National Mining Association has provided the following background information on coal. WMC has updated the section on coal technologies.

Coal Is Integral to Modernizing and Maintaining U.S. Infrastructure

As President Trump and Congress advance policies to build and improve America's infrastructure, coal can play a central role in ensuring we have the energy and materials needed to power and build the Nation to its full potential. Coal is central to a diverse, affordable and resilient electricity supply. It also provides an essential feedstock for making steel and cement.

To provide a durable foundation for improving our infrastructure and continued economic growth for, any infrastructure package should modernize the permitting processes, eliminate barriers for the maintenance, improvement and building U.S. coal baseload electric-generating facilities and remove impediments to U.S. coal exports.

Modernize Permitting Systems and Policies

New Source Review (NSR) is a permitting process under the Clean Air Act (CAA) that requires industry to undergo a preconstruction review for environmental controls if they propose either to build new facilities or modify existing facilities that would create a "significant increase" in regulated emissions. In reality, NSR discourages needed maintenance and improvement projects at existing facilities, including projects aimed at restoring or improving unit efficiency lost over time. H.R.3127 and H.R.3128 would remedy this situation. H.R. 3127 would exclude energy efficiency, emissions reduction, and grid reliability projects from the definition of "modification."[1] H.R. 3128 would amend the statutory "emissions increase test" by requiring an hourly rate—the standard measure of efficiency improvement—instead of an annual emissions test.[2]

Clean Water Act (CWA) permits are required by virtually every major sector of the U.S. economy including mining, transportation, construction, and manufacturing. The Environmental Protection Agency (EPA) has the authority to veto Section 404 permits issued by the Army Corps of Engineers, preemptively or retroactively, at their sole discretion. This prospect introduces enormous uncertainty and adds a significant risk premium for attracting capital needed to finance mines and infrastructure projects. H.R. 2917 is a step in the right direction to amending CWA to remove EPA's authority to veto 404 permits under Section 404(c) which will provide more transparency and certainty to the regulated community while ensuring continued environmental protection, responsible natural resource development, and economic investment and growth.[3]

Duplication and Delays are trademarks of the current federal and state permitting systems. The development of coal projects on leased federal lands is a primary example of this inefficiency. The process for leasing and permitting a coal mine can stretch to almost a decade. Even expanding an existing mine on federal lands can take five years or more. The process is fraught with duplication and delays in environmental reviews for leasing, federal mine plan approval and state permitting. The process can be streamlined by relying upon existing environmental reviews conducted initially at the leasing stage and upon state mine permitting review as it relates to the federal mine plan approval process. Time lines should be imposed at each stage and NEPA Categorical Exclusions and Determinations of NEPA Adequacy deployed instead of a duplicative EIS or EA where the actions have already been adequately analyzed at an earlier or concurrent stage of the process.

State Impediments to Coal Exports Facilities Should Be Set Aside and Federal Funding Should be Directed to Maintaining and Improving the U.S. Waterway Transportation Network

Every million tons of coal exported supports 1,320 direct, indirect, and induced jobs in the economy.[4] These coal-export related jobs (at coal mines, transportation companies, port and port services, and coal-exporting

ships) earn an annual average family-wage of over $90,000.[5] Almost 100 million tons of U.S. coal was exported in 2017.

Asian markets for coal are growing. However, the ability for U.S. coal producers to serve those markets has been hindered by the inability of project developers to gain state approval for permits to build state of the art coal export facilities on the West Coast. West coast states have refused to afford project developers fair, objective and timely review of applications for permits and other authorizations to construct export terminals and related infrastructure. Their intractable determination to prohibit the construction of state of the art export facilities interferes with interstate and foreign commerce and deserves heightened scrutiny by the federal government.

Larger ships, such as the bulk carriers and freighters that commonly transport coal, require deeper navigation channels to fully utilize existing facilities. The Harbor Maintenance Trust Fund (HMTF), with an untouched at approximately $9 billion,[6] is intended to cover 100 percent of the costs of operations and maintenance (O&M) of the nation's deep draft and coastal waterways.

However, despite the significant and ongoing dredging needs at many U.S. ports, monies appropriated for harbor maintenance over the past 15 years have been far less than those collected. H.R.1908 would make the entire HMTF available for its originally intended use without appropriation.[7] The Army Corps of Engineers should also accelerate the permitting process and related funding for dredging projects that have been identified as providing a significant economic benefit. Further, multi-year funding for waterway maintenance and improvement projects would provide stability and certainty for the shipping community.

Federal Support for Efficient and Advanced Coal Technologies

The current diversified US electric supply portfolio anchored by coal baseload power generation lowers the cost of electricity by about $114 billion per year and reduces the average retail price by 27 percent. Coal baseload power plants equal or exceed other generation sources in providing the essential attributes of an efficient power system: reliability, resilience, economic dispatch, grid support and network integration. However, these essential attributes for an optimally performing electric supply portfolio are being severely compromised with the closure of plants well before the end of their useful life and the impediments to building new advanced coal plants. To date, more than 600 coal-fueled generating units in 43 states have either been shut down or are expected to close soon. The going forward costs to replace these plants being prematurely retired are significantly higher than the costs of the existing plants.

More advanced clean coal technologies are can help the U.S. meet its requirements for efficient, reliable electricity infrastructure. The current average global efficiency rate for coal plants is approximately 33 percent.[8] While this compares favorably to other fossil fuel-based generators, newer-generation coal plants can achieve 40 to 45 percent efficiency.[9]

High-efficiency, low-emission (HELE) coal plants that use supercritical steam cycle units are being successfully deployed globally including in Germany, Denmark, Japan and China. For example, China's 100 most efficient coal plants include 90 using ultra-supercritical and 10 using supercritical technologies.[10] The United States by contrast, is home to only one ultra-supercritical coal-fired power plant — American Electric Power Co. Inc.'s Turk plant in Fulton, Ark. Another generation of advanced technology, carbon capture use and storage (CCUS) will depend upon HELE plants to demonstrate the technological and economic feasibility of CCUS technology.

A policy portfolio to maintain and grow critical coal baseload generation infrastructure should include:

- Federal Tax Credit for existing coal baseload plants to partially off-set a portion of the fixed operating and maintenance (O&M) costs for plants that invested in emissions controls since 2006 to meet requirements imposed by EPA under the Clean Air Act.
- Congress enacted 45Q tax credits into law in February 2018 in order to provide certainty to support investments necessary to demonstrate the technological and commercial viability of this next generation technology.[11]
- Reform New Source Review Program to remove irrational impediments to plant owners investing in maintaining and improving the efficiency of their power plants.
- Modify standards for new coal plants that impose limitations on emissions that do not pose a danger to public health. The 2012 Utility HAPS rule imposed limits on acid gas emissions notwithstanding EPA's admission that those emissions do not pose a public health concern. Most of the $9 billion annual costs for complying with the regulations are attributable to those benign emissions.
- Private Activity Bonds should be authorized for projects incorporating advanced coal technologies and projects for maintaining and upgrading the efficiency of existing plants.
- Loan guarantees should be available and adequate to encourage the design, development and commercialization of advanced coal technologies in the U.S.

U.S. Coal: Key to Domestic Steel Industry and American Infrastructure

Metallurgical coal is a key input for U.S. steel production from blast furnaces. Every ton of steel requires .85 tons of coal.[12] Steel produced from blast furnaces is used in finished products essential for infrastructure projects including bridges, buildings, pipelines, cables, wires and rails. By-products from blast furnaces are used in concrete products, cement, road bases and railroad ballast. Rebuilding and expanding our infrastructure will require a competitive American steel industry backed by U.S. metallurgical coal.

Endnotes

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6. Treasury Direct, December 2017- ftp://ftp.publicdebt.treas.gov/dfi/tfmb/dfihm1217.pdf.
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12. World Coal Association, How is Steel Produced? - https://www.worldcoal.org/coal/uses-coal/how-steel-produced.