

**City of Falcon Heights
Planning Commission Minutes
August 25, 2009**

PRESENT: Commissioners Black, Gosline, Gustafson, Hasegawa, Noble, Rodich and Watkins, Council Liaison Kuettel, Staff Liaison Jones.

A quorum being present, the meeting was called to order by the Chair at 7:00 p.m.

The Planning Commission minutes for June 23, 2009 were approved.

Presentation by Innovative Power Systems on a proposed solar energy installation at 1800 W. Larpenteur Avenue.

Staff Liaison Jones introduced the presentation with a brief summary of the case before the Planning Commission this evening. The city requires a conditional use permit for any solar energy system with active mechanical components. The owner of the apartment building at 1800 W. Larpenteur wishes to install a solar hot water heating system on the roof of the building and has applied for a conditional use permit. The original application also included a provision for height in excess of 10 feet from the roof, but now more exact dimensions are available, the equipment will not be over 10 feet high, so that portion of the CUP application has been withdrawn.

Jamie Borell and Matthew Miller of Innovative Power Systems, the company building the installation, came to the podium to show design drawings and address the Commission. Mr. Borell said that Innovative Power Systems has been in business since 1991 and has installed hundreds of similar energy systems around the state. The proposed solar thermal system at 1800 W. Larpenteur is intended to provide both heating for the building and domestic hot water. It will be the largest solar thermal system in Minnesota. The building has been examined by a structural engineer to ensure that the roof is capable of bearing the weight of the system.

- There will be 40 (4' x 10') panels with 1600 square feet of collecting area
- The collection panels are manufactured in Minnesota.
- The system provide about 40% of the domestic hot water and heating needs of the building.
- The system will offset 38,000 pounds of carbon dioxide every year, the equivalent of planting 1,900 trees.

Commissioner questions elicited additional information:

- The system will be fixed; it will not track the movement of the sun. "Wind-load" is more of a concern than "weight-load" on the roof of a building, and a fixed system is more secure from wind.
- Taking into account government rebates and incentives the owner will qualify for, the system will pay back in 6 to 7 years.
- There is a 10 year warranty, but the builders expect the system to last for 30 to 40 years. The panels are rated for hail to one inch and 50 mph winds.
- The owner's motivation is financial. In combination with a new boiler being installed, the owner will realize at least a 50% reduction in his gas bill for the building.
- The expectations for the system (outlined above) do take into account Minnesota weather conditions.
- The building owner also owns the identical apartment building at 1818 Larpenteur and will be comparing to the two systems over the next two years to evaluate whether to install a similar system on the other building and other multi-family buildings he owns.
- This is a flat roof. The panels will be at about 45 degrees. Panels could be installed on a sloping roof as long as the roof could accommodate the optimum angles, which varies

- Only the collectors will be outside the building. Pipes will go through an existing stack to the basement. All mechanical components will be installed in the basement.
- There should be no noise outside the building. The only noise would be from circulating pumps in the mechanical room, no louder than the fan from the projector.
- The panels face south and are spaced far enough apart so as not to shade each other when the sun is low in winter.

In response to commissioner questions, Jones said that the structural considerations would be covered in the permitting phase, that the conditional use permit is really concerned with zoning only, whether to allow the installation. The mechanical contractor, if not licensed in Falcon Heights now, will be by the time the permit is taken out. Licenses and permits are often issued at the same time. (Building and mechanical permits will be separate.)

Jones added that the site is between Hermes and another apartment building and otherwise surrounded by UM fields. It is more than 350 feet away from the nearest single family residence. Therefore, the impact of the installation on neighborhoods will be minimal, if any.

Public Hearing: Conditional Use Permit for a solar thermal energy installation at 1800 W. Larpenteur

The Chair opened the public hearing. There being no one who wished to speak, the Chair closed the hearing.

Discussion and Recommendations on the Conditional Use Permit for 1800 W. Larpenteur

Several commissioners commented positively about the proposed project. Jones offered one final comment from the staff: the project has the full support of staff as being a significant step forward in sustainability, one of the primary vision areas of the new comprehensive plan. It was moved by Gustafson, seconded by Gosline, to recommend approval of the conditional use permit. The motion was approved unanimously and will go to the City Council for final approval.

INFORMATION AND ANNOUNCEMENTS:

The City Wide Garage Sale will take place Saturday, September 12. The Neighborhood Clean-up will take place two weeks later on Saturday, September 26. Jones gave a brief summary of the two events (information can be found on the city website) and extended an apology from staff for leaving the dates off the monthly flyer that just went out.

ADJOURNMENT: The meeting was adjourned at 7:24 p.m.

Respectfully submitted,

Deborah Jones, Staff Liaison