Policy Decision Memo

CLIMATE CHANGE LEGISLATION IN THE U.S. SENATE

Recommendation for Senator Barbara Boxer (D-CA) to vote on the Climate Stewardship and Innovation Act of 2005 (McCain-Lieberman), as proposed in an amendment (S.Amdt 826) to the Energy Policy Act of 2005 (H.R.6).

June 21, 2005

To: Senator Barbara Boxer From: ANONYMIZED

Re: Voting position on S.Amdt. 826: McCain-Lieberman: Climate Stewardship and Innovation Act of 2005.

Date: June 21, 2005

Today, Senators McCain and Lieberman attached their climate change bill (S.1151) as an amendment (S.Amdt. 826) to the Energy Policy Act of 2005 (H.R.6). Contrary to your previous support of the McCain-Lieberman legislation, I recommend that tomorrow you vote against this amendment. Primarily, your vote will be a strong statement against their inclusion of subsidies to nuclear power utilities. This may prove to be the strongest platform that we can use to object to large government subsidies for nuclear power generators, and we can do so while remaining supportive of the main goal of McCain-Lieberman: reducing greenhouse gas emissions. Voting against the amendment is more symbolic than substantive, as Senators McCain and Lieberman have again not collected enough votes from moderate Republicans to give the bill a chance of passing.

The Climate Stewardship and Innovation Act of 2005 (S.Amdt. 86, S.1151) is a step ahead in the right direction on climate change. It would establish a cap and trade system to reduce greenhouse gas emissions in the United States, and potentially at the lowest-cost. However, the costs of doing so are still large and uncertain, and therefore pose risks to this market and to the overall economy in the future.

As an environmental leader in Congress and a member of the Environment and Public Works Committee, which has been charged with evaluating S.1151, you are in a key position to make a statement on S.Amdt. 826. Taking action by voting against the amendment would send a clear signal to the Senate that you disprove of subsidies to nuclear power providers, and will oppose them in committee.

S.Admt. 826 is administratively feasible, though it should prove difficult with limited funding for both the EPA and DOC. However, California is in a unique position as a first-mover in the greenhouse gas emissions market, with the recent creation of the California Climate Action Registry for greenhouse gas emitters. Also, in 2002, with the passage of limits in California of emissions from mobile sources (cars and light trucks) taking effect in 2009, California is the first state to restrict carbon dioxide, and will set the stage for any later greenhouse gas emissions market nationallyⁱ. As a California Senator, you can take the symbolic stance of rejecting this amendment, knowing that your state has the willingness and ability to participate in a future greenhouse gas market-based program.

Climate change is an issue that the 109th Congress is attempting to confront and deal with. However, addressing climate change is a difficult problem because the earth's atmosphere is jointly shared by all the world's countries. No single country should want to extend itself to deal with the problem, given that the solutions will be very costly, and the entire globe will enjoy the benefits of greenhouse gas reduction. Because climate change is more than a national issue, Congress faces great difficulties in determining how the U.S. should approach reducing greenhouse gas emissions.

Currently, the most notable proposal in Congress is the Climate Stewardship and Innovation Act of 2005 (S.1151, S.Amdt 826), co-sponsored by Senators John McCain (R-AZ) and Joseph Lieberman (D-CT). Senators McCain and Lieberman have attempted legislation on this issue since 2001, with little success. Today, June 21, 2005, Senators McCain and Lieberman converted the Climate Stewardship and Innovation Act into an amendment (S.Amdt. 826) to the Energy Policy Act of 2005 (H.R.6). Tomorrow the Senate will be asked to vote on the amendment.

S.Amdt. 826 would to establish a market-based system for reducing greenhouse gases, which are the primary factor driving global climate changeⁱⁱ. Specifically, it would establish a national cap and trade program for greenhouse gas emissions, where overall emissions from covered entities would be capped at a government-mandated level, but then entities would be able to trade emissions allowances on a market, which is a cost-effective solution to regulation. This system is based on the successful Acid Rain reduction trading program, established by the 1990 Clean Air Act Amendmentsⁱⁱⁱ. Emissions of greenhouse gases (GHG) would be capped at 2000 levels and achieve that target by 2010. According to the Congressional Research Service Report RL32953, this

should achieve a 6.7% reduction in GHG in 2010, compared to no other government action to reduce GHG emissions^{iv}.

However, this reduction does not come close to returning the U.S. to 1990 or even to 2000 GHG emission levels, and is a tiny reduction compared to that required under the Kyoto Protocol^v. The Kyoto Protocol requires member countries to reduce emissions *below* 1990 levels, and initial estimates find that in 2003, overall GHG emissions were 5.9% below 1990 levels^{vi}, an early indicator of success.

The CRS report emphasizes the large uncertainty around compliance costs for S.Amdt. 826, mostly driven by a reluctance to forecast economic growth and its increased pressure on GHG emissions against the cap. Indications are that it will be more costly than \$7 per ton of GHG emissions, and the EPA states that our GHG emissions per capita are around 6.6 tons. Aback of the envelope calculation would be the 7% reduction under S.Amdt. 826, which is 0.5 tons per capita; there are 300 million people in the U.S. Which means 150 million tons at \$7 per ton, implies costs of at least \$1.05 billion per year, and this is most likely a low-end estimate.

Technically, S.Amdt. 826 is feasible, but in its current form, projected costs most likely outweigh the benefits. Approving S.Amdt. 826 would involve committing ourselves to enormous costs, with their associated drag on economic performance, for small benefits, which is a bitter pill any way you present it. This is fundamental reason the U.S. has not ratified Kyoto, underlying all the political positioning around the developing countries. While the principle of the amendment is sound, it is economically difficult to justify, and on the technical aspects alone, I recommend that you vote no.

At an initial level, it makes good political sense to again vote for the McCain-Lieberman legislation. Sen. Boxer, as an environmental leader, you recognize that the United States will eventually have to confront global climate change, and as a leader, you would rather be proactive. Given the projected impacts of global warming on California, in particular, with decreased water supply for southern California, and potential flooding in northern California with sea-levels rising, you have a strong interest in joining the Congressional leaders on combating climate change and supporting legislation to cap GHG emissions to protect your constituency^{ix}. The League of Conservation Voters has appointed you an "Environmental Champion", and this is part of your identity as a career politician^x. Voting against S.Amdt. 826 would reverse your previous course of supporting McCain-Lieberman legislation, and may be viewed by some as an abandonment of environmental principles.

However, Senators McCain and Lieberman have made an enormous concession to the nuclear industry in order to gather Republican support for their bill. You have previously spoken out against this inclusion of subsidies for the nuclear power industry^{xi}, but your attention to this detail has been overshadowed publicly by the association of the McCain-Lieberman bill with its principle of reducing GHG emissions by means of a market-based system, instead of the implications of nuclear subsidies. Voting no on S.Amdt. 826 would allow you to emphasize your position on nuclear subsidies as a deal-breaker, and you could do so at only a small cost.

Having just run successfully for re-election last year, you do not have the pressure of organizing a campaign, which means you can focus more on political relationships in Congress and a bit less on gathering swing votes in California. Your constituency has

already endorsed your positions on the environment, evidenced by your seniority. The key issue is whether voting no on S.Amdt. 826 will engender strife between you and Senators McCain and Lieberman, and other Democratic Senators who have supported McCain-Lieberman legislation in the past. If S. Amdt. 826 passes, it would be a landmark in the climate change arena. Unfortunately, given its previous versions and lack of success, the bill still does not have the projected number of votes to pass. Inclusion of this nuclear provision has not pulled enough moderate Republican votes over to approve the bill, given the current consensus in the Senate. Taking this into account, your vote will not be pivotal, and therefore you'll have the space to express your disproval of the nuclear subsidies without being solely responsible for rejecting McCain-Lieberman.

Senators McCain and Lieberman are aware of their need for increased support for their bill, and that they are far from the critical number required for approval. Because you all have mutually supported each other on prior environmental legislation, such as your Clean Water Act amendment in 2001^{xii}, we can reasonably expect Senators McCain and Lieberman to accept your no-vote as constructive criticism, rather than total rejection.

California Democrats will support you, given both their innovative creation of a GHG inventory program in 2001 and recent, turbulent history with electric utilities, during the energy crisis of 2000 and 2001. In voting no, you can state your general support for S.Amdt. 826, and your refusal to accept nuclear subsidies as part of that package. The Democratic Party has downplayed climate change as an important issue, both during the 2004 Presidential campaign and currently, so there should be no prohibitions against a no-vote here.

As a minority member of the Environment and Public Works Committee, you have a key voice on this legislation. By voting no, you also indicate that you will again vote no, if S.1151 comes to a committee vote, unless the nuclear subsidy provision is removed. This is one of the most effective ways to communicate your opposition to a particular section of the bill, and Senators McCain and Lieberman will be forced to take this into account, in order to ever get S.1151 out of committee.

There are two remaining political concerns: electric utilities in California, and environmental groups. Voting against S.Amdt. 826 would further remove thoughts of large government subsidies that are incredibly attractive to utilities. However, given that they are not significant campaign contributors, and that you have fought them before and are still fighting over the California Energy Crisis of 2001, and the utilities refusal, so far, to pay retribution to the state of California for market-manipulation^{xiii}, we should not worry about losing electric-utility support.

Environmental groups, on the other hand, may pose the largest risk. While generally supportive of the Climate Stewardship and Innovation Act of 2005, some environmental groups, such as the Sierra Club, oppose the inclusion of subsidies for new nuclear power plants enough to no longer support the McCain-Lieberman legislation. But not all groups agree that nuclear subsidies are a terrible deal. Some see nuclear power, as the Bush Administration proposes, as a relatively clean alternative to fossil fuel use, in terms of GHG emissions. Looking at your major environmental campaign supporters, in the 2004 election they were the League of Conservation Voters, the California League of Conservation Voters, and the Sierra Club^{xv}. So we can count on

their continued support, as they also support renewable energy sources, instead of nuclear, with complicated waste disposal options^{xvi}.

If S.Amdt. 826 were to pass, there would be some serious issues for implementation, but ultimately, it appears that the U.S. will be able to support a GHG market sometime in the future. That said, my recommendation for you to vote against S.Amdt. 826 is not based on issues related to implementation. However, it is worthwhile to understand these issues, and how California may be uniquely positioned to take the most advantage of a GHG market in the future.

The policy objectives of S.Amdt. 826 are clear: to create a market-based system to restrict GHG emissions in the United States, and to reach the stated goal of reductions to year 2000 emissions levels by 2010. The cap on the level of emissions in 2010 is unambiguous, and would have legal backing, if S.Amdt. 826 passes.

Prior experience with cap and trade programs, such as the Acid Rain trading market established by the 1990 Clean Air Act Amendments, indicates that it should be feasible to implement S.Amdt. 826. A key difference between the two is the relative size of the two programs: both are nationwide, but cover different entities. The Acid Rain program only covers power plants, while the McCain-Lieberman amendment would cover power plants and any other entity emitting over 10,000 metric tons of carbon dioxide equivalent annually xvii. This implies that the oversight agencies, the Environmental Protection Agency (EPA) and Department of Commerce (DOC), would be involved in a task that at least EPA has some experience with, since they administer the Acid Rain program, but at a new, monumental scale.

Specifically, DOC will be charged with allocating initial quotas for GHG emissions to covered entities^{xviii}. This is no small task, and may very well prove to be next to impossible to accomplish, both practically and politically. Creation of a market-system for trading GHG emission allowances instantly creates wealth for those involved in the system, because now entities can sell their ability to reduce GHG emissions, whereas before they had no monetary outlet for that action. S.Amdt. 826 indicates that DOC shall provide allocations to covered entities at no cost. Essentially, the government is transferring ownership of the right to pollute GHGs to these entities, in the amount of their assigned quota. Alternatively, the government may auction off these allowances and use the associated revenue to offset government spending on program administration, or in other areas, or even deficit-reduction. Allocation of these allowances will require large amounts of DOC resources, and will most likely require hiring new staff, which specialties in industry analysis, and creation of a whole retinue of new SOPs to deal with this allocation task, which would be new for DOC.

S.Amdt. 826 also would establish the Climate Change Credit Corporation, a non-profit entity charged with facilitating the market in GHG emissions^{xix}. This new institution alone will be a large draw on already-limited DOC resources. In fact, S.Amdt. 826 intends for the market-based system to be self-financing^{xx}, with proceeds from the market-transaction of allowances. Money to support this amendment appears to be quite limited, and will likely be a contentious issue, particularly given the large projected compliance costs of reducing GHG emissions.

One factor that may prove crucial to implementation is the various initiatives that have already been started by a few select states. California, for example, has already

established a GHG registration program, in anticipation of a future market for GHG emission allowances^{xxi}. S.Amdt. 826 has a clause that would provide greater allowances to entities that have been first-movers, and are already participating in a GHG emission program, such as the California Registry^{xxii}. Existing markets, such as the Chicago Climate Exchange^{xxiii} where participants voluntarily trade greenhouse gas emission reductions, stand to make substantial profits if their markets expand to cover the electric utilities, manufacturing, and transportation sectors. They already have the technology in place to support a mandatory cap-and-trade market, and will profit enormously from expanding those markets, if the government chooses to include them, instead of recreating a similar system as part of the Climate Change Credit Corporation.

Finally, a large implementation issue is the dual responsibility assigned to the EPA and DOC under S.Amdt. 826. While DOC will deal with the initial issues of allocating quotas, the EPA will be burdened with enforcing the legislation, and with bear the brunt of DOC's initial allocation decisions at the ground-level. The two agencies will be forced to work together in order to effectively implement the cap and trade program, and this will require large amounts of resources: money, staff, information, and motivation. In effect, S.Amdt. 826 would multiply both agencies responsibilities but provide them with very limited resources to do so, which should prove problematic.

In sum, your best position on the McCain-Lieberman bill, as attached to the Energy Policy Act of 2005, is to vote against it. Politically, this is feasible for you, and possibly the most effective way to voice your opposition to included nuclear power subsidies. Technically and administratively, this will be a difficult policy to create. While we agree with the principles of the amendment, I recommend that you vote no.

Appendix A: Primary Decision Maker / Decision Point

In this policy decision memo, I advise Senator Barbara Boxer (D-CA) to vote *against* the McCain-Lieberman amendment to the Energy Policy Act of 2005 (S.Amdt. 826 to H.R.6). A temporary suspension of disbelief will place us back in time to June 21, 2005, when Sen. McCain (R-AZ) introduces the amendment, with Sen. Lieberman as cosponsor. The amendment, S.Amdt. 826, will go to a vote on the Senate floor on June 22, 2005.

In fact, Senators McCain and Lieberman proposed their Climate Stewardship and Innovation Act of 205 (S.1151) in amendment form (S.Amdt. 826), in order to attach it to the larger energy policy legislation (H.R.6)^{xxiv}. The amendment would "provide for a program to accelerate the reduction of greenhouse gas emissions in the United States," a policy stance that Sen. Boxer has previously supported. Interestingly, Sen. Boxer voted to support the 2003 version of the McCain-Lieberman bill, but voted against S.Amdt. 826, which was defeated (38 yea - 60 nay) on June 22, 2005. An article in Greenwire sites the reason for Sen. Boxer's change: "the inclusion of nuclear power provisions". Sen. Boxer is one of four Democrats who changed their vote, after supporting McCain-Lieberman in 2003.

Senator Barbara Boxer (D-CA) has served in the Senate since 1993, and prior to that, served ten years in the House of Representatives^{xxvii}. Sen. Boxer was just re-elected in 2004, with 58% of the vote, and will be up for re-election in 2010^{xxviii}. Sen. Boxer was born in 1940, received her BA in Economics from Brooklyn College in 1962, and is married with two children^{xxix}. She currently serves on three Senate committees: Commerce, Science, and Transportation; Environment and Public Works, and Foreign Relations^{xxx}. Sen. Boxer has received campaign contributions from various sources, the majority of whom are individual contributors (77% since 2001).^{xxxi} Top individual contributors include the University of California, the State of California, Time Warner, and the League of Conservation Voters. The top sectors contributing are lawyers and lobbyists, single-issue and ideological groups, and communication and electronics. The energy and natural resources sector contributes the least, in comparison^{xxxii}.

Sen. Boxer has a strong environmental record. **xxiii** Sen. Boxer has been endorsed as one of the League of Conservation Voters' (LCV) "Environmental Champions" because she has a proven history as an environmental leader in the Senate. She received a 100% score from the LCV in 2004, and 89% in 2003. **xxvv** In 2001, Sen. Boxer authored an important amendment to the Safe Drinking Water Act, that requires improved standards for arsenic and provisions for public notification of water quality. **xxvvi** In 2005, Sen. Boxer introduced legislation (S. 439) to prevent MTBE contamination. But Sen. Boxer is also willing to make statements with her votes, as she has on the past few energy bills, including the 2005 bill (H.R.6), which she voted against because they did not encourage clean, renewable energy enough compared to subsidies for nuclear and fossil fuel use **xxxvii**.

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