

**Eugene M. Trisko
Attorney at Law
P.O. Box 596
Berkeley Springs, WV 25411
(304) 258-1977
(301) 639-5238 (cell)
emtrisko@earthlink.net**

**Statement on behalf of the
United Mine Workers of America, AFL-CIO
Before the
Committee on Environment and Public Works
United States Senate
October 29, 2009
S. 1733, Clean Energy Jobs and American Power Act**

Chairman Boxer, Ranking Member Inhofe and distinguished members of the
Committee:

I am pleased to be here today to testify on behalf of the United Mine
Workers of America (UMWA), the labor union representing the nation's organized
coal miners. I have represented the UMWA in clean air and global climate change
issues for more than 20 years, including participation as an NGO at all major
United Nations climate negotiating sessions subsequent to the 1992 Rio Earth
Summit. A copy of my bio is Attachment 1. Attachment 2 is a recent op-ed by
UMWA President Cecil E. Roberts outlining the union's concerns with current
climate change legislation. My testimony addresses these issues in more detail.

The Clean Energy Jobs and American Power Act Act (S. 1733) is being
considered as the Senate counterpart to H.R. 2454, the energy and climate change
legislation adopted last June by the House of Representatives. We are very pleased

to have the opportunity to comment on this proposed legislation, and will focus particularly on its cap-and-trade and carbon capture and storage provisions.

Because the Chairman's Mark was just released as this statement was being prepared, and because the bill may be expanded with the addition of energy and other proposals, the union does not take any position on the bill at this time.

Background

The UMWA has sought technological solutions to the environmental challenges facing coal production and use for decades. The union fought, but ultimately lost, a 10-year legislative battle to require large coal-based generating plants to install available scrubber technologies to reduce their sulfur emissions. Due to fuel-switching to meet Title IV acid rain emission reductions, coal production in major eastern coal producing states declined by more than 113 million annual tons between 1990 and 2000. More than 30,000 coal mining jobs were lost. Dozens of mining communities have all but ceased to exist across economically-depressed Appalachia and the rural Midwest.

The UMWA recognizes that climate change legislation represents the greatest threat to its membership and to the continued use of coal. In July 2007, the UMWA, the AFL-CIO and other industrial unions endorsed the bipartisan Bingaman-Specter climate change bill (S.1766). In our view, that bill provided an appropriate balance of technology incentives, reasonable emission reduction

targets and timetables, and safeguards for the economy. Achieving the proper balance among technology incentives, the timing and stringency of emission reductions, and economic safeguards will be essential for obtaining broad bipartisan support for climate legislation.

Preference for National Legislation

The UMWA strongly prefers properly balanced national climate legislation to U.S. EPA regulation of greenhouse gas emissions, or to piecemeal state and regional climate programs. U.S. EPA regulation of greenhouse gas emissions is already underway in response to the Supreme Court decision in *Massachusetts v. EPA* (2007). The union recognizes that national legislation is the best means to balance competing energy, economic and environmental interests, while assuring appropriate incentives for the development and deployment of advanced coal generation employing carbon capture and storage (CCS) technologies. These technologies will be essential for meeting any national or global carbon reduction goals over the next century. The United States should position itself as the technological leader of CCS development in order to foster its widespread adoption here and abroad.

While the UMWA did not endorse H.R. 2454, the union supported the House climate process, and was encouraged by the provisions of the bill supporting non-budget funding for the early demonstration of CCS technologies, and bonus

allowance support for subsequent commercial deployment of CCS. The UMWA likewise views the work of the Senate Coal Group, much of which is reflected in the Chairman's Mark, as providing important forward progress in the development of comprehensive climate legislation. The union remains concerned, however, about a number of aspects of the bill, including the stringency of its initial targets and timetables, the uncertainties of adequate supplies of domestic and international offsets, the elimination of the House provisions preempting future EPA regulation, and its potential adverse impacts on domestic coal production and related coal mining employment.

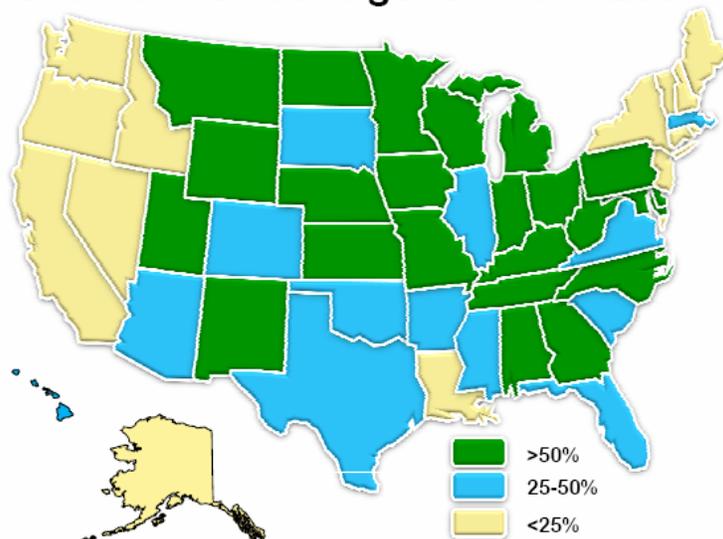
The Role of Coal in America's Energy Supply

Coal is an indispensable part of America's energy supply. The U.S. has a demonstrated coal reserve base of 487 billion tons, with an estimated 267 billion tons of recoverable reserves.¹ Our recoverable coal reserves have the energy equivalent of roughly one trillion barrels of oil, equal to world known oil reserves.

Approximately one-half of our electricity is generated by coal. Twenty three states rely on coal for more than half of their electric supplies, while another 12 states receive 25% to 50% of their electricity from coal (see map below).

¹ <http://www.eia.doe.gov/cneaf/coal/page/acr/table15.html>

Coal % of electric generation - 2007



Source: U.S. DOE/EIA, Electric Power Annual (2008)

To reduce coal in our energy supply mix means using another fuel to replace it for baseload generation, most likely a combination of nuclear and natural gas, supplemented by renewable energy. Such a fundamental shift in U.S. energy policy would bring into question the cost and the availability of natural gas supplies. Substantial increases in demand for natural gas, even with enhanced domestic supplies, likely would lead to higher electric generation costs and higher natural gas costs for consumers and industries. Current natural gas futures prices indicate gas prices increasing from \$5.48/mcf in December 2009 to \$7.20/mcf in January 2011 and \$8.03/mcf in January 2015 – before climate legislation has been enacted.²

² Data from NYMEX as of October 26, 2009, at http://www.nymex.com/ng_fut_csf.aspx

S. 1733 Requires Comprehensive Economic Analyses

Due to its aggressive emission reduction targets and timetables, S. 1733 would impact virtually every aspect of energy supply and demand in this country. We look forward to complete U.S. DOE/EIA and U.S. EPA analyses of the economic, energy and environmental impacts of this legislation, and hope that these studies will be available to guide the Committee's deliberations. EPA's preliminary evaluation of the bill, released on October 23, relies mainly on previous studies of the House bill, and does not provide any coal market impact results.

Support for Senate Coal Group Recommendations and for Non-Budget Early CCS Demonstrations

There is much in this proposed legislation that UMWA supports, including improvements to the House bill recommended by the Senate Coal Group in areas such as advance payments for CCS bonus allowances, increasing the threshold for CCS-based NSPS standards for new coal plants from 4 Gigawatts to 10 Gigawatts of demonstrated capacity, redefining the bases for CCS bonus allowances to net "treated" capacity, and making methane from coal mines and landfills potential sources of domestic offsets, rather than regulated source categories.

We strongly endorse the adoption in Section 125 of non-budget support for the early demonstration of CCS technologies on a commercial scale. Changes to

this provision since its initial development in the House by Rep. Rick Boucher have enhanced the role of state public utility commissions, ensuring greater transparency and accountability. Appropriated funds cannot provide the security for financial planning that developers of multi-billion dollar projects require.

This non-budget support for early CCS deployment is based on the unanimous recommendations of the U.S. EPA Advanced Coal Technology Work Group (ACT). In January 2008, U.S. EPA's ACT Work Group, representing a broad array of industry, state and environmental stakeholders, including the UMWA, unanimously recommended that Congress create a Carbon Capture and Storage Early Deployment Fund to defray the additional costs and risks of these technologies.

Early Demonstration of CCS is Essential

The capture and geological storage of CO₂ is the key to retaining domestic coal as a viable energy supply in the context of constrained U.S. greenhouse gas emissions. While various private and federal research programs are exploring the potential for carbon sequestration, a secure and adequate funding source is not available to accelerate essential applied research, development and commercial-scale demonstration of carbon capture and storage as a viable commercial option for existing and future coal-based energy providers.

The 2007 MIT report, *The Future of Coal*, cautioned that:

“Today, and independent of whatever carbon constraints may be chosen, the priority objective with respect to coal should be the successful large-scale demonstration of the technical, economic, and environmental performance of the technologies that make up all of the major components of a large-scale integrated CCS system — capture, transportation and storage. Such demonstrations are a prerequisite for broad deployment at gigatonne scale in response to the adoption of a future carbon mitigation policy, as well as for easing the trade-off between restraining emissions from fossil resource use and meeting the world’s future energy needs.” (*Id.*, at xi.)

MIT also concluded that current funding for advancing CCS was “completely inadequate”:

At present government and private sector programs to implement on a timely basis the required large-scale integrated demonstrations to confirm the suitability of carbon sequestration are completely inadequate. If this deficiency is not remedied, the United States and other governments may find that they are prevented from implementing certain carbon control policies because the necessary work to regulate responsibly carbon sequestration has not been done. Thus, we believe high priority should be given to a program that will demonstrate CO₂ sequestration at a scale of 1 million tonnes CO₂ per year in several geologies. (*Id.*, at xii.)

More recently, an MIT Energy Initiative Symposium echoed the basic premises underlying Section 125’s provisions for an early CCS demonstration program with secure, non-budget funding:

“The Federal government should dramatically expand the scale and scope for utility-scale commercial viability demonstration of advanced coal conversion plants with CO₂ capture. The program should specifically include demonstration of retrofit and rebuild options for existing coal power plants. New government management approaches with greater flexibility and new

government funding approaches with greater certainty are a prerequisite for an effective program. ...

Such a strategy can be begun under the current DOE Clean Coal Power Initiative (CCPI) demonstration program, if it is expanded and has enhanced flexibility for speeding up the government process and for private sector project management and financial accounting. However, new legislation should be considered in parallel with the CCPI program solicitation and implementation. An expanded commercial viability utility-scale demonstration program should be established through a quasi-government corporation. The authorities of the new corporation should be designed with a broader mandate than that of the CCPI program, encompassing the full range of low-carbon electricity technologies and fuels and financed from a multi-billion dollar annual small electricity line charge (as has been under consideration in the Congress).”³

Congress should heed these recommendations. CCS technologies are the only means for assuring that domestic coal can continue to supply a significant share of our electric generating needs in a carbon-constrained environment. As discussed below, the widespread deployment of CCS technologies also can provide a major source of new, well-paying low-carbon jobs involving a broad range of skills.

The U.S. must take the lead in establishing the technical and commercial viability of CCS technologies for use both here and abroad. The world’s ability to stabilize global CO₂ concentrations – the long-term goal of the U.N. Framework Convention on Climate Change - depends upon the willingness of major developing economies like India and China to accept meaningful commitments to

³ MIT, Retrofitting of Coal-Fired Power Plants for CO₂ Emissions Reductions: Energy Initiative Symposium at 7-8 (March 23, 2009, emphasis in original).

reduce their future greenhouse emissions. These countries have vast coal reserves, and will continue to rely upon them to support their economic development.

Support for Commercial Deployment of CCS Technologies

The UMWA supports the objectives of the CCS commercial incentives provided by the Senate Coal Group's recommendations, reflected in the Chairman's Mark, such as the measurement of qualifying capacity based on net "treated" capacity sequestered, and the award of advance CCS bonus allowances. A financial mechanism such as bonus allowances is needed to defray the incremental capital and operating costs of CCS technologies at new and retrofit plants relative to units not employing carbon controls. Advance payments of bonus allowances will help developers to secure financing – an increasingly difficult hurdle for major projects.

Regarding the potential scope of bonus allowances available for CCS applications, the Committee should consider the potential demand from both new and retrofit facilities. There are more than 300 Gigawatts of existing coal capacity across the nation. As recognized by the recent MIT symposium on retrofit opportunities,⁴ many of the larger units (>300 MW) equipped with conventional pollution controls and located near carbon storage sites may represent viable

⁴ *Id.*

candidates for retrofit CCS controls. The demand for new coal plant applications also must be considered.

CCS bonus allowances received approximately 4.6% of the H.R. 2454 allowance pool, compared to the 8% CCS allocation provided in the 2007 Bingaman-Specter bill (S. 1766). With a smaller Senate allowance pool available for allocations and bonus allowances, a larger percentage allocation would be needed to match the number of allowances provided by H.R. 2454. The recent EPA report qualitatively discusses this issue, but it does not provide comparative findings on projected CCS deployments under the House and Senate bills.⁵

Job Benefits from CCS Commercial Deployment

The National Commission on Energy Policy issued the report of its “Task Force on America’s Future Energy Jobs” in September 2009.⁶ The Task Force consisted of representatives of academic, industry, environmental and labor organizations, including the AFL-CIO, UMWA, IBEW and Boilermakers.

The Task Force relied in part on electric power job data provided by Bechtel Power Corporation, a major international power engineering and construction company. Bechtel’s workforce estimates for alternative generation technologies

5 U.S. EPA, Economic Impacts of S.1733: The Clean Energy Jobs and American Power Act of 2009 (October 23, 2009) at 14-15.

6 National Commission on Energy Policy, Task Force on America’s Future Energy Jobs (2009). Solar electric options also have relatively high job creation potential, but are not projected to supply significant amounts of future electricity due to cost and geographic constraints.

show that coal-based CCS and nuclear generation options have substantially larger job creation potential than other supply options such as natural gas and wind:

**Man-Years per Gigawatt of New Generation Capacity,
Development plus Construction Phases**

Technology	Salaried Workforce	Hourly Workforce	Total Man-Years
Nuclear	4,785	9,575	14,360
Supercritical PC coal with CCS	2,140	8,435	10,575
IGCC gasified coal with CCS	2,795	8,145	10,940
Natural gas combined cycle (NGCC)	495	1,270	1,765
Onshore wind	305	1,180	1,485

Source: NCEP, Task Force Report on America's Future Energy Jobs (2009).

These findings are normalized to 1 Gigawatt of electric capacity, equivalent to one 1,000 Megawatt coal or nuclear unit, or 250 wind turbines with 4 MW of generating capacity per turbine. These four generating supply options – nuclear, gas combined cycle, advanced coal with CCS, and wind - are projected by most analysts to meet most of the nation's demand for new electric capacity under climate change legislation.

Need to Address CCS Liability

S.1733, like H.R. 2454, calls for a study of long-term liability and related legal framework issues for CCS projects. While the interagency study recommended by S. 1733 is appropriate, along with the provisions calling for a

coordinated approach to siting and permitting new facilities, provisions need to be added to the bill resolving long-term liability issues for early-mover demonstration plants. We understand that these issues may be addressed through current energy legislative proposals.

Support for Strong Border Adjustment Provisions

The Chairman's Mark contains a placeholder for a border adjustment mechanism:

“SEC. 765. INTERNATIONAL TRADE.

“It is the sense of the Senate that this Act will contain a trade title that will include a border measure that is consistent with our international obligations and designed to work in conjunction with provisions that allocate allowances to energy-intensive and trade-exposed industries.”

The House adopted a weakened version of a program of border adjustments on goods and products imported from countries that have not adopted comparable greenhouse gas controls. The House provision departed substantially from that included in the Warner-Lieberman bill (S. 3060). Changes to the proposal included delaying its start date to 2020, replacing the “comparability” test with a “competitiveness” test more likely to be challenged successfully under WTO, and transferring administrative authority and discretion over the program to the President rather than to an independent commission subject to judicial review.

These modifications weaken the prospective effect of the border adjustment proposal, and reduce the pressure on developing nations to adopt greenhouse gas

controls. We are advised that the revisions improve the likelihood of successful challenges under WTO.

With major developing economies unlikely to agree to any form of enforceable emission caps under the UN FCCC process in Copenhagen this year - or for the foreseeable future - the U.S. should not limit its options for helping to create a level playing field in international commerce. At the 1992 Rio Earth Summit, there was no expectation that within less than 20 years China would emerge as the world's largest coal consumer, the dominant source of manufactured goods exported to the United States, the world's largest emitter of greenhouse gases, and the holder of vast quantities of U.S. Treasury debt in its Sovereign Wealth Fund.

We recommend that strong border adjustment provisions be incorporated in S.1733 without the weakening changes in the House bill. Adoption of strong border adjustment provisions would help to close the largest loophole in the UN Framework Convention on Climate Change and the Kyoto Protocol: the exemption of developing countries from quantified emission limitation and reduction obligations.

Support for Free Allocations to the Electric Sector

The UMWA favors the largest possible use of allowance allocations to the electric supply sector and its consumers as well as to vulnerable manufacturing and

energy-intensive industries.

The UMWA supports the recommended approach to allocations to electric suppliers and independent generators outlined in a joint letter to Congress in March 2009 by the IBEW and the Utility Workers of America (Attachment 3).

The allocation of emission allowances downstream to electric utility “wires” companies (on behalf of their consumers) avoids the risk of windfall profits, while an appropriate allocation to independent generators in restructured states, sufficient to offset their compliance costs, will reduce the risk of large-scale switching from coal to natural gas. Auctions, in contrast, ensure that the costs of obtaining allowances would be passed through immediately to customers, increasing the cost of the program and reducing public acceptance.⁷ The Title IV SO₂ allowance allocation program, with bonus allowances for early adoption of technology, is a good example of how direct allocations can minimize customer costs while providing incentives for early use of control technologies.

At the same time, however, the UMWA recognizes that an allocation formula based in part on electricity sales can penalize coal-dependent states and confer benefits on states with lower carbon emissions profiles. The union strongly prefers the use of an emissions-based formula to reduce the economic impacts of

⁷ EPA’s October 23rd analysis of S. 1733 confirms this observation in its finding that a projected 13% electric rate increase in the 2030 policy case reflects the phase-out of free allocations by that time. EPA, *op cit.*, at 17-19.

climate legislation on coal state economies.

Concerns about Timing and Stringency

S. 1733 proposes a very aggressive schedule of greenhouse gas emission reductions that could lead to large-scale displacement of coal-based generation before CCS technologies can be adequately demonstrated for widespread commercial use. Of all the concerns addressed in this testimony, this is the most fundamental. The UMWA is less concerned about the bill's long-term proposed reduction target of 83% below 2005 emissions by 2050 – assuming that CCS technologies can be widely deployed well before that time - than by the 20% reduction target for 2020.

Any new power plant designed for CCS technologies and scheduled to be in commercial operation by 2020 should be in the design and siting process today.

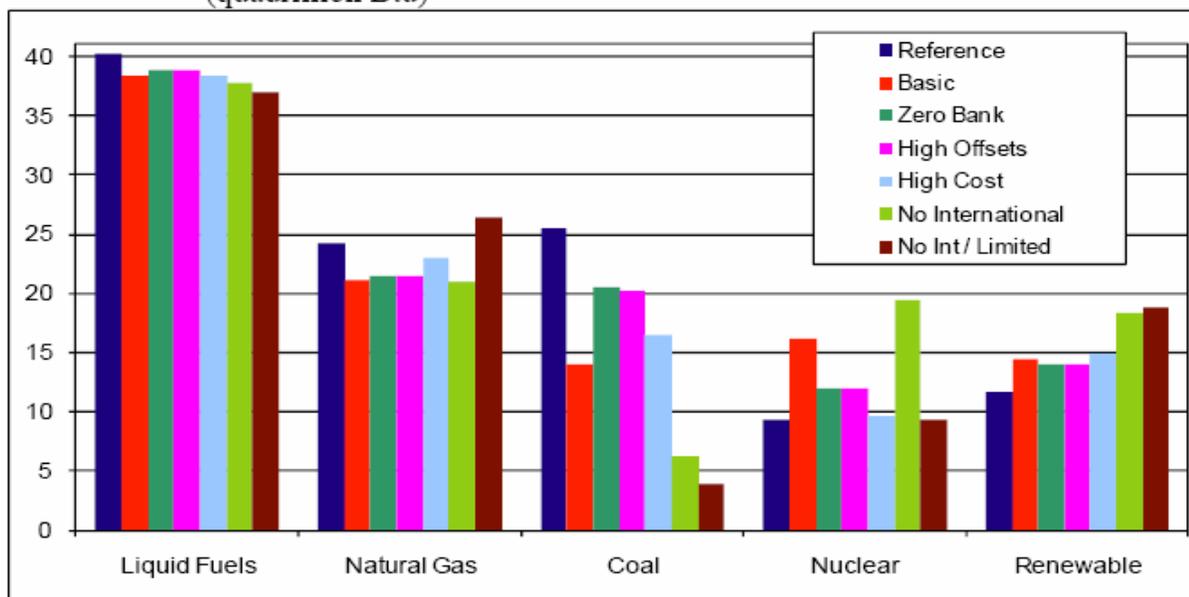
S. 1733 recognizes, through its adoption of the early CCS demonstration provisions of the House bill, that commercial use of CCS by 2020 is very likely to be limited to a handful of early-mover plants. The 2020 target also should recognize that the electric generation sector tends to bear the brunt of national emission reductions in an economy-wide trading scheme, well in excess of its contributions to greenhouse gas emissions.

The Energy Information Administration of the U.S. Department of Energy (DOE/EIA) released an economic analysis of H.R. 2454 on August 5, 2009. EIA

used the National Energy Modeling System to estimate the energy market, GDP and other economic impacts of the House bill. Due to limitations in the model, impacts were estimated only to the year 2030, when the national greenhouse gas emission cap declines to 42% below year 2005 levels. EIA's modeling of the House bill underscores the UMWA's concerns about the impact of aggressive 2020 emission reduction targets.

The chart below summarizes EIA's findings on the energy market impacts of H.R. 2454:

Figure ES-2. Primary Energy Consumption by Fuel in Main ACESA Cases, 2030
(quadrillion Btu)



Source: DOE/EIA, Analysis of HR 2454 (August 2009).

The adverse coal market impacts of H.R. 2454 are most pronounced in the two EIA cases where offsets are limited (“no international” and “no

international/limited”).⁸ In these cases, coal utilization drops from more than 25 Quadrillion BTUs in 2030 (approximately 1.25 billion tons) to levels of 4-6 Quads, a reduction on the order of 75% to 85%. Coal use in the Basic case is about 47% below projected 2030 reference case levels. In the high offset case, however, coal use in 2030 is 11% below 2007 actual levels. This finding emphasizes the need for assurance of adequate supplies of all domestic and international offsets provided by S. 1733.

EIA’s projection of a 47% reduction in coal use in the basic case from its 2030 reference case levels underscores UMWA’s concerns about the impacts of overly aggressive climate change targets and timetables when CCS is not commercially available on a widespread basis. Moreover, if EIA’s basic case assumptions about trebling nuclear power capacity by 2030 proved optimistic, utilities would have little choice but to switch from coal to natural gas on an unprecedented scale.

The critical role of international offsets is evident in EIA’s Gross Domestic

⁸ EIA describes these two cases as follows: The No International Case is similar to the Basic Case, but represents an environment where the use of international offsets is severely limited by cost, regulation, and/or slow progress in reaching international agreements or arrangements covering offsets in key countries and sectors.

The No International/Limited Case combines the treatment of offsets in the ACESA No International Case with an assumption that deployment of key technologies, including nuclear, fossil with CCS, and dedicated biomass, cannot expand beyond their Reference Case levels through 2030.

Product and industrial shipment findings shown in the table below. GDP is reduced 0.8% in 2030 in the Basic case (undiscounted), compared to 2.3% in the no international/limited offsets case. Similarly, industrial shipments in 2030 are 2.5% lower than the reference case in the Basic case, declining to -6.8% in the no international/limited offsets case. Industrial shipment impacts are a reasonable proxy for impacts on traditional manufacturing sectors.

Table ES-2. Macroeconomic Impacts of ACESA Cases Relative to the Reference Case
(billion 2000 dollars, except where noted)

	Basic	Zero Bank	High Offsets	High Cost	No International	No Int / Limited
Cumulative Real Impacts 2012-2030 (present value using 4-percent discount rate)						
GDP						
Change	-566	-432	-523	-781	-717	-1897
Percent Change	-0.3%	-0.2%	-0.2%	-0.4%	-0.3%	-0.9%
Consumption						
Change	-273	-196	-252	-384	-323	-988
Percent Change	-0.2%	-0.1%	-0.2%	-0.3%	-0.2%	-0.7%
Industrial Shipments (excludes services)						
Change	-910	-753	-480	-958	-1720	-2877
Percent Change	-1.0%	-0.8%	-0.5%	-1.1%	-1.9%	-3.2%
Nominal Revenue Collected 2012-2030^a	2971	1292	1332	2299	3462	6350
2020 Impacts (not discounted)						
GDP						
Change	-50	-19	-26	-70	-34	-112
Percent Change	-0.3%	-0.1%	-0.2%	-0.5%	-0.2%	-0.7%
Consumption						
Change	-21	-7	-11	-30	-15	-64
Percent Change	-0.2%	-0.1%	-0.1%	-0.3%	-0.1%	-0.6%
Industrial Shipments (excludes services)						
Change	-68	-54	-32	-69	-108	-186
Percent Change	-1.0%	-0.8%	-0.5%	-1.0%	-1.6%	-2.8%
Nominal Revenue Collected^a	71	44	46	79	118	215
2030 Impacts (not discounted)						
GDP						
Change	-161	-104	-120	-214	-226	-453
Percent Change	-0.8%	-0.5%	-0.6%	-1.1%	-1.1%	-2.3%
Consumption						
Change	-63	-36	-50	-97	-69	-180
Percent Change	-0.4%	-0.3%	-0.4%	-0.7%	-0.5%	-1.3%
Industrial Shipments (excludes services)						
Change	-183	-125	-87	-198	-338	-506
Percent Change	-2.5%	-1.7%	-1.2%	-2.7%	-4.6%	-6.8%
Nominal Revenue Collected^a	330	205	211	367	556	1030

Source: DOE/EIA, Analysis of H.R. 2454 (August 2009).

Sensitivity of Coal Impacts to 2020 Reduction Targets

Reducing U.S. greenhouse gas emissions by 20% below 2005 levels by 2020 is equivalent to an emission reduction of nearly 1.2 billion tons of CO₂-equivalent.⁹ The table below shows the total annual CO₂-equivalent reductions associated with alternative 2020 economy-wide reduction targets below 2005 levels, expressed in terms of equivalent annual reductions from U.S. automobiles and the annual emissions of energy used by U.S. homes:

2020 Economy-wide CO₂ reductions for alternative reduction targets

2020 Target Reduction (below 2005)	2020 CO₂ Emissions (Mil metric tons CO₂)	2020 CO₂ Reduction (Mil metric tons CO₂)	Equivalent U.S. cars (Millions)	Equivalent U.S. Homes (Millions)
-6%	5,623	-358	66	33
-10%	5,384	-597	109	54
-14%	5,145	-836	153	76
-20%	4,786	-1,194	218	108

Source: DOE/EIA, *U.S. Carbon Dioxide Emissions from Energy Sources 2008 Flash Estimate* (May 2009). Equivalent tons for cars and homes are from U.S. EPA emissions calculator, available at <http://www.epa.gov/RDEE/energy-resources/calculator.html>

The CO₂ reductions associated with a 20% cutback by 2020 from 2005 emission levels (assuming no emissions growth since 2005) are equivalent to removing 218 million cars from the road by 2020 - virtually the entire fleet - or eliminating all energy-related emissions from 108 million U.S. homes. For

⁹ U.S. DOE/EIA, Annual Energy Outlook 2009 (DOE/EIA-0383, March 2009), Table 18.

comparison, in 2008 there were 117 million U.S. households, while in 2006 the U.S. had 235 million light-duty passenger cars, trucks and SUVs.

Without the widespread availability of CCS technologies for both new and retrofit applications by 2020, a significant portion of these emission reductions likely would be achieved by switching utilities from coal to natural gas and, to a lesser extent, to renewable energy sources. We are not persuaded that evidence of recent CO₂ reductions by U.S. sources - reflecting the impact of one of the worst recessions in our history, and the loss of millions of jobs - justifies a 20% reduction target by 2020. The UMWA therefore urges moderation in the choice of the 2020 target, recognizing that the vast majority of emission reductions required by S. 1733 occur later in the program when technological advances should facilitate their implementation.

Need for Assurance of Adequate Offsets

EIA's analysis of H.R. 2454 also highlights the critical role that offsets play in moderating the economic impacts of climate legislation, and the uncertainties inherent in assuring supplies of two billion annual tons of domestic and international offsets:

While the (2 billion ton/year) ceiling on offset use is clear, their actual use is an open question. Beyond the usual uncertainties related to the technical, economic, and market supply of offsets, the future use of offsets for ACESA compliance also depends both on regulatory decisions that are yet to be made by the EPA, on the timing and scope of negotiations on international agreements or arrangements between the United States and countries where offset opportunities may exist, and

on emissions reduction commitments made by other countries. Also, limits on offset use in ACESA apply individually to each covered entity, so that offset “capacity” that goes unused by one or more covered entities cannot be used by other covered entities. For some major entities covered by the cap-and-trade program, decisions regarding the use of offsets could potentially be affected by regulation at the State level. Given the many technical factors and implementation decisions involved, it is hardly surprising that analysts’ estimates of international offset use span an extremely wide range. One recent analysis doubts that even 150 MMT of international offsets will be used by 2020, while another posits that 1 BMT of international offsets will be used almost immediately from the start of the program in 2012, followed by a quick rise towards an expanded 1.5-BMT ceiling shortly thereafter.¹⁰

The work that the Senate has done to expand the potential supply of offsets is an important step forward in the process. We believe additional improvements are warranted on the international side, independent of the outcome of the UN FCCC negotiations in Copenhagen. The UMWA has suggested creation of an international offsets bank as an independent agency of the U.S. DOE, empowered to negotiate bilateral or multilateral agreements with nations with large potential supplies of forestry or other offsets. We are pleased that this concept is receiving serious consideration and hope that it can be advanced within the Senate bill or companion offsets legislation.

Support for Integration of State and Regional Climate Programs

A single national federal currency for allowance trading is essential to the operation of an efficient carbon market. Duplicative and overlapping state cap-and-trade programs could raise program costs while achieving no real environmental

¹⁰ DOE/EIA, Analysis of H.R. 2454 (August 2009).

benefit. We support clear preemption of state and regional cap-and-trade programs affecting sources covered by national legislation, to avoid the creation of a “crazy-quilt” pattern of federal and state regulation.

Avoiding the duplication of state CO₂ cap-and-trade programs will not impede continued state climate change initiatives focused on energy efficiency and other source sectors. S. 1733 provides states with ample resources to pursue such programs.

Domestic Climate Legislation in a Global Context

As a long-term NGO observer of the UN FCCC process, the UMWA is well aware of the limited prospects in Copenhagen for a new multilateral agreement that will significantly advance the commitments of major developing nations, or that will entail enforceable commitments beyond 2020 for Annex I industrial nations.

While much has been made of the July 8, 2009, agreement among the leaders of the G-8 “to reduce their emissions 80% or more as its share of a global goal to lower emissions 50% by 2050, acknowledging the broad scientific view that warming should be limited to no more than two degrees Celsius,” the G-8 agreement itself is not legally enforceable, and its targets have not been adopted within the UN FCCC process.

We view the Copenhagen process – which could extend into 2010 - as likely to produce differentiated commitments for Annex I industrial nations potentially

similar to the differentiated targets in the Kyoto Protocol, applicable to the 2013-2020 period after Kyoto's first budget period (2008-2012) has expired. Beyond 2020, industrial nations may agree to a statement of "shared vision" concerning "goals" such as 80% reductions by 2050, but these will be subject to future negotiations, and not to the same enforcement or sanction provisions that might be agreed upon for any new 2020 Annex I commitments. The willingness of developing nations to join in a statement of "shared vision" entailing numerical emission reduction goals for developing countries is very uncertain.

The positions taken thus far by the Group of 77 & China, the large bloc of developing nations that negotiates within the FCCC process, do not promise any breakthrough agreements. At the June 8, 2009, Bonn meeting of the Ad Hoc Working Group on Long-Term Cooperative Actions, the G-77 & China offered its interpretation of the "measurable, reportable and verifiable" emission mitigation actions by developing nations called for by the Bali Action Plan¹¹:

"... (W)e will do as much as we can do, and what we can do is dependent – the extent of what you can do is dependent on meeting commitments on the part of developed country parties in relation to financial resources and transfer of technology. ...

(W)e agree that measurable, reportable and verifiable mitigation actions by developing country parties are only those enabled by measurable, reportable and verifiable provision of financial resources

¹¹ The Bali Action Plan, negotiated in Bali, Indonesia, in December 2007, contains the framework for the Copenhagen negotiations.

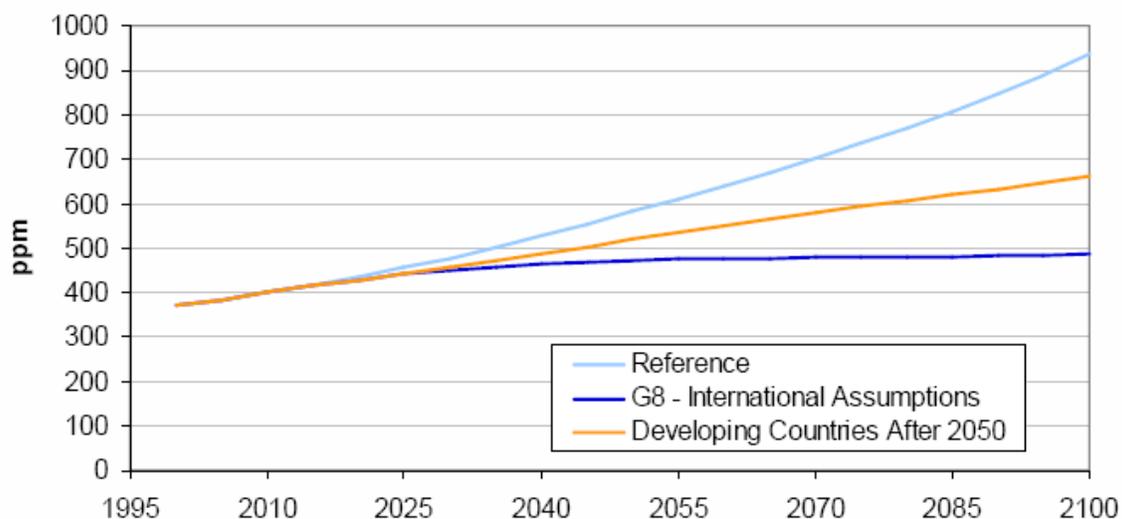
and technology and capacity building.”¹²

The limited prospects in Copenhagen for advancing a global agreement involving enforceable commitments beyond 2020 by industrial nations, or any quantifiable and enforceable commitments by developing nations, raises concerns about the nature of U.S. commitments to 2050 that may be established by national legislation. The dynamic nature of the UN FCCC process - and the widely varied social, political and economic interests of developed and developing nations - supports the need for frequent, periodic assessments of the progress achieved by the FCCC in agreeing to and meeting specified goals such as a 2 degree temperature increase. The assessments called for by the National Academy of Sciences should be helpful in assessing progress toward meeting global climate objectives. However, even with substantial new commitments from developing nations, the U.S. cannot serve as the residual guarantor of a specific target.

EPA’s preliminary analysis of S. 1733 supports these observations in its assessment of future CO₂ concentrations under the G-8 targets, which assume that developing nations begin a path of absolute reductions of emissions in 2025, and a scenario in which emission growth by developing nations is not eliminated until 2050:

¹² Transcription from Webcast of June 8, 2009, informal plenary session (10 am) of the Ad Hoc Working Group on Long-Term Cooperative Actions, available at http://unfccc2.metafusion.com/kongresse/090601_SB30_Bonn/templ/ovw_page.php?id_kongressmain=76.

Figure 5 – CO₂e Concentrations (Climate Sensitivity = 3.0)



Source: U.S. EPA, Analysis of S. 1733 (October 23, 2009), at 28.

EPA indicates that the 2 degree target could be reached under the G-8 scenario, but not with the delayed response by developing nations. The long-term interaction of the oceans and climate further complicate policy responses intended to meet and maintain the target:

“It should be noted that the temperature change in 2100 in this scenario is not stabilized, so the observed change in global mean temperature in 2100 is not equal to the equilibrium change in global mean temperature. There are two reasons for this. First, while the G8 international goals stabilize global GHG emissions at 50% below 2005 levels, CO₂e concentrations and temperature are not stabilized. Determining an equilibrium temperature under any scenario requires additional assumptions about post-2100 emissions. If emissions remain constant post-2100, CO₂e concentrations will continue to rise. Equilibrium temperature would only be achieved after CO₂e concentrations are in equilibrium. Second, the inertia in ocean temperatures causes the equilibrium global mean surface temperature change to lag behind the observed global mean surface temperature

change by as much as 500 years. Even if CO₂e concentrations in 2100 were stabilized, observed temperatures would continue to rise for centuries before the equilibrium were reached.”¹³

Understanding climate change as a 500-year global challenge should caution against the provision of Presidential discretion for federal agencies to use “existing authority” to help meet targets that may be changed before (or after) they are adopted by the world community. Achieving progress toward meeting global climate change objectives, such as the UN FCCC objective to avoid “dangerous anthropogenic interference” with climate, is a process that can only be accomplished through concerted multilateral actions.

Conclusion

The UMWA gratefully thanks the Chairman, the Ranking Member, and the Committee for their consideration of its views.

¹³ U.S. EPA, Analysis of S. 1733 at 29.

Attachment 1

Eugene M. Trisko
Attorney at Law
P.O. Box 596
Berkeley Springs, WV 25411
(304) 258-1977
(301) 639-5238 (Cell)
emtrisko@earthlink.net

Mr. Trisko has a B.A. in economics and politics from New York University (1972) and a J.D. degree from Georgetown University Law Center (1977). He is admitted in the District of Columbia, and has appeared before the U.S. Court of Appeals for the D.C. Circuit in matters concerning the Clean Air Act. He has lectured on the Clean Air Act and climate change at The Pennsylvania State University, the University of Virginia, and West Virginia University College of Law.

Mr. Trisko was active on behalf of the United Mine Workers of America in the reauthorization of the 1990 Clean Air Act Amendments. He has participated as an NGO on behalf of the UMWA in all major United Nations climate change negotiating sessions since the 1992 Rio Earth Summit. He currently represents the Illinois AFL-CIO, the UMWA and IBEW local unions in the Midwest Governors' Association climate initiative.

Mr. Trisko is a member of U.S. EPA's Clean Air Act Advisory Committee. He served on EPA's Mercury MACT Work Group from 2003 to 2005, and on the Advanced Coal Technology Working Group in 2007-08. In 2000 and again in 2007, he was appointed by the U.S. Department of State to represent U.S. labor and stationary source interests as a member of the U.S. Delegation in bilateral air quality negotiations with Canada. These 2000 negotiations led to the U.S.-Canada Ozone Annex to the U.S.-Canada Air Quality Agreement, including Canadian commitments to match the reduction of EPA's 1998 Ozone Transport Rule (SIP Call).

Mr. Trisko is the author of more than 20 articles on energy, climate and clean air policy issues published in energy, environmental and law journals. Before entering private practice, he served as an attorney with the Federal Trade Commission, and as an energy economist with Robert R. Nathan Associates. He also has appeared as an expert witness on water utility cost of capital before several state public service commissions.

Sunday Gazette-Mail, Op-ed (Charleston, WV)
September 19, 2009

Cecil E. Roberts: UMWA fighting for better cap-and-trade bill

CHARLESTON, W.Va. -- Coal miners, their families, and those who live in coalfield communities across West Virginia and the nation are worried. They have heard a lot of talk about the effects of legislation pending in Congress that would impose a so-called "cap-and-trade" system on carbon emissions.

Coal miners have a right to be worried. The legislation Congress is considering, also known as the Waxman-Markey bill, will have far-reaching effects, not just on their jobs and their families' future, but on our entire nation's economy.

It is important that Congress get it right. Because if it does not, or even takes no action at all, the consequences will be severe. That's because there is a clock ticking on the wall at the Environmental Protection Agency. If Congress doesn't act to reduce greenhouse gas emissions, then the EPA will. The EPA, as a result of Bush administration policies, was given the authority to do just that in 2007 by the U.S. Supreme Court. Since that time, under both Republican and Democratic administrations, the EPA has been drafting rules and regulations that will restrict greenhouse gas emissions.

No one who works in the coal industry should have any illusions about this. The impact of EPA regulations will mean a relatively swift and painful reduction in coal production and coal jobs. That is the last thing anyone related to our industry should want.

So this is the choice before us: Either Congress acts or EPA acts. Those who say nothing should or need be done about climate change are simply wishing this reality away. Given that choice, the UMWA believes it is far better for Congress to pass legislation that maintains coal's position as the dominant source of electricity generation in America.

Despite what some say, the UMWA did not endorse the Waxman-Markey bill. We were consistent in our belief that while much good work was done to include funding to ensure the future of coal in that legislation, more needs to be done.

That remains our position. Let me be clear: If significant improvements are not made to the bill in the Senate, the UMWA cannot and will not support the legislation.

Here's what we need to see:

A reduction of the 2020 emission reduction target from 17 percent to a more realistic number, in order to provide sufficient time for the development and commercial application of carbon capture and storage technology on new or retrofit plants.

Windfall emission allowance allocations to non-carbon emitting sources should be prohibited.

The Waxman-Markey bill uses a formula for the distribution of allowances that gives a windfall to nuclear, hydro and other non-carbon emitting sources. The UMWA favors an allocation approach that reflects historical emissions.

Assure full funding for commercial carbon capture projects. The Waxman-Markey bill provides \$150 billion in bonus emissions allowances for commercial carbon capture and storage applications. However, these bonus allowances should be expanded substantially because they are critical to the widespread deployment of technologies on new and retrofit power plants.

Strengthen provisions on international participation. If other nations, particularly those like China, India and other developing countries, do little or nothing to curb their increasing carbon emissions then this legislation becomes little more than just another mechanism to transfer American jobs overseas. The legislation must ensure that our nation does not suffer severe economic harm should other nations fail to meet their responsibilities.

Assure the full and timely availability of emission "offsets" from domestic and international sources. The bill provides generous credits for activities that reduce carbon, but does not assure that utilities will be able to access these credits in a timely way. The Department of Energy's analysis shows that the availability of emission offsets is a critically important tool to keep coal miners working while emissions are being reduced.

During the discussions and debate in the House about this legislation, the UMWA was just about the only voice at the table speaking out for coal. Because of our efforts and those of coal's friends like Rep. Rick Boucher (D-Va.), much was done to lay the groundwork for the future for coal in this legislation.

But much was left undone. It is not yet clear if the future for coal under this proposed legislation will be a robust one that recognizes the overwhelming availability and cost advantage coal provides our nation's energy producers and consumers.

Until that future has been assured, we will continue to fight in the halls of Congress on behalf of our members, their families and their communities.

Roberts is international president of the United Mine Workers of America.



March 27, 2009

The Honorable Barbara Boxer
Chair
Senate Environment and Public Works Committee
410 Senate Dirksen Office Building
Washington, DC 20510

The Honorable Henry Waxman
Chair
House Energy and Commerce Committee
2125 Rayburn House Office Building
Washington, DC 20515

The Honorable Jeff Bingaman
Chair
Senate Energy and Natural Resource Committee
304 Senate Dirksen Building
Washington, DC 20510

The Honorable Ed Markey
Chair
House Energy and Environment Sub-Committee
2125 Rayburn House Office Building
Washington, DC 20515

The Honorable Max Baucus
Chair
Senate Finance Committee
219 Dirksen Senate Office Building
Washington, DC 20515

The Honorable Charles Rangel
Chair
House Ways and Means Committee
1102 Longworth House Office Building
Washington, DC 20515

Dear Senators and Congressmen:

Last November we wrote you on behalf of our respective labor unions to express support for balanced, comprehensive legislation to reduce greenhouse gas emissions. We also expressed our strong opinion that emission allowances be allocated, not auctioned, under a cap-and-trade program. Our concern that workers in impacted industries not be adversely affected has become even greater as the economic down-turn has deepened.

We're aware that some economists claim that auctioning allowances would be more efficient than administrative allocations to affected industries. Others who support a large or total auction are attracted by the financial proceeds such an auction would yield. We strongly disagree that auctioning off allowances, particularly in the early phases of a cap-and-trade program, would be best for our nation's energy supply or consumers. We believe an allocation scheme much like that in the successful Clean Air Act acid rain program would greatly mitigate impact on consumers and minimize disruption of our economy and workers. This allocation method has been extremely successful in achieving emission reduction goals at the lowest cost to consumers.

Much has changed since November. The economic slump is severe and appears to be long-lived. Also, two organizations – Edison Electric Institute (EEI) and the United States Climate Action Partnership (USCAP) – each issued principles on cap-and-trade legislation after considerable deliberation. We note with interest that each recommends allocating allowances for the electricity sector to distribution utilities *and* to merchant coal generators who are unregulated, competitive power producers from which utilities in some states purchase electricity for their customers.

The Honorable Boxer, Waxman, Bingaman, Markey, Baucus, and Rangel
March 27, 2009
Page 2

In our letter, we recommended allocating all allowances for the electricity sector to distribution companies rather than generators. For regulated electric power markets, where fully integrated utilities own both generation and distribution under state regulation, this approach is sound. However, both the EEI and USCAP proposals recognize the importance of merchant coal generators to consumers in unregulated markets and advocate allocations to cover only their "net compliance costs" over some reasonable transition period until replacement or retrofit technology develops.

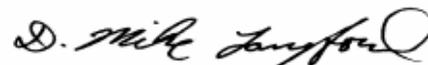
We realize the importance of merchant coal generators to our electricity supply as we transition to low-or-zero carbon alternatives. About half of our nation's electricity is produced from coal and about one fourth of that is provided by competitive or merchant generators who sell their output to regulated utilities and their customers. Without allowances, those generators would be forced to retire prematurely early in the transition, which costs all consumers and jeopardizes the system's reliability. Any potential of "windfall profits" for such generators can be addressed by restricting the quantity of allocated allowances to only the amount necessary to cover net compliance costs (defined as incurred allowance cost minus increased wholesale electricity prices).

We urge you to recognize the significant differences in market structures that exist for coal-fired generators in the United States as you deliberate the most effective and efficient way to address greenhouse gas emission allowance allocations. Market-specific allocation schemes will be required to ensure equitable protection to all union members and consumers.

Sincerely,



Edwin D. Hill
International President
IBEW



D. Michael Langford
President
UWUA

/ceb

Copy to President Barack Obama
All Members of United States Congress