



July 10, 2009

Honorable Barbara Boxer
Chairman
Committee on Environment and Public Works
U.S. Senate
Washington, D.C.

Dear Chairman Boxer,

During the July 7, 2009 Committee hearing on global warming legislation you asked me to provide additional responses to two questions: what provisions of the current Clean Air Act authority to regulate greenhouse gas emissions are important to retain and why. Second, you asked for NRDC's views and recommendations on the Congressional Budget Office's approach to estimating the budget impact of allowance allocation provisions.

I. Current Clean Air Act

In constructing a new program to cap and reduce carbon pollution, we should build on, not replace, the existing Clean Air Act. The House bill, however, makes a number of unnecessary and, we believe, damaging changes to the Clean Air Act.

The House bill would add a new section 811 to the Clean Air Act that would entirely repeal current Section 111's New Source Performance Standards for greenhouse gas emissions from sources covered by the House bill's cap. Section 833 of the House bill would exempt consideration of greenhouse gases under the current Act's New Source Review (NSR) provisions for all sources, capped or not. NRDC believes these provisions are too sweeping and would inappropriately eliminate the government's ability to establish reasonable and affordable performance requirements that would complement the cap and contribute to achieving the goals of the law in an efficient and cost-effective manner.

Since the first comprehensive federal clean air law signed into law by President Nixon in 1970, Congress has recognized the value of providing complementary approaches to achieving our air quality and emissions objectives, rather than relying exclusively on a single instrument. Thus, in the 1970 Act Congress enacted both a broad *air quality management program* aimed at limiting ambient air concentrations of

pollutants (sections 108-110) and *emission standard* programs to continuously reduce emissions from motor vehicles (section 202) and large stationary air pollution sources (section 111).

Congress created this dual system because if we did not take advantage of technology improvements to achieve emission reductions from the largest pollution source categories in the economy, there would be too much strain placed on the ambient air quality standards. In the 1977 amendments to the Act, Congress established a case-by-case process under the NSR Program in order to assure a more rapid updating of improvements in pollution control technology as new plants were built and old ones modernized.

The argument has been made that with an overall cap or budget on greenhouse gas emissions, we should simply not care about the amount of emissions from individual sources or even entire sectors. But Congress rejected that approach in the 1990 amendments when it enacted a cap on sulfur dioxide emissions from the electric power sector to combat acid rain. Congress retained the NSPS and NSR programs for the sources covered under the acid rain program, and those programs have continued to function well to minimize emissions from new sources, thereby reducing pressure on the sulfur dioxide cap and demonstrating improved and less expensive means of emission reduction that can be used to reduce emissions from existing sources as well.

There are even stronger reasons to retain minimum levels of emission reductions for key sectors in the global warming legislation Congress is considering. First, we know that the near-term cap targets in the legislation are substantially weaker than what the science requires. They are compromises, apparently reflecting the best that a majority in the current Congress is prepared to support. The goal of reducing emissions by 80% from 1990 levels by 2050 is like a marathon: we cannot hope to complete the race if we do not set and maintain a pace of technology improvement for key sectors from the start of the race. This is especially true for long-lived, high capital investment projects like coal-fired power plants. If we do not craft a program that will reduce emissions from the existing fleet of coal-fired power plants at a reasonable but steady pace we run the risk of facing claims of threatened power shortages or destructively large electric rate increases as an aging fleet reaches the point where major retrofits or retirements are required for a huge fraction of the fleet in a very short period of time. A cap with no other complementary measures would encourage delay in reducing emissions from the existing coal fleet.

In addition, the very large volume of offsets in the House bill will encourage reliance on offsets to comply rather than on investments to reduce emissions from existing coal generating units. Even if the offsets are of the highest quality and represent emission reductions fully equivalent to emissions from covered sources, overreliance on such offsets by key sectors like the power sector will leave the sector poorly positioned to achieve the deep reductions that are required to meet the longer-term cap objectives of the legislation. And if, as is likely, some fraction of offsets do not achieve fully

equivalent reductions, then system-wide emissions will be higher than required to meet the legislation's objectives.

The amendments made by the House bill would exacerbate the threat of continued high emissions from the existing coal fleet. While the bill includes statutory emission standards for new coal units, all existing units are grandfathered from these standards. In addition, the new source standards in the House bill do not apply even if an existing unit makes a major overhaul that increases its emissions substantially and extends its operating life by decades. Under the current Clean Air Act such old plant overhauls would be covered under NSPS as a modification and required to meet modern emission standards. But the House bill repeals this NSPS modification provision, creating a loophole that could frustrate the intent to require new investments in coal generating units to meet the emission standards established by new section 812. With the new modification loophole there will be an incentive for existing coal plant owners that need additional capacity to produce that additional capacity by refurbishing and expanding one or more existing units rather than building a new unit that would have to meet the section 812 emission standards. For example, if a power company needs an additional 300 MW of generating capacity to meet forecasted demand it could build a new 300 MW unit and meet the section 812 standards but due to the modification loophole, it could evade these standards by refurbishing and expanding an existing unit that has only operated a fraction of the year. Instead of building a new 300 MW unit the company could refurbish and expand 500 MW of existing capacity that has operated, say, only 35% of the year so that the expanded modified capacity is available 85% of the year, providing generating capability as great as or greater than building a new unit. This loophole must be closed and can be done by including a simple provision that requires existing units that expand operations and/or increase nameplate generating capacity to meet the section 812 standards. Since the House bill provides for substantial subsidies for carbon capture and disposal for existing as well as new units, meeting these requirements at refurbished coal plants need not result in disruptive fuel shifts or substantial electric rate increases.

While closing the modification loophole is critical, if only that change were made EPA would still be left without adequate authority to assure reasonable progress in reducing emissions from the existing coal fleet. Under current law section 111(d) provides EPA and the states with a mechanism to achieve reasonable reductions from existing units but that provision is repealed in the House bill. Rather than creating a gap in authority to implement such reasonable reductions, we urge your Committee to consider a couple of alternatives that would be effective in assuring that today's existing coal fleet does get cleaned up over time. One approach would be to require aging coal units to either meet the section 812 emission standards or to be replaced with modern capacity. Such a "birthday provision" would apply only to older units that have been fully amortized, for example units that have reached 50 or 60 years of age. Another approach would be to establish a low-carbon generation obligation that would require an increasing fraction of generation from the existing coal fleet to meet the section 812 standards over time. A version of this concept was included in S. 309 in the previous Congress, sponsored by you, Senator Sanders and then Senator Obama, among others.

II. CBO Budget Impact Estimate Methodology

The Congressional Budget Office described their approach to estimating the budget impacts of allowance allocations in a May 15th letter to Chairman Waxman.¹ In this letter CBO indicates that allowances allocated to electric local distribution companies (LDCs) would be scored as not having a net budget impact if the LDCs are allowed to use the allowances to reduce customer bills directly through rate reductions or rebates, but that if LDCs are directed to use allowance value for energy efficiency investments such allocations would be subject to a 25% revenue offset. NRDC believes that this analysis is substantively incorrect and leads to a perverse policy outcome by discouraging a requirement for LDCs to invest in cost-effective energy efficiency measures which would result in greater consumer benefits than direct rate reductions.

CBO's analysis is premised on the idea that direct rebates to electricity consumers counteract the price impact that would otherwise occur so there is no budgetary impact, whereas increased spending on energy efficiency is assumed to displace other spending in the economy (based on CBO's fixed nominal GDP assumption) and therefore does not generate an "offsetting offset" to the 25% revenue offset CBO normally assumes for government measures that raise revenues or equivalently increase consumer costs. CBO's analysis is incomplete, however, because it does not consider the consumer benefits that result from cost-effective energy efficiency investments.

Consider the following examples:

Case 1: An LDC sells \$100 worth of allowances and uses the proceeds to "counteract the price increase that consumers would otherwise face" by reducing the distribution charges on customer's bills. Overall taxable income would be unaffected by the policy, according to CBO's May 15 letter.

Case 2: An LDC sells \$100 worth of allowances and uses the proceeds to buy energy efficient light bulbs for their customers. This efficiency improvement counteracts the price increase that consumers would otherwise face by lowering their electricity consumption. The LDC has no net change in its income because its rates are subject to a decoupling provision (which automatically adjusts their per kilowatt-hour rates to compensate for reduced sales from the efficiency measures), and consumers would face the same total cost of electricity as before the proposal was enacted. Electricity generators would have less taxable income due to lower demand, but this is compensated by increased spending elsewhere in the economy according to CBO's fixed nominal GDP assumption. Accordingly, taxable income in the economy as a whole is unchanged as are government revenues.

¹ <http://www.cbo.gov/ftpdocs/102xx/doc10232/5-15-WaxmanLetter.pdf>

Both of these cases result in the same outcome for consumers—their electric bills remain unchanged as a result of the policy—yet CBO’s current approach suggests that Case 2 results in a \$25 loss of government revenue whereas Case 1 does not.

As I stated in response to your question at the July 7th hearing, I urge you to ask the Director of CBO to reconsider their approach and ensure that CBO is appropriately accounting for the consumer benefits of energy efficiency investments.

Please let me know if I can provide any additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "David G. Hawkins". The signature is fluid and cursive, with a prominent initial "D" and "H".

David G. Hawkins
Director
Climate Programs