



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

March 15, 2001

COMMISSIONER

The Honorable Jeff Sessions
United States Senate
SR-493 Russell Senate Office Building
Washington, D.C. 20510-0104

Dear Senator Sessions:

Thank you for taking the time to meet with me on March 6, 2001. I enjoyed visiting with you.

During our discussion you asked about the additional electrical energy that existing nuclear plants in this country could produce from increased gains in efficiency and from regulatory approvals to operate at higher power levels. Significant gains in nuclear plant electricity output have been realized over the last decade, with production increasing from 577 billion kilowatt-hours in 1990 to about 754 billion kilowatt-hours in 2000. This is a gain of over 31% for the entire fleet for the last decade. Most of these gains are from increased capacity factors (from 64% in 1990 to about 90% in 2000), because the amount of time the units were shutdown for repairs, refueling and maintenance decreased steadily. It would be increasingly difficult to continue improvements at this rate since capacity factors are approaching practical limits.

My back of the envelope calculation says there is a potential for 2-4% additional capacity factor, with most of the increases coming from plants that are below the average. This increased capacity could add up 21 billion kilowatt-hours to the country's electricity supply in the next 2-3 years, if aggressive programs are pursued. These would be the equivalent of adding three 1,000 MWe plants to the grid.

Besides better capacity factors, there could be gains from power up rates and from improved instrumentation technologies. These could add another 14 to 28 billion kilowatt-hours to the grid. All have associated costs and would require regulatory approval. Depending on the economics and legislative changes, I venture to say that another 21 billion kilowatts-hours could be added to the electrical supply in the next 2-5 years.

There is discussion by the industry on re-starting and/or completing plants that were well advanced in their construction. For example, TVA has one plant on extended shutdown (Browns Ferry 1) and 3 plants (Watts Bar 2 and Bellefonte 1 and 2) that were partially constructed when work stopped. The total power rating for these units is about 4,000 MWe

B/6

Senator, I just delivered a speech to the 2001 NRC's Regulatory Information Conference reflecting my approach to regulation. I believe the thoughts are compatible with yours. I think you may find it of interest. A copy is enclosed for your information.

I would be happy to continue our discussions. I hope my observations regarding nuclear power facility up-grade are useful as you marshal your bill to provide tax credit to nuclear facilities through the Senate. I may be reached at (301) 415-8420.

Sincerely,

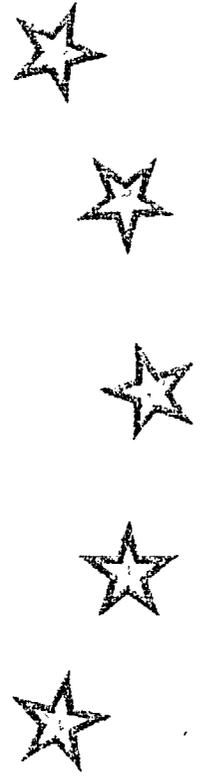
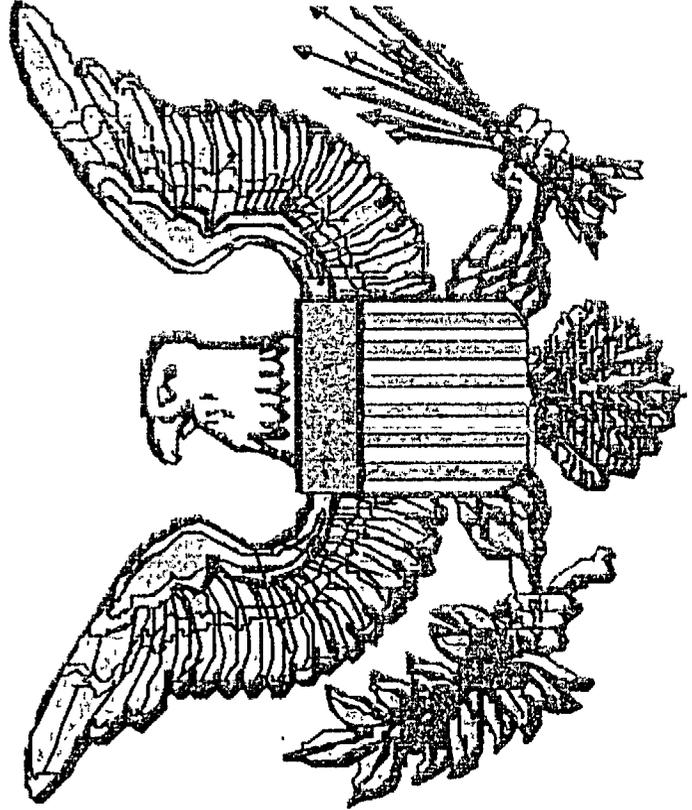
A handwritten signature in black ink, appearing to read "Nils J. Diaz". The signature is fluid and cursive, with the first name "Nils" being the most prominent part.

Nils J. Diaz

Enclosure: As stated

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UNITED STATES NUCLEAR REGULATORY COMMISSION



Remarks of Commissioner Nils J. Diaz
United States Nuclear Regulatory Commission
2001 Regulatory Information Conference
March 14, 2001

Regulating for the Common Good

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It is a real pleasure to be able to participate in the thirteenth annual NRC Regulatory Information Conference (RIC). I know that almost every major regulatory issue on our table has or will be discussed at this conference. At the last four RICs, I focused on the issues of the day and even tried to bring a couple of practical solutions to the table. Today, the NRC appears to be on a well-chartered steady course, facing squarely the difficult challenges of the present and the future, with a better vision and better tools. Yet, the nation is once again encountering that almost forgotten enemy: expensive and unreliable energy. We have seen what happens when energy is costly, scarce, or not available on demand. America's dependence on energy is somewhat unique and solutions are needed for the short and the long term. We might be asked, as would other government agencies and the private sector, to sharpen our skills, and improve our efficiency to meet the needs of the country. So, at this particular time, I will not dwell on NRC-specific issues. Instead, I will present my personal views on why and how regulation must function effectively in a democratic society. And although I know I am preaching to the choir, I will start at where it all begins: democracy.

There are some people who believe that democracy is weak and that a free market society is unfair. I disagree. A truly democratic republic is the strongest form of government because individual rights and quality of life are dominant drivers. Democracy offers the best chance for freedom, and the free market, within a democratic society, offers the best chance for the pursuit of happiness. The free market, with its inherent efficiencies and accessibility, serves to eliminate waste and prevents the continued expenditure of resources on that which is neither efficient nor useful. It is the free market that forces the efficient transition from an idea, to a product or service that is useful to society, in most cases without the intervention of the government. The combination of a democratic society and a free market provides the most powerful combination for achieving fairness, equity, and the protection of rights, property, health and safety. I am sure we agree that democracy is essential to our way of life, and there is no full democracy without a free market.

Moreover, I strongly believe that the free flow of information is crucial in a democracy. I also believe that the free flow of information is crucial for a free market to operate for the benefit of all. These truths are now self-evident. In fact, the RIC conferences are a leading example of the importance of information exchange. In the era of information technology, where you, and most everyone else, can quickly get any information desired, information provides the feedback needed to assess performance while acting to promote or reduce expectations. If used well, information anchors democracy, even

if you don't like what you're hearing or seeing. Democracy needs checks and balances.

The free flow of information shines light on the checks and balances. Information is a deterrent to wrongdoing....I am an optimist.

Once information regarding patently objectionable behavior becomes known in a free society, the information about these actions and the response of society to it, will, sooner or later, remedy the situation. If the issue is in the marketplace, the society with free market forces will correct the situation faster and better than closed market societies. However, in just about any type of society, information, when made available to the people, should lead them to correct injustices, whatever their origin. It may just take longer in societies that do not have the privilege of our cornerstones of democracy and free markets. Too much information could be confusing, but I will take too much information anytime.....too little information reduces freedom.

The late 80s and 90s are full of prime examples of the value of widespread information. Let me give you just one. Fidel Castro, an old enemy of democracy, was once asked how the Central European nations gained independence from the Soviet Union. His response: "Socialism in Central Europe failed because people received more information than was necessary."¹

In between the democratic and free market cornerstones, sits a force that feeds on information and that can be used to build or to destroy; to add checks and balances or to skew, to advance democracy and improve quality of life or to arrest the democratic and the free market forces. It is called regulation. ...And what a good thing it can be to enhance democracy and its benefits! ...And what a bad thing it can be if misguided, uncontrolled, or if it is driven by anything but the common good.

Good regulation provides for the proper exercise of democratic and free market processes to enhance the common good. It is established to provide a framework that allows for the conduct of individual, industrial, commercial, financial, and other activities. Although all regulations restrict, regulation should not deter beneficial activities, but frame them and guide them. Thus, the minimal amount of regulation that achieves the primary objective is best for our society. That said, we should exercise the words of President Ronald Reagan: "Trust, but verify."

¹ John D. Sullivan, Center for International Private Enterprise, an affiliate of the US Chamber of Commerce, in his July 29, 1998, statement on How the Internet Promotes Free Market Philosophies and Democratic Principles Overseas before the House Committee on Commerce, referencing a statement by Eugen Jurzyca.

Poor regulation, on the other hand, focuses on restricting, limiting, and controlling, losing sight of the common good. This is in direct contradiction to the fundamentals of a democratic society and the free marketplace. Poor regulation can create the illusion of being "protective" while stripping freedom, all the way to the individual. There is a well known title for extreme regulation: dictatorship.

Regulation is a tool. It is not the alpha and the omega. The foundation, the beginning, is the democratic society itself and the free market system. The omega is the actual useful work done to benefit society. I believe that the role of regulation is to provide a meaningful and useful framework for the protection of rights, health, safety and the environment. Regulation is not to be made in isolation. If made in isolation, regulation is sure to be skewed. Establishing good regulation is a participatory undertaking, wherein the regulation is balanced by the national interest and by the views of proponents and opponents of the regulation.

I believe it is fair to say that presently there is seldom a lack of regulation. It is frequently too easy to do a little more, to appear a bit more "protective", and to add another ounce of conservatism. More regulation can appear enticing; but I am convinced that the right goal in our society should be to have *less and better* regulation. I believe this to be true because we have powerful self-correcting forces that will act promptly in favor of the people. These self-correcting forces are inherent to democracy itself, and include a free market system and the free flow of information. It is here that I want to acknowledge the importance of the information that we receive from our stakeholders. I especially want to thank David Lochbaum and Paul Leventhal for their personal insights.

Regulations need to result in a benefit, or they will result in a loss. There are no benefit-neutral regulations. I believe that it is sometimes better to regulate less than to regulate more. For instance, better reactor oversight has resulted when permitting more self-regulation, with more emphasis on safety.

Regulators must be mindful of the need to make policy decisions based on unbiased, substantiated and reliable information ... as things can easily go wrong. Let me give you a fictitious example: A government agency decided, after a favorable poll, to focus its resources on increasing the life span of its citizens. Rulemaking was expected, so two totally independent studies, conducted in isolation, were commissioned with the expectation that some convergence of results would make decision-making achievable within the life span of the agency. To everyone's surprise, the studies arrived at two drastically different conclusions, based on the same mortality data. Here are the results:

Study 1: Everyone that does not receive medical attention eventually dies.

Recommendation: Establish a plan to require that everyone receives mandatory health care at a significantly increased frequency. Monitor improvements for 100 years and report to the Secretary.

Confirmatory Note: A PRA study calculated the risk of death at one.

Study 2: Everyone that receives medical attention eventually dies.

Recommendation: Establish a plan to require that all health care systems be eliminated. Monitor improvements for 100 years and report to the Secretary.

Confirmatory Note: A PRA study calculated the risk of death at one.

It should not go unnoticed that, for the first time in history, two PRA studies got the same result.

These divergent recommendations were based on facts, although it should be noted that the panels did not address the minor issue of quality of life. This would be the objective of a follow-up study. It should also be pointed out that the substantial cost of the two plans were comparable: more health care on Plan 1 and more lawyers on Plan 2.

Caught in the ensuing controversy, the Secretary had to announce to the nation that: "It is not possible, generically, to rule out the possibility of death."

Seriously, as we all know, if there is life, there is risk. The only way to get to zero is to use infinity, and the only way to get to infinity is to divide by zero. Regulatory actions need to be based on facts; but facts that are placed carefully in the proper context and supported by the best available knowledge and operational safety experience.

And that brings us to assurance of adequate protection of public health and safety from the risk of the peaceful uses of nuclear energy and radiation. The NRC is not in the business of zero risk. We are responsible for assuring that risk is understood, that it is managed, and that it is low. Zero is not an option, it is a disruption. We take our business seriously and not in isolation. With the participation of the staff, stakeholders, and industry, we are getting better and better at it. Now, we know how to mix and match deterministic and probabilistic regulation, how to add requirements and how to decrease the unnecessary ones ... and we have the will to do it. We are learning how to define adequate protection in more precise terms, and to define it in terms that make sense to the American people, a task dear to my heart. A task I assure you I will not let go.

Today, you and I are enjoying the stability of good work and the expectation of better things to come. Rather than end on a technical note, allow me to close by expanding way beyond his original intent, a few chosen words from Paul of Tarsus. I am sure

Saint Paul did not have regulation in mind when he wrote to the Corinthians, but minor details like that have never bothered me much. So...

REGULATION

it does not put on airs
it is not snobbish
it is never rude
it is not self-seeking
it is not prone to anger
neither does it brood over injuries
it does not rejoice in what is wrong, but rejoices with the truth.

This is the Diaz addendum to the NRC's Principles of Good Regulation.

Whether it is love, democracy, the free market, information flow, or regulation, it should work for the common good.

I wish you well and I will see you here next year.