
9
               CHAIRMAN JACKSON: Joe, do you have any comments
10
     you want to make on this?
11
               COMMISSIONER DIAZ: I do.
12
               CHAIRMAN JACKSON: Let me just --
               MR. CALLAN: I'll defer to Commissioner Diaz.
13
               CHAIRMAN JACKSON: No. I'm not going to let him
14
15
      off the hook.
               MR. CALLAN: I think Harold's point about the fact
      that we -- there's too much posturing going on, and we see
17
18
     it -- we've seen it recently in the 10 CFR 59 arena, our
19
      quest for arriving at an improved assessment process.
             But I think it's improving. I think recently in
20
21
      the last several months, I think we've developed a better
22
      relationship with industry groups such as NEI and it's
     improving, but it hasn't been a good record. I admit that.
23
24
              I'm not -- I don't go back far enough to remember
     co-groups, so I can't address that. That's before my time.
25
1
               MR. RAY: That's the price I pay, I guess.
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MR. CALLAN: That's right.

MR. MCNEILL: I think you need to put these in

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I'm not a historian of this, but my recollection
5
      is that somewhere in the late eighties or very early
     nineties, we began to discuss -- and when I say, "we," it
      was the collective industry including the regulator.
8
               And some pilots came out. Pretty soon, everybody
10
     had to produce one. There was an issue around submitting
11
      them for review and your analysis and where there were any
12
      specific risks within your plant.
13
               And out of that became a better understanding of
14
     some of the value and use of a PRA that went beyond its
     original intent, which I -- when it was prescribed, it was
15
16
     around are there any unidentified specific risks on a
17
      plant-by-plant basis.
               And I think we were -- because of the nature of
     the development of the models, there were differences of
19
20
      opinion, not only on how to do it, but to what level of
21
     detail it needed to be done.
22
               And that, in a historical perspective, is probably
23
      not bad because you were able to get a synergism of the
24
      different viewpoints that may have now arrived at a better
     basis for determining what you want on an ongoing basis, you
25
      know, in terms of model detail and things of that nature,
     than you would have gotten if somebody had sat down and
2
      said, "Right here from the start, here is what I want,"
4
      because this was really untested methodology.'
               Well, we now have come to the point where my sense
5
6
      is that we have enough data to provide in more detail
      explicit framework.
               What challenges does that present? Well, maybe
9
      there are some people that have not done it in that manner.
      It's going to cost them money to go back and redo it, as an
10
11
     example.
               And I think that history provides a real
12
      justification for potentially looking at what Commissioner
13
      McGaffigan, in his remarks, stated because I can give you
14
      examples of barrier analysis, the cultural issues that
15
     reflect some plants, and I think that Joe Callan has pointed
16
17
      out what I think is a very important issue for the NRC.
18
              Just as our histories in the utilities business
19
     came out of the original design construction operation.
20
     married to some extent with the Navy background that many of
21
      us have, the NRC has developed a culture of its own.
22
               And if you're going to make a dramatic change, one
23
      of the things that we have found is that you cannot do that
     without an emphasis on cultural change, which is a somewhat
     different activity than just rewriting regulations and
25
1
     things of that nature.
2
               I mean there -- and if you don't do that, you end
      up with organizational dichotomy that really is conflicting,
3
4
      as you go forward.
               And the point that I was trying to -- we now have
 5
      40 years of experience. The industry is on the verge of a
     different change.
8
               Is it not time to sit back on a broader scale,
      work on a long-term basis to, in fact, restructure the way
9
10
     we regulate the industry?
11
               And it's not a short -- it's not something you can
12
      do in a year or two. And it's something that has to be
13
      adapted.
14
              I would offer to you that if I'm correct, and I
      think Harold shares this view and there are many others that
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perspective, and I think maybe the PRA is a good example.

4

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16
     share the view on consolidation -- that, in fact, it will be
17
     easier.
18
               Part of the problem -- I don't want to -- a lot of
      the problem is the fact that diversity of the ownership
19
      interest across the industry makes it difficult for us to
20
21
     commit to collectively. And as you reduce the number of
22
      operators of plants, you are going to have stronger
23
     commitments from fewer people.
24
              You are also going to run, I think, into more
25
      challenges around smaller items. In other words, the NRC
1
     can take advantage of our inability to come to a collective
     viewpoint within the industry on something, and you may find
     yourself in court someday because three of us have gotten
3
      together and said, "Hey, this is inappropriate for you and
      we -- three of us can get together pretty quickly and have a
5
6
      lot of economic power to go and do things.
               Now I don't say that in a threatening manner. I
8
      think that's a reality of a smaller or consolidated industry
9
     as we go forward.
               CHAIRMAN JACKSON: Okay. Commissioner Diaz?
10
               COMMISSIONER DIAZ: Yeah. I'd like to go back to
11
12
     the focus of your initial thing, which is -- was risk
      information and the zero factor. And let me see if I can,
13
14
     you know, put them together.
15
               The zero factor in 5059 is just an indication of a
16
      larger zero factor that exists in this agency, and that zero
     factor is reflected in many ways that we operate it -- and,
17
18
     you know, especially when somebody tries to conserve and
19
     preserve not only the status quo, but preserve the design
20
     basis or preserve something. And many of those things are
21
      legalistic in nature.
22
              And this agency need to be a technical legal
     agency. It cannot be purely legalistic.
23
24
      The risk information goes at the heart of the zero factor.
25
              If we have risk informed regulation, truly and
      completely, the zero factor disappears because this has no
      longer reason to exist.
3
               And that is the reason that I have advocated and
4
      will continue to advocate risk information. It is not
5
     because it's just a tool or because it gives you a meter.
6
     It's because it goes at the heart of the guestion.
              We really cannot accept a zero factor or zero
8
     change or zero deviation. What we should access is actively
      managed risk by the utilities and actively managed risk by
9
      the agency. And that can only be done when we start with
10
11
     risk informed regulation.
12
               CHAIRMAN JACKSON: I want to get to Joe. I know,
      Dr. Remick, you wanted to speak, but I think, Joe, yours is
13
      probably a longer, and I'm assuming yours is a shorter
14
15
      remark. And if I'm wrong, I'll have to switch you over.
16
               MR. RAY: Okay.
               CHAIRMAN JACKSON: Let me let you make a quick
17
     remark.
18
19
               MR. RAY: Okay.
               CHAIRMAN JACKSON: And then I'm going to give the
20
21
      floor --
22
               MR. RAY: I want to go to your point about --
               CHAIRMAN JACKSON: -- to Joe.
23
24
               MR. RAY: -- risk informed, and what kind of a
     commitment from the NRC and what kind of a commitment from
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the industry.
1
              Back in a different forum, not too long ago, I was
2
      asked the question, "Could Part 50 be made risk informed?"
4
     And I said, yes, I thought it could but I was not smart
     enough to know how to do it as a whole.
5
               But I spoke very positively about the commitments
     that industry has made on a number of pilots, and you
8
     mentioned some of them, QA, grade QA, IST, ISI, some of the
      ones on hydrogen recombiners, the diesel start and load time
     and so forth. I thought this was the way to do it.
10
11
               You take some specific things, and the industry
     has made tremendous commitment of resources to look into
12
13
     these. How could you use things like safety goals and PRA's
14
      and come up with an answer.
15
              Give some insight, risk insight, based on the
     PRA's and so forth, on regulations that might be changed.
16
17
             But what I have not seen -- these things -- these
18
     are some of the examples of decisions languaging, in
19
     general, that I addressed where continuous request for
20
      information.
21
              And I use as a precedent, back when I was on ACRS,
     there was a program called, "SEP, and I forget if that was
22
23
     Safety Evaluation Program or systematic evaluation of a
     program, but it was a question of do the early plants meet
     the intent of current regulations which had changed
25
1
     dramatically.
2
              And there was a case where that project, from the
3
     perspective of an ACRS member, I thought was very well
     managed by somebody who took the ball, made very, very
5
     difficult decisions, and you did not have these layers and
     layers and layers of concurrence, and people questioning an
      indecision on coming to some kind of decision. Some of the
8
     decisions maybe not have been exactly correct, but decisions
9
10
              And I think what the Commission needs -- I don't
      see the Commission -- and I'm going to speak of the Agency
11
      -- is taking full advantage of the insights of those various
12
     pilot programs are going out and making the best of it, and
13
14
     seeing how one might approach Part 50 and making it more
     risk informed, a bite --
               MR. MCNEILL: What's your best --
16
17
               MR. RAY: -- a bite at a time.
18
               MR. MCNEILL: -- successful, and how do we emulate
19
     that success?
20
               MR. RAY: Okay.
              CHAIRMAN JACKSON: Thank you.
              MR. RAY: You're welcome.
22
23
               CHAIRMAN JACKSON: Joe?
24
               MR. COLVIN: Chairman, thank you.
25
               I'd like to -- I'd like to digress for one second
     just to make a point, and I promise I will come right back
1
     t.o --
2
               CHAIRMAN JACKSON: That's all right.
               MR. COLVIN: -- risk informed.
5
               CHAIRMAN JACKSON: You can talk now because we
     took all your time.
              MR. COLVIN: Oh, thank you.
8
               I think that we need to -- as we go through this
     dialogue, we need to think about the concept of the old
     cliche of not throwing out the baby with the bath water.
10
11
     And I think that if we -- and I'll make a couple of points,
     and I'll get back to your real question.
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I think there are some steps that we need to take
      and can be taken fairly immediately and without changes to
14
15
      regulation requirements that are characterized under
      enhancing the credibility of the regulatory process. And I
17
      think we need to go back to the -- to some of the basics in
18
      that, and I'll just pick up on Forest Remick's comments
19
      about confirmatory action, one of those things.
              I think that if you look at a rigorous application
2.0
21
      of what is currently required under the context of rules,
22
      requirements, law, tech specs, licensing. It's the things
2.3
      that are binding on a licensee, and then look at the other
24
      things that the -- the products or vehicles the agency uses
25
      to manage, cajole, arm twist the license to do things,
      confirmatory action letters, generic letters, bulletins,
      confirmatory orders. You go down that whole list which are
     not a -- do not have a legal basis in the context of the
3
      regulations.
               And a rigorous application of those by the staff
      and by the industry would, in fact, be a very positive step.
 6
      I think the rigorous application of the backfit rule, or
      certainly the consideration of what you are trying to
8
9
      achieve, vis-a-vis that, in all the decisionmaking, if, in
      fact, that was the goal, the threshold that the staff or the
10
11
     department or division or whomever, would look at, I think
12
     we would -- we would enhance the credibility and we would
13
      raise the level up to things which are really important to
     safety and not in the grass. And I think that -- that would
14
15
      focus our resources.
16
              I think that we're -- and I have some other
17
      examples, but I'd like to go back to your question.
18
              I think in a sense, we have an excellent example
19
     of how to proceed in the context of risk informed
      performance based regulation. There's been a lot of work
20
21
      done, and that is clearly the maintenance rule.
22
              Now we don't have a clear understanding between
     the Agency, the industry, the staff, the plant maintenance
23
      superintendents of what we mean by that, and I think the
24
25
      first step in that process would be to come to some common
1
      agreement at a very high level of what we mean collectively.
2
               I think the second step in that would be then to
3
      look at --
4
               CHAIRMAN JACKSON: Excuse me. When you say,
5
      "common," you mean common agreement rate with respect to the
6
      implementation of --
               MR. COLVIN: What is it that we expect of the
8
      maintenance rule.
               We have a maintenance rule that has a risk
      informed section. I mean basically we go through and
10
      through a process that uses the best tools that we have
11
12
      available, whether that's PRA, PSA, expert groups or other
13
      issues, to define what are the system structures and
14
     components that are important to safety and that we need to
15
      manage, and we need to place more attention.
16
               And we have a process in that that tells you how
17
     to deal with those, how to identify them, how to monitor
18
     them, how to set goals and reliability and availability. We
19
     have all that in progress, okay. And we have a vehicle by
      which to do that.
20
21
               And we then look at the performance of those
22
23
               I think we need to define the risk side. I mean I
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24
      agree with Commissioner Diaz and the other comments that
      you've made. Risk and performance based are not the same
25
 1
      thing, and we need to have a clear understanding of what
      they are
2
               But then we have to have an expectation of what in
      -- what is the end state or the desired result. And I would
      submit we do not have that within -- there is -- within the
 5
      expectation of the inspector or the expectation of the
      maintenance superintendent, or perhaps all of us.
 8
               I think that -- so I would submit, we need to come
      to grips with what are we trying to achieve through that
 9
10
     process?
11
               MR. MCNEILL: The practicality of that is that we
12
      are still in the inspection of the implementation. We are
13
      not yet reviewing the outcome.
14
              MR. COLVIN: That's exactly right. We're not
15
      looking at the --
16
               MR. MCNEILL: Nobody is --
17
               MR. COLVIN: -- outcome of performance --
18
               MR. MCNEILL: Nobody has year -- although the
      plant's monitoring their own performance through this to
19
20
      find what is acceptable or unacceptable.
21
               CHAIRMAN JACKSON: Okay.
               MR. COLVIN: And I would just say that the next
22
23
      step in that process, I think, is to then take and look at
24
      that maintenance rule and the process and the output and
     decide what is currently being done as required by other
25
1
      regulations and other regulatory positions that are now
 2
      unnecessary and not required because we have this as our
 3
      product.
 4
               And I think that just -- one last comment.
 5
               We have spent many years in these issues. It's
      taken four years. We're still working on reg guides and
      ISI, IST and graded OA.
 8
               CHAIRMAN JACKSON: I thought those were
 9
      promulgated?
               MR. COLVIN: Well, it's taken four years to get
10
11
      those. We got a -- we've got a situation where we've tried
12
      to have a pilot project on a whole plant risk, and we're
13
      really wrapped around the axle of one example which was made
14
      by somebody many years ago that we would do post-axial and
15
      hydrogen sampling, and 30 minutes after true.
16
               We'd like to make it 90 minutes. We can't get
17
      beyond that simple example to really figure out how to make
18
      this work.
              And I think the reason goes back to setting the
19
20
      goals that the Commission needs to set, putting the proper
21
      people in a room and letting them go figure it out with a
      common goal and objective. They have a common end point.
2.2
23
      And I think that's what been missing.
24
               We get the staff positioning, as Harold points out
      back and forth. I think we need to take advantage of
25
 1
      figuring out a new way to bring the resources together.
               CHAIRMAN JACKSON: Mr. Lochbaum.
 2
               MR. LOCHBAUM: Yeah. I just have a brief comment
      on risk informed regulation.
 4
 5
               To paraphrase Jack Nicholson, risk informed
      regulation, we don't even know what risk is. And as an
      example, I'd cite a report that was submitted this week by
 8
      the owner of Big Rock Point who informed the NRC that they
      discovered that the pipe -- the discharge pipe from their
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10
     sodium pentoborate had a boring tank that was severed.
              CHAIRMAN JACKSON: Thirteen years. Right.
11
12
               MR. LOCHBAUM: One-third of that plant's life,
13
      that safety function would not have been performed.
               I haven't been to the PDR yet, but I'm sure that
14
15
      that plant's IPE does not show the reliability of that
16
      safety function to be zero, if that's what the reality was.
               And that's not the only example. Jim Riccio has
17
18
      been collecting outside design basin reports for the last
19
      two years. I don't think that stack is a couple of inches
2.0
      tall right now.
21
              Not all of those rendered the safety system
22
      inoperable, but a disturbingly high number of them did, yet
     the IPE's for these plants show that these systems are
23
      highly reliable, but that's not reality.
24
               We need to narrow the gap between what the IPE's
25
1
     say and what reality is before we can do any real risk
2
      informed regulation.
               MR. RAY: May I respond to Mr. Lochbaum?
3
4
               CHAIRMAN JACKSON: Yes.
5
               MR. RAY: I guess my only point in the example you
6
      cited, which I know nothing about it, other than what you
      said, would be, notwithstanding that, the IPE, given the
      right direction, could have sent people to look at that
8
9
      important and critical component in terms of verifying its
10
      integrity, rather than dissipating the resources of both the
      licensee and the agency in the areas that were not as
11
12
      important as that obviously was.
13
              So there is a benefit, notwithstanding this
14
      experience, and, in fact, perhaps it tends to underscore the
15
     importance of knowing what's important so you can then focus
16
     your attention on it.
               MR. LOCHBAUM: May I respond to that?
17
18
               I think I --
19
               CHAIRMAN JACKSON: Would you pull the microphone
     down? Thanks.
20
               MR. LOCHBAUM: I think PRA's -- avenues to
21
22
      prioritize work that needs to be done at plants, and I've
23
      seen that done at a number of plants very successfully.
24
               You need to focus attention on the more
25
      significant items. So I would agree wholeheartedly with
1
      that. I've seen it done and it works very well.
2
               But at the same time, when there are misses -- and
3
      these are misses -- we have to recognize that that is
      reality and factor that into what we're doing before we can
 4
     proceed, and just because we have a mathematically correct
5
 6
      model, that's not the whole complete picture.
               CHAIRMAN JACKSON: Yes?
               COMMISSIONER MCGAFFIGAN: I'd just follow up on
8
9
      this interchange.
10
              How did -- if we had a risk informed regulatory
     framework as opposed to a deterministic regulatory
11
12
      framework, how -- that's what we had at Big Rock Point and
13
      it didn't catch it, either.
14
              So I think what Mr. Ray is saying is that you'd
15
     have a higher probability of catching the problem you're
16
     describing, which I know nothing more about than what you
      said either, but if you had a -- a more risk informed
17
18
      framework
19
               We had a framework. The licensee didn't catch it,
      obviously, our staff didn't catch it, and so the question
20
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for the Commissioner is, which framework should I be working
21
22
     toward?
23
               Should I be -- just because there are misses, does
24
     that mean the risk informed framework is not worth working
25
      toward?
1
               MR. LOCHBAUM: No. I think you can use risk
2
      informed regulation or risk results to figure out which
      systems you need to focus your attention on, but those have
      already been done for these plants, and they're still
 4
5
      finding problems in those high-risk systems.
               So how are we to determine what those high-risk
      systems are. We haven't solved the problem. That system
8
      was tested in the last 13 years, and it passed every test
9
      apparently.
               So why -- we knew that was a high-risk system at
10
11
     that plant. We tested it frequently. We didn't catch it,
12
      so I don't know what could have been done differently. But
13
     that isn't the way to do it.
               CHAIRMAN JACKSON: Joe, do you have a comment?
14
15
               MR. CALLAN: Well, I know more about that episode
      than what he said, and -- but I agree with everything he
16
17
      said regarding the episode. We just -- I just briefed the
18
     Chairman on it a couple of days ago.
              But I agree with Commissioner McGaffigan's point
19
20
      and I guess Harold Ray's point that a risk informed approach
21
     would increase our -- increase the probability that either
      or both the licensee or the NRC would focus on that system
22
23
      and do the necessary verifications to identify the problem.
24
             MR. CALLAN: I think what you are talking about,
25
     Dave, is perhaps over-reliance on IPE to base a regulatory
      judgment -- in other words, to modify that system for
1
2
      example or modify another mitigative system because you have
      such a high confidence in the functioning of that system.
     That is slightly a different situation than what we are
5
      talking about, which is to use risk to focus and allocate
      resources.
               CHAIRMAN JACKSON: Well, actually, I have a
8
      question that follows on from what you just said, Joe, and
      what Commissioner McGaffigan just asked.
               That is, if the system is as risk-significant as,
10
11
      you know, you have told me it is, how did it get missed and
12
      what does that say about how risk-informed, how much of a
13
      risk-informed inspectable population we have at the plants
14
      or that we have our inspection -- I don't want to get into
15
     inspection yet per se, but in terms of Commissioner
     McGaffigan's question about would risk-informed regulation
16
17
     have helped us at least to identify that this was a system
18
      that warranted a deeper look than apparently it got -- what
     do you have to say about that?
19
20
              MR. CALLAN: We are doing a lessons learned,
21
     obviously, because at least superficially our reaction is
     that our inspection procedures, which are moderately
2.2
23
      risk-informed, should have directed inspection resources at
24
      some periodicity to walk down that system.
               MR. COLLINS: It's an internal line.
2.5
                                                           74
               MR. CALLAN: What?
               MR. COLLINS: It's an internal line.
2
               MR. McNEILL: Can I? Let me offer just a little
4
     differing view on this.
5
               CHAIRMAN JACKSON: Wait -- I missed that
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interchange. Excuse me.

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MR. COLLINS: I believe that line is an internal
      line that is not inspectable unless you get inside the tank
8
      and that was not done routinely in order to observe that
10
               CHAIRMAN JACKSON: Okay.
11
12
               MR. COLLINS: So it is a little less applicable
13
     perhaps to routine licensing inspection or NRC oversight,
14
     but clearly there are lessons learned for hidden issues.
15
               CHAIRMAN JACKSON: Okay, thank you.
16
               MR. McNEILL: And my point is that I am not so
17
      sure that inspection is the appropriate -- it may in fact be
18
      testing and demonstrable results from testing. One of the
19
     lessons we have learned in the Navy is that there are --
     there were many things that if tested once may not be
20
      observable over an extended period of time and you had to go
21
      back periodically and revalidate the system operation by
22
23
     test, demonstrable test, with proven results because you
      didn't have the kind of visual monitoring that apparently is
24
25
     not available in this particular circumstance.
               CHAIRMAN JACKSON: Well, it strikes me that there
1
2
     are two things that can be said.
3
               One is I agree with whoever made the comment -- I
      think there are two pieces to it. One has to do with what a
 4
5
      risk-informed approach directs you to pay attention to and
     the other is if you are making specific judgments based on
      whatever assessment methodology presumes a certain status of
     something in the plant, does that something in the plant in
8
9
     fact have the status that that judgment is based on, and so
10
     those are two separate issues, but in fact this -- Corbin,
11
     your point brings me to one of my earlier guestions, which
12
      is what does risk-informed really mean in the sense that
13
      somehow -- you know, whatever the lessons learned will be,
      in the end the bottom line is that the licensee wasn't aware
14
15
      of this severing of this line for 13 years, nor were we, so
16
      the question becomes if -- theoretically if out of some IPE
     or PRA analysis or some other kind of way of doing a risk
17
      assessment one had indicated that this was a very critical
18
19
      line in the plant which required some periodic going in and
20
     looking at it, which might not have been built into how the
21
     licensee did its business if it wasn't something that was
22
      easily observable in the normal course of events, that by
23
      definition implies perhaps some additional effort, some
24
      additional resource commitment.
25
               That is why I raised the issue about what does
      risk-informed mean? Does it mean that the chips fall down
1
     on both sides -- as opposed to taking away attention from
      what is trivial, it can also mean that if something is
      deemed by a risk assessment to be more important than you
5
      thought it was, or very important, that then you may have to
 6
      take some extra steps -- which means resources.
               MR. McNEILL: In this case --
               CHAIRMAN JACKSON: To go in and do something about
8
9
      it.
10
               MR. McNEILL: In this case, you know, a four-year
11
     internal inspection or a --
12
               CHAIRMAN JACKSON: Whatever, right --
13
               MR. McNEILL: -- four-year flow test may be the
      appropriate thing that has to be done --
14
15
               CHAIRMAN JACKSON: Right --
16
               MR. McNEILL: -- on that kind of a system.
17
               MR. RAY: I just, I want to raise an objection
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whenever we are talking about it is going to take more.
18
               I don't think it takes more.
19
               CHAIRMAN JACKSON: Okay.
20
21
               MR. McNEILL: Collectively more.
               MR. RAY: I think it's better prioritization is
22
23
     the way I like to think about it --
24
               CHAIRMAN JACKSON: Sure.
               MR. RAY: -- we can choose our own models but that
25
     is --
1
2
               CHAIRMAN JACKSON: Well, I agree. I mean but all
     I mean when I say the chips fall down both ways is by
     definition you prioritize some things are going to come off
5
      the bottom, so to speak, but there could be things that are
      up at the top that heretofore we have not had before.
7
               MR. McNEILL: And I don't think the industry has
8
      ever or let me say I think the industry has understood that,
     that is, as Harold would say, it's a reallocation of
     priority, and I think that our instinct tells us that
10
11
      collectively all of those activities may in fact reduce --
               CHAIRMAN JACKSON: -- the burden.
               MR. McNEILL: -- the burden.
13
               CHAIRMAN JACKSON: Right. I could probably agree
14
15
     with that. I certainly think that certain things have to
     fall off the table and other things go on.
16
17
               MR. COLLINS: Chairman Jackson?
18
               CHAIRMAN JACKSON: I'm sorry. Sam wanted to say
     something. Thank you.
19
20
              MR. McNEILL: Thank you.
21
              MR. COLLINS: I wanted to address perhaps an
22
     overarching issue and although we are talking specifically
23
      about risk-informed and performance based has been mentioned
24
      as a part of that two brief comments.
               One is we're complete -- the maintenance rule
2.5
      application inspections -- in fact, Limerick, Corbin, I
1
2
      think was the last plant I think --
               MR. McNEILL: Right,
               MR. COLLINS: -- and the routine maintenance
4
5
     inspections have been modified to include what we now hope
      to be a performance-based measurement of the maintenance
     rule, but it is very difficult.
               The Commission asked the question of the staff,
9
      how do you know this rule is working? And that took a lot
10
      of thought and we yet don't have an answer.
11
              [Laughter.]
12
               MR. McNEILL: So the effort is not over yet?
              MR. COLLINS: No, we are still -- although we're
13
14
     giving it a lot of good thought. The effort is still yet to
15
     play out over time of how to measure performance-based
     implementation over a spectrum of facilities over a spectrum
16
17
     of time, but our inspection has been modified to give us
18
     that data and we hope to achieve that result and provide the
     feedback but it is an example of how difficult in fact
19
20
      performance based --
21
               MR. McNEILL: Particularly if you are going to
2.2
     use -- I mean if the ultimate says -- I mean there is a
     tendency, an organizational tendency -- the Commissioner
23
24
     says risk is never zero in this business but a Commissioner
     can say that the risk will be zero of a major accident
2.5
     during my tenure, all right, because the timeframe is so
1
2
      short, so you have to understand that this is not a riskless
      business.
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Almost any activities in human society are not
5
     riskless so there is a fine balance to understand the
 6
      distribution of that risk with time.
               CHAIRMAN JACKSON: Absolutely.
               MR. COLLINS: My second point, and this is the
8
9
      overarching aspect, would be much of what we are talking
10
     about I believe the Staff is very receptive to, and that is
      engagement, certainly the guidelines and the Commission's
11
12
      role in providing those guidelines and reinforcing the
13
      bounds of that decision-making process is important but it
      gets down to providing the forum for the Staff, and I am
14
15
     here as pretty much the implementor of the programs and to
16
      provide the Staff the tools to get to where we want to go as
      a broader based body.
17
               We are really looking at what process barriers
18
      currently exist to prevent the type of dialogue that we are
19
20
      referring to from occurring. Many of those are historical.
      We have mentioned the zero change aspect, but in fact many
21
22
     of those are embodied in our process and our regulations and
     interpretation of those regulations as to how much can be
23
     done in a forum like this, only if you can envision the
24
      working level around this table to get to the goal that we
25
1
     need to get to.
               Those are process issues which I believe we need
3
      to look at internally and provide the forum for these types
5
               And type of end results to be formulated. So they
 6
      can be raised up in a shorter time frame in a more
      consolidated sense to provide for some of the issues being
     resolved. Without that type of change internally to
8
9
      processes and to facilitate the results, we are not going to
10
     get to where we need to go.
               CHAIRMAN JACKSON: I agree.
11
12
              MR. COLLINS: I think that is a significant
13
      challenge for us.
              CHAIRMAN JACKSON: Also, I think one thing that
14
      relates to your over-arching comment that I would like to
15
      extract because it ties to back to, I think, where Joe
16
17
     Colvin started, and that is this issue of -- you mentioned
18
     the maintenance rule and you are right, the Commission has
19
     asked you, how do you know that the rule is accomplishing --
              MR. COLLINS: I just wanted you to know I hadn't
20
21
      forgotten the questions.
22
               CHAIRMAN JACKSON: Good. And that is the issue of
2.3
     having the objectives clear from the beginning, and the
      implementation of the rule being oriented to those
24
      objectives. And it is something that the agency has been
25
      struggling with. But it is a fundamental issue and
2
      something fundamental that has to occur.
3
               But now back to Joe.
               MR. COLVIN: Well, I was just going to pick up on
     Sam's comment. I think that the process issues are very
5
      important and we need to work through those to establish the
 6
      framework. And I think the Commission, certainly, in my
      view, has the ability to establish the proper framework to
8
9
     allow this -- I will use the term "partnership" between the
10
     appropriate stakeholders to work through these issues. And
      it needs to be there, I think, with an equal, if that is
11
12
      possible, an equal commitment to what the desired end-point
13
     and end-state is.
               And I will just share with you, the maintenance
14
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rule guideline development is an excellent example of that.
15
     And we used a process by which we had a senior policy level
16
      group from the industry and one from the NRC staff. We had
17
      a common end-goal, which was develop a guideline that fit
18
      within the context of the rule, and improve maintenance, and
19
20
      we had that commitment on both sides, and we had the
21
      interactive engagement of the Commission, and, in
22
      particular, one Commissioner leading that interface. I
23
      think the result of that was very positive.
24
               Now, we tried that same process, I will tell you,
25
     on Graded QA, ISI, IST and a number of other issues, and
     they -- I guess I would be blunt, say they failed miserably,
1
2
     if you look at them in the context of the maintenance rule.
      And it was in large part, I think, because of not having the
      common objective, not having the commitment on both sides to
4
5
     the end result of what was desired, and not having an open
      dialogue of the issues.
               We run against, up against, well, this is
      pre-decisional or this is preliminary, or OGC prevents us
8
      from this or that. I mean all kinds of barriers, which, in
     fact, if you worked through those, could be worked -- they
10
11
      could be eliminated. I think that's -- I really would urge
12
     the Commission to look at those and take the steps to
      establish that framework to have an open dialogue. And
13
      whatever forum is the end result, I think we can work in
14
15
      many different fora to get there.
               CHAIRMAN JACKSON: Okay. I think we need to
16
17
      probably draw this -- but everything weaves through
      everything else, as we can see, but we need to move on, and
18
19
      it just so happens that it is 11:30 and we need to have our
20
      affirmation and give people the time to their phone calls
21
      and stretch their legs.
2.2
               But let me just quickly go around the table.
     Since this the topical area of risk-informed regulations and
23
     regulatory policies -- I mean we have talked a lot about the
24
2.5
      maintenance rule, which is one that already exists, and then
     the Commission has done some fine-tuning to it lately.
1
2
               But are there other areas or other regulations, we
      have talked about 50.59, but are there other targets of
      opportunity where we think there would be greatest payoff
4
 5
      vis-a-vis risk-informed, development of risk-informed
     regulations that anybody would like to speak to? And what I
     am just going to do for that is to start to my right and go
 8
      around the table with Mr. Nye.
              MR. NYE: Chairman, I think I will defer to some
     of these others who have a closer focus on this.
10
11
               CHAIRMAN JACKSON: Okay. Dr. Pate.
12
               DR. PATE: The same.
               CHAIRMAN JACKSON: Mr. Lochbaum?
13
14
               MR. LOCHBAUM: No.
15
               COMMISSIONER McGAFFIGAN: I would like, I was
     looking for a chance to talk, and I won't talk very long.
16
      But I want to go back to Commissioner Remick, and maybe
17
      since he will be soon following me in this order, challenge
18
19
      do we get a risk-informed Part 50, and I have asked at the
20
21
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But I want to go back to Commissioner Remick, and maybe since he will be soon following me in this order, challenge or the -- I think I may have been the one who asked him how do we get a risk-informed Part 50, and I have asked at the Reg. Info Conference, how do we get a risk-informed Part 50?

And I don't know how to get there. I do think some of these mechanisms that Joe has been talking about might help. If that is a fundamental goal, to get to a risk-informed Part 50, we could go through and we could look

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24 25

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at Part 50. Another former Commissioner has suggested to me
     that, in light of the maintenance rule and its success,
      should we look at Appendix B to Part 50 and pull some stuff
 5
               The Commission, at that time, when they propounded
 6
      the maintenance rule, didn't feel that it was appropriate at
      that point. But I know the industry view, as is sometimes
      expressed, is that the maintenance rule is a layering on of
      what is already there in the traditional prescriptive
10
      framework.
11
               So I don't know whether in risk-informing it is a
12
      step by step process, where we take areas of opportunity,
13
      such as Appendix B, or whether it is a massive, one-time
      change. But I do think we need to think about it.
14
               One of the diagrams that a licensee has shown to
15
16
      me, and it is a licensee who presumably has one of the
     better PRAs. They have looked at rules that have been
17
      passed by the Commission going back to the post-TMI rules or
18
19
     requirements, and they showed me a sort of step-down curve
      of their core damage frequency and the various post-TMI
20
21
      action items had almost no effect for this particular plant.
22
      The station blackout rule had a large effect. Presumably,
23
      they added a diesel, they did something, but it had, you
      know, a really remarkable effect on their core damage
24
25
      frequency.
               And that is sort of a metric of whether rules are
 2
      worth doing or not is -- you know, if we could -- and which
 3
      rules are no longer worth having, if, when you pull them
      off, there's microscopic or no effect.
               And going to Dave's point, I think we have had a
 5
 6
      lot of discussion at various meetings. I see the ACRS
      there. I think everybody believes that deltas in core
      damage -- or deltas in IPEs, deltas in core damage frequency
 8
      is a result of a specific change or have greater fidelity
 9
10
      than the IPE itself. I mean the Commission, if you had been
      to any of our meetings, you would have seen all of us asking
11
      the exact same questions -- Is this IPE number worth
12
13
      anything? But I think the strong view of the ACRS, and
14
      others who know more about this than I, is that the delta
15
      means something.
16
              So that is just a bunch of rambling thoughts. But
      the challenge is -- we have been talking about it forever,
17
18
      and how to, with some speed and with some common sense of
      goal. The industry, one person walked up to me at the Reg.
19
2.0
     Info Conference and said, Commissioner, we do have people
      thinking about a risk-informed Part 50 and how to get there,
21
22
     but there is not consensus as to whether we do it piecemeal
2.3
      or whether we do it -- try to do it in one large action, and
24
      there are pros and cons of both.
               So I throw out those thoughts and I look forward
25
 1
      to the rest of the discussion.
               CHAIRMAN JACKSON: Great. In fact, as we go
 2
      around, perhaps, you know, you can put your commentary in
 3
      that context, in terms of where there are opportunities in
      terms of development of risk-informed regulations, this
 5
 6
      piecemeal versus, you know, let's throw the whole thing out
      and sit down and rewrite Part 50.
               Joe.
               MR. COLVIN: Chairman, I think there are probably
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a lot of rules that we could look at individually and try to make performance-based, risk-informed and so on. We have

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11

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tried those with diesel reliability. Containment leak rate
      testing is an excellent example of taking that in. We do
13
      have the work on Graded QA and how fits into Appendix B, I
      think is a work in progress, as well as ISI, IST and how
15
      that fits. So I think we ought to pursue those and go back
16
17
      and also take my previous recommendation about the
      maintenance rule and use that as the example before we walk,
18
      before we run, so to speak. I think we will learn a lot
19
20
      through that process.
21
               I also think we need to go back to basics about
22
      what is the ultimate goal and where is the threshold of
      safety. It goes back to the point that Mr. McGaffigan just
23
      made. We implemented a lot of changes based upon a lot of
24
2.5
      good ideas that didn't have -- that had little impact in
1
      improving safety.
2
              And, yet, a rule like station blackout, where
      there was a clear recognition that there was, in some cases,
      a 90 percent impact on core damage frequency for some
 4
      plants, we really grabbed ahold of that as an industry and
      the agency and dealt with it. And that rule is in place and
      I think that rule, the rigor of that rule and the guideline
      it has implemented has shown true, even through today, and,
      in fact, that -- the example, the tornado hit at Davis
      Bessey, I think, and the actions, and how that showed that
10
11
      the rigor of that was in fact correct.
12
               CHAIRMAN JACKSON: Okay. But the question I am
13
      really trying to get at is whither to now.
14
              MR. COLVIN: I understand that, but I am just --
15
      let me just close on this point, because I know you are
16
      trying to move on.
17
               I think that we -- though, my point is we use a
      lot of means currently such as calculations of averted
18
19
      on-site costs, and other things, to justify a regulation and
      the implementation of that regulation, that may in fact have
20
21
     little, real true benefit of safety.
               So we have got -- I think that we have got to take
2.2
      the regulations. We have got to look at the risk-informed
23
      information we have and at the same time decide where the
24
25
      threshold is, otherwise, we will continue putting in place
1
     regulations that are risk-informed and/or performance-based
      but which do not contribute to safety.
               CHAIRMAN JACKSON: Okay. So let me make sure I
 4
      understand what you are saying. You are saying if one looks
 5
      at the risk-informed information available, that what you
      are really suggesting is that in promulgating or considering
      the promulgation of any rule or rule change, one needs to
      use that in a more rigorous and systematic way in
     determining the basis for doing the rulemaking in the first
10
      place.
11
               MR. COLVIN: Yes. And have a clear expectation of
12
      what safety benefit is in fact desired in order to make that
13
      determination.
               CHAIRMAN JACKSON: Okay. Mr. Ray.
14
15
               MR. RAY: Chairman Jackson, it is 11:40. There is
16
      much I would like to say in answer in your question. I will
     limit myself to just two things. First, yes. Secondly, I
17
18
19
               [Laughter.]
               CHAIRMAN JACKSON: What? You are going to give me
20
21
      a million dollars?
22
              MR. RAY: No. Yes, I think to the question you
      asked, which I won't try and repeat back to you.
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MR. RAY: But in any event. The other thing I
25
      would say to you and then I will quit for now, is we operate
      our plant differently because of the safety monitor. We
2
      don't just look at core damage frequency. We look at the
 3
     probability of boiling in the core. There are lots of
     things that -- functions that it has. I think that they are
5
 6
      things that this agency cares about, just as I do, and we
      can -- I am wandering. We can use this technology to
     improve the results that we achieve in the way of safety.
8
9
     There is no question about it. It shouldn't be a subject of
10
11
               I know you are looking for what is the next thing
12
      for us to do, and I will have to tell you -- I will have to
      tell you after lunch or after we get back.
13
               CHAIRMAN JACKSON: Thank you. Thank you.
14
               MR. RAY: It's too long.
15
16
               CHAIRMAN JACKSON: Okay. Thanks.
17
               Sam
18
               MR. COLLINS: I just have a brief comment. Again,
     that is having agreed with the intent of most if not all of
19
20
     the discussion. My issue would be, How do we apply it? How
     do we get it into the process by which we can achieve these
21
     goals and then how do we, in fact provide the right types of
22
2.3
     guidance, whether it be policy or implementation, to our
24
      reviewers and to our inspectors, such that it manifests
25
      itself in the right result?
1
               I perceive it as a gap right now, even
2
     philosophically, in the initiatives that have already been
3
      taken, because the guidance and the training, although it is
      in progress, has not really manifested itself in the desired
4
      results.
5
               Will it get there? I think so. Could we do it
 6
7
     quicker and faster? Probably so, given resource
      constraints. But I would like to stay focused not only on
8
      it philosophically, but bring it back into the practical
10
      application aspect, because that's -- and only then we
11
      achieve the results.
12
               CHAIRMAN JACKSON: Okay. Thank you.
13
               Joe?
14
               MR. CALLAN: Well, I'll just say that I -- we are
15
      talking about risk in the context of operating facilities.
     But I think to really do the kinds of things we are talking
16
17
      about, we as an agency have to be willing to accept more
      risk in our processes. You can call it litigative risk or
18
     however you want to define it. But our regulatory regime is
19
2.0
      predicated on driving our risk to zero, and that leads to
      complexity. And it gets back to the notion --
21
22
               MR. McNEILL: And high costs.
23
               MR. CALLAN: Yes, it gets back to the notion that,
24
      and I agree with this whole-heartedly, that our quest for
     perfection, and I'll paraphrase a little bit, perfection in
25
     regulatory processes can be the enemy of adequacy or good
2
      enough. And I think we have to be more willing as an agency
3
     to accept good enough as an answer. And risk-informed, QA,
     \ensuremath{\mathsf{ISI}}, and \ensuremath{\mathsf{I}} think our quest for perfection in those areas
     killed it.
5
               CHAIRMAN JACKSON: They aren't dead.
               MR. CALLAN: Well, they are not dead. Thank you.
```

But we have to be able to say that is good enough.

CHAIRMAN JACKSON: Sure.

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CHAIRMAN JACKSON: Okay. Since people have talked
     about the overly legalistic -- Karen, do you have any
10
11
      comments you want to make?
12
               MS. CYR: Well, I didn't interpret Joe's in that
     case particularly. I mean, clearly, there are legal
13
      framework issues that you have to work within, but I think
14
15
     they provide you lots of flexibility and you have to be
     willing to take the flexibility that is there and work with
16
17
               CHAIRMAN JACKSON: Okay. Corbin.
18
19
               MR. McNEILL: I have one area here in this area
     that I think is important, because it is an expansion of the
20
     use of this issue. And it really gets down to the public.
21
2.2
     The public's appreciation of the risk of nuclear is in some
23
      way formed by NRC's public reactions to things, and it is
     not clear to me that the public is not drawing an incorrect
2.4
25
     view of risk because of the way that the NRC publicly
1
     handles issues, whether it is enforcement or things of that
               And by that I mean, and this goes back to Harold's
 3
4
      very early remarks about whether, in fact, notices of
5
     violation on inconsequential --
               CHAIRMAN JACKSON: We are going to come to that.
               MR. McNEILL: Yes. Okav.
               CHAIRMAN JACKSON: Right.
 8
               MR. McNEILL: But I think that that is an issue.
     If the public presentation of NRC actions was more aligned
1.0
11
     with the true risks, that, in fact, the industry would be
12
     more acceptable to the general public.
               CHAIRMAN JACKSON: Okay. Why don't we come back
13
14
      to that point after the break?
15
               Dr. Remick.
16
               DR. REMICK: All right. Well, certainly, first, I
     would endorse Commissioner McGaffigan's suggestion, Appendix
17
     B being ripe for one to be looked at. Look at the number of
18
19
     NOVs that are based on Appendix B on matters that, really,
      many of which have very little, if any, safety significance.
20
21
     Basically, Appendix B says you are going to establish
22
      procedures and in the procedures it says you are going to
23
      shave every morning, and you didn't shave this morning,
      that's Level 4 and somebody has to respond to that.
24
25
               Also, I would say complete the pilots that you
1
     have underway. There are some significant pilots there.
2
     They have drug on for a long time. You need to better
     manage those projects. You need to set schedules for
      completion. Already, there is reluctance, I am told, by
4
      some licensees to submit the results of their analyses
6
     because they don't expect anything is going to happen based
     on some of the early ones. But I think those pilots can
8
     help show the way for further changes to the regulations.
     And I would say get them done.
               CHAIRMAN JACKSON: Great. Thank you.
10
11
               Commissioner.
               COMMISSIONER DIAZ: I just want to take a year
     leave of absence from the Commission and make Part 50
13
     risk-informed.
14
15
               [Laughter.]
               CHAIRMAN JACKSON: Okay, I have Diaz, Part 50.
16
17
               Okay. Well, my only comment is all of the above.
     And I think the challenge is to go back and look at what is
18
19
     already underway. Get to the basics, based on the
      cornerstones of what our jobs are, and to have the staff
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21
      break away the barriers to working with our stakeholders and
22
     to put the focus and attention to move these things along a
23
               We will take a break till 12:05, and then what I
24
25
      would like to do when we return is to have a combined
     discussion of inspection, enforcement and assessments, since
1
     they all go, and should go together, even if we don't think
2
3
      they do as well. And then, finally, close with the
 4
      timeliness of NRC processes and then we will capture
     whatever is left after that, and to try to see where we go
5
      from here.
 6
               So I thank you for your indulgence. I know all of
     you are very busy, but I do think this is an important
8
      discussion. Thanks.
10
               [Recess.]
               CHAIRMAN JACKSON: Well, thank you very much.
11
12
               As you know, fundamentals of NRC's mission of
13
     protecting the public's health and safety is our need to
     independently know that the licensees are meeting their
14
      responsibilities for safe operation and a key part of it is
15
     NRC's inspection program.
16
17
               We also have additional parts to our oversight
      assessment and enforcement. And other than my beginning a
18
19
     long soliloguy, I think it's appropriate, given the
2.0
      background that we have from this morning's discussion, just
21
      to launch directly into comments from the various members of
22
     our discussion at the table in these areas.
23
               And so I'm going to again start right and then go
24
      to the left and invite Mr. Nye to make any comments he
25
     wishes to make in these three areas.
1
               MR. NYE: Thank you, Chairman. I won't offer
     anything very profound in this respect, other than to say
2
      that it does seem to me that perhaps we could all agree that
3
     the increase in apparent violations is somewhat inconsistent
      with what I believe we all perceive as an improved
5
      performance on behalf of the industry. And so there is some
      disconnect there with respect to the inspection process.
8
               I would suggest that there may be an inconsistency
9
      in your goal of assuring adequacy in the sense that we have
10
     a fair amount of time spent on what I would regard as very
11
     low-risk -- not very sharply defined, at least with respect
12
     to safety issues, that take time and take resources away
13
     from presumably more important and more safety significant
14
     matters.
               My suggestion, and I think the standard suggestion
15
      is that minor discrepancies which may need to be noted, may
16
17
      need to be followed can be treated as inspector follow-up
      items, not necessarily becoming violations.
18
               I'm not suggesting we throw out all ideas.
19
20
      think we ought to pursue all thoughts that anyone can come
21
     up as to how to make this better.
22
               Here, again, prioritizing around those things that
23
      are safety significant, including our resources and our
      time, all those, and handling the others in a more informal
24
     fashion, it seems to me, to be a productive start.
25
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91

I'm going to make one change in what I said. I
had said we would just go around the table, but Mr. McNeill
informed me that he's going to have to take his leave

1

shortly. So, Corbin, if you would care to make some

CHAIRMAN JACKSON: Thank you.

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MR. MCNEILL: Okay. The remarks I made just
     before the break are related to this where it's not clear to
8
9
     me that these areas of assessment oversight and enforcement
     are properly balanced versus risk. And I do -- I'm somewhat
1.0
     of an outlyer in the industry in this area, that I do at
11
12
     least believe that the NRC needs a mechanism at the highest
     levels, at the Commission level, to have some understanding
13
14
      of the health of the industry and other plants and that that
     does require some form of assessment.
15
16
              Now having said that, I think the issue here is
      where you draw a line, and clearly, it's not a bright line
17
     between regulatory arena data and that's a truly with
18
19
      safety, along with just normal performance data.
20
               And I think that, in part, that is an issue that
21
     perplexes us as an industry and is one of the drivers behind
22
      some of the interaction or the strong interaction that we,
23
     from time to time, have.
24
             But I do think that that has to be addressed.
25
      Risk, it could be one factor in evaluating where that line
1
2
              Likewise, as I said, I'm not so sure that some of
     the enforcement actions that we get project a true picture
     to the general public around the risk associated with
4
      whatever actions that the NRC takes. And I think that is an
6
     issue that needs to be reviewed.
7
              I'm not here to present any particular answer,
8
     other than to give you sense that I have that enforcement
     actions -- my judgment would be that enforcement actions are
     sometimes initiated at too low a level. Let me put it that
1.0
11
12
               That's not to say that you're not implementing
13
     your existing policy. It probably is in reference to a
      modification to that policy.
14
15
              CHAIRMAN JACKSON: Okay. Thank you.
16
               Dr. Pate, Zack?
               DR. PATE: Thank you, Chairman.
17
               Picking up on what Earle Nye just said, as well as
18
19
     Corbin's comments, and indeed, that other people around the
20
     table said in the first section this morning, and that is
     all having to do with the impact on the industry and whether
21
22
     requirements imposed in the plants and on the utilities are
23
      reasonable, or sometimes unreasonable and unjustified.
24
              I asked myself what I would do if I were in the
25
      shoes of the Commissioners or the EDO, and based on this
     reflection, I want to give you one suggestion that may be
1
     helpful in addressing this issue, and perhaps other issues
2
3
     that have been discussed, as well.
              And that's to suggest that you conduct a high
4
5
     level self-assessment of the NRC's activities that involve
     the plants and the utilities, and that is an assessment at
     both the interface between the regions and the plants and
      between headquarters and the plants.
              Utilities have used self-assessment to great
10
      advantage, often at the urging of the NRC. And, indeed,
     INPO evaluations and WANO peer reviews are a form of
11
12
     self-assessment.
13
              A carefully chosen self-assessment team or perhaps
      two teams could be put together. The teams, in my view,
14
     should report to the Commission or to the EDO.
15
16
             Team members should be selected by the Commission
      and the EDO. Perhaps NEI could nominate some of the
17
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remarks.

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candidates.
19
              I would recommend small manageable teams or teams
20
      -- a small manageable team or teams of people like, just for
      example, Jim Snesiak, who is retired from the NRC, or Forest
21
22
     Remick or Jim -- Jim Curtis or previous Commissioners, Bill
23
     Conway, who is a retired utility executive more respected in
24
      the industry and so forth.
               These are just examples. I've not, in fact, asked
25
1
      these people whether they would be willing to do such a
     view, so I stress that they're just examples. But I think
2
     you can see that I'm illustrating a team comprised of senior
3
      seasoned experienced people.
4
               In any event, I would avoid a team that takes a
5
      negative approach. The self-assessment should be
      constructive and forward looking, with a sole aim of
     improving the regulatory process and not in assessing blame.
8
               Of course, one of the principle benefits of a
10
      self-assessment initiative is the following: If it's
      structured correctly and if the right people are picked, it
11
      begins to have a salutary effect on the behavior of the
12
      organization from the day it's announced.
13
14
              I hope this is a helpful suggestion.
              CHAIRMAN JACKSON: Thank you. Thank you very
15
16
      much.
17
               Mr. Lochbaum.
               MR. LOCHBAUM: We think that the largest problem
     with the inspection enforcement in any assessment program
19
20
      are all tied to the same thing, and that's the NRC views on
21
      these things are dictated by its -- how it classifies the
22
     plant's performance, or how it predetermines the plant
23
     performances.
24
             If a plant is in good standing, then it gets good
     inspections. It gets good enforcement action, and it gets
25
     good performance assessment.
             If the NRC places that plant into regulatory
2
      distress category, then all these things drop off the board,
      and there's a step change virtually overnight into the other
5
     category.
 6
               The example we'd use for inspection is D.C. Cook,
      which was shut down last September following the AE
      inspection. We went back and looked at the inspection
8
      reports issued at that plant in the last two years prior to
10
     September, 1997. Fewer than half of those inspection
11
     reports contained violations.
               Since 1990 -- January, 1998, virtually every
12
13
      single inspection report has contained one or more
14
      violations.
               The plant's status did not change overnight, just
15
     the NRC's perception of that plant. What in the past
16
17
      apparently was written up as a non-cited violation on
18
     nothing is now being cited as a violation.
```

19 And that the standard shouldn't change. If there
20 were problems before, they should have been reported as
21 problems before. If they're not problems today, they

22 shouldn't be reported as problems today.

23 There's something wrong with that kind of 24 performance, and that's not the only example. It's just the 25 most recent one that we've been aware of. There's probably

10

1 been some since.

```
assessment. We've been involved in the last few months with
     the IRAP, and we had -- I've had some discussions with
      members -- NRC staff members on that task force who said
      that the NRC needs to maintain the ability to adjust the
      final outcome of any performance assessment program because
     the process may give a plant too high or too low a rating,
      and they want to be able to adjust the plant's rating down
1.0
      or up to what they think it really is.
               And if you don't trust your process, or if you
12
      already know what the plants are, just say well, effort, and
13
      send them a letter every six months or whatever, however
     often you want to do it. And don't go through all that
14
     process. It's a waste of everybody's time and effort.
15
16
               So -- and if you don't trust your process, then
17
      why use it. So I don't -- I'm constantly baffled by that
     kind of approach to things.
18
19
              And I think, again, it's reflective of the same
20
     thing. The NRC staff has a feeling for how these plants are
21
     performing and all of it's actions in terms of inspection,
22
      enforcement, and assessment are dictated by those overriding
23
     philosophies or attitudes, whether they're right or wrong.
24
               Thank vou.
25
               CHAIRMAN JACKSON: Thank you. Commissioner?
               COMMISSIONER MCGAFFIGAN: Let me go try to go back
1
      to where I was going to start and then pick up on something
2
3
      to respond at least or talk at least about -- a little about
4
      what Dave just said.
5
               I agree with Mr. Nye that there is a problem with
      the disconnect we have at the moment, and we've -- we're
6
      trying to figure out what needs to be done there.
               The suggestion you made about treating the
9
      violations as inspection findings if they're below a
10
      threshold of safety significance, I think we need to look at
11
12
               There clearly -- we should not be expending large
13
      resources -- asking you to expend large resources on
      something that you found that you have in your corrective
14
     action plan already, and that somehow, we torque you around
15
16
     and make it more important than things that perhaps clearly
17
      are more important already in your corrective action
18
      program, so we've got a problem there.
19
               All right. I'm going to be frank about where part
20
      of the problem may come from.
21
               We don't speak with one voice on the issue. Our
22
     Inspector General -- your Inspector General, at last year's
23
     reg info conference, I went to a breakout session where Bill
     Beach was talking about the difference between a non-cited
24
25
      violation and a cited violation at level 4.
1
               And I walked out of the meeting and I said Bill
2
      just had done a pretty good job to one of the staff that was
      there, and the staff said, "Commissioner, we're not going to
3
      change. You know, we read the Inspector General's report."
 4
               And, you know, it's the safest thing is to write
6
      it up.
               Yet we also have an Inspector General who will
      tell us that we need to spend less time on compliance, a
     famous September of last year report, and more time on risk
10
      significant things.
11
               CHAIRMAN JACKSON: But risk informed wasn't going
12
     to work.
13
               COMMISSIONER MCGAFFIGAN: But -- and we weren't
      doing enough to move towards risk informed.
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We had an IG report last year about an absolutely trivial security violation at Millstone, where a woman 16 17 managed to get through the machine using somebody else's Millstone identified -- Millstone was dealing with 19 20 it. Our inspector gave it all due attention that was 21 necessary. He made one mistake. He pretended he -- in writing it up, he was sloppy in writing it up and said he'd 2.2 23 done more than he had done in terms of inspecting that 24 particular situation, and he got called on it. 2.5 You know, we are, in all honesty, if you are one of those people in the field who sometimes get maligned trying to figure out what they're supposed to be doing, they're getting a very strong signal at times, with very high amplitude, that they had best be writing everything up 4 5 or their career could be at risk. And I think it's -- we need to find a way, and I think the staff needs to find a way to give a clear signal that we'll stand behind the staff if they decide, as that 8 inspector did at Millstone, to -- that this is a trivial security violation. I have better ways to spend my day 10 11 12 And if somebody comes along and second-guesses me later, we'll back them up. 13 14 Because it is a matter of applying scarce 15 resources intelligently. The issue of assessment -- I would be very 16 17 interested if people could tell me -- we have tried to make some changes. We have something. It isn't Jim Curtis and 19 Forrest Remick but the Arthur Andersen group that Chairman 20 Jackson asked to look at our Senior Management Meeting 21 process a couple years ago I think has effected some very 22 good improvements in that process. 23 There is a lot more use of objective data today 24 that has to be refuted -- if it says a plant is an outlier and we decide not to take action, they have to have a good 25 rationale that they can explain to the Commission. 2 We have been trying to make improvements in some of these processes. The plant issues matrices have now gone 3 out to everyone in the last couple months with the latest PPR results and I think we have to align these various processes but the Staff has been trying to improve these processes, make them more transparent. 8 I would be very interested if NEI could survey folks and find out what they thought of this plant issues 9 matrix and whether it was fair and whether it was on point 10 11 and what they are reading in the plant issue matrix aligns with what they are reading in the various other assessments 12 that they are getting from us. They should. 13 14 But it is an ongoing process and we are open to 15 trying to improve all of them -- inspection, assessment and 16 enforcement. 17 Finally going back to Joe Callan, we can't let the 18 perfect be the enemy of the good enough in this area either and if we can get a process that is defensible -- it will 19 20 never be perfect -- can we move on? 21 CHAIRMAN JACKSON: Joe Colvin? MR. COLVIN: Madam Chairman, thank you. I think 22 23 that you at the summary before we broke, you made the point 24 that what we are talking about is inspection, assessment and enforcement, that they are inextricably linked and certainly 25

that is the view that we have and I think a view in which we 1 need to proceed. 2 Just basically, I think you are aware and I would 3 be happy to talk in greater detail, we have proposed on the 4 5 industry side a new plant assessment process which integrates in a risk context, a risk-informed context a process by which you focus inspection, you make the assessment processes and you look at how that ties to 9 enforcement. 1.0 It does so in an objective way that -- you have to get at a common, I think that the key to issue that 11 Commissioner McGaffigan is talking about is we don't have a 12 13 common understanding of the performance we are trying to 14 achieve at the end of the day and there are probably several different thresholds of levels that we need, so we need some 15 16 way to measure, some common way to measure the safety 17 performance of nuclear power plants. 18 I don't think we have that, quite honestly. We 19 have a lot of ideas, but we haven't gotten there. 20 I think that goes to Corbin's point also -- if we 21 had this process we would be able to accurately communicate 22 that safety performance to the public and the other 23 stakeholders. We would have a common means of talking about this and then I think we could analyze that data and I think 24 25 probably more importantly we would be able to have thresholds that distinguish where your expectation of 1 utility action is appropriate and where you as the regulator 2 need to have these steps, and I have some slides to 4 illustrate that and after -- perhaps if we have time I would be pleased to give you a concept of what we are talking about in greater detail -- but I think we have the framework 6 7 to do that. Probably more importantly, we have the ability, you have the ability to do that now and without any 9 rulemaking process that would take an inordinate amount of 10 time. I think it is within the capability of the Commission 11 and the Staff to put in place, put in place fairly quickly, 12 13 and does not take any -- the processes should not 14 unnecessarily delay the accomplishment of that task -- and I will stop with that and be happy to speak further. 15 16 CHAIRMAN JACKSON: Thank you. Mr. Ray. 17 MR. RAY: Let me start with performance assessment 18 and then talk about inspection enforcement separately. 19 Chairman Jackson. 20 I guess I am not as sanguine about performance assessment as perhaps everybody else here is. 21 22 I do think that for example it can drive perverse 23 behavior -- from the Commission's standpoint. Joe indicated it's safety performance that the 2.4 25 Commission is properly concerned with, not performance in some other context, and I would underscore that. 1 The performance indicators that are often used I 2 think you should just be very thoughtful about. Let me take 3 4 one simple example -- what is sometimes referred to as unplanned capability loss factor. That is a factor often in performance metrics that are used, quite rightly. 6

In the regulatory and safety context however, it is not something that you want to discourage necessarily because it can be a reflection of a conservative, thorough, 10 meticulous attention to detail kind of a program and if you penalize that particular parameter you can, for example,

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13
     done in the time that I planned for it and I am not going to
14
     have any unplanned capability loss.
15
               So I just urge you on the issue of performance
     assessment to look at it carefully from the standpoint of,
16
17
      as I say, not driving perverse behaviors inadvertently from
18
     the Commission's standpoint.
19
              Now with regard to inspection and enforcement,
20
      this is not the place where I should come and bring to the
21
      agency problems that I should be talking about with the
      region or others. Unfortunately I am here and --
2.2
23
               CHAIRMAN JACKSON: Or fortunately we are.
24
               [Laughter.]
               MR. RAY: -- it seems to me that there are times
25
      when specific examples need to be used. I just want to make
1
2
      the comment that they are not things that I am coming here
      complaining about, having not gotten satisfaction elsewhere.
               That is not the case, but I want to share with you
      some additional data that I included just briefly in my
5
      initial remarks.
               I said since January '97 San Onofre had 21 cited
8
     notices of violation on procedure. This is out of a total
      of only 30 so there were only 9 violations since January of
9
10
     1997 that were not procedure-related or based on procedure
11
      noncompliance; 21 that were.
12
               In the area of noncited the numbers are -- 37 was
13
     the total, 22 are procedure, and 15 were not -- so there is
14
      a very, very heavy weighting in the area of violations that
15
     we received in connection with procedural compliance.
16
               I have already made all the comments I want to
      make about why that is. I am not going to change. That is
17
18
      just the way we are going to do business there.
               I am insistent that people comply with procedures
19
20
     but I think I can take care of that myself and I really
21
     don't feel that we're productively using the time and energy
      in that area in the regulatory environment.
22
23
               On the ones that were cited, I want to acknowledge
24
      that 3 of them were categorized as having actual safety
     significance, 6 had none, 4 had potential and 8 had
25
1
      something called regulatory concern associated with them and
2
      then there are statistics on the non-cited ones as well, but
3
      I won't bore you with that.
               Now why do I say all this? Well, I have indicated
4
5
     that it is consuming a lot of our time and attention. What
      do I think you should do? I think that is what you would
     want to hear from me. We can't -- you can't ignore
      violations of procedures. It is a requirement that we have
 8
      procedures and that we follow them -- but you certainly can
      choose not to take enforcement action if you feel that we
10
11
      are properly managing procedure compliance ourselves.
12
              To use Joe Callan's point, there needs to be
     robust guidance provided there. I think Commissioner
13
14
      McGaffigan's comments about what are the incentives that
15
      inspectors have in the field is surely on point. Is it well
16
     understood and is there some robust guidance available to
17
      the Staff?
18
               One of the things that helps with guidance I find
      is to focus people on what is important -- in other words.
19
20
      we can try and contrive some complex set of rules for
21
      inspection and enforcement in the area of procedure
      compliance, but probably will never get anything terribly
22
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force people to say I am, by god, going to get this thing

satisfactory. What I think is going to produce the results 23 that we all want to achieve is what I have done with my own 24 staff and that is to say what you do every day has got to be 25 driven by some understanding of the connection that it has 1 to safety and you have got to defend it on that basis. 2 That means that time and effort is going to have 4 to be put in to develop an understanding and to make judgements that are defensible based on the fact that they truly are related to safety, not simply that it is a 6 7 noncompliance and that is my sole justification for writing it up, period. I don't know if that was very helpful to you. I 10 want to pass on the additional data and I did want to 11 introduce this note of caution about performance assessment because I do have experience where I think it can motivate 12 13 the contrary behavior to what the Commission really wishes. 14 CHAIRMAN JACKSON: Well, let me make sure I 15 understand something vis-a-vis performance assessment. 16 Is your concern with it relative to performance 17 indicators driving the process to some undesirable result or are you arguing that the agency perhaps should not do 18 19 performance assessment at all? 20 MR. RAY: I might like to make the latter argument --21 22 [Laughter.] 23 MR. RAY: This is not a good place for me to do it. I don't think, just because of the circumstances and the 24 25 clock and so on. 1 I am just urging that you, given that performance 2 assessment is something the Commission has deemed important and necessary, that you give careful thought to the metrics that you use in performance assessment to ensure that they in fact are linked to safety because not every indicator out there is. 6 Let me take another example, just radiation exposure, and we were talking about the experience at Big 8 Rock Point, which I am learning about it now than I knew 9 10 before, but be that as it may, it is arguably possible that 11 radiation exposure could have been increased by some 12 requirement that would have been deemed appropriate to go 13 and inspect whatever it was that wasn't right or perhaps to 14 maintain something that is important to safety, but it creates a radiation exposure, manrem exposure. 15 16 The industry rightly should be pursuing an ALARA 17 program, but not at the expense of doing the things that are important to safety. There is inevitably a trade-off there, 18 19 something that is very good, low manrem exposure at the 20 plant, we just need to be sure it is not driving us to not 21 do things that create radiation exposure inevitably. 22 CHAIRMAN JACKSON: Well, I think the problem we 23 all have in talking about Big Rock Point as an example is that --2.4 25 MR. RAY: I don't mean to --1 CHAIRMAN JACKSON: -- that the data is not in, but no, that does not obviate the point I think you are trying 2 to make in terms of one desirable outcome can have an adverse effect on another desirable outcome, but I think what we all would like to reach is a point where we understand and that there is a clear statement, particularly 6

in risk-significant areas, that those tradeoffs are understood and have been resolved in some way.

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I think that is the way that one addresses that
     kind of issue, because I agree with you that those kinds of
10
11
      tensions are going to exist in any operation.
               MR. RAY: I have been troubled, as you can tell,
12
13
      by this high rate of NOVs that we have had for a long time.
14
     This isn't a recent experience. I mean Joe and I talked
15
     about it when he was a regional administrator.
16
              I pointed out that I believe you have made remarks
17
      that, well, noncompliance, numbers of noncompliances ought
18
      to be an indication of performance.
              CHAIRMAN JACKSON: Well, I don't know -- I've
19
20
     never quite said it that way.
21
              MR. RAY: Well, that is the inference I got, maybe
      wrongly, from something I read.
22
23
               CHAIRMAN JACKSON: I think so.
               MR. RAY: In any event, the point is that I am
24
25
      committed to what we do as producing the safest result and I
1
     just think we all ought to have a chance to talk about that
     in the course of establishing a performance assessment
2
      matrix, however they are chosen.
               CHAIRMAN JACKSON: No, I understand. Very good.
4
5
     Thank you. Sam.
              MR. COLLINS: I am going to be brief. I don't
     disagree with any of the concepts I have heard given the
8
      common philosophy of the dedication of resources, both the
      licensee's and the agency's towards what is truly important
               I think that approach can be taken in assessment,
10
11
     in inspection, and also in enforcement. We have in fact met
12
      with NEI, public meeting, on the indicators. I think we
13
     provided fairly positive feedback on that. The staffs are
14
      continuing to work.
15
              To speak to David's point I think any indicator
     needs to be mutually agreed upon, so we engage ourselves
16
17
     based on the results and not on the information itself,
18
     which is a tendency that we currently have with the
      processes that are in place and I agree with David's point
19
      that it needs to be scrutable. I think the IRAP always had
20
21
      a box for more than one process to be able to cross-check
     the agency's IRAP proposal and we had a tendency to lean
22
23
      overly on enforcement and we have the clear message from the
24
     Commission to reassess that and we will do that in a public
25
      way with a meeting in August, we hope.
1
               We have had a number of internal discussions --
2
     Joe may speak to that directly -- in fact, as early as
      yesterday, with two members of the Commission dealing with
      proposed enforcement and issues which touch upon many of
      these areas to reach to the point that Joe and Commissioner
      spoke to, we have to be willing to accept licensees'
      processes as being able to disposition items of less than
8
      significant safety impact.
              We have to be willing to let go of our current
     processes and we have to be willing to have a different type
10
11
     of follow-up to violations and focus on those types of
12
      issues that are truly safety significant and bring us
      meaningful information on the status of the industry.
13
14
              In terms of assessments, I just happened to list
15
      the number here and the number I have, it's not complete, of
      ongoing assessments within the NRR program office and the
16
17
      number is seven.
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Two of those are JTAs where we are looking at

regional inspection and licensing PMs and follow-up to that.

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One is an internal initiative by a contractor, Cox &
20
     Associates.
21
22
               We have two in progress with Arthur Andersen and
23
      we have at least two that I know about, OIG reviews, looking
24
      at our processes.
               I only say that to indicate that we are receptive
25
1
      to all of those but the last two being independently
 3
               We are receptive to self-perception,
 4
      introspection. I would sign on with any type of insights
     that could be derived from independent parties with the
     caveat that the intent should be focused and the intent
 6
      should be mandated in a way that it has I believe Commission
      EDO buy-in into what are we trying to achieve and how will
9
      it be measurable in the product line -- the types of
10
     initiatives that I mentioned earlier with the seven really
11
      are refinements of existing processes.
12
              I understand Dr. Pate's point and it is a good one
13
      is that we need to look at some of the fundamental precepts
     and concepts by which we operate. That would be a different
14
     type of review. It would clearly have to be mandated with
15
      some fundamental goals involved.
16
17
               With that, I think I'll leave the remaining points
18
     to Joe.
19
               CHAIRMAN JACKSON: Actually, I am not quite going
20
     to Joe yet. Since Karen is at the table, I am going to
     offer her the opportunity if she has any comments in this
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22
      area because some of these things get into somewhat
23
      legalistic considerations.
24
               MS. CYR: Well, again I think the Commission has a
25
      lot of discretion in terms of how it approaches an
1
      enforcement program in terms of being able to structure a
     program that focuses on those things that are most safety
2
      significant and to in fact rely on licensee's programs and
3
      followup, and if that is what they choose to do I clearly
 4
      think that is something within our authority to do -- within
      any agency's general authority to do.
6
7
               CHAIRMAN JACKSON: Thank you. Joe.
               MR. CALLAN: I am not going to belabor these
      points, but I will just say that the Staff in fact
9
10
     understands that we have a lot of work to do with
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      enforcement, particularly what we call non-escalated
12
      enforcement, the type of enforcement that is below the level
13
      where we would consider civil penalties or other sanctions.
14
               We have a lot of work to do.
               Jim Lieberman, who is sitting in the audience, who
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16
     is our Director of Enforcement, Office of Enforcement, asked
17
      me yesterday afternoon if he should come to this room and
     observe -- watch it by television. I told him to come here
18
19
     in person.
20
               [Laughter.]
               MR. CALLAN: In fact, right now, and I think Jim
21
22
      would nod his head, this subject is probably on the top of
23
      my list in terms of my priorities. It's kind of
2.4
      embarrassing to admit this but I think Harold referred to
     this fact. When I was Regional Administrator it took him
25
1
      actually to shine a bright light on problems I had internal
      to the region. I mean we had significant non-escalated
      enforcement consistency problems within a branch -- one
3
     branch -- not to mention among the various branches.
               Now I am EDO and it actually took Earl -- your
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staff -- who came in a year ago and shined a bright light on significant consistency problems amongst the plants around the country, so all my insights I have gotten from the industry, which points out the fact that as an agency we have not focused management attention on non-escalated enforcement up until about two years ago. It has not been an area of management attention. We have focused most of our management resources. particularly from headquarters, on escalated enforcement, and we can talk about that, but for every escalated enforcement action we basically have 25 non-escalated cases, about half of which are cited and the other half are not cited, so it is about a ratio of 25 to 1, and we just haven't really focused on that in terms of, well, the kind of management attention that we should be focusing on. What has happened I think is that the industry has gotten better to the point where now non-escalated enforcement in my view is almost as important to a plant as an escalated enforcement action was 10 years ago in terms of the way the plant internalizes it, the way plant management

reacts to it, and the significance of it, and our processes just didn't keep up with that reality, so we are scrambling and looking for ideas.

2.5

We are meeting frequently on the subject and thinking of and working with industry groups such as NEI to come up with schemes and, as Karen mentioned, OGC has been quite supportive in enabling the Staff to think of approaches that are nontraditional to deal with this.

I will just finish by saying this, that despite what I said about the insights I gained from Comanche Peak and San Onofre regarding the problems we had, the most compelling arguments I have heard regarding the need to make changes in an urgent fashion on non-escalated enforcement I get from the meetings that I have from time to time with plant managers.

INPO hosts groups of plant managers who come here about every three months. These are groups of -- well, actually plant managers-to-be. It is a training course and they are usually, in fact, Commissioner McGaffigan, you sometimes attend, groups of 15 to 20 individuals who are typically operations supervisors, maintenance supervisors, sometimes they are actually plant managers, and I have been through maybe a half-dozen of them since I have been here, and the first thing that is on their mind when you ask them what is on your mind is this subject.

The issue to them is they plan their activities and they allocate resources at the station based upon their prioritization of all the problems that they have on their plate and they prioritize in a fairly sophisticated manner, most of them, taking into consideration risk insights and resources, and then we come along with an initiatives -- say, a procedure violation at San Onofre, and that trumps everything.

That trumps everything on their plate and so they have to drop what they are doing basically, reorder their priorities, and deal with our problem, and our problem, if we were to objectively assess it in the context of their priorities, we would probably agree in many cases, most cases perhaps, that it would be well in the pack and not deserve that kind of treatment but they have no option.

Under our current process, they really have no

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17
     option but to reorder their priorities and that message
     comes over, over and over again, in a very heartfelt way,
18
      and so to me from a safety perspective, risk perspective,
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20
      that is the most compelling argument of all, to make the
      changes we need to make with enforcement.
21
               I will stop at that.
22
23
               CHAIRMAN JACKSON: Okay.
               DR. REMICK: Along with what Joe just said, I
24
     think somebody earlier said the Staff always wins and that
25
1
     is largely true.
               Harold reminds me of something I might share with
2
      the other Commissioners because I think it is very important
3
      to remember what you say and how you say it can be
      significant on what the Staff does.
               I learned as an early Commissioner an offhand
6
7
      comment in the presence of Staffers, something to the effect
      that I think the agency should be doing this, and lo and
     behold about a month later -- "Commissioner Remick, here is
10
      what you asked for" and I realized and I tried to use it on
11
      a number of occasions at Commission meetings where I would
      tell the Staff why I think you should do this, but then I
12
13
      would say, but remember, instructions from the Commission
14
     come through Staff requirements memoranda, they don't come
     from offhand comments from Commissioners telling you what to
15
16
17
               To address the question of inspections, there is
     no question in my mind inspections are important. They do
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19
      sometimes come up with safety significant findings.
20
     Sometimes they come up with a lot of trivia. Just to give
21
     you an example, in the last week while reading an inspection
22
      report of a facility -- fortunately I don't even remember
23
      which one it was -- at a time I guess when I had nothing
2.4
      better to do in Happy Valley or couldn't sleep or something
      like that --
25
                                                          122
1
               [Laughter.]
               DR. REMICK: -- I was reading this inspection
2
      report and in the inspection report the inspector pointed
3
4
      out that the licensee was using a hand calculator rather
      than a computer to calculate effluent releases.
               Fortunately, later on in the inspection report, he
 6
      pointed out that those hand calculations, however, were
      okay. I asked, well, maybe that is good advice. It is
9
     something I might expect in an INPO evaluation -- if that
1.0
      truly is the computer is better than the hand calculator to
11
     do it, I would expect that they would pass that information
     on -- but I really question, even though it might be good
12
13
      advice, what is it doing in an inspection report? It might
14
      even be just an offhand comment of the inspector. Do you
     know other people are using this particular software in a
15
16
      computer to do it? But I question whether it was an
17
      inspection report although fortunately it certainly did not
     lead to a notice of violation, but I think there is a
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19
      balance missing in many inspection reports of the type of
20
      things that are discussed. Are they safety significant?
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     Are they tied to the regulations -- and so forth. I think
      senior management and the Commissioners have to keep asking
22
23
     that question.
2.4
               On the question of enforcement, I strongly agree
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      there is a disconnect between the number of Notice of
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Violations and the civil penalties associated and there is another aspect. There has been a recent trend I believe in

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aggregating Notice of Violations that makes some sense.
     Maybe it is even more efficient, but I have been involved in
      some litigation as a witness in which people use the fact
      that these things have been aggregated into a larger number
      and then saying this must be poor management because this is
     the "x" highest number that has ever been given to a
8
10
               I think that is misuse of the information which
11
     might otherwise be well-intended.
12
              I have always felt that the enforcement process is
13
     too punitive and that sometimes it appears to be intended to
     be setting an example, not necessarily for that licensee,
14
15
     but for the industry, and I think that is misuse of the
16
      process.
17
               To give you an example, as a former Commissioner
     on enforcement action, I remember this one. A matter had
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19
      come up to the Commission. I believe it came to the
     Commission because there was a difference between the
20
21
     enforcement office and the Staff and in this it had to do
     with employee concerns, problems, and in this the Staff had
22
     written that the licensee had done this and the licensee had
23
     done this, and the licensee had done this, and the licensee
24
25
     had done this -- but the problem wasn't solved, therefore a
1
      $100,000 fine.
2
               My reaction was but they did all these things that
      seemed to be logical type of things. They didn't work
      apparently, admittedly, but the agency is not able to say
4
5
     yes -- something that they should have done, and I certainly
     sitting and thinking about it couldn't think of anything
     that I would have done in a similar situation.
8
     Unfortunately I lost on a 4-to-1 vote, but I still felt
      proud that I was the one who voted against that enforcement,
     but sometimes it is not clear why somebody is being
10
11
      penalized, even though they have tried everything that we
12
      can conceivably think of as an agency.
              On the question of assessment, I would just second
13
      what Joe Colvin has said, and I have had no involvement with
14
      the NEI approach on the assessment process but I have heard
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16
     it discussed and I have read about it and I find it exciting
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      because it basically goes to the point of what are the
18
     objectives that we are trying to seek?
19
              Let's define those objectives and do it
20
      collegially to get to those objectives and then set up
21
      indicators of whether we are achieving those objectives, and
2.2
     base the assessments on that.
               I find it a very logical approach and I think it
23
      is something highly worth considering. I think it would be
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2.5
     a definite improvement over the current assessment
1
      processes.
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               CHAIRMAN JACKSON: Thank you. Commissioner Diaz?
               COMMISSIONER DIAZ: Let's see. First of all, I
     want to make a quick comment to Dr. Pate, who suggesting
4
     have teams of senior people. I think teams are great.
5
      Let's bring some junior people in the teams.
               DR. PATE: I agree.
7
8
               [Laughter.]
               COMMISSIONER DIAZ: So that people from the
10
     trenches --
11
               I am going to go back to what Commissioner
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     McGaffigan said and try to put a couple of comments.
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The Commission has been working I think

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14
      practically since I got here to make better inspections and
      assessment processes. We even called them integrated and we
15
      realized there were too many levels, to many different
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17
      inspections and assessments. They were too fragmented into
      too many offices
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19
               I think we are getting to the point where we now
20
      understand how fragmented they were -- maybe we even
21
      understand where we should be going with them.
22
               One thing that, you know, has always been lacking
23
      is enforcement and I think enforcement lags because in
24
      itself it's an integrated process, and so it just lags
      everything behind, but it is an important part and it should
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1
      be as integrated and consistent with inspection and
 2
      assessments as anything else.
               There is another element that I am glad Commission
 3
 4
      McGaffigan brought up and that is how consistent and how
      integrated is the Office of the Inspector General with
      whatever else we do? Inspector General is an independent
 6
      office and they do things independently and we respect that
      independency.
 8
               However, I think the Commission needs to have some
 9
10
      assurances that what the Inspector General is assessing is
11
      consistent with the Commission rules, regulations, and
      policies, and maybe in that case, you know, some integration
12
13
      in the policy area of what we do with enforcement and
14
      inspection on assessment and how it reflects what OIG is
      going to do independently might be a very good idea.
15
16
               That's it. Thank you
17
               CHAIRMAN JACKSON: Okay. Are there further
      comments anyone has in this arena? Have I missed anybody?
18
19
               Why don't we move on and talk about --
               COMMISSIONER McGAFFIGAN: Madam Chair, there's
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21
      just one item. I'd like to address a question to Joe if
22
      it's okay?
23
               CHAIRMAN JACKSON: Sure. Sure.
               COMMISSIONER McGAFFIGAN: It's a high priority
2.4
      figuring out how to deal with this non-cited violation
25
1
      issue. Do you want to share any initial thoughts that Karen
      will let you share?
               MR. CALLAN: Well, I'll just say that --
 3
               COMMISSIONER McGAFFIGAN: How do you propose to
      solve it? Because we all recognize it's a problem, the
 6
      staff recognizes it's a problem. I know there are some
 7
      thoughts out there as to how to get rid of this torquing
      people around when they don't deserve to be torqued issue at
      least is --
 9
10
               MR. CALLAN: Well, one of the most exciting
11
      approaches as Forest Remick -- I was going to say
12
      Commissioner Remick -- referred to is coming out of NEI.
13
     The thinking that is going on at NEI with the team that they
14
      formed -- industry team -- to come up with this new
      assessment process that does what IREP, our version, didn't
15
      do very well. It truly does provide a mechanism for
16
17
      integrating enforcement into the assessment process and it
18
      basically avoids the trap, I think, that Dave referred to
      which is the notion that if you get the wrong answer you
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20
     have to apply, you know, kind of a J factor. That was true.
21
               In fact, I would say that was probably the fatal
22
      flaw of the IREP was that we didn't have enough confidence
23
      in the answer we would get, so we wanted that kind of escape
      path.
2.4
               With the NEI approach, as I understand it now, we
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may be able to avoid that problem. But anyways, in its essence, the industry thinking that we're looking hard at would establish thresholds of performance in various categories. And as long as a utility's performance meets or -- either above or below, how ever you want to look at it, a certain threshold then the regulatory environment is more benign for them because they meet some standard of excellence, quite frankly, in performance. And then as long as they're in that zone of performance then our enforcement 10 process would take that into account and perhaps violations 11 would not be cited, a document would not be -- there are 12 various ways of approaching it. And if they are outside that zone we approach enforcement differently. They even 13 defined a zone, what they call a "red zone" of extremis in 15 which case the enforcement posture could be quite harsh. 16 So that's the kind of thinking we're doing. 17 Internally Sam and I kick around ideas with the staff, for

Internally Sam and I kick around ideas with the staff, for example, looking for ways to integrate non-escalated enforcement into a utility's corrective action program. And we're seeing that these programs are becoming quite sophisticated across the country. And I think in Dave's opening comments he noted that management determines whether or not the off-the-shelf program works or doesn't work, and

we understand that. But assuming it works, can we use that

25 to prioritize a utility's response to our issue.

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COMMISSIONER McGAFFIGAN: Could I follow up though? My question is more short-term than I think getting to an assessment process that's different from the one we have today, and that's with the severity level fours and non-cited violations, minor violations that are out there today, are there thoughts being given to how we today totally aside from the assessment process look at severity level fours and the degree to which -- I mean, if we recognize today that in many cases we are forcing people to put something higher up in a corrective action list that's already on a corrective action list, should we back off.

When you met with the senior managers the last time you threw out a notion of not requiring the degree of response, having the degree of response to a severity level four be the same as what it is to a non-cited, so they don't get torqued around as much. Are there things like that we can do sooner?

MR. CALLAN: Yes, there are. In fact, there are some very near-term actions that I don't -- I've got to be careful here because we're -- we don't have Commission buy-in yet, but there are some very near term actions that again the cliche of low-hanging fruit that we're plucking quickly, that we're going to do that will reach to some of those kinds of questions.

One thing, by the way, that started about a year

ago is we added resources to the office of enforcement which
we're paradoxically because by adding resources we feel like
we can not make enforcement more aggressive or assertive,
but rather to provide greater discipline in the enforcement
process. So we're taking steps -- we've been taking steps
to -- I think the critical threshold in enforcement quite
frankly, the critical threshold is the threshold that
demarkation between what we call a minor violation which is
a category of violation that we don't even document. And
it's a defined threshold.

11 We tell inspectors, we have explicit guidance to inspectors that if a violation of non-compliance is labeled 12 minor, a minor violation unless they have a very compelling 13 reason they're not even to document -- it's not even worth 14 the resources of document. The threshold between that 15 category and what we call level four violations which is the 16 17 category we cite, has not been policed. And we're doing 18 that now. That's where a lot of mischief can occur in that. COMMISSIONER McGAFFIGAN: Madam Chair, one last 20 point, and this goes to a point of I think Joe made earlier 21 about our communications with the industry. I someday, and 22 the Staff has gotten very different guidance -- I had this 23 conversation with Frank Miraglia at the reg info conference. 2.4 The Commissions over the years have kept the staff on very 25 short leashes at times and said everything is predecisional 1 and don't talk about anything, and then at times we've said go talk and they get confused. As people probably know coming from Congress of 3 the school that we should have a lot of conversations pretty much out in the open, always subject to the Commission potentially overruling if we don't like what the staff 6 produced, but if we're kept closely informed as to what the staff is thinking they're probably not going to get too far astray and so I'm not going to prolong the discussion but I do think allowing the staff to talk pretty openly about how 10 11 we're going to solve these problems even if they don't have Commission buy-in, that's my only point. I don't mind the 12 13 staff talking quite openly about ways to solve problems and brainstorming about them even though I have not yet -- it 14 15 ultimately is going to be a policy matter that has to come 16 to the Commission and they're going to have to get a yea or 17 nay out of the Commission. But I just thought I detected a 18 sense of that in Joe's comments. 19 MR. CALLAN: Well, you know, part of it, though, is by me speaking with too much certainty on some of these 20 ideas I put my thumb on the scale. The staff has to work at 21 some of these issues, too, and I'm not saying I represent 22 23 staff views. I represent my own views. I think I talk 2.4 enough to Sam and some other senior executives, I can maybe claim I represent their views. But we have to make sure that we develop issues broadly. And I don't want to skew that process. That's why I'm a little hesitant. 3 CHAIRMAN JACKSON: Okay. Let's take up the issue 4 of timeliness. And, Earl, you sent us a very thoughtful piece on NRC adjudicatory processes and so I thought that I'd like to ask you to share some of those thoughts openly. 6 MR. NYE: Thank you, Chairman. I don't want to 8 take away from other comments, but I will say we had some 9 experience in a prior lifetime with respect to timeliness of 10 various kinds of activities and particularly the ASLB 11 process and you asked for comments about how our experience might apply to relicensing. And while we are not quite on 12 the verge of relicensing we know others are and we would 13 like to facilitate that. So we did send a letter and you 14 15 were very kind to respond I thought in a very thoughtful manner, and I was very pleased with that and frankly I am 16 17 encouraged by what was said and what was implied in your comments. I don't know that it's worthy of taking that 18 diversion at this point, but timeliness is important. 19 20 I was sitting here thinking and this is probably a 21 digression also, what list of to do things am I taking from this? Because I made a note here, what is the industry

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appraisal being what it is, perhaps we're not in the best
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      position to say what we've done, but I think that NEI has
     been fairly active in trying to be constructive. But I'm
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     curious, what is the process that takes us from this place,
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      what kind of a authority is the Commission willing to
     delegate to staff and other, and what is the expectation
5
      that they would have. And I'll just leave those as open
6
      questions.
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               CHAIRMAN JACKSON: Thank you.
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               MR. LOCHBAUM: I think as far as the timeliness
      the one example that I'll choose to talk about today was an
     event that happened up in Perry that we got involved in last
10
      June. The plant had suffered an unplanned SCRAM due to, I
11
     believe, a transformer failure. That problem was fixed
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13
      relatively quickly and the plant was on its way in startup
      to restart when the NRC staff showed up with a list of three
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15
     things that needed to be fixed before they would allow the
     plant to restart. Although it wasn't exactly stated in
16
      those terms, but it was -- the heavy arm was there and those
17
      three things were fixed before the plant started up.
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19
              I called the resident inspector when I heard about
      that to find out when those three things were identified.
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21
     He told me they were identified by the NRC during
2.2
      inspections in January and February of that year, but they
23
      weren't serious enough to shut the plant down. Yet, when
      the plant does -- due to some untoward reason it's a big
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25
      enough issue to keep the plant from restarting. It doesn't
1
      make any sense to us. I don't know why that happens.
2
               I had worked as a consultant at Perry before
      joining UCS, so I talked to some people who worked on fixing
3
      those three items. Since they were needed to be fixed
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5
     before the plant could restart, it was a band-aid fix. The
      individual I talked to said he wasn't even sure they would
     last until refueling. But it was enough to get the plant to
               The whole process was a waste of time and effort
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      and didn't do anything for safety. And the fact that things
11
     like that happen in 1997 is baffling. And, again, that's
12
     not the only example, but I don't understand how things like
      that happen in this environment. Thank you.
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               CHAIRMAN JACKSON: Thank you.
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               COMMISSIONER McGAFFIGAN: Timeliness. I do want
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     to also compliment Mr. Nye for his letter and for some
     previous interactions we've had on this issue of the
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     adjudicatory process.
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               One of the major points in Mr. Nye's letter I want
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      to get out in the open is the notion that at some point we
     may need to go and get authority to have legislative style
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      or informal hearings for issues such as license renewals,
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     such as license transfers, such as the ATWS application that
      we may get from USEC next year.
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               You can make a case at the moment that we could by
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     rulemaking try to do some of this, but if we don't have
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     Congressional buy-in that rulemaking could be perilous. And
     so I think if Congress -- one of the "to dos" that may come
     out of this, Congress may well provide us as we go forward
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to hearings a couple of weeks from now under the new

Congress, but one issue that I would urge people to think
about is whether we should seek amendments to sections 189

willing to do and what has the industry done and self

for most licensing cases and 193 for ATWS so that we could use more informal proceedings. 9 We just went through one and the Commission very 10 11 much appreciated Mr. Lochbaum's letter about the legislative style hearings we went through in Millstone. He didn't 12 13 agree with our conclusion, but the process he complimented us on and I think you can run -- if you can come out of the 14 15 legislative branch, you can run legislative style hearings very fairly and efficiently and get the issues on the table. 17 Other agencies of the Government, the FAA, was 18 referred to earlier, where they certify aircraft without adjudicatory hearings. The FDA yesterday decided 19 20 thalidomide was safe enough for use in leprosy applications 21 with very strong license conditions presumably on 22 pharmacists, et cetera, they did that without adjudicatory hearings. The EPA recently decided the waste isolation 2.3 2.4 pilot plant was safe enough for EPA to commence operations without adjudicatory hearings. And so I do think that there's a major question as to whether adjudicatory-style hearings are the most efficient way to carry out our business. And obviously we have some recent cases that 3 raise questions and I don't know, we're going to try. The Chairman in her letter to Mr. Nye said we're working on a policy statement, but having watched American 6 jurisprudence -- I'm not a lawyer, I should add -- I'm not 8 sure how far we're going to be able to go within an adjudicatory setting in streamlining a process. Those two 9 10 terms may be incompatible. 11 CHAIRMAN JACKSON: Oxymorons. 12 COMMISSIONER McGAFFIGAN: Yeah, oxymorons. 13 With regard to timeliness of other areas, one thing I've learned is if we give an area significant 14 15 attention we can speed up the processes at the senior management attention. The AP 600, I think Sam Collins has 16 17 correctly gotten a lot of compliments for how the AP 600 18 process has worked in the last seven or eight months as they've worked through the issues to get to final design 19 approval there. 20 21 The improved standard tech spec process, we didn't 22 get a lot of compliments early, although Sam's predecessor 23 was promising six-month reviews which we never really were 24 capable of doing, but we are -- we have learned and there was a recent interaction I heard about where the four loop 1 group came in and met with Sam and Joe and on their own the two senior managers raised the question of why are the requests for additional information so voluminous here. The 3 licensees weren't even asking that. They were just trying 4 5 to get the trains to keep running on schedule. There are other areas, however, where we have a 6 ways to go and dry cask storage comes to mind, how we're dealing with some of the decommissioning plants come to 8 mind, and we sort of have this rolling area where we shine spotlights on things and as we shine the spotlights we can 10 11 solve some issues. But the fundamental issue on timeliness, 12 I think Joe Colvin has already talked about and that is the issue of a perfection standard, a working the asymptotes or 13 14 the Nth-order terms, the equation standard versus a standard 15 that's good enough and appropriate to the circumstance we have. And if there's a cultural change, I think Mr. McNeill 16 before he left talked about cultural changes and 17 18 dichotomies, but there's a cultural change that we need to bring about, it's getting a standard that is good enough and

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is very detailed in cases where it's necessary where we
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      really rake somebody over the coals on a safety significant
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      issue, but where it's a very straightforward process.
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               Gary Hollahan in one briefing to Commissioner Dias
      and me talked about a nanosecond clearance process and Steve
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      Burns promised a second nanosecond for OGC concurrence for
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      some of these trivial things that come before us. But we
2
     don't have that. I mean, when I said that to an industry
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      executive a few days later in a meeting he said, I'd like to
4
      know what an NRC nanosecond was. So we have a ways to go.
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              MR. COLVIN: Define a nanosecond.
               COMMISSIONER McGAFFIGAN: Yeah, define a
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7
      nanosecond.
               [Laughter.]
               COMMISSIONER McGAFFIGAN: But if we shine -- and I
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     think license renewal, probably the most important area, we
      have Frank Miraglia at the moment empowered to keep an eye
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     on that process and deliver SERs and environmental
     statements by late next year in the case of the initial
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      applicant. So we've got to figure out how to do that more
     broadly and not have to -- not have that require the degree
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      of senior management attention it seems to require in order
     to bring it about. But that involves empowering people at
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      lower levels to a different standard from what they have
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      today.
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               MR. COLVIN: Chairman, thank you. I'd like to
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     pick up on just a couple of comments and then on to your
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     basic theme. With respect to the hearing issue, I would
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      support the efforts you have underway and the leadership
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     that this Commission is taking in relooking at the hearing
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      issue. We have analyzed that over the years and I would say
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      we don't think that the processes that the Commission uses
      are necessarily embodied within the statutory requirements
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     law. They certainly have been used to a great degree, and
      we would support your efforts from the legislative arena to
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      support your efforts to make the appropriate changes.
               A second issue I guess I would put under the
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7
      heading of when I look at timeliness and I look at the
      comments that Mr. Lochbaum made, the double standard issue,
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      I think we really need to go back to the key point in my
     mind, that is confidence that we develop in the process.
1.0
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      And I think confidence in the process drives schedule and it
12
     drives the perceptions. And if you take a look at some of
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      the issues that we have faced or are facing, I mean, let me
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      just throw a couple of examples, and it leaves those as
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     illustrative and not to get into the details. But if you
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      look at it and take a step back and look at the timeliness
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      to make a decision on bearing the Trojan reactor vessel in
      tact, and you look at that and say, that's been done for
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      many, many years through the Navy process. It's done
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      routinely, and yet we have spent nine plus months looking at
      it and now we've outlined a process which will take a year
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     to develop the process and a year to implement the process.
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               Now, I know there's changes being applied and
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     there's improvements to that, but on its face it says that
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     that's a very difficult hard thing to do and yet I think
     what that does is undermine a confidence that the industry
1
     has that decisions will be made in a timely manner only gets
     people into the, this is very hard, when it ought to be
      fairly easy to make those decisions. Dry cask storage
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that Mr. McGaffigan made of shining a light on there. We
      see tremendous commitment out of NMSS to shorten that
      timeframe and that's very important as you all know, and I
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     won't go into the reasons. But I think that if we look at
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      -- we seem to get back to the point, we've got to decide
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     what the end objective is and then we can set the time
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      schedule to meet that appropriately.
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               If we take license renewal, I mean, it's very
      important, but if we set the schedule without defining the
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      end objective and setting the scope, the scope will
      ultimately drive the schedule and we won't meet the
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     deadlines we have to make. So that comes back to the
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      central objective of each of those issues. What do we want
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      to do, how are we going to measure, what is success, and
     then set the schedule to meet that and then I think we can
2.0
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      make those changes.
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              So I'll be happy to speak more to that, but in the
23
      interest of time I'll pass.
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               CHAIRMAN JACKSON: Thank you. Harold?
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               MR. RAY: Thank you. Chairman Jackson, as the
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      chairman of NEI's regulatory process working group it falls
     to me to try and maintain often industry support for much of
      what we're talking about here. And I must report to you
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      that there is -- it's increasingly difficult. There's a
      skeptical world out there, but on the other hand I'll tell
     you, I think there's a craving to see progress to the point
6
      that all we need to do is show some progress and the
7
      skepticism will evaporate.
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               I give you as an example, I was just at the recent
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      meeting. I shared where we stood on 50.59, a meeting we had
      with you all in which we indicated we understood the
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      separation of the issue of scope and one that was going to
      be addressed as to what the scope part of 50.59 should be
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      and so on. There was real satisfaction, I think, and I want
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     to feed back to you on the part of the industry that, well,
      it looks like there's progress being made. This a logical
     thing to do. Do you have confidence that we'll really be
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      able to come to grips with this issue and run it to ground
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      in a reasonable time, I said, yes, I did.
               So there is a desire, and like I say, a
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21
      willingness to believe that we are in fact going to overcome
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      what is perceived to be a problem with timeliness at least
23
     in the narrow area that I'm talking about with you now.
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               On the other hand, let me say that I think we're
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     getting all that we can out of the people who are having to
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     get the job done today, and that whereas I think you have
     sufficient resources in the Agency, there's no doubt in my
     mind, and this may be gratuitous, and if it is, please
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4
      forgive me, but I think that resources are going to have to
     be redeployed into these areas that are going to require a
      lot of work. It cannot get done by a waving of the wand.
      It is going to require a hard slog in many areas. We are
     going to have to join with you in order to make the result
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      as efficiently arrived at as we can. And let me just leave
     that there, then.
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              The last thing I want to say with regard to
12
     timeliness is back on my third overhead in my opening
      remarks, it's on the issue of restructuring, you've now
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     heard it said many times and I perceive it perhaps doesn't
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     need to even be said to you. But there is this train coming
      and when I think about skepticism, I have to think in terms
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licensing and I do agree with the concept or the discussion

of the world that I spent a lot of my time in and that is
where we're restructuring the industry.

I have now closed and gotten in hand the money for
the sale of 12 generating plants that my company owned up
until a couple of weeks ago. That process went forward in
accord with the changes that have taken place in California,
and as you know, it's happening in other parts of the
country. The nuclear plants are in line. They're going to
have to get out of the utility or shut down. And there is a

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whole lot of people who believe that we're not going to find
a way to get them out of the utility that they're going to
have to shut down.

I am committed as I think everyone else here is to
the proposition that that isn't the case, that we will be
able to transfer these licenses, but it will not, of course,
happen if the pattern of experience recently in taking such
actions continues in the future. I know you're committed
that that will not be the case, I just want to underscore
that there's a large volume of these things coming and it's
a tough challenge for you I know to decide how to deal with
it in a way that will allow this transition to take place.

Thank you.

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CHAIRMAN JACKSON: Thank you. Sam?

MR. COLLINS: I just want to state, I think the Office's commitment to acknowledging that timeliness or the paradigm wherein timeliness is different than it has been in the past. We, by being in line with processes and business decision, we implement actual business decisions and the unregulated environment play, by no small means, a part in the licensee's ability to conduct business efficiently. And as stated here previously the efficiency goes to safety hand in hand. I think our operating plans go to a large extent to that, the discipline through the budget process that we're trying to implement, but we are resource constrained

given what's on our plates, so we have to work smarter. We have to work in a way that raises those priorities much to the issues that have been mentioned here this afternoon first.

5 So the question becomes, can we do that, do we have the processes to do that, and the checks and balances 6 to ensure that it gets done? And my response would be, yes, in some cases, and in other cases we're developing those. We have had some successes and credit for license renewal 10 progress with Brian Grimes -- or Chris Grimes, excuse me, and his crew and AP 600 with Ted Quay. It goes pretty much 11 in others to the staff's ability to act given the right 12 tools to do that with. And that includes oversight and 13 14 direction, but mostly decisionmaking discretion which is an 15 area that we have to continue to work on which, again, I 16 think, comes back to the overarching issue of how do we 17 provide for that? How do we monitor it, and how do we surface those issues up to the line that need broad policy 18 19 decisions. I think that will be a continuing challenge for 20 us, but clearly working with the industry we need to be sure 21 that those issues that are on our plate are the most 22 important

23 The most recent example of that is the elevating 24 of the importance of risk-informed tech spec amendments to a 25 high priority category two rather than the lower priority.

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industry about the progress of these initiatives given the
     Commission's intent to provide focus on those areas. So we
      went back and looked at our processes and they were not
      commensurate with that direction. We have to do more of
     that I think we'll find other instances as we continue to
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               CHAIRMAN JACKSON: Karen?
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               MS. CYR: I think there are a lot of lessons we
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      can take both from what we see in the industry in terms of
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     how they've gone about setting improvements for themselves
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      in terms of setting clear expectations, setting schedules,
      holding people accountable for their actions and monitoring
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     actions that you set in place. Those apply in an
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      adjudicatory context. They apply in regulatory context in
      terms of decisionmaking for processes and we're committed to
      the Commission in terms of the regulatory -- the
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      adjudicatory process to take a look in the next few months
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     about where we may change or there are opportunities to
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      either change our regulations, or if not, opportunities to
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      change -- to go beyond that if we want to, to seek
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      legislation. And we will do that.
               And we've helped provide the Commission in the
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      last few months some options for how within the existing
     framework we think that they can monitor the adjudications
      themselves to do some of these things in terms of setting
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      expectations and schedules. And so hopefully those will go
      a long way in terms of trying to address some of the
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      immediate issues that we have before us.
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               CHAIRMAN JACKSON: Joe?
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               MR. CALLAN: Chairman, I really have nothing to
      add to what Sam said. And I'll just -- I guess I would also
      reinforce what Commissioner McGaffigan said about accepting,
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      as appropriate, the good enough standard and that will, as
     you said, entail some degree of a culture change in the
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      staff. But there's only so much you can do with the process
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      and until you change that mindset, you're not going to make
      the kind of breakthrough improvements that I think we're
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      talking about. So we understand that.
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               CHAIRMAN JACKSON: Thank you. Dr. Remick?
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               DR. REMICK: In preparing my remarks the last
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     couple of days, I went back over it and asked, where can I
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      expect the Commission is going to pin the tail on the donkey
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      and say, give me some specific examples. So on the bit of
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      timeliness I'll share with you some of the notes that I made
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      at the time, and some of the issues, the pilots I've already
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     referred to. But Part 50.59 improvements are certainly
     languishing, the final guidance from the Commission on that.
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               The update guidance on USAR certainly is
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     languishing, the licensees out there are trying to comply,
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     but they don't know what the final guidance is going to be.
     The Louisiana Energy Services hearing certainly was very,
      very lengthy. The improved tech spec approvals certainly
      are languishing, but why are these important to licensees.
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      And you have to look at it from the licensee standpoint,
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      that if they have initial classes of licensed operators
      coming along, and this is a long, lengthy process of
     training these people, do they get trained on the existing
      tech specs, or do they get trained on the improved tech
      specs. And if they go on that, that they're going to be
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      trained to the improved tech specs and the Commission does
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     not live up to the schedule, when these people are ready to
      be examined for their license, it can be a disaster. You
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can't change from one set of tech specs to the other after 15 people have been trained for many, many months on that. 16 The Part 52 reviews and much of the onus of that 17 is on the Commission on which I served as much as on this Commission. And although I'm happy to hear that AP 600 is 18 19 moving along, certainly the two evolutionary plants and the 20 one -- I can't think of the -- the advanced plan, AP 600, 21 that is really an inordinately long process of reviewing 22 those applications and comparing what was done in this 23 Agency 20 years ago when there were just multiple, multiple 2.4 applications for plants. 25 Topical report reviews which was a problem six, eight years ago, I'm told it's still a problem with very, 1 very low priority on reviewing and completing topical 3 representative reviews. 4 License amendment approvals also. The Generic Letter 9606, this is the one that has to do with the 5 question of water hammer and containment air coolers and so forth, they're still daily going out -- I shouldn't say "daily", but I see occasionally RAIs going out which I can't help but question, aren't these overkill questions that are 9 1.0 going out and are they just questions based on job security. It's already been raised, the spent fuel cask 11 12 reviews, this is extremely important. 13 We mentioned the question of resource allocation. 14 I can't help but raise the question, is it still necessary to have as many as five residents at one site in some cases? 15 16 And I'm not talking about Millstone. Is it really necessary 17 in this day and age to have as many as five residents at one 18 19 The other matter I would like to talk about is the 20 ASLB process. And the reason I'd like to talk about that, I 21 have some prejudice or bias. I quess, because I served ten 22 years as a part-time administrative judge on the licensing 23 boards. And I guess I am defensive in a way inasmuch that I really found that people serving on those boards at a time, 24 when there were many, many, many proceedings under way, were 25 1 trying to do the best job possible. 2 And after serving on there for ten years, then I served as director of the Office of Policy Evaluation, a 3 4 small office that reported to five commissioners at the time, and I sat at the Commission table just like the General Counsel does at every Commission meeting. 6 7 And on several occasions frustrated Commissioners asked why in the "H" are these licensing boards making decisions for us out there? And because of my background, 10 and the Commissioners did not have that background, I was able to point out, they're out there doing it for you. 11 You've delegated them that responsibility, you could 12 13 certainly do it. But there's no way physically you could 14 handle all of these proceedings. So you've asked this group of people to hear these cases and come up with initial 15 16 decision which you can step in and modify if you wish. 17 Those people are trying to do a good job, but they are receiving, and I felt this at the time, receiving absolutely 18 19 no direction from the Commission on what the expectations 20 were. 21 And so my advice on the hearing process is that 22 the Commission needs to stay in tune. They need to 23 establish expectations and schedules on what these

proceedings should be. You can't tell the licensing board

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members how to decide, but you can tell them expectations on
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      timeliness and so forth. And as Karen mentioned, you can
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     monitor them closely, and you certainly have the authority
     to reach down and bring things up for you to correct or
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      redirect and so forth.
              Now, on the question of adjudicatory legislative,
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      certainly I personally would support more legislative-type
     of hearings. I predict, however, it's going to be a very
      touchy political question. There are a lot of people out
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      there who very much want that opportunity provided by the
      adjudicatory hearings. I would like to see more legislative
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      -- Commissioner McGaffigan and I bounced around the idea a
     few weeks ago of the Commission taking on the first license
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      renewal case and hearing it. And I told Commissioner
     McGaffigan, if I was still on the Commission I would
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     probably be dumb enough to sign on and suggest that the
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     Commission do it. Because I applaud the intent of it, and
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     that is try to set an example of how the efficient process
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      could be handled for the first one.
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               But if it is an adjudicatory-type of hearing, I
     think there is considerable risk that you might cause the
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     opposite. Because I think it will receive a lot of
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     attention, and nobody on the Commission currently has
      administrative law experience, and, therefore, you're going
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      to be sitting as a Commission certainly with guidance from
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     legal counsel and so forth, but in a public eye, trying to
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      come up with collegial decisions on procedural matters which
     you could easily make a mistake on, you can also look bad by
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      taking a long time to come to those decisions and to be
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      appealable in the courts, I presume, and so there is some
      risk. I applaud the idea. I do support the idea. I would
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      like to see more legislative-type of hearings, but I must
      admit, I predict there would be a lot of opposition to
     changing from adjudicatory to legislative.
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               COMMISSIONER McGAFFIGAN: On that one issue that
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      we did talk about, I should inform you and the public that
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     the Commission decided not to take --
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               DR. REMICK: I see.
               COMMISSIONER McGAFFIGAN: -- it to BG&E;'s, you
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     know, sighs of relief. We decided that we would not --
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               [Laughter.]
               COMMISSIONER McGAFFIGAN: -- do that.
               DR. REMICK: You needed my vote.
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               [Laughter.]
               CHAIRMAN JACKSON: Not in this instance.
               DR. REMICK: I'm finished, thank you.
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               CHAIRMAN JACKSON: That's it?
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               DR. REMICK: Yes.
23
               COMMISSIONER DIAZ: Okav. In the interest of
24
     timeliness I think some of the concepts that come out which
25
     can help us do things more timely is full consideration of
                                                          152
     eliminating the zero factor. There's no such thing as a
      zero factor. It's just an invention and its time is passe.
3
      I think the elevation that "good enough" is fully acceptable
      is something that we should seriously address and seriously
 4
     carry down, you know, all the way down to implementation.
5
              I think that if we take these two things, both the
 6
      elimination of the zero factor and the elevation of the
      "good enough" is fully acceptable and integrate it with
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     processes that discriminate from the beginning what the
     priority are rather than looking at the process to make the
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discrimination, that should accelerate, you know, a lot of
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     the licensing actions.
13
               And then finally in the interest of timeliness
      I'll say ditto to all of the above.
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               CHAIRMAN JACKSON: Thank you.
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               I think we've covered quite a full panoply of
17
      issues today. But I would like to have, as they call it, a
      "green-light session" to see if there are any other, you
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19
     know, issues that anyone would like to raise. Joe?
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               MR. COLVIN: Chairman, if I could pick up one last
21
      comment on the rulemaking and timeliness or the timeliness
22
      activities. There were two areas that were not raised and I
23
      would be remiss if we didn't mention them. And I think
      that's the recommendation to the Commission on a process to
24
      decide on petitions for rulemaking in a timely manner that
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1
     have been issued to the Commission. When a petition for
      rulemaking is submitted, it goes into some place and one may
2
     never hear whether it's been accepted or not accepted until
3
      some actual decision is made. And I think we've had
 4
      petitions for rulemaking pending for four or five years and
     really don't know the status. And I think that that's an
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7
      area that would be an easy recommendation to take in effect.
               I think the second issue has to do with the length
9
     of rulemakings. And I know you've worked on this and tried
      to come at other issues. But other agencies, and I would
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11
      use the FAA example only for illustration, when there is a
      problem that is in fact a safety issue they pull together
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13
      the stakeholders, the engine manufacturers, the airframe
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      manufacturers, the operator and so on, put them in a room,
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     they solve the problem and the FAA issues an airworthiness
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      directive which I think falls into the order category which
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      is then implemented. And they do that in a fairly rapid
      manner. So there are probably some examples like that I
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19
      would encourage the Commission and where they may need
20
      statutory, and these may require legislative statutory
     fixes, and I recognize that and industry would be pleased to
21
22
      work with the Commission and support the appropriate changes
23
      to provide efficiencies in the process.
24
               MR. COLLINS: Chairman, I agree with the petition
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      for rulemaking issue. I think there's been one on QA
1
      specifically that the staff has been wrestling with for a
2
      period of time. That and the 2.206 process which David
      Lochbaum has brought to us, I think are examples perhaps
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 4
     where a focused review, perhaps Dr. Pate's concept, would
      apply. I think it would be beneficial to sit down with the
      stakeholders and carve those out, if you will, of the
 6
     overall issues that we're dealing with and try to pick those
     processes off independently. And I'm willing to dedicate
     resources to that because that -- and only after we improve
10
      those processes will they start to bring good results.
               CHAIRMAN JACKSON: Very good. Thank you.
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               Are there any other issues that anyone would like
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13
      to raise?
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               MR. COLVIN: Chairman, I have one other point. I
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     don't want to belabor the conversation. I wanted to just
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      enter and give to you the Commission, we have a two-sided
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     sheet of paper which has eight specific recommendations,
      many of which we have talked about today.
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               CHAIRMAN JACKSON: Okay.
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               MR. COLVIN: And I just wanted to provide that,
      and there are copies that will be provided for the other
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parties.
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               CHAIRMAN JACKSON: Thank you very much.
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24
               Anyone else?
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               COMMISSIONER McGAFFIGAN: Madam Chairman, just one
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      point. Obviously what provoked this discussion more than
      anything was the language from the Senate Appropriations
 3
      Committee and I think it's been very useful and we obviously
      have things we need to do to improve. I would prefer -- I'd
      just state to this group that I don't know that cutting
 6
      resources -- and I had a conversation with Dr. Remick about
      this -- cutting resources is a very blunt instrument and it
     doesn't necessarily lead to the improvements we're all
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 9
      desiring. It may well be that if we fix all these processes
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      we need fewer resources. But at times fixing the processes
      requires resources up front. So I would just make that
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13
               The Commission also, on the issue that I think was
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      most -- and maybe I should defer to the Chairman on this.
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      but the issue that was of most concern to the industry, the
      fairness and equity issue, I think we -- why don't I just
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      turn it over to you and let you say whatever you want there,
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      but we have responded.
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               CHAIRMAN JACKSON: Yeah, let me take that up and
      then let me talk to the resources issue.
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               I that in fact -- I mean the Commission made a
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     decision and our original timeframe was for the FY-2000
      timeframe, but in fact we're prepared and certainly willing
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24
      to propagate it into FY-99 to address the issue of fairness
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      and equity of fees by looking to take off of the fee base
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      those activities that have less direct connection to the
      activities of our domestic licensees. And the Commission
 3
      decided on a percentage formula up to 10 percent to come off
      of the fee base -- 10 percent of our current budget.
 4
               There are various proposals, but one in particular
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 6
      that I'm sure will be discussed at an authorization hearing
      we'll be having at the end of the month that's arisen in our
      authorization committee that would take up to, I believe,
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 9
      $30 million off of the fee base, and we've said that we
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      could work with that, although there are some procedural
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      things that we've been talking with the committee about.
12
      And so -- I mean, that's an issue that has been around and I
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      think that -- in fact I particularly congratulate my
14
      colleagues in this regard and then one member of my staff in
15
      working out a formula for how that could work. And the
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     member of my staff is Jackie Silver who I don't think is
     here. But I think all of us worked to try to come up with a
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18
      reasonable approach recognizing what the issues are and that
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      we needed to address this forthwith.
               And on the resources issue, I would like to come
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21
      at it this way, I'm sure many of you have had experience,
22
      perhaps much more than some of us, in managing your
      enterprises and you make various decisions relative to
2.3
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      streamlining and downsizing and what needs to happen. But
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      in the end that comes out of a set of decisions having to do
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      strategically with where one wants to go, what the strategic
 1
     focus and positioning of your enterprise needs to be, and
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      that what downsizing decisions are made are made in a very
      deliberate fashion that ends up having to balance, you know,
      what needs to go out the window with what needs to perhaps
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 6
      come in the window.
               And Commission McGaffigan has already spoken to --
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corrections themselves require resources, speaking of
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      deployment or redeployment of resources and that is
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      certainly true, and I was going to speak to that at any rate
      in a minute. But in the end that implies there are
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      resources to be deployed. At the same time the Commission
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     has been pressing the staff very strongly on issues related
      to timeliness and efficiency. I won't tell you some of the
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      things that Commission McGaffigan really presses the staff
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      on in terms of trying to be more efficient in how we use our
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      resources. And I have worked very closely with the
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      executive council in particular to develop a budget and
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     planning and performance management framework and to squeeze
      and to think about how we can use in a very smart way the
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      resources we have including redeployment of people as
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      necessarv.
24
               What one would not like to risk is to lose faith
      with the staff in carrying out these processes that as we
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1
     demand that they become more business-like in their focus.
      more efficient in their use of resources and squeeze money
      out of the budget. And believe me, we are continuing to do
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 4
      that. That, in fact, people feel they are penalized for, in
      fact, exposing more of how they in fact manage their shop.
     And there are any number of vulnerabilities and improvements
 6
      that can be made, but I think it's very important that the
      staff be able to manage those processes down with clear
      quidance and direction from the Commission. And I think we
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10
     feel very strongly about that. And so I thank Commissioner
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     McGaffigan for bringing that up.
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               Now, all of that said, let me thank particularly
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      our invitees, Mr. Earl Nye, Mr. Joe Colvin, Mr. Corbin
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      McNeill who had to leave, Dr. Zack Pate, Mr. Harold Ray, Mr.
     David Lochbaum, Dr. Remick, a former commissioner, as well
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      as my colleagues and the NRC staff, and all of you who came
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17
     out today for your participation in, and/or interest in this
     round-table meeting. I hope that you in fact have felt that
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      it has been a round-table discussion. Notwithstanding the
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20
     geometry of the table.
21
               [Laughter.]
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               CHAIRMAN JACKSON: And I will state on behalf of
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     the Commission, and I hope you've seen this in the
24
     discussion today that we recognize the challenges before us.
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      And we in fact embrace a movement to improvement in how we
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     do our business. And I want to reassure the public, in
      particular, that the Commission remains committed to
2
     maintaining our focus on our primary health and safety
      mission. In the end that is what we are here for as we
      continue to improve our oversight of nuclear programs along
      some of the lines we've been discussing today.
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7
               Now, of particular interest to me today, and \ensuremath{\text{I'm}}
      going to try to see how well I've captured. Unlike our
     totally choreographed Commission meetings, this one is a
10
     challenge in terms of capturing, as we've gone along, the
11
      essence of what we've discussed. But I think of particular
12
      interest were the discussions regarding issues of management
13
      within the NRC and the timeliness of NRC activities, the
14
      insights on risk-informed regulation, the need for
      adjustments to our inspection or reworking of our inspection
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process, and pointing out some of the abuses of regulatory

proper focus in our inspection program; and in particular I

process at the site interface; reworking and ensuring the

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in order to carry out these new -- a number of these

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      think -- I and the whole Commission is in interested in
      ensuring that all of these functional areas of NRC fit
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21
      together in a logical cohesive framework for regulatory
22
      oversight. And let me see if I've captured some of the
23
     points of concern.
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               This is probably not comprehensive, but I would
25
      say in the management arena there were examples and
     discussions of lack of clear direction. On one hand a lack
      of oversight of field personnel in certain instances as I
3
      talked about particularly in the inspection area, but on the
      other hand the need to empower the staff in order to be able
 4
      to move along on some of these joint initiatives. And
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 6
      overall a need for cultural change in order to move from
      where we've been to a truly risk-informed regulatory
      framework. There's the need for the Commission itself to
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9
     satisfy itself that it understands what's going on in the
10
      field with respect to its direction and how the practices
11
      are carried out in conjunction with Commission procedure.
12
               There are any number of comments made on the
13
     assessment and enforcement and inspection areas
      specifically, but the NRC does look to validate its
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15
      assumptions about licensee performance. But we've heard
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      that a number of our enforcement actions, for instance,
     frequently are not focused on what is safety significant and
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      can serve unwittingly the misdirected purpose of
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19
     misdirecting licensees' attention. That there is a burden
      that we place on our licensees for relatively low-level.
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21
      non-safety significant violations and we need to look at
22
      that.
23
               In the overall area of regulatory excesses we've
24
      heard repeatedly about inspector mischief, about our use of
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     informal means such as confirmatory action letters or
      generic communications to de facto create regulatory
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      requirements and that we get in our own way at times by
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3
      focusing on perfection versus what is adequate or good
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               In the timeliness area, there are issues having to
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6
     do with boundaries and barriers to interactions between the
      various parties. We've talked, there were a number of
      specific areas but focusing on the adjudicatory process, et
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               Now, Mr. Nye spoke of a "to do" list and I've
11
      tried to capture some of the "to do"s and then if there are
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      any that any others feel we need to specifically focus on, I
13
      would welcome your giving us that input.
              I think we need to work on our working
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15
     relationships on the various initiatives to have the right
16
      working groups to be more open in terms of how we work with
     our stakeholders to move along on these initiatives and
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18
     create within those relationships the means to break log
19
      jambs immediately.
2.0
               There's the need to bring to closure certain
21
      specific initiatives. We've talked about the results of
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      some of the pilot programs. In particular in-service
2.3
      inspection we know is an important one as well as the others
      that have traditionally been talked about.
24
25
               I think we ourselves can ask how can the -- we can
      ask you, and I think we have, what can we learn from the
     industry in terms of developing our own get-well approach.
3
     I mean, we always talk with the industry about the need for
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clear objectives, the need to have a management team focused

on achieving those objectives, and then to have people actually working on getting the work done.

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There was a specific recommendation to convene a high-level assessment group and Commissioner Diaz pointed out, I think, rightfully so, that one needs to be sure 9 there's fresh blood in that group, folks who are where the 1.0 11 rubber meets the road, but that this -- the Commission needs 12 to be clear on what the objectives of such a high-level 13 review would be and it needs to have the full Commission 14 buy-in and the EDO's endorsement. And it perhaps needs to 15 look at some of the more fundamental precepts and concepts but since what fundamentally we're talking about here 16 17 largely involves looking at what we do in our reactor regulation program. I think it is very important that we 18 understand how any new assessment or review would play off 19 of the existing assessments. And Sam talked about various 20 21 ones, and I'm sure coming out of Congressional concerns 22 there may be yet other assessments that get done. And in 23 the end we have to look at the tradeoff between studying things to death and getting things done. And I know that 24 Sam and his folks are working very hard and are feeling 25

pretty overwhelmed at this point.

With respect to timeliness, I think we know where 2 3 we are on the adjudicatory issues. I think there are some more innovative approaches that may require some legislative help, but at the same time we are where we are and we're in the middle of some important processes that have 6 7 adjudicatory aspects, license renewal obviously being a big banana, but at the same time the reality that a number of you have spoken of, of the reorganization of the industry --10 nuclear power industry pursuant to deregulation and that 11 there will be any number of license transfers. And our OGC has offered us a number of options which the Commission is 12 13 probably going to try to adopt as many of them as we can for 14 moving things along.

And recently, Commission McGaffigan had raised the issue of -- and I'd ask Karen specifically of looking at with respect the license transfers what kinds, do we have any flexibility on the kinds of hearings that we might have.

The point has been made that we need to give more management attention to speed processes that we need to redeploy resources into areas where the high priority work needs to be done, that we need to particularly perhaps we could use a focus to review with respect to how we handle petitions for rulemaking as well as 2.206 petitions and that we can learn things from other agencies such as the FAA by

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looking at things like the length of rulemaking.

2 And so in closing let me sort of leave a couple of thoughts. There were a couple of times that the statement 3 was made that the staff always wins. And I think that I would not like to have us leave this meeting with any kind of pejorative statements or implication relative to the NRC 6 staff. The NRC staff works very hard to carry out its regulatory mission. That it feels it is very strongly focused on safety, that we have managed to license over 100 9 1.0 currently operating nuclear plants, they have been safely 11 operated. The responsibility for safety rests with those who own and operate the facilities, but I think we at the 12 13 NRC believe that we've had a strong hand in the safety 14 record of that industry, but particularly the NRC staff.

There have been any number of normalizations that

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have been made along the way in response to not only
16
      industry, but Congressional to GAO and other stakeholder
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      concerns and reviews, some with unintended consequences
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     perhaps. For instance, the issue of the severity level four
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     violations and their increase, but growing out of a desire
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21
      and an attempt to be more consistent in how things are done,
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      activities taken pursuant to the situation at the Millstone
23
     Nuclear Power Plant.
24
               Ironically I believe that there's always a silver
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      lining because a benefit has been that along the way what
      we've done is to expose what really have been festering
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     problems in terms of, for instance, how we handle
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3
      enforcement, the tie of our enforcement actions to risk and
      safety significance, and these things predated the specific
      run up of severity level four violations recently, and
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 6
      predated any number of other things. But nonetheless, it's
      clearly on the table.
               Joe spoke circumspectly about some things that we
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      are considering, but they do have to come to the Commission
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      for the Commission's decision.
               Similarly, growing out of our experience which
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      none of us would like to repeat with Millstone, the whole
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     issue of finally doing a rulemaking on 50.59 where we get at
     this issue that Commissioner Diaz spoke eloquently about of
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     getting rid of -- of recognizing that the zero is not zero
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      anyway. And it doesn't make sense. And looking at issues
      of the safety analysis reports and how they are handled.
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     even though I agree, we need to get the guidance moved
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      along.
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               So we have initiatives under way. And what we are
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      in the process of doing is culling through, you know, what
     we think is working, what is not working, and what needs
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2.3
      fundamental change. And I think that our discussions today
      are going to contribute very strongly to that. And there
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      are a number of thoughtful proposals that have been placed
      on the table and thoughtful communications such as the NEI
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      proposal on risk-informed oversight, others, there are some
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      petitions for rulemaking as well as communications we've
     gotten from various individuals. What we have to do then is
      to engage with our stakeholders, engage with the industry to
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      work through them in an expeditious manner.
               We do have a planning process which we hope will
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     help us to accommodate change whether it's -- as I've talked
9
      with the staff about -- a modulation of trajectory or a bend
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     in the road, but as I've also told them that a bend in a
     road is not the end of the road unless you fail to make the
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12
      turn. So in the end communications is the key.
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               And I hope that the discussion today has helped us
     to take a step along the road of better communications, but
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15
     more importantly, through the communications to rectify what
     have been these long festering issues. And I think the
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     Commission and all of us are committed to that. And we may
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      have differences of opinion on any number of things, but I
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19
      think that we're all committed to making progress in these
2.0
      areas and making it forthwith.
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               So unless there are any further comments, we are
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     adjourned.
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               [Whereupon, at 2:00 p.m., the meeting was
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      concluded.]
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