

MEMO

TO: Interested Parties

FM: Ben Larson, Marchant Wentworth, Union of Concerned Scientists

RE: Compromise Biomass Definition for the Renewable Electricity Standard

DATE: April 11, 2009

Background:

The Union of Concerned Scientists and the Southern Alliance for Clean Energy (SACE), working with forest landowners, foresters and biomass power developers and the environmental community, have helped craft a compromise biomass definition for the renewable electricity standard (RES).

Our definition strikes the appropriate balance between biomass use and ecological protection. Our compromise definition of biomass will provide new markets for forest owners, loggers and related industries while at the same time developing biomass as a renewable resource to reduce the threat of global warming. At the same time, our definition recognizes the need to protect private lands from possible environmental impacts. We developed our definition to reap biomass' benefits and avoid its risks.

Scope of definition

From January to April 2009, UCS and SACE convened a wide range of stakeholders from SE states to develop a consensus on the range of woody biomass materials eligible from private lands and the sustainability standards forest owners would need to meet. Accordingly, our consensus definition does not address ag biomass or biomass from federal lands. Instead, we anticipated that our consensus approach on private lands would be paired with provisions addressing ag resources as well as federal lands.

What the Compromise Does

The Compromise definition provides new markets to private landowners who have been shut out under previous definitions.

Developing biomass markets will provide new income to forest owners, loggers and related industries in many areas of the country. For private lands, our definition clarifies the eligibility of woody biomass from private forests, which has been vague in some previous definitions.

The compromise definition protects private lands

Surprisingly, previous biomass definitions for the RES and the RFS lacked minimal sustainability standards to ensure even the regrowth of forests. In contrast, our definition provides that, at a minimum, forests must be regrown for woody biomass to be eligible as a renewable resource. In addition, our definition provides protections for other critical indicators of forest sustainability—namely, water quality, soil productivity, wildlife habitat, and biodiversity.

But our definition does not impose a one-size-fits-all sustainability standard, i.e., a uniform, national standard developed by the federal government. To take into account the wide variety of forest types and local conditions around the country, our definition provides landowners the choice of flexible, locally-adapted programs to demonstrate that their forests are managed sustainably.

Our definition also contains protections against conversion of natural forests to plantations, which typically have less ecological diversity than naturally-regenerated forests. But unlike the RFS, our definition doesn't exclude all new plantings, even where they have environmental benefits over the current land use or forest type. Hence, our definition allows biomass from new plantations on former agricultural lands and also from new stands planted to restore native forests.

The compromise definition helps us achieve our environmental and global warming goals

We need to use biomass to displace coal and achieve aggressive carbon emissions reductions. UCS and EIA analyses have estimated that biomass will provide between 1/3 to 2/3 of the renewable energy needed to meet a national RES. Attaining needed emissions reductions at the most economical cost makes it imperative that we maintain access to sustainable sources of biomass in the RES in all regions of the country.

Endorsements to date:

Union of Concerned Scientists

Southern Alliance for Clean Energy (SACE)

North Carolina Woodlands

Ozark Woodland Owners Association

Association of Consulting Foresters

NC Chapter, Association of Consulting Foresters

Biomass Power Association

RollCast Energy

Arkansas Association of Resource Conservation and Development Councils

Woody Biomass on Private Lands

I. Eligible Types of Woody Biomass

The following types of woody biomass are acceptable:

- a. Mill residues
- b. Urban wood residues, including tree waste, construction and demolition debris, that contain no hazardous coatings, chemically treated wood, or other non-wood materials
- c. Dead, severely damaged, or infested trees involved in salvage operations. The salvage operations must follow a disaster, such as a fire or hurricane.

If one or more of the sustainability protocols outlined in Section III are met, the following types of woody biomass (“d” through “g”) are eligible:

- d. Trees, logging residues, brush or other undergrowth and interplanted energy crops from planted stands existing at the time of enactment, and from any subsequent stand planted on the same land.
- e. Logging residues, cull trees, and pulpwood from naturally-regenerated forests.
- f. Logging residues, cull trees, and pulpwood removed from stands planted once after enactment to facilitate restoration or maintenance of native forest types in their historic range as determined by their species composition and structure.
- g. Trees and logging residues from planted or naturally-generated stands established on lands that at the date of enactment were cultivated lands (e.g., cultivated cropland, vineyard, pasture – reference 2008 U.S. National Vegetation Classification standard)

II. Forest types excluded from supplying biomass

- a. No biomass is eligible from forests or forestlands that are ecological communities with a State ranking of critically imperiled, imperiled, or vulnerable pursuant to a State Natural Heritage Program.
- b. No biomass is eligible if it originated from an old-growth forest as defined by the appropriate agency, credible scientific source, or state forestry commission.

III. Options to Ensure Forest Health and Regeneration

For woody biomass from private forests to be eligible, it must be harvested according to one of the following protocols:

- a. In states that have developed and/or amended water quality BMPs and have amended those BMPs or amended “biomass harvesting guidelines” to address environmental sustainability considerations associated with biomass removal such as wildlife, maintenance of soil productivity, and biodiversity, the landowner will follow the water quality BMPs and biomass harvesting guidelines.
- b. In states without biomass BMPs, biomass must be harvested in accordance with a forest management plan that minimizes negative short-term impacts and protects against long-term deterioration of water quality, soil productivity, wildlife habitat, and biodiversity, and that provides for the regeneration of the forest. The plan must be developed under the guidance of a professionally-accredited forester.
- c. Forest owners must be certified by a third-party certification program that minimizes negative short-term impacts and protects against long-term deterioration of water quality, soil productivity, wildlife habitat, and biodiversity, and that provides for the regeneration of the forest.

IV. Resource and Carbon Assessment aka “Lookback” Provision

Within one year after enactment, and then subsequently every five years, the Secretary shall conduct scientific investigation that:

- a. Assesses positive/negative landscape-level impacts of biomass harvesting on water quality, soil productivity, wildlife and biodiversity.
- b. Assesses full life-cycle, net carbon impacts, including indirect land-use impacts.