The ***Clean, Renewable, and Efficient Energy Act*** (Public Act 295 of 2008, MCL 460.1001 to 460.1195) was signed on October 6, 2008 and given immediate effect. Now we are somewhat suddenly faced with a requirement to hand in, later this week, ***two plans*** nobody here has had longer than a week. I don't blame the City for all of that; I'm sure MPSC or DELEG didn't issue instructions much before the 60-day deadline in the Act on how to prepare plans. But I want to know all efforts the City made, how soon after October 6, to start preparing them and to elicit and gather public input on them, absent a Future Energy Needs Committee (**FENC**). And I want to hear what the City plans to do, how soon, to improve these short-notice plans. To put it another way, I want to see the City's timeline – up to now and from now on.

Of course, the short notice affects concerned citizens like me, too. It's not easy to find the time to give the City's Renewable Energy Plan (**REP**) and Energy Optimization Plan (**EOP**) much of a review. But here are some comments I've so far found reasons to make about the draft plans.

I want the City to "show its work" more. Where and how did we get the numbers that the plans use to base their projections of what the City needs to do to comply with this new state law? And I'm not just asking for sources here – for the names of people or groups we're trusting. I want to know the reasons why we're projecting the changes we are in energy demand, generation costs, overhead, etc. For example:

- Why does the **REP** project the total figure for retail electricity sales for Marshall to go up 0.5% per year until 2012 – then to rise 1.5% for the next three years, when presumably we will either still be working to encourage conservation, or have fully implemented tried and tested conservation programs in place, or both? (Also, though Section 27 of the statute doesn't require us to look at figures for sales/consumption after 2015 for the **REP**, are we in fact looking? If so, how would they fit into this spreadsheet? If not, why not?)
- The **REP** projects the general retail cost per megawatt-hour for power to go up 1% per year, but the retail cost for renewable-source power is only projected to rise by 0.5% per year. If that is and continues to be true, and the spreadsheet is correct that renewables cost less per megawatt retail now, renewable-source power will never be more expensive than power in general. And that would mean we'll never have to talk about allocating additional costs to customers. But is this realistic? Who says so, and why?
- Shouldn't we differentiate among different types of power in the two categories? Aren't they likely to change costs differently over time, within as well as between the categories? Might capacity and availability also vary among the different types and categories?

Earlier, I urged the City to make public its timeline for working on these plans and giving the public an informed chance to participate in that work. My own timeline on energy issues goes back before I was put on the original FENC, six years ago. I've been talking conservation since before then, and I'm glad to see it mentioned in the **EOP**. But I'm not sure we're even saying we plan to do as much as we should do.

- Why not make conservation an even bigger part of the **EOP**? Among other benefits, it offers both short- and long-term reductions in both capital investment and operating expense. It even promises to help control any special efforts the City might otherwise need to make to achieve renewable-energy requirements.
- Why not use "market forces" to encourage consumption – by making additional energy consumption and peak-load demand bear more of the cost of additional energy generation and capacity? Even if we don't go to progressive rates, we could do something by making base "service charges" a smaller share of total bills.

  This could also perhaps earn the City some credit in the category of "Residential Low Income Services" – in fact, if not in law. If you reduce a low-income family's electricity usage to 10 kilowatt-hours a month, but they still have to pay $10 as a base service charge, that family is paying $1/kWh. Such families are a particular example of the fact that conservation programs will be more effective the greater impact reducing consumption actually has on the final bill.

I was quite surprised to see old tires making up a prominent portion of our **REP**. Tires are renewable? Really? Section 11 of the Act defines a "renewable energy resource" as one that "naturally replenishes over a human, not a geological, time frame and that is ultimately derived from solar power, water power, or wind power." It adds that "Renewable energy resource does not include petroleum". And petroleum is, if not the most important, then at least one of the more important ingredients of tires that makes it possible to get usable amounts of energy by burning or gasifying them. This may be part of the reason why the federal Energy Information Association no longer recognizes tires as a renewable resource, and even discounts the non-renewable portion of municipal solid waste in general. See:

http://www.eia.doe.gov/cneaf/solar.renewables/page/prelim_trends/rea_prereport.html
http://www.eia.doe.gov/cneaf/solar.renewables/page/prelim_trends/pretrends.pdf

For that matter, I haven't found any definition in the Act or any other state law which explicitly includes tires. (Which is not to say my search was definitely exhaustive. As I noted above, I'm suffering from time pressure too. But shouldn't we be sure about this before we include it?)

I will grant that it may be better overall to get some usable energy out of scrapped tires rather than let them catch fire and burn in landfills. But I have some questions that need answers before I would be sure gasification is the best thing overall to do with old tires. For example:

- Is burning old tires an ecologically responsible fuel source? There are obviously some non-fuel "impurities" to handle before the tires turn into fuel. And some of those materials are pollutants. Anyone who lives in Michigan knows there are issues of environmental justice in generating energy from incinerators; why wouldn't the same potential for "hot spots" and "pollution ghettos" arise here?
- Is burning old tires really an efficient activity? What figures do we have on the net energy-efficiency of tire gasification – before and after accounting for the costs (in petroleum-as-raw-material and in energy) of *making* tires in the first place? Would re-treading old tires to extend their lives be a better way to reduce energy and landfill consumption, for example?
- Again, where are we getting the facts to address the above questions and others like them? And how sure are we (and should we be) of them? I am old enough to remember the Carter administration's push for synthetic fuel from coal . . . and we've all seen commercials for what is arguably the modern equivalent, so-called "clean coal". If our only source for information on tire gasification is the people who are promoting the process, without any independent verification or review, I would not be comfortable counting on it in the City's **REP**.

Tire gasification may turn out to be the win-win solution for Marshall that it appears to have the potential to be. But it is not hard to find information suggesting that the process is not so regarded everywhere. To pick two examples:

http://www.energyJustice.net/tires/
http://www.goErie.com/apps/pbcs.dll/article?AID=/20080822/NEWS02/808220393

As my comments indicate, I see accountability and flexibility as essential elements of both these plans. And both elements are somewhat lacking in both plans – probably due in significant part to time pressures. But there will be opportunities to do better – and we should.

The City will have to prepare annual reports on its **EOP**, and provide them not only to Council but also to all customers. Similarly, MPSC will review the City's **REP** at least every two years – and anytime the City proposes any changes to that plan – and either the City or MPSC must hold public hearings in association with those reviews. But the City will lose a great opportunity to benefit from these plans if it treats these reports, hearings, etc. as merely procedural mandates – instead of chances for genuine public input and involvement in making the plans, and the City's energy future, work better.

I urge the City to seize the opportunities available. For example, Council could move toward accountability in implementing the **REP** and the **EOP** . . . by establishing a Citizen Energy Needs Committee (**CENC**) to take the place of FENC. Properly empowered, CENC could

- offer citizens a focused contact point for feedback and ideas to improve the plans;
- serve as a forum for developing required reports on and reviews of the plans; and
- review the City's progress on implementing these plans and the purposes of the Act.

In other words, CENC could help the City do better at achieving the Act's goals – including the "overall goal" mentioned in Section 71 of "reduc[ing] the future costs of provider service to customers" and "delay[ing] the need for constructing new electric generating facilities[,] thereby protect[ing] consumers from incurring the costs of such construction." And it should be a citizen committee to involve all types of stakeholders in the City's energy future – particularly customers of all types. That kind of diversity of membership would be of more use in this rôle than the limited geographical representation available in a Council committee.

I expect to find more areas deserving of comment as I continue to review the City's **REP** and **EOP**. But I do not expect that review to be done by noon tomorrow. So I hope – and suggest – that the City take steps to make sure this is not citizens' last opportunity to comment on the City's plans and actions for our energy future.

John Anthony La Pietra
386 Boyer Court
Marshall, MI 49068
269-781-9478
jalp@triton.net
http://members.triton.net/jalp/

Appendix: Selections from Text of the **Clean, Renewable, and Efficient Energy Act** (Public Act 295 of 2008, imd. eff. 2008/10/06)
http://www.legislature.mi.gov//documents/mcl/pdf/mcl-Act-295-of-2008.pdf

MCL 460.1011 Definitions; R.

Sec. 11. As used in this act:

. . .

(i) "Renewable energy resource" means a resource that naturally replenishes over a human, not a geological, time frame and that is ultimately derived from solar power, water power, or wind power. Renewable energy resource does not include petroleum, nuclear, natural gas, or coal. A renewable energy resource comes from the sun or from thermal inertia of the earth and minimizes the output of toxic material in the conversion of the energy and includes, but is not limited to, all of the following:

(i) Biomass.
(ii) Solar and solar thermal energy.
(iii) Wind energy.
(iv) Kinetic energy of moving water, including all of the following:
(A) Waves, tides, or currents.
(B) Water released through a dam.
(v) Geothermal energy.
(vi) Municipal solid waste.
(vii) Landfill gas produced by municipal solid waste.

MCL 460.1025 Municipally-owned electric utilities; applicability of section; filing of renewable energy plan; requirements; public comment; initial approval; review; amendment; determination of noncompliance.

Sec. 25. (1) This section applies only to municipally-owned electric utilities.

(2) Each electric provider shall file a proposed renewable energy plan with the commission within 120 days after the commission issues a temporary order under section 171 [sic; should be 191]. Two or more electric providers that each serve fewer than 15,000 customers may file jointly. The proposed plan shall meet all of the following requirements:

(a) Describe how the provider will meet the renewable energy standards.
(b) Specify whether the number of megawatt hours of electricity used in the calculation of the renewable energy credit portfolio will be weather-normalized or based on the average number of megawatt hours of electricity sold by the electric provider annually during the previous 3 years to retail customers in this state. Once the commission determines that the proposed plan complies with this act, this option shall not be changed.
(c) Include the expected incremental cost of compliance with the renewable energy standards.
(d) Describe the manner in which the provider will allocate costs.

(3) Subject to subsection (6), the commission shall provide an opportunity for public comment on the proposed plan filed under subsection (2). After the applicable opportunity for public comment and within 90 days after the proposed plan is filed with the commission, the commission shall determine whether the proposed plan complies with this act.

(4) Every 2 years after the commission initially determines under subsection (3) that a renewable energy plan complies with this act, the commission shall review the plan. Subject to subsection (6), the commission shall provide an opportunity for public comment on the plan. After the applicable opportunity for public comment, the commission shall determine whether any amendment to the plan proposed by the provider complies with this act. The proposed amendment is adopted if the commission determines that it complies with this act.

(5) If a provider proposes to amend its renewable energy plan at a time other than during the biennial review process under subsection (4), the provider shall file the proposed amendment with the commission. Subject to subsection (6), the commission shall provide an opportunity for public comment on the amendment. After the applicable opportunity for public comment and within 90 days after the amendment is filed, the commission shall determine whether the proposed amendment to the plan complies with this act. The proposed amendment is adopted if the commission determines that it complies with this act.

(6) The commission need not provide an opportunity for public comment under subsection (3), (4), or (5) if the governing body of the provider has already provided an opportunity for public comment and filed the comments with the commission.

(7) If the commission determines that a proposed plan or amendment under this section does not comply with this act, the commission shall explain in writing the reasons for its determination.

460.1027 Electric utility with 1,000,000 or more retail customers; renewable energy capacity portfolio; renewable energy credit portfolio; standards; substitution of energy optimization credits, advanced cleaner energy credits, or combination; rates.
Sec. 27.

. . .

(3) Subject to sections 31 and 45, an electric provider shall achieve a renewable energy credit portfolio as follows:

(a) In 2012, 2013, 2014, and 2015, a renewable energy credit portfolio based on the sum of the following:

(i) The number of renewable energy credits from electricity generated in the 1-year period preceding the effective date of this act that would have been transferred to the electric provider pursuant to section 35(1), if this act had been in effect during that 1-year period.

(ii) The number of renewable energy credits equal to the number of megawatt hours of electricity produced or obtained by the electric provider in the 1-year period preceding the effective date of this act from renewable energy systems for which recovery in electric rates was approved on the effective date of this act.

(iii) Renewable energy credits in an amount calculated as follows:

(A) Taking into account the number of renewable energy credits under subparagraphs (i) and (ii), determine the number of additional renewable energy credits that the electric provider would need to reach a 10% renewable energy portfolio in that year.

(B) Multiply the number under sub-subparagraph (A) by 20% for 2012, 33% for 2013, 50% for 2014, and 100% for 2015.

(b) In 2016 and each year thereafter, maintain a renewable energy credit portfolio that consists of at least the same number of renewable energy credits as were required in 2015 under subdivision (a).

(4) An electric provider's renewable energy credit portfolio shall be calculated as follows:

(a) Determine the number of renewable energy credits used to comply with this subpart during the applicable year.

(b) Divide by 1 of the following at the option of the electric provider as specified in its renewable energy plan:

(i) The number of weather-normalized megawatt hours of electricity sold by the electric provider during the previous year to retail customers in this state.

(ii) The average number of megawatt hours of electricity sold by the electric provider annually during the previous 3 years to retail customers in this state.

(c) Multiply the quotient under subdivision (b) by 100.

(5) Subject to subsection (6), each electric provider shall meet the renewable energy credit standards with renewable energy credits obtained by 1 or more of the following means:

(a) Generating electricity from renewable energy systems for sale to retail customers.

(b) Purchasing or otherwise acquiring renewable energy credits with or without the associated renewable energy.

(6) An electric provider may substitute energy optimization credits, advanced cleaner energy credits with or without the associated advanced cleaner energy, or a combination thereof for renewable energy credits otherwise required to meet the renewable energy credit standards if the substitution is approved by the commission. However, commission approval is not required to substitute advanced cleaner energy from industrial cogeneration for renewable energy credits. The commission shall not approve a substitution unless the commission determines that the substitution is cost-effective compared to other sources of renewable energy credits and, if the substitution involves advanced cleaner energy credits, that the advanced cleaner energy system provides carbon dioxide emissions benefits. In determining whether the substitution of advanced cleaner energy credits is cost-effective, the commission shall include as part of the costs of the system the environmental costs attributed to the advanced cleaner energy system, including the costs of environmental control equipment or green-house gas constraints or taxes. The commission's determinations shall be made after a contested case hearing that includes consultation with the department of environmental quality on the issue of carbon dioxide emissions benefits, if relevant, and environmental costs.

(7) Under subsection (6), energy optimization credits, advanced cleaner energy credits, or a combination thereof shall not be used by a provider to meet more than 10% of the renewable energy credit standards. Advanced cleaner energy from advanced cleaner energy systems in existence on January 1, 2008 shall not be used by a provider to meet more than 70% of this 10% limit. This 10% limit does not apply to advanced cleaner energy credits from plasma arc gasification.

(8) Substitutions under subsection (6) shall be made at the following rates per renewable energy credit:

(a) One energy optimization credit.

(b) One advanced cleaner energy credit from plasma arc gasification or industrial cogeneration.

(c) Ten advanced cleaner energy credits other than from plasma arc gasification or industrial cogeneration.