

Electric Power Supply Association (EPSA)
John E. Shelk, President & CEO
jshelk@epsa.org
202-628-8200

The Electric Power Supply Association (EPSA) is the national trade association representing competitive wholesale power suppliers, including generators and marketers. Competitive suppliers as a sector account for 40 percent of the installed generating capacity in the nation. These suppliers provide reliable and competitively-priced electricity from environmentally responsible facilities using the full range of fuels and technologies. EPSA seeks to bring the benefits of competition to all power customers. These comments represent the position of EPSA as an organization, but not necessarily the views of any particular member.

EPSA as an organization does not support a Clean Energy Standard (CES) and is not recommending that the Senate develop one. However, EPSA members are significant providers of electricity throughout the United States, including as the primary suppliers in many regions. EPSA welcomes the opportunity to be part of the Committee's deliberations on these matters. Certain EPSA members may support and advocate individually for adoption of a CES.

Question 1: Any federal CES should apply to all entities (no carve out). There should generally not be state exemptions (except for Alaska and Hawaii).

Question 2: Determination of what resources should qualify depends on the purposes in pursuing any CES. If the purpose is GHG reductions then the definition should be based on GHG emissions; if the purpose is technology deployment then the definitions might be different. The Committee is wise to be concerned about the costs of any CES and thus should promote the maximum use of market-based mechanisms and wholesale competition to deliver the greatest benefits at the least cost. The Committee's focus with any CES should be electricity generation.

Question 3: As to crediting and timetables, impacts prior to a long away target year such as 2035 need to be considered. The determination to treat all sources equally or encourage only "new" will be contentious. As a general rule, electricity policies should not discriminate between "existing" and "new" resources. Whether to allow partial credits goes to the purpose(s) the Committee has in mind for any CES. As a general rule, individual tiers for classes of technology distort markets. The same credit should be available for both federal and state requirements if tendered by the same entity. The Committee should study banking/borrowing options.

Question 4: There are too many variables to predict impacts on dispatch and generation mix.

Question 5: There are too many variables to predict precise price impacts. Market-based products need to be enhanced to firm up more intermittent generation. Plant retirements may increase from a CES but by how much compared to the level without a CES cannot be predicted.

Question 6: Any CES should be accompanied by measures to promote competitive procurement of electricity, should generally not try to address the challenges facing each technology, and should address permitting obstacles to development of necessary resources.

Question 1: What should be the threshold for inclusion in the new program?

- *Should there be a threshold for inclusion or should all electric utilities be subject to the standards set by a CES?*

In answering this question, EPSA stresses that in doing so it is not endorsing the concept of a CES or any particular formulation of a CES. As the Senators' thoughtful white paper stipulated, these questions flow only **if** the Committee on Energy and Natural Resources elects to develop a CES.

In that context, and **if** such a CES places the compliance obligation on distribution utilities, then the CES obligation should apply to all distribution utilities **without** a carve out such as for those selling less than 4 million MWhs per year as was the case in the RES in the last Congress. While placing a CES obligation on distribution utilities is in keeping with the structure of past proposals for an RES, the Committee may wish to consider other options for the compliance obligation that may be developed by other stakeholders. EPSA is not taking a position on where the compliance obligation should be placed.

John E. Shelk, President & CEO, Electric Power Supply Association (EPSA)

- *Should any states or portions of states be specifically excluded from the new program's requirements?*

Generally there should be no state exemptions (except perhaps as to Alaska and Hawaii for physical supply and related reliability reasons).

John E. Shelk, President & CEO, Electric Power Supply Association (EPSA)

- *How should a federal mandate interact with the 30 existing state electricity standards?*

Question 2: What resources should qualify as “clean energy”?

- *On what basis should qualifying “clean energy” resources be defined? Should the definition of “clean energy” account only for the greenhouse gas emissions of electric generation, or should other environmental issues be accounted for (e.g. particulate matter from biomass combustion, spent fuel from nuclear power, or land use changes for solar panels or wind, etc.)?*

EPSA is not endorsing the concept of a CES or any particular CES formulation. The answer below is provided in the context of the Senate white paper’s premise if the Committee elects to develop a CES. In that context, a central threshold question for the Committee to answer as to the basis for defining qualifying “clean energy” is to determine the purpose or purposes the Committee has in mind for developing a CES. If a federal CES is in essence a proxy for acting to address concerns about greenhouse gas emissions, then as a starting point for further discussion the definition of “clean energy” should be linked to GHG reductions. If all or part of the purpose is to encourage all or certain technologies then other formulations will no doubt be offered. Any formulation has trade-offs that the Committee would need to consider as other survey questions highlight.

- Should qualifying clean energy resources be expressly listed or based on a general emissions threshold? If it is determined that a list of clean energy resources is preferable, what is the optimal definition for “clean energy” that will deploy a diverse set of clean generation technologies at least cost? Should there be an avenue to qualify additional clean energy resources in the future, based on technological advancements?

If the Committee elects to pursue development of a CES, the Committee should examine a range of options to determine whether to base the definition of “clean energy” qualifying under the CES on general emissions or on an express list, taking into account the considerations below.

To avoid gaming, any credits based on a definition of “clean” should be based primarily on quantifiable factors (such as relative GHG emissions) and not on qualitative factors subject to gaming.

The Committee is wise to be concerned about implementing a CES – **if** the Committee elects to develop a CES proposal – on how to do so in a least cost fashion. There is considerable risk that a poorly designed CES could increase costs to consumers above what would be necessary for a given set of policy objectives. A least cost CES of any kind will come from the maximum use of market-driven, competitive-based processes, including competitive procurement of clean energy, such as is the case without a CES.

The Committee should be very concerned about attempts by traditional rate-based regulated utilities to use a CES of state RPS requirements as a basis or pretext to undermine federal and state policies in support of wholesale competition for electricity generation. Truly competitive wholesale markets such as those run by Independent System Operators and Regional Transmission Organizations facilitate the development and deployment of all resources on a least-cost basis and also facilitate integration of intermittent resources.

As to future adjustments, given the risks of developing a poorly designed CES from the outset, or risks of future developments not anticipated initially making implementation in practice turn out differently from initial assumptions, the Committee is wise to explore options for making adjustments as future events unfold. The caution here, however, is not to make significant changes too often or else such an adjustment feature could create too much investment uncertainty.

- *What is the role for energy efficiency in the standard? If energy efficiency qualifies, should it be limited to the supply side, the demand side, or both? How should measurement and verification issues be handled?*

The focus of a CES should be on generation and electricity supply **if** the Committee elects to develop a CES proposal. CES design issues should not be considered in isolation, particularly given the deep physical and financial interconnections inherent in the networked nature of the country's electricity systems. In this regard, the Federal Energy Regulatory Commission has recently adopted an ill-advised final rule on Demand Response Compensation in Organized Wholesale Electricity Markets that will distort electricity markets with subsidies in violation of the Federal Power Act. While there is a role for demand response in organized markets, as witnessed by the levels clearing wholesale capacity markets, the compensation for DR must be consistent with sound economic principles and the Federal Power Act's requirements. If the Committee elects to pursue a demand side component to a CES, it should replace and not duplicate the FERC final rule. In the same vein, if the Committee elects to pursue a demand side component to a CES, strong measurement and verification protocols with appropriate penalties should be included (FERC failed to adequately address measurement and verification in the final rule on DR compensation).

John E. Shelk, President & CEO, Electric Power Supply Association (EPSA)

- *Should retrofits or retirements of traditional fossil-fuel plants be included in the standard?*

John E. Shelk, President & CEO, Electric Power Supply Association (EPSA)

- *Should the standard be focused solely on electricity generation, or is there a role for other clean energy technologies that could displace electricity, such as biomass-to-thermal energy?*

Given the inherent risks in attempting to develop a properly designed CES for the interconnected nature of electricity, and given the potentially negative consequences from ill-designed CES mandates, the sole focus of a CES should be on electricity generation and not on technologies to displace electricity.

John E. Shelk, President & CEO, Electric Power Supply Association (EPSA)

Question 3: How should the crediting system and timetables be designed?

- *Should the standard's requirements be keyed to the year 2035 or some other timeframe?*

If the Committee elects to develop a CES, it would not be wise to only focus on the impact of such a proposal on far-away target years such as 2035. The real world in which private investors put money at risk on generation projects at both existing plants and new plants (and not on the risk of captive ratepayers) requires carefully analyzing the impact of all electricity policies, including alternative CES approaches, across the various likely policy and economic landscapes at various times between now and 2035.

John E. Shelk, President & CEO, Electric Power Supply Association (EPSA)

- *What interim targets and timetables should be established to meet the standard's requirements?*

- *What are the tradeoffs between crediting all existing clean technologies versus only allowing new and incremental upgrades to qualify for credits? Is one methodology preferable to the other?*

It will come as no surprise to the Committee that **if** the Committee elects to develop a CES the issue framed by this question will be one of the most contentious issues during its deliberations and consideration of any legislation. The white paper properly points out that there will be tradeoffs and thus they should be acknowledged and considered. This largely goes to the threshold question of what a CES is supposed to achieve from a public policy perspective. If the emphasis is on emissions reductions in a least cost manner, for example, then it would not be wise to differentiate between vintages of sources so long as they meet the definition of “clean” under the legislation. On the other hand, if the primary purpose of a given CES is to encourage the development of new technologies or new sources of existing clean energy (even if doing so costs more than otherwise would be the case if all sources, existing and new, were allowed to qualify), then a different approach will be taken. The Committee will no doubt also confront the question of when, given the many decades of a mandate stretching out to 2035, a “new” source when first deployed becomes an “existing” source at some point in the future. The maximum use of market-driven, competitive processes will bring about the greatest results at the least cost to consumers in any context (with or without a CES).

John E. Shelk, President & CEO, Electric Power Supply Association (EPSA)

- *Should partial credits be given for certain technologies, like efficient natural gas and clean coal, as the President has proposed? If partial credits are used, on what basis should the percentage of credit be awarded? Should this be made modifiable over the life of the program?*

As with other design elements, this question and its answer would flow in large part from what the Committee decides as a premise is the rationale for a CES **if** the Committee elects to develop one. If the Committee's purpose is to address GHG emissions, some argue that partial credits based on partial performance relative to GHG contributions from a given fuel or technology would be warranted, while others argue that only zero GHG emissions should qualify.

John E. Shelk, President & CEO, Electric Power Supply Association (EPSA)

- *Is there a deployment path that will optimize the trade-off between the overall cost of the program and the overall amount of clean energy deployed?*

- *What would be the effect of including tiers for particular classes of technology, or for technologies with different levels of economic risk, and what would be a viable way of including such tiers?*

If the Committee elects to develop a CES, generally there should not be tiers or carve outs for technologies or fuels within an overall CES; to do so would distort markets and would run the risk of resulting in inefficient and more costly ways of meeting any given CES should the Committee elect to develop one. Any carve outs (e.g., sub-percentages for specific technologies) should be considered very carefully in light of this general concern.

- *Should the same credit be available to meet both the federal mandate and an existing state standard or should a credit only be utilized once?*

If the Committee elects to develop a CES, a given credit should satisfy both federal and any state requirements if the credit meets the definition of “clean energy” under both the federal and a given state’s mandate and the credit is tendered by the same entity with a compliance obligation. This is suggested to avoid “double counting.”

John E. Shelk, President & CEO, Electric Power Supply Association (EPSA)

- *Should there be a banking and/or borrowing system available for credits and, if so, for how long?*

If the Committee elects to develop a CES, there may be merit in banking and/or borrowing of some type to provide flexibility and thus reduce compliance costs. This should be studied in more detail with an option of a five year banking and borrowing period as the starting point.

John E. Shelk, President & CEO, Electric Power Supply Association (EPSA)

Question 4: How will a CES affect the deployment of specific technologies?

- *How valuable would clean energy credits have to be in order to facilitate the deployment of individual qualified technologies?*

- *How might a CES alter the current dispatch order of existing generation (such as natural gas-fired power plants), which has been driven by minimization of consumer costs, historically?*

If the Committee elects to develop a CES, how particular CES designs would impact the dispatch order of existing generation depends on CES specifics, the nature of the electricity system in a given region or state, and other public policies. For example, two-thirds of the country is served by organized wholesale power markets with fully developed RTOs or ISOs that operate with security-constrained economic dispatch. This structure minimizes consumer costs. This is not true in the one-third of the country without organized wholesale power markets.

Given the many variables that determine current dispatch orders, not to mention near-term conditions much less those as far out as 2035, it is impossible to determine with much precision (if at all) how a given CES would alter the dispatch order from that which would occur in the absence of a given CES. That said, generally the most likely impact would be that a CES will result in a generation mix that will cost more than that without a CES or else a CES would not be necessary; how much more costly depends on a variety of factors, including the nature of any CES and matters outside the CES (e.g., relative fuel prices). The Committee and the Congress would need to determine if any increased costs would be justified by achieving the stated reasons and benefits for imposing a federal CES.

- *What is the expected electricity generation mix for a target of 80 percent clean energy by 2035, under the President's proposal or an alternative construct?*

Given all the factors that go into determining the generation mix nationally, regionally and in a given state, it is impossible to say with any precision in 2011 what the expected mix would be from a mandate of an 80 percent CES by 2035. The policy decision should **not** be driven by a desire for a particular mix of sources of "clean energy" generally and certainly not by a year as far away as 2035. If the country should have learned anything from energy events in recent years and decades it is that developments in fuels and technologies are rapidly changing such that aiming for a specific mix to get to any overall "clean energy" target is a mistake (if the Committee elects to develop a CES). The emphasis should be on market-driven, competitive processes for all sources – within the constraints of any CES; to do otherwise would distort market signals and thus needlessly increase consumer costs.

John E. Shelk, President & CEO, Electric Power Supply Association (EPSA)

- *Could different crediting and requirements than those proposed by the President be more effective in deploying clean technologies?*

The Committee should be open to considering other alternatives that may be offered in the course of its review of the responses to this survey.

Question 5: How should Alternative Compliance Payments, regional costs, and consumer protections be addressed?

- *What are the anticipated effects on state and regional electricity prices of a CES structured according to the President's proposal? What are the anticipated net economic effects by region?*

If the Committee elects to develop a CES, these are important and understandable questions to ask. Unfortunately, given all the many variables at work it is impossible to estimate the anticipated effects on state and regional electricity prices or the net economic effects by region. The U.S. already has vastly different wholesale and retail electricity prices across and within states and regions due to a variety of factors. Other factors being equal, a CES could increase prices depending on what resources would have been acquired in the absence of a CES, but there are too many factors to estimate the impact over the short run, medium run and long term to 2035 with any real certainty.

John E. Shelk, President & CEO, Electric Power Supply Association (EPSA)

- *Would other CES formulations or alternative policy proposals to meet a comparable level of clean energy deployment have better regional or net economic outcomes?*

John E. Shelk, President & CEO, Electric Power Supply Association (EPSA)

- *How might various price levels for the ACP affect the deployment of clean energy technologies?*

If the Committee elects to pursue development of a CES the ACP will be a critical design feature. In simple terms, if the ACP is too low then the goals of a CES will not be achieved if the goal is to increase deployment and use of more “clean energy” than would occur in the absence of a CES. If the ACP is set too high, then the costs of a given CES might be greater than stakeholders would accept as reasonable.

John E. Shelk, President & CEO, Electric Power Supply Association (EPSA)

- *What options are available to mitigate regional disparities and contain costs of the policy?*

John E. Shelk, President & CEO, Electric Power Supply Association (EPSA)

- *What are the possible uses for potential ACP revenues? Should such revenues be used to support compliance with the standard's requirements? Should all or a portion of the collected ACP revenues go back to the state from which they were collected? Should ACP revenues be used to mitigate any increased electricity costs to the consumer that may be associated with the CES?*

John E. Shelk, President & CEO, Electric Power Supply Association (EPSA)

- *Should cost containment measures and other consumer price protections be included in a CES?*

John E. Shelk, President & CEO, Electric Power Supply Association (EPSA)

- *How much new transmission will be needed to meet a CES along the lines of the President's proposal and how should those transmission costs be allocated?*

- *Are there any technological impediments to the addition of significantly increased renewable electricity generation into the electrical grid?*

If the Committee elects to develop a CES, the Committee would be wise to pay special attention to technical impediments to adding significant intermittent renewable electricity generation and how to overcome them to deploy renewable electricity while maintaining system reliability. This can be enhanced with market-based products for generation sources necessary to provide firming capabilities for intermittent generation along with other steps presently being considered by federal and state regulators. There is a great deal of work being done by various stakeholders and experts that the Committee should examine in this regard.

John E. Shelk, President & CEO, Electric Power Supply Association (EPSA)

- *What are the costs associated with replacing or retrofitting certain assets within the existing generation fleet in order to meet a CES?*

- *What level of asset retirements from within the existing generation fleet are anticipated as a result of a CES?*

While this is an excellent question if the Committee elects to develop a CES, there are too many variables that cannot be accurately estimated to come up with a sound forecast of what would happen to the level of asset retirements from within the existing generation fleet *as a result of a CES*. For starters this inability flows from not knowing the specifics of a given CES to analyze; different formulations will have vastly different impacts including as to asset retirements. In addition, increased retirements are already highly likely for lots of reasons, including the age of many existing power plants, lower electricity demand, imposition of subsidies for demand response, the relative economics of different fuels, and what will occur under existing state RPS standards as they are implemented with escalating amounts of renewable required. Thus, one really cannot quantify the level of asset retirements likely from a CES other than to make the general observation that there would likely be a higher level of asset retirements on a sooner time frame than likely in the absence of a CES.

Question 6: How would the CES interact with other policies?

If the Committee elects to develop a CES, it is important to look at CES issues within the broader policy context of issues impacting electricity generation, particularly given the unique nature of electricity. These unique characteristics include mandatory excess supply requirements in the form of reserve margins, the practical inability to store electricity in large quantities, and what it takes for market-based, competitive investments to occur.

It is also important for Congress and states to look at who will build, own and operate any generation necessary to meet any federal CES or state RPS requirements (in addition to the use of existing generation that qualifies under any CES as defined). The goals of a CES or state RPS will be obtained at lower cost with market-driven, competitive procurement mechanisms, but that will not happen across the country without urgent attention to the many ways in which current practices favor utility self-build over fair access for competitive suppliers. This is ironic in light of the fact that competitive suppliers were the pioneers who founded the renewable energy industry in the first place, deployed more efficient combined-cycle natural gas technology, and significantly improved efficiencies at existing nuclear and coal plants.

There are differences between RTO/ISO regions and those without them to evaluate in this process. Any CES should be accompanied by policies to promote RTO's as part of managing more intermittent resources. Cost-regulated states will have to address the ratepayer impact of large capital investments while market-based states will need to allow competitive wholesale power prices based on supply and demand and not artificially suppress market-priced prices as a few seek to do.

John E. Shelk, President & CEO, Electric Power Supply Association (EPSA)

- *To what extent does a CES contribute to the overall climate change policy of the United States, and would enactment of a CES warrant changes to other, relevant statutes?*

John E. Shelk, President & CEO, Electric Power Supply Association (EPSA)

- *What are the specific challenges facing individual technologies such as nuclear, natural gas, CCS, on- and offshore wind, solar, efficiency, biomass, and others?*

- *Will the enactment of a CES be sufficient for each technology to overcome its individual challenges?*

If the Committee elects to develop a CES, the general view is that the emphasis should not be on whether a given CES design overcomes present obstacles and challenges for each favored technology – that distorts markets, undermines competition and thus increases consumer costs. If the real purpose of a CES is “clean energy” however defined then the fewer thumbs on the scale the better, acknowledging that applying this principle will be in the eye of the beholder. Others argue that at least initially during a transition period any CES in combination with other forms of policy support should give each individual technology a fair chance to become cost-competitive over the longer term with support phased out over time.

- *Should there be an examination of energy-connected permitting?*

If the Committee elects to develop a CES, the entire matter of permitting should be examined as to both federal and state permitting. This is a very serious issue that needs to be addressed if timely projects are to move forward to meet goals of state RPS requirements and any federal CES. Absent permitting reforms it would likely be difficult to meet aggressive CES timetables depending on the details.

John E. Shelk, President & CEO, Electric Power Supply Association (EPSA)

- *Are there specific supporting policy options that should be considered for coal, nuclear, natural gas, renewable energy, and efficiency?*

John E. Shelk, President & CEO, Electric Power Supply Association (EPSA)

- *What is the current status of clean energy technology manufacturing, and is it reasonable to expect domestic economic growth in that sector as a result of a CES?*