

SUMMARY OF KEY PROVISIONS OF THE AMERICAN POWER ACT OF 2010 (APA),

(May 13, 2010 Discussion Draft)

The American Power Act (APA) “discussion draft” circulated by Senators Kerry and Lieberman provides inadequate greenhouse gas emission reductions, rolls back proven Clean Air Act programs that could otherwise provide the needed reductions, and actually expands our reliance on dirty technologies like coal-fired generation, offshore drilling, and nuclear power. Moreover, because the APA relies heavily on offsets, which frequently do not result in real and additional emission reductions, it is highly unlikely that even the modest reductions called for under the bill would be realized.¹

THE APA IS CONSISTENT WITH A TRAJECTORY RESULTING IN ATMOSPHERIC GREENHOUSE GAS CONCENTRATIONS OF 650 PPM, A SURE PATHWAY TO CLIMATE DISASTER

The APA’s emission reductions fall far short of the reductions needed to significantly curtail the risk of severe, widespread, and irreversible effects on the planet. Leading scientists warn that “to preserve a planet for future generations similar to that in which civilization developed and to which life on Earth is adapted . . . CO₂ will need to be reduced from its current 385 ppm to at most 350 ppm.” The APA would put us on a pathway to atmospheric concentrations of greenhouse gases of 650 parts per million (ppm), a recipe for disaster.

The stated goals of the APA are to reduce economy-wide greenhouse gas pollution and emissions from capped sectors to 17% below 2005 levels by 2020 and 83% below 2005 levels by 2050. However, the actual reductions required under the bill do not meet this goal, partly because the ‘cap’ envisioned under the APA only covers approximately 85% of domestic emissions and remaining uncapped sources of emissions would be exempted from federal regulations for greenhouse gas emissions until at least 2020. Even under the optimistic assumption that the cap-and-trade program functions as envisioned and the large quantity of offsets do not undermine reductions, the APA would only reduce economy-wide emissions by approximately 14.5% from 2005 levels by 2020, or a mere 0.7% below 1990 levels. By 2050, emissions would be reduced by 73% below 2005 levels, or 69% below 1990 levels.

According to emission reduction trajectories analyzed by the International Panel on Climate Change, the 0.7% reduction from 1990 levels by 2020 under the APA is consistent with a trajectory resulting in atmospheric greenhouse gas concentrations of 650 ppm CO₂-eq. At 650 ppm, there is a 92% chance that the resulting increase in global mean temperature will exceed 2°C (3.6°F) from pre-industrial levels, an 80% chance that the increase will exceed 3°C (5.4°F) and a 40% chance that the increase will exceed 4°C (7.2°F).

With temperature rises of 2°C, millions of people would be displaced due to sea level rise, entire ecosystems would be lost, and multiple climactic “tipping points” such as complete loss of summer Arctic sea ice and the

¹ The Center’s analysis of the American Power Act, including citations and supporting references, can be found at http://www.biologicaldiversity.org/programs/climate_law_institute/legislating_for_a_new_climate/index.html.

irreversible melting of the Greenland ice sheet could be triggered, resulting in accelerated warming and a further sea level rise of seven meters. With a 3°C temperature rise, tens of millions of additional people would be displaced by sea level rise, billions of people would suffer an increase in water stress, 65 countries would lose 16% of their agricultural gross domestic product, and the Amazon forest would be converted from a carbon sink to a carbon source. And with a 4°C temperature rise, entire regions, including Australia, would not be able to sustain agriculture and many experts estimate there would be a greater than 50% chance that ocean circulation, including the Gulf Stream, would break down.

It is critical that policymakers acknowledge the great danger to humankind from half-measures like the APA, which would leave future generations to deal with what can only be labeled climate catastrophe. Emission targets must be strengthened to reduce CO₂ concentrations to below 350 ppm. This requires a comprehensive solution that reduces greenhouse pollution by at least 40% below 1990 levels by 2020.

THE APA EXPANDS AND PROLONGS AMERICA'S RELIANCE ON DIRTY ENERGY

The APA provides a package of subsidies, regulatory streamlining provisions, and other incentives for expanded offshore oil exploration, nuclear power, and continued reliance on coal-fired electricity generation.

Offshore Oil: The bill incentivizes more offshore oil drilling by expanding state and local government eligibility to receive a share of the revenue from offshore oil royalties and leases. Coastal states not currently sharing in offshore oil revenues would receive 37.5% of lease rental payments, lease royalty payments, royalty proceeds, and other revenues, 20% of which would be sent directly to county-level local governments along the coast. The clear intent is to *expand* offshore oil drilling into new areas by promising enough money to overcome state and local opposition.

Nuclear Power: The APA limits public participation in approval hearings, streamlines environmental review, and provides new tax credits and subsidies for nuclear power. The bill directs the Nuclear Regulatory Commission to develop an “expedited process” for approving new nuclear plants, which may impose new restrictions on public participation. The bill also limits review of nuclear projects under the National Environmental Policy Act; environmental review of actual power plant construction would be required only in limited circumstances. Finally, the bill provides additional financial guarantees, incentives, and subsidies, including payments in the event of project delays, to this dangerous and already intensively subsidized industry.

Coal-Fired Electricity Generation: The bill could relax environmental standards for existing coal-fired power plants while subsidizing carbon sequestration technology for future plants. For existing plants, the bill would add a new section to the Clean Air Act providing incentives for increasing efficiency at these plants and eventually shutting them down. However, the bill also establishes a “task force” that would consider granting exemptions from Clean Air Act regulations limiting emissions of non-greenhouse pollutants in exchange for a promise to close down. For planned and future plants, the bill creates a \$2 billion per year subsidy for carbon capture and sequestration, funded by assessments on utilities that will be passed on to ratepayers, and allocated under the guidance of an advisory council dominated by industry. The bill also distributes potentially valuable emissions allowances to operators of carbon capture and storage projects—another direct subsidy for an as-yet-unproven technology ultimately intended to expand and extend America’s reliance on dirty coal.

THE APA STRIPS EPA OF AUTHORITY TO REGULATE GREENHOUSE GAS EMISSIONS UNDER THE CLEAN AIR ACT

The APA dramatically curtails federal authority to regulate greenhouse gas emissions under existing laws. These provisions would senselessly discard some of our most powerful existing legal tools for reducing greenhouse pollution—including nearly all of the proven, effective programs established by the Clean Air Act. For four decades, the Clean Air Act has protected the air we breathe, saved thousands of lives each year and improved public health. No changes are needed to the statute before it can be deployed to reduce greenhouse gas pollution. Yet the APA exempts greenhouse gases from most of the statute's provisions.

First and foremost, the bill would prevent establishment of a science-based, nationwide limit on greenhouse gas concentrations in the atmosphere. Under the Clean Air Act's national ambient air quality standards program, EPA must limit atmospheric concentrations of dangerous pollutants to protect public health and welfare. The Clean Air Act thus provides a readily available, powerful tool for limiting maximum concentrations of CO₂ to 350 ppm, the level scientists currently believe is necessary to avoid the worst impacts of global warming. Under the APA, this authority would disappear.

The bill also would eliminate nearly all existing authority under the Clean Air Act to regulate greenhouse gas emissions from major "stationary sources" like factories and power plants. EPA and the states would be unable to set minimum emissions requirements under the Clean Air Act's new source performance standards program for a wide range of industries covered by the bill's cap-and-trade provisions. The bill also exempts many new and modified sources of greenhouse pollution from existing permit requirements under the Act's new source review and Title V permitting programs. Finally, the bill restricts the Clean Air Act's ability to address ocean acidification, a growing problem resulting from atmospheric CO₂ dissolving in the oceans and making them more acidic.

Also troubling is the bill's treatment of sources of greenhouse pollution not covered by the cap-and-trade system. These "uncapped" sources include major emitters of methane—a greenhouse gas far more potent than CO₂—such as landfills, livestock feeding operations, and coal mines. Yet the bill would exempt these uncapped sources from *any* federal emissions limitations until at least 2020. Instead of requiring any of the many available and cost-effective emissions reductions from these sectors, the bill would allow reductions to be turned into carbon credits, sold to polluters subject to the cap-and-trade program, and used to offset capped emissions for at least the next decade.

The bill thus preserves only a few shreds of existing Clean Air Act authority. EPA would be allowed to establish new source performance standards for existing coal-fired power plants. However, it is unclear how this authority would dovetail with the bill's process for creating exemptions from other Clean Air Act requirements for existing coal plants. EPA also would retain authority to limit emissions from passenger cars and trucks in conjunction with the establishment of fuel economy standards. Yet the bill also creates new exemptions and imposes new conditions on EPA's ability to regulate emissions from other "mobile sources" of greenhouse gases like ships, airplanes, and off-road engines.

The bill thus leaves the nation's response to climate change entirely dependent upon an untested cap-and-trade program—a program already weakened by over-reliance on offsets of unknown quality and a set of woefully inadequate emissions reduction targets. Any future efforts to reduce greenhouse gas emissions must be *in addition to*—rather than *instead of*—the Clean Air Act and other environmental laws.

HEAVY RELIANCE ON OFFSETS UNDERMINES ATTAINMENT OF THE APA'S EMISSION REDUCTION OBJECTIVES

The APA relies primarily on a “cap and trade” program. Entities covered under the cap must hold either an emissions allowance or an offset credit for each ton of CO₂eq emissions they emit. Under the APA, capped entities may collectively use up to 2 billion tons of CO₂eq offset credits each year to demonstrate compliance with the cap. One quarter of these offsets may come from international sources, though EPA can increase the amount to half (one billion tons) if it is determined that insufficient domestic offsets are available. Because offsets relieve capped entities from reducing their own emissions, if all 2 billion tons of offset credits were used each year, direct emissions from capped sources in the U.S. in 2020 would actually grow 16% above 2005 levels and would not begin to drop below 2005 levels until 2027.

APA's heavy reliance on offsets will likely result in higher levels of global emissions than would have occurred in the absence of the offset program. Unless offsets represent real, measurable, permanent and “additional” reductions – reductions that would not have otherwise occurred in the absence of the incentive provided by the offset credits – they do not help achieve the targets because these credits simply allow entities to increase their emissions without a corresponding reduction in emissions elsewhere. These concerns are particularly acute because some of the activities eligible to generate offset credits are uncertain or are already happening. Emission reductions from agriculture, land management, and forestry, which could comprise a significant portion of domestic offsets under the APA, are particularly uncertain.

In addition, because the APA prohibits federal regulation of projects eligible for offsets until at least 2020, it foregoes steeper and critically needed additional reductions for important greenhouse pollutants like methane, where many emissions reductions are available at no cost or even a cost savings. For example, sources like coal mines and landfills are increasingly capturing methane because the technology is available, relatively inexpensive or cost-saving, and can provide a commercially viable source of energy. However, rather than require mines and landfills to realize these reductions, the APA makes methane collection projects eligible for offset credits. Doing so could allow methane reductions to be used as a substitute for, rather than a supplement to, reductions by capped entities and pay methane producers a premium for measures they already have a financial incentive to undertake.

The international offsets under the APA face similar, well-documented problems. The significant uncertainties associated with calculating sector-wide GHG reductions, the notorious difficulty of accurately measuring forest carbon, and the substantial risk that emissions avoided in one area will be displaced elsewhere, all threaten the integrity of the proposed program. One 2007 study examining 93 official projects registered between 2004 and 2007 in the world's largest existing offset market, the Clean Development Mechanism, found that the climate benefit was questionable for fully 40% of the projects.

Despite the government's own determination that carbon offsets “may not be a reliable long-term approach to climate change mitigation,” the APA would make offsets a prominent part of U.S. climate policy. This result must be avoided at all costs: if it is cheaper for polluters to purchase offsets than reduce their own emissions, there will be little incentive to invest in the transformative technology needed to transition to a low-carbon economy.