August 3, 2010

Missouri Department of Natural Resources
Division of Energy
Attn: Charlie Pappas
PO Box 176
Jefferson City, MO 65102

Re: PROPOSED RULE
Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 140—Division of Energy
Chapter 8—Certification of Renewable Energy and
Renewable Energy Standard Compliance Account

Cc: Robert Stout

Dear Mr. Pappas:

MoFRAC wishes to register the following concerns about the Proposed Rule as it relates to the use of wood, especially from forest-related resources.

Section 393.1025, RSMo, merely defines potential sources of renewable energy without specifying how they will meet the criteria of renewability. That is what the Proposed Rule should, but does not do.

A hydropower facility located on a hilltop in a region of low rain fall would not supply renewable energy—once its reservoir is drained, it can no longer supply energy. In the same fashion, a forest harvested unsustainably cannot continue to supply feedstock for a "renewable" energy facility.

The Proposed Rule makes no requirement for sustainable harvest of forest related resources [(2)(A)6.A.(I)], as it appropriately does for dedicated energy crops [(2)(A)3].

There are no applicable federal or state regulations re: wood harvest [(4)(C)4.A.(II)] . Even watershed Best Management Practices in Missouri are voluntary and so cannot be "violated".

There is no specification of "undue adverse air, water, or land use impacts" [(4)(C)4.A.(III)] so how will lack of adherence be determined? Strictly for purposes of energy generation, any forest harvest practices might be considered justifiable if the lights might otherwise go out. "Undue" requires context and some specificity regarding sustainability; e.g., not harvesting at levels that exceed the replacement rate.

The three preceding failings can all be addressed by *requiring* (i) adherence to the "Missouri Woody Biomass Harvesting – Best Management Practices Manual" [(4)(C)3.C.] for all feedstock acquired from forest-related resources and (ii) use of timber harvesters who have Missouri Master Logger certification (HYPERLINK "http://www.moforest.org/education/masterlogger.html" http://www.moforest.org/education/masterlogger.html).

There is an element of the requirement that there be no adverse impacts on air by a renewable energy facility that is not addressed by the above Best Management Practices Manual. This concerns the time it takes for woody biomass to become carbon neutral with respect to greenhouse gas emissions.

A recent study (HYPERLINK "http://www.manomet.org/node/322" http://www.manomet.org/node/322) indicates that forest residues burned to produce electricity require about three decades to repay their

carbon debt, and thus will do little to mitigate climate change in the short term. Although this study was specific to forest harvest practices in Massachusetts, we believe that the identified shortcomings of using forest wood to generate electricity are likely general.

These shortcomings do *not* apply in a similar degree to mill residues, construction debris, and other non-forest sources of wood, nor do they apply to the use of forest residues in thermal or combined heat and power facilities.

For these reasons, we do not believe that using forest residues to generate electricity only meets the full criteria for renewable energy, and therefore should be excluded as an allowable feedstock for such limited facilities until additional research proves otherwise in the Missouri context.

The Proposed Rule relies excessively on self-verification by the applicant for Renewable Energy Credits (REC)s. Thus, an assessment of the facility's air, water, or land use impacts, including impacts associated with the gathering of generation feedstocks, is to be submitted by the applicant and verified by a forester hired by the applicant [(4)(C)3.C.].

It is essential that there be third-party, *field* verification at a specified sampling intensity by authorized entities. In this case, the Missouri Department of Conservation should be designated as the relevant authority for specifying the appropriate criteria for third-party verifiers of forest feedstocks and listing eligible verifiers from which REC applicants may choose. This task will require special training of consultant foresters if they are to be considered qualified verifiers.

There is minimal provision for entities outside of the department to challenge certification and for that challenge to be answered [(4)(C)6.]. This is an invitation to litigation, which should instead be the measure of last resort. The process of certification should be open, accountable, and transparent with online publication of all relevant documents. The Climate Action Registry's listing of carbon offset projects provides a useful model.

A good contract specifies a grievance procedure for resolution of disputes between the parties to the contract. The Proposed Rule should be more specific about how the Department of Natural Resources will handle requests for a revocation review in a transparent and public fashion.

We thank you for this opportunity to comment on the Proposed Rule, and we hope that you share our opinion that the Proposed Rule requires substantial modification to effectively meet its stated purpose.

Sincerely,

Scott Brundage, Chair
Missouri Forest Resources Advisory Council