

Transcript of the Jarrod Thomas Show, KNOX AM-Radio  
Wednesday, April 20, 2011 – 9 a.m.

In-studio guests: Rick McCarthy and Susan Mickelson

Phone guest: Dave McFarlane, president, McFarlane, Grand Forks, ND

*Dave is the head of all engineering functions at McFarlane and has overall responsibility for Design-Build, TAB, Commission and Retro-Commissioning projects. A nationally-recognized expert in the field of energy commissioning, Dave is a NEBB-qualified supervisor with more than 25 years of experience. His expertise has helped form U.S. national standards for environmental balancing in HVAC systems. He has often served as guest lecturer for industry professionals and has written numerous trade journal articles on the subject.*

McFarlane:

“About three or four years ago, we started working with the City of Grand Forks to identify the energy use in all of their buildings. We also looked at the County buildings and anything that was kind of City-related. The library was one of those. Of the 30 or 40 buildings we looked at, the Grand Forks Library was in the top five most inefficient buildings. Now, my memory isn’t that good, but it maybe even in the top three.

“It was built in 1972, at a time when energy was cheap. I don’t know if you remember this. . . NSP Electric, at the time, had a Reddy Kilowatt guy running around, and their logo was “Electricity is penny-cheap at NSP”. Because of this, the design professions at that time did not concentrate on energy usage – electric, gas, or anything. Because of that, the system that was put in there was just a very inefficient system.

“Right now, Susan (Mickelson) asked me to look at it, so we’ve taken the last three years’ energy bills and we’re in the process of reviewing that to determine exactly how much energy per square foot the building has used over the last three years. We’ll get back to her this week with that information.

“Once we see what the energy usage is, we can determine what it should be -- from a lot of the work we’ve done -- and tell you exactly how much the library is spending over what it should be. But it’s significant. It’s one of the worst buildings the City owns.”

Thomas:

“Is there a way to make the building more energy efficient?”

McFarlane:

“To do so would mean, basically, shutting the library down for a year, gutting the mechanical system, replacing with something new, and putting it back in. This building is almost 40 years old. The life expectancy on equipment like this is 25 to 30 years. Because of that, you need to gut it and start over, basically.”

Thomas:

“So, if we were to build a new library, would the energy efficiencies that were to be put into it today, would they be only good for 25 to 30 years? Or have we moved far enough along in this arena, where we can make sure that if we want this building to be around for 40, 50 years or more, that it’s going to continue to be energy efficient?”

McFarlane:

“The energy efficiency sequences and control logics, the design strategies that are used are state-of-the-art right now. But, I’ll bet you anything – 30 years from now – someone will have come up with a better way of doing it. They will be efficient by today’s standards – which are much more efficient than they were 40 years ago. Mechanical equipment, by its nature, is going to wear out. So, once you get more than 40 years out of a system, you may end up having to replace components anyway.”

###