## Saint John's Solar Farm Groundbreaking Speech by Mario Monesterio

Good afternoon and thank you for coming and celebrating this special occasion with us. From my perspective this project has be a long time coming.

Solar technology has had a long and rich history in our state. In the late 60's Honeywell started research on thermal solar panels using reflectors that would track the sun; that was quickly followed by a sizable installation at the U of M campus.

At that time most of the potential market was focused around the thermal technologies because in the Midwest, energy costs are driven by heating (heating-degree-days), as such, photovoltaic technology was something mostly read about in research journals and "Mechanics Illustrated."

Again in the early 80's a surge in interest and activity arose from the Carter administration's federal incentives quickly followed by a 20% State-wide incentive. This spurred local businesses, again, like Honeywell, to be among the leading thermal solar equipment manufacturers in the country. Some of you may remember the then newlybuilt Minnesota Zoo in Apple Valley operated one of the largest solar thermal systems in the country using locally manufactured equipment.

Due to our unique energy demands mentioned earlier, a market started to immerge in the Midwest, although it was short-lived. As a new administration took charge, the political winds were not favorable. In '85 the incentives expired and the bottom fell out of the market.

Imagine where we would be today, had we stayed the course.

I started my career in this industry in 1979. My interest was seeded in '77 at an event not much different than this one, when I attended the opening of a geodesic dome house while at college. Architecturally it was interesting, but it was the energy efficiency implications that stayed with me.

After completing a two-year solar program in Redwing - the first of its kind in the country - I entered the industry full time and participated in all aspects of its growth...and demise...then again its resurgence.

While preparing for this event, it occurred to me; it would be interesting to compare the installed square feet of all my installations in the past to this one...That exercise took much longer than I intended.

The bottom line is, this single project is far bigger than any I have undertaken before, and it surpasses any photovoltaic installation in Minnesota four times over, representing over 30% of the state's solar capacity.

For those interested there will be 32,356 sq.FT (or 1,820 of these – [point to sample]) solar panels at this site. This represents the Midwest's first large scale tracking system. The tracker will maximize the performance of the modules and increase energy generation by 15%. All of the components are American made – and we thank the

representatives from MA Mortenson Construction, Siliken Renewable Energy and Advanced energy for being here today.

Westwood's hope here is to help dispel past negative notions of the technology's viability, capacity and true potential in the Midwest.

The reality is, Minnesota has a tremendous solar resource. And, contrary to popular belief, photovoltaic technology operates most efficiently in cold weather. This stems the fact that electrical conductance is optimized in cold environments. This system will produce more energy hour per hour on a cold sunny day in Minnesota than on a hot sunny day in New Mexico.

By bringing this project to our back yard, we can leverage advances in its acceptability, stimulate businesses and State investments, educate and train a present workforce need and most importantly, continue a legacy, future generations can be proud of.

Today is an important day - as it represents over 2 years of hard work by our project partners - and there have been many. In fact we lost count after reaching over 125.

However, special thanks are in order for the Renewable Development Fund Board and the rate payers of Xcel Energy for providing the critical capital to make this project a reality. Without it, Minnesota would be waiting much longer for Commercial solar to gain a foot hold in these northern climes.

The Renewable Development Fund staff and our partners at Xcel Energy have been extremely helpful in guiding us through the interconnection and regulatory processes and we thank them for all their hard work. The Department of Commerce and the Office of Energy Security should also be commended for their efforts to bring solar to Minnesota.

I would like to thank the Minnesota legislature for having the foresight to create the Renewable Development Fund. It has and will continue to provide the kick start to Minnesota's ever expanding green economy and green job industries. We have witnessed the jobs the wind industry has brought this state – the solar industry can do the same and this project will provide the foundation to do so.

Lastly, I would like to thank Abbott Klassen, Father Koopman, Brother Benedict Leuthner, and all those at Saint John's Abbey and University for taking an active role as a true partner in this project. After shaking hands in just May of this year – we accomplished what many said could not be done – including 14 public meetings and countless hours coordinating every aspect of this project.

We could not have asked for a better partnership and look forward to a great educational opportunity for years to come. Thanks for coming.