

Monroe A. Miller Jr.
19 Big Spruce Lane
Waynesville, NC 28786
August 17, 2010

Mark Bumgarner
Chair, Haywood Community College Board of Trustees
385 North Haywood Street Suite 3
Waynesville, NC 28785

Dear Mr. Bumgarner,

Please find copy of my comments during the HCC Public Hearing yesterday.

FYI.

Sincerely,

Monroe A. Miller Jr.

cc w/enc:

bcc:

Donna Forga
HCC Board of Trustees
1606 Sulphur Springs Road
Waynesville, NC 28786

Michael McConnell
HCC Board of Trustees
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HCC Public Hearing
August 16, 2010

All of you attended an HCC Work Session on May 12th, to review the construction process for the \$9 M Creative Arts Building. I recorded the meeting. Mike Nicklas, the architect, spoke via teleconference in detail about the design, and that electrical power was to be generated for the building primarily through Solar Panels. A question was asked about back-up, which was electrical, but there was not enough capacity to power the building with the electrical back up. Nicklas also cited a business in Fletcher using a similar successful installation.

That installation in Fletcher was debunked by Dr. Rose Johnson in an interview with the Mountaineer on June 15th, when she said, in part: “A solar system installed at a Fletcher business ... didn’t function as expected...”

At the County Commission meeting on June 7th, Dr. Johnson indicated that someone named “Guiney” looked at the energy proposal and was “complimentary on the design”. Also, an engineer looked at it. “Guiney” indicated there were 35 installations like this already.

Unfortunately, that was debunked in an article in the SMN on August 10th by Becky Johnson which said: “There are around 30 other solar thermal projects in the nation installing similar technology, though none are fully up and running yet.”

What?

I thought I should take a look at the specifications for this solar project. I went to HCC last Thursday and requested to view the specifications. I was presented with large architectural drawings and the Electrical Proposal. They contained ... **nothing**.

I was told that a local company, FLS in Asheville, was going to do the solar project, but no specifications were available, as the only people that were dealing with FLS directly were Dr. Rose Johnson and the Board. Some red flags popped up.

I researched FLS and discovered FLS was the company that installed an electrical (solar voltaic) system at the Canton dump, also known as the Evergreen Solar Farm. I happened to take a aerial photograph of it when I took photos of the quarry. It contains 195 arrays, which contain a total of 2,340 panels, capable of generating a maximum of 555 KW, and covers an estimated area of about 3 football fields. The energy created feeds directly to the grid through Progress Energy. FLS sells the power to the electric company.

I returned to HCC the next day, last Friday, to have them arrange it so that I could speak directly with FLS. As almost an afterthought, I was told that FLS is going to do the same thing at HCC as was done with the Evergreen Solar Farm. FLS is going to sell the electrical power created on the roof’s of the Creative Arts Buildings to Progress Energy by connecting directly to the grid. Also, FLS will retain ownership of all of the solar equipment.

That was the surprise of the day, as I had been lead to believe up to that point, that the electrical energy derived from the solar voltaic cells were to provide power directly to the building. HCC evidently has not been forthcoming. **I feel there has been deception, a really big red flag.**

I'm not the only one that was deceived. As an aside, I spoke to Julie Davis this morning on a related issue, and when I told her about HCC's solar plans, the expression on her face was priceless! I asked what she had been lead to believe. She thought that the building was going to be supplied with electricity from the solar cells, and any excess electricity was going to be sold to the power company through the grid. That was this morning. The one person it is not nice to deceive is the person that is going to make the loan happen.

Back to last Friday.

Dr. Johnson arranged that I was able to speak to Frank Marshall, a marketing guy, at FLS. No engineers were available. He indicated that the public utilities commission prohibits sale of electrical power directly to customers, but they can sell BTU's, which means they can sell hot water. He indicated that the maximum electrical power generation capability of the roof installation at the Creative Arts Building was 109KW, about 1/5 the capacity of the Evergreen Solar Farm. He indicated that the roof was to contain a mixture of solar voltaic panels, and solar hot water panels. FLS owns all of the equipment, and will lease the space on the roof from HCC. All of the revenue from Progress Energy for the electrical generation will go to FLS. We did not get into a discussion of the efficiency of the Solar Hot Water Panels in the dead of winter, nor did we discuss any aspects of the Solar Thermal design.

Recalling the architectural drawings I was presented, it now makes perfect sense that there were no specifics about the Solar design. It is not part of the project. There were two drawings however that implied a solar design. A page indicating an intricate network of pipes embedded in the floors of the buildings, presumably for hot water heating and chilled water cooling, and a page indicating lots of solar panels on the roofs of the buildings - no indication as to whether they were hot water or voltaic panels. There was an option for a future 150KW inverter.

When a vendor builds his own equipment into a new County owned facility, I feel that there may have to be a lot of on-the-job learning necessary for our poor County Attorney to make this a bullet proof contract. What if FLS goes out of business or is bought out? There is a phrase that describes what you, the county commissioners, will be getting into: **Opening Pandora's Box.**

So, why on God's Green Earth, is FLS installing solar voltaic panels on the roof of the new Creative Arts Building? HCC could instead lease a parking lot or a field if they wanted lease revenue. If FLS wanted to sell extra power to Progress Energy, they could easily add panels to the Evergreen Solar Farm. Does anyone besides me realize how absurd this whole thing is?

In a recent e-mail from Mike Nicklas sent specifically to Kirkwood Callahan, who wrote a recent opinion piece in the SMN, Nicklas refers to a guarantee that the College will have a 65% to 70% reduction in energy bills. He also says the college would pay less for energy because of the "solar developer approach" to the solar devices on the roof.

The only savings HCC will benefit from the electrical portion will be the lease payment for FLS's equipment on the roof. HCC will be purchasing BTU's from FLS, a company that will have made a huge capital investment in installing their Solar Thermal equipment that will be **an** intricately integrated system woven into the county's Creative Arts Building, and as a private company, need to realize a return on investment and make a profit to stay in business. So, after the middle-man, FLS, sucks off enough profit from the sale of the BTU's to HCC, I would be interested to know from Mike Nicklas how HCC will realize 65% to 70% in energy savings. By the way, I still don't have a clue what is meant by the "solar developer approach", one of the red flags.

I have at least three serious concerns here:”

- That the solar voltaic system was portrayed as being able to supply electricity to the building,
- The excessive cost of the building as Kevin Ensley has been complaining about all along, and
- This loan should not even be approved with out a public vote. If revenues from the 1/4 cent sales tax fall short, it will be the taxpayers of Haywood County that become responsible for the debt repayment. Again, from Article V, Section 4 of the Constitution of the State of North Carolina:

The General Assembly shall have no power to authorize any county, city or town, special district, or other unit of local government to contract debts secured by a pledge of its faith and credit unless approved by a majority of the qualified voters of the unit who vote thereon, ...”

It should be noted that there is a razor thin majority of HCC Board Trustees in favor of this project. This fellow, Mark Bumgarner, a member of the college board, in an article in the SMN, has attempted to denigrate two of the most recently appointed board members for not voting with him, maligning members of his own board. Bumgarner also stated that “switching gears and going back to the drawing board at this point could cost more than it would save.”

You know, I really take offense at a statement like that. Commissioner Ensley felt that the Building could be adequately constructed at a cost reduction of \$2.5 to \$3M less than initially proposed. I’d like to hear from Bumgarner that it would cost over \$2.5 to \$3M to “switch gears”.

It was also noted in the same SMN article that: “The cost of the solar thermal is between \$600,000 and \$700,000.” What is that for? I thought FLS owned the equipment. Is this the cost of intricately integrating vendor owned equipment into the county buildings at taxpayer expense?

I can only figure out one reason why HCC is pushing this approach. That is to be able to point to the roof of the Creative Arts Building loaded with Solar Voltaic and Hot Water Panels, and be able to say: “See, we are now Platinum Grade Certified Environmental Wacko’s”. If this thing passes, you gentlemen could wind up becoming the laughing stock of Western North Carolina.

I feel that you, Commissioner **Swanger**, and you, Commissioner **Upton**, need to stand up to the plate behind Commissioner Ensley, and send this project back to the drawing board. In the same breath, you could advise HCC to loose the architect and get a new one.

I appreciate your allowing time for me to express my concerns. Thank you.

Monroe A. Miller Jr.