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 FAXED

September 17, 2008

Public Utilities Commission of Texas
 Attn: Central Records Filing Clerk
 1701 N. Congress Avenue
 Austin, Texas 78701

RE: Request for comments: Non-wind Electric Generation Goal

The Texas Solid Waste Association of North America appreciates the opportunity to present comments regarding possible regulatory changes that could increase the utilization of biomass energy resources in Texas. TxSWANA is an organization with 430 members whose members primarily represent local governments throughout the state who are responsible for the proper management and disposal of municipal solid waste generated by residents and businesses.

The generation of electricity from municipal solid waste offers an option for increasing electric generation that utilizes resources that are at this time largely untapped. Annually, Texas disposes of approximately 30 million tons of municipal solid waste. On a BTU basis, this is equivalent to approximately 15 million tons of coal each year. There are 246 permitted landfills in Texas and 4200 closed facilities throughout the state. According to TCEQ records, only 14 are permitted or registered to capture gas for energy recovery. ERCOT records show that 70 MW of electricity are generated from landfill gas at 14 facilities. There is considerable interest across the state in developing this resource. It is TxSWANA's opinion that through a combination of regulatory changes by both the PUC and the TCEQ, the amount of electricity generated from municipal solid waste could exceed the Public Utility Commission's (PUC) goal of 500 MW of electric generation.

Questions:

1) Are additional measures for the support of non-wind renewable generation necessary and appropriate in order to achieve 500 megawatts of non-wind renewable generation in Texas by 2015?

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The use of biomass as a resource for electricity generation in Texas represents less than one percent of the total electric generation mix. Texans disposed of 30.4 million tons of municipal solid waste in 2006; an amount equal to 15 million tons of coal. The technologies available for generating electricity from municipal solid waste are well proven. These technologies include landfill gas-to-energy and mass burn or refuse-derived-fuel facilities.

In the 2008, ERCOT reported that the estimated electric generation from biomass is at 20 MW and electric generation from landfill gas is at 70MW. This represents less than 1% of the state's generation mix. Landfill gas projects are taking place at 14 sites throughout the state. Overall, the state has 246 permitted landfills and 4200 closed landfills. While not all of these facilities can economically be developed into landfill gas to energy projects, the US EPA has identified at least 55 landfills that have strong potential for development utilizing current technologies. Advances in methane generation and recovery could increase this number.

2) What level of support for non-wind renewable generation would be needed in order to achieve 500 megawatts of non-wind renewable generation in Texas by 2015?

Currently, there are a number of projects that are being considered across Texas due to the increases in energy prices and the ability to garner carbon credits for installation of the system. It is our opinion that in order to increase generation, additional financial incentives would lead to greater generation.

Unlike other types of energy generating technologies, there are a considerable number of variables associated with landfill gas projects. Each landfill has its own methane generating characteristics in terms of the energy value of the gas and the quantities of gas that can be generated. We would encourage the development of a per kWh incentive of one cent to further encourage the development of gas to energy projects. In lieu of a per kilowatt incentive, TxSWANA is in favor of grants, loan assistance and tax incentives.

3) Which measures would be most cost-effective in providing inducements for the development of additional non-wind renewable generation?

As several landfill gas-to-energy projects are marginally economical, any financial assistance would be helpful in order to increase generation. TxSWANA is primarily comprised of local government entities, and as such, are not subject to corporate or sales taxes. Therefore, incentives such as favorable buy-back rates, grants to assist in the construction of facilities and low interest loans would directly benefit the municipalities interested in pursuing facilities. It is recognized that a number of facilities built in the state are through partnership with private developers, therefore, TxSWANA would also encourages the PUC to consider tax incentives as well.

4(a) Does the commission have the authority to adopt additional measures for the support of non-wind renewable generation in order to achieve 500 megawatts of non-wind renewable generation in Texas by 2015?

Yes. The commission has the authority to adopt additional measures to achieve the goal of at least 500 megawatts of non-wind renewable generation in Texas by 2015. The legislature mandated that the Commission establish a goal of at least 500 MW of capacity from non-wind renewable energy technology. The legislature also has given the Commission the authority to establish a separate alternative compliance payment for the goal of 500 MW of capacity.

The Texas Supreme Court has repeatedly held that an agency has the implied powers to carry out its statutorily imposed duties and objectives. Because the legislature mandated the Commission to establish a minimum amount of non-wind renewable energy capacity within the overall goal, the commission has the implied power to adopt measures to achieve the minimum goal.

4(b) In particular, does the commission have the authority to adopt a requirement for retail electric providers to retire non-wind renewable energy credits that are distinct from the existing RECs?

Yes. The commission has the authority to require non-wind RECs be retired as distinct from the existing RECs in the RPS. The Commission has the authority to establish minimum annual renewable energy requirements for REP. To carry out the objectives the Commission has the implied power from its authority to define a certain amount of RECs and compliance premiums that must be retired from non-wind renewable energy capacity within the RPS.

5(a) Should the commission adopt measures for the support of specific non-wind renewable generation technologies?

TxSWANA strongly supports the PUC's efforts to encourage non-wind renewable energy generation technologies. The amount of potential generation from these resources is considerable as discussed above. However, for a variety of reasons, non-wind renewable resources account for less than one percent of the state's generation mix. The benefits of encouraging development of this resource include:

- A reduction in dependence on energy resources imported into Texas for electricity generation.
- Capturing gas and utilizing it for energy projects will improve air quality throughout the state.

- A possible reduction in the amount of landfill space utilized in the state either through more efficient use of existing sites by using leachate recirculation techniques or by utilizing waste directly through either mass burn systems or gasification.

The following are major barriers to the development of this resource:

- Cost of constructing electric generating capacity at landfills compared to projected return on investment.
- Regulatory constraints placed on landfill operators that hinder the development of technologies that would enhance the generation of landfill gas.
- Increased gas production would significantly improve the cost effectiveness of projects as well as increase the total electric generation from landfill gas.
- Local government understanding of PUC rules and regulations related to renewable energy credits, net metering and utility interconnections.

Actions that could reduce or eliminate these barriers include:

1. Encourage the environmentally safe development of technologies to enhance methane generation would significantly increase the development of landfill gas to energy projects and also increase generation at sites where energy recovery is already taking place. This is among TxSWANA's highest priorities related to increasing energy generation from landfills.
2. Regulations related to development of gas projects at any of the state's 4200 closed landfills should be streamlined to allow for development of this resource as well.
3. Greater outreach by the PUC to local governments, in conjunction with the TCEQ, could help identify opportunities and encourage development of projects by these entities. Issues to focus on could include: renewable energy credits, net metering, interconnection requirements, methane gas enhancement options, use of closed sites for development.
4. The establishment of financial incentives to further advances the development of waste to energy projects. The approach and size of these incentives are discussed below.

5(b) For which technologies should additional support measures be adopted?

Landfill gas-to-electricity is a proven technology that can provide reliable electric generation capacity on a continuous basis. With current energy prices and the availability of carbon credits, many projects are seriously being examined. The addition of an economic incentive could double or triple the amount of electricity generated in the state using this technology.

Bioreactor technology represents a landfill technology that is proven to increase gas generation rates significantly. The development of this technology can only move forward in an aggressive manner if there are changes to TCEQ regulations that allow for this proven technology to be developed at a faster rate than is currently taking place.

Texans generate a total of 30 million tons of municipal solid waste per year. On a Btu equivalent basis, this is equal to 15 million tons of coal. Mass burn, landfill practices that enhance methane generation and gasification of waste through pyrolysis are at varying degrees of technical viability. Given current land availability, Texas landfill tipping fees will make the development of traditional mass burn technologies unlikely in the near future. Tipping fees for a landfill are almost one fourth that of tipping fees at a mass burn facility. There is interest in developing new technologies such as gasification and pyrolysis to convert solid waste to energy and recoverable gases. No facilities are currently operating. Research and development efforts sponsored by the state could help provide the waste industry with valuable information that could help make these options more feasible in the long-term.

5(c) *What measures should be adopted?*

- An ongoing education/training program for the solid waste industry on how to best develop energy recovery projects. A program co-sponsored by the PUC and the TCEQ would be of great assistance and can be undertaken without any special rule making.
- Remove barriers to the development of landfill technologies that enhance methane generation.
- Adoption of a streamlined permitting program for developing landfill gas projects, including standard air permitting and establishment of notice policies for the development of gas projects on closed landfills.
- Establishment of a separate renewable portfolio standard for biomass energy.
- Grants funds for solid waste projects at the local level should be allowed to be used for landfill gas recovery projects.
- The establishment of favorable incentive buy-back rates for power generated from biomass resources. In lieu of an incentive rate, a grant program similar to that established under HB 1090. PUC should encourage the legislature to include

landfill gas projects in the grant program and devise a grant formula that provides an equivalent incentive or grant as landfill gas project are not figured in tons to energy, as those provided in the grant program. This should also be afforded to projects involving photovoltaic solar energy at landfills.

5(d) What target levels of development should be established

The 500 MW target is within the range for electricity generated from landfill gas and other technologies by 2015.

5(e) What would be the cost of such measures?

The EPA program identified that there are approximately 55 landfills with the potential to develop waste to energy projects. Some of these projects are actually being developed at current electric rates; however, further incentives would help fully recognize the potential of this resource. TxSWANA would encourage PUC and TCEQ to work together to identify a range of costs for establishing a cost for these incentives.

Regulatory changes allowing for the development of bioreactor technology would come at no cost to the state, but would have a significant impact on the net costs of a landfill gas-to-energy project.

TxSWANA appreciate the opportunity to make comments regarding the generation of electricity from non-wind renewable energy. Do not hesitate to contact me should you have any questions regarding our comments.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ron Smith', with a long horizontal line extending to the right.

Ron Smith
President, Texas Chapter
Solid Waste Association of North America

Cc: TxSWANA Board