



City of Madison

City of Madison
Madison, WI 53703
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Meeting Minutes - Approved SUSTAINABLE DESIGN AND ENERGY COMMITTEE

Monday, August 11, 2008

4:00 PM

215 Martin Luther King, Jr. Blvd.
Room 300 (Madison Municipal Building)

CALL TO ORDER / ROLL CALL

Present: 12 -

Satya V. Rhodes Conway; Judy Compton; William Bremer; Sherrie Gruder;
Michael J. Vickerman; Lance T. McGrath; Paul D. Muench; Julia D. Voss;
Catherine E. Mackin; Garrick R. Maine; Leslie C. Schroeder and Ashley A.
Brenke

Absent: 1 -

David W. Drummond

Excused: 4 -

David C. Boyer; James D. Armstrong; Lou W. Host-Jablonski and Peter J.
Taglia

Others present were Kay Schindel, Kitty Noonan, Jeanne Hoffman, George Hank, Brad
Murphy and Matt Tucker.

APPROVAL OF MINUTES

**Alder Satya Rhodes moved referral of the July minutes to next meeting so that
members can provide changes. Garrick Maine seconded and the motion
passed unanimously.**

PUBLIC COMMENT

Sherrie Gruder reviewed the agenda (list of speakers) for this item and also reminded committee members to only ask questions of staff after each speaker and to hold discussion/debate until the speakers are done.

Sherrie Gruder then began public comment for this item. Speakers had three minutes. (There is also written comments handed out at the meeting that will be attached to the Legistar file.)

Phil Salkin – Spoke in Opposition representing self and Realtors Association of South Central Wisconsin (RASCW). 4801 Forest Run Road, Madison, WI 53704

Has concerns regarding State Statutes 66.0401. RASCW does not think that the City should get involved in private restrictions.

He also stated that SB 544 did not pass at the state level last session and that might impact this proposed ordinance.

He also mentioned that he works with historical preservation and has concerns about this ordinance, personally, from that perspective.

Mike Bernhard – Spoke in Opposition representing self. (Also see written comments.)

Feels that this ordinance violates the new State Statutes regarding electrical licensure. Also has a concern that homeowners should be able to do their own work if they don't opt to use a licensed electrician.

He also has a big concern about NABCEP. This is an out of state certification program that the state does not recognize. Focus on Energy requires that the solar systems are NABCEP certified. Madison's language would require electricians to obtain multiple licenses. NABCEP installers may not have electrical knowledge. There should be state regulations and licenses to be able to install systems. There is a license idea that is being worked currently by the Technical Colleges for an electrical apprenticeship that may not even reference NABCEP. Committee needs to consider carefully who can do this work and that these people should have electrician licenses not the NABCEP certification program.

Ed Blume – Spoke Neither in Support or Opposition representing RENEW Wisconsin, 222 S. Hamilton Street, Madison. (Also see written comments.)

He referenced the recent Capital Times article and does not know of any wind turbines in Madison. Further, Focus on Energy would not provide funding for a 200-foot tall wind turbine; anything over 170 feet is considered a commercial turbine and not funded by Focus. It would not be economically feasible to build something like that. RENEW wants to make sure that people are not worried about this. He

provided a handout.

Public Comment ended. There are more written comments included in the Legistar file.

OLD BUSINESS

11077

Amending Sec. 28.03(2), creating Sec. 28.04(18)(e); repealing Secs 28.08(2)(c)16., 28.08(9)(c)5., 28.08(11)(c)9., 28.12(13)(a)10.d.; renumbering current Secs. 28.12(13)(a)10.e. through g. to Secs. 28.12(13)(a)10.d. through f., respectively; amending Secs. 30.01(3)(b)5., 30.01(5)(b); repealing Secs. 30.01(9)(c)9. and 11.; renumbering current Sec. 30.01(9)(c)10. to Sec. 30.01(9)(c)9.; amending Sec. 30.05(2); repealing Sec. 30.05(5); renumbering current Secs. 30.05(6) through (17) to Secs. 30.05(5) through (16), respectively; amending Sec. 30.05(9); repealing 30.05(11)(e); creating new Sec. 30.05(13)(d); renumbering current Secs. 30.05(13)(d) through (f) to Secs. 30.05(13)(e) through (g); creating new Secs. 30.05(13)(h), 30.05(15)(b), 30.05(15)(c); renumbering current Secs. 30.05(15)(b) and (c) to Secs. 30.05(15)(d) and (e); and repealing Sec. 33.19(12)(d)3.; renumbering Sec. 33.19(12)(d)4. through 11. to 3. to 10.; repealing Sec. 33.19(12)(f)1.f.; renumbering Sec. 33.19(12)(f)1.g. to f.; repealing 33.19(13)(d)8. and renumbering Sec. 33.19(13)(d)9. through 13. to 8. through 12., respectively of the Madison General Ordinances to update provisions relating to solar/wind systems.

Attachments:

[Info.pdf](#)

[Memo dated May 2008.doc](#)

[SolarOrdinanceReport070908.pdf](#)

[Ordinance explained.pdf](#)

[solarestriction.pdf](#)

[Excel Noise Test.pdf](#)

[Windletter Renew.pdf](#)

[Permit Process Historic.pdf](#)

[Permit Process UDC.pdf](#)

[Written Comment from the August SDE Meeting.pdf](#)

[Memo dated August 2008.pdf](#)

[SolarOrdinanceReport090308.pdf](#)

[Draft Substitute 100108.pdf](#)

Ald. Satya Rhodes-Conway began by briefing the committee on the ordinance stating that this language was introduced to Common Council. The lead committee is Plan Commission and it was referred it to Urban Design Commission (UDC), Landmarks, and Sustainable Design and Energy C (SDEC).

She further stated that the ordinance go back to UDC and Landmarks and Plan (again, which is lead). All the discussion and recommendations will be there for the council members to review when it gets to Council.

Finally, this ordinance deals with energy and renewable energy systems, but we also regularly update our ordinances because we must follow state law (this state law went into effect in 1981). Also, we do so when we discover that they are conflicting with other parts of the City's ordinance. If the City were to deny a renewable energy system and that denial violates the State Statutes and someone decided to sue the City, the City would loose. So this ordinance change is bringing our ordinance into compliance with state law.

She apologized because she will need to leave early to go to the zoning code rewrite meeting at 5:30pm.

City Attorney Kitty Noonan then began and asked committee members to refer to Exhibit C. She referenced the state statutes language on the last page of Exhibit C. Stating that language is short and very clear.

Then going through Exhibit C starting with...

#1. Stating that this section adds definitions for solar and wind. Kitty explained that she used the definitions from the state statutes.

2. This is the "use" statement. In reading the state statutes, there are only a couple of restrictions that the City can put on solar/wind. These restrictions are for public health and safety and energy generation and cost. The two boards and commissions that deal with this are UDC and Landmarks. These two boards deal with aesthetics or design. They do not deal with technical issues regarding siting solar/wind systems and they don't make determinations regarding public health and safety. Because of this, the determination of whether there is a public health or safety issue and the analysis to see if another location or some other restrictions can be placed on the project that does not substantially impact cost or energy effectiveness will be an administrative analysis.

These projects are permitted accessory use, which means there needs to be a principal use on the lot. Someone could not install a number of PV systems or a wind turbine on a vacant lot as there would be no principal use and they are not considered a principal use.

This section also provides you with an idea of what materials staff will be reviewing so that staff can do an analysis based on public health and safety or cost/ energy effectiveness. There is a catchall phase that the City can request additional information if needed. City staff may go to the site.

The language here is directly from the State Statutes.

#2. In the same box there is language regarding voiding all private agreements and provisions. The state statutes do not speak to this as the statutes only talk about what

municipalities can do. However, the feeling is that we did not want these private restrictions to restrict these types of installations.

There is an attachment (Exhibit B), which is a memo regarding another state statute that originally was for Ice Age Trail and then a couple of years ago the state added voiding private restrictions for solar/wind systems.

Our language adds that the City would become involved in these issues. Without that language it would be a private matter that the city will not be involved. Of course, according to state statutes it is not legal to restrict renewable energy systems through private restrictions.

#3 R1 indicates solar/wind conditional uses throughout our residential zoning district – we only needed to change the ones listed. (R1, R4L, R4A, etc.)

Kitty Noonan described building envelope and that this ordinance only deals with the space that is called the front yard. Currently a solar/wind project in this area would be a conditional use and conditional uses go through the plan commission, which can apply restrictions that go beyond the state statutes. But within the building envelope you can build these systems and the city can't say anything about it.

#6. This was removed conditional use – because of the above.

#7-8. This section was there only for re-numbering purposes.

Kitty Noonan then jumped to #23

#23. This section is to repeal a provision in Landmarks, which provided for conditions or restrictions above state law. We cannot require – a system to be unobtrusive – but this is not something that we can do via state law.

#25. This is another historical district, University Heights

#27. The Marquette Historical District actually prohibits solar installations. This needed to be removed.

There were a few more editing issues.

George Hank will now talk about issue related to building code

#9. This section allows NABCEP certification for solar thermal system without City license.

#10. Strictly housekeeping

#11. Renumbering

#12. Shading the solar collector. This is for consumer protection and protects the property owner. You can install a system that has more than 20% shading, but the owner needs to know. Again this is for solar thermal.

#13. Deletes wood for structures.

#15. Deals with piping system for solar thermal to make it more energy efficient. This is being done to protect the consumer.

#16. This involves insulation around solar thermal systems so the systems are good. It also protects the consumer.

#20. This is regarding the pressure gauge

#21. This is for temperature values, so you can read the ins and outs of the system.

George Hank ended by saying that most of the items are housekeeping or items that make for good practice that protect the consumer.

Sherrie Gruder asked if any committee members had questions.

Satya Rhodes-Conway questioned #9. A4 license is a City Madison license for heating?

Correct? You still need state license?

George Hank indicated that was correct.

Satya Rhodes-Conway also asked about private restrictions. What does it mean to have it in our ordinance or not?

Kitty Noonan indicated that if it were not in our codes, it would be a private legal action. If it is in our ordinance, the City could fine them for having that provision but there would probably still be a need for a private action. But this is a way for the city to get the word out about this state statute.

Satya Rhodes-Conway asked about section 2 and if there would be a way by which a wind system would be unlawful and if we could add language in the ordinance?

Kitty Noonan stated that she kept the language as broad as possible but that clearly if a wind turbine falls into another property, that would be a health and safety issue. Though the city may not deny it, the city would restrict the system by height so that it may not exceed the shortest dimension of the property.

Paul Muench asked what is the context by which this came out? What are the ramifications if we didn't comply?

Kitty Noonan stated the City would lose lawsuits. If the City denied a system, then the property owner would sue and the City would lose because it is clearly in the state statutes. In addition, there is a lot of case law regarding when an ordinance cannot follow state statutes. In this case the intent is clear, so the City would lose.

Paul Muench also asked about time. What happens if a neighbor has solar installed and then ten years later a tree grows and blocks the sun?

Kitty Noonan stated that our ordinance has nothing to do with this. This ordinance is about how the City will approve systems.

Furthermore the WI State Supreme Court already ruled on this and said that this is a valid reason for a private nuisance action.

Finally, Kitty Noonan stated that residents could ask for a variance. One of the things the City looks at in terms of issuing the variance – will the variance have an impact on your neighbor's light and air. If someone is looking for relief from the code through a variance, then the city looks at this, but from the opposite perspective.

Paul Muench asked if the City is on a slippery slope regarding the right of a property owner to sun?

Kitty Noonan again indicated that the WI State Supreme already decided that. It is a private law suit.

Judy Compton questioned this ordinance and condos?

Kitty Noonan stated it would be the same; a condo is considered a lot that can install a renewable energy system. However, all of the private documents would be their matter.

Judy Compton then asked about fences/TV satellite dishes?

Kitty Noonan stated that if someone came in and wanted to put up a fence, the City issues the permit if it meets city codes. For solar/wind it would be the same, the City would issue the permit. The City does not check if there are private restrictions.

Judy Compton then asked about a court case - City of Mequon and a Court of Appeals decision that Mequon could not use conditional use standards.

Kitty Noonan stated that the Court of Appeals sent it back because Mequon was using a different state statute. Court of Appeals sent it back to the lower court and it was not heard from again.

Furthermore, in our codes, we do have conditional use for utility systems. This is different than an accessory use, which this ordinance speaks to. Utility systems are a separate issue and require a different process.

Sherrie Gruder asked that Brad Murphy and Kitty Noonan talk about process.

Brad Murphy stated that currently the standard that the staff uses to decide whether something goes before the commission is basically the same standards that the commission itself uses. For Landmarks there is a list of standards in the ordinance. UDC has a more subjective set of standards. If it were a significant change to the project, then it would go before the UDC. If it is not a major change, it would be a staff approval. If it is a major alteration or does not meet the standards of Landmarks, then staff works with the applicant to go before the commission or board.

Kitty Noonan stated that with a solar/wind system the process would be the same when it came to the decision staff makes to determine whether it goes before the commission, but the applicant also needs to provide a placement plan. The staff person would review the proposal and look at the standards to determine if it is ok to approve administratively or does it need to go to the commission. If the staff person feels that it meets the standards, then he/she could approve it, which is current practice. If the project does not meet the standards (including concerns about design, the staff person will work with staff in Engineering and BI to see if there are restrictions that could be placed on the project and meet the state statutes, such as lowering the height for moving the system to an alternative location.

If there are restrictions, such as alternative sites, then the staff person will send it to the Board or Commission and they can decide whether they want to approve the original system

or the system with restrictions, such as alternative locations.

If however, staff analysis shows there are no restrictions, such as alternative locations that will work for vis-à-vis the state statute, then it will go directly to the director for approval.

This is the same for UDC. If the staff person has concerns (including design) about the project as proposed, the staff person will work with Engineering and BI staff to see if there are restrictions that can be placed on the project that mitigate the concerns, like an alternative site. If there are not any issues, based on the standards that staff already uses, then staff will approve it, like staff does today for all sort of minor changes to projects. If Engineering and BI staff determine that there are restrictions like an alternative site, then the staff person will refer to UDC and they will decide which location they want. If, however, there are no restrictions that meet state statutes, then it will not go to UDC and be approved by the Director.

Kitty Noonan stated that this law has been on the books since 1981 and that the legislative history specifically says that you cannot use aesthetics as a reason to deny a system.

Judy Compton asked if there is a way for neighboring properties to review this?

Brad Murphy stated that if it doesn't go to the UDC, Landmarks or Plan, then there would not be a public notice.

Judy Compton asked whether Plan Commission makes health and safety decisions now?

Brad Murphy indicated that the Plan Commission does that right now. Kitty Noonan clarified that by stating that the Plan Commission uses health, safety and welfare, which allow the Plan Commission to consider broader concerns. This statute does not speak to this. Clearly something on a tall pole could have a health and safety issue. There could also be a noise issue regarding health and safety.

Judy Compton asked if the City is taking something away from the public in not letting let speak? Is that putting the city at risk if there is no public process?

Kitty Noonan stated that we could require all sorts of public hearings, but this is giving false expectation that the City can do something it can't because, by state statutes, the City is limited in what it can do regarding denying these systems.

Judy Compton asked whether Plan Commission could take this up if someone claims his or her access to vitamin D is taken away for example?

Kitty Noonan further stated that this is a public health and safety issue, not an individual health and safety issue. There has already been legal history regarding this issue as it relates to cell towers. The Federal Government has already stated that individual health issues regarding cell towers are not a public health and safety issue. This is the same thing. There may be individuals that are sensitive but this is not necessarily a public health and safety issue.

Bill Bremer asked whether projects would still need to get City permits.

Brad Murphy and Kitty Noonan indicated that yes they need to get a building, plumbing,

electrical permit, etc., as needed.

Paul Muench asked why was this referred to SDE when this seems like a legal issue? What is it that SDE is supposed to do?

Jeanne Hoffman and Kitty Noonan stated that SDE will vote to recommend approval (or not) and can also forward to the lead committee other suggestions or comments, etc., for the Plan Commission to consider when they take this up.

Kitty Noonan mentioned that the City plans take these flowcharts and put them into the ordinance language in other sections of the MGO in the UDC and Landmarks sections.

Sherrie Gruder asked the committee members if they had any questions.

Leslie Schroeder asked if the homeowner could put up a system?

George Hank informed the committee that yes an owner of an owner-occupied single family house can do it all themselves, but they must follow ordinance and get proper permits.

Leslie Schroeder asked about the language regarding 20% shading.

George Hank indicated that the property owner signs a form that states that the owner knows about the shading and again the City does this for consumer protection.

Leslie Schroeder asked a question about SB544 that was referred to in Mr. Slakin's public comment.

Mike Vickerman stated that SB544 is a bill regarding PSC siting of wind systems with regard to public health and safety.

Kitty Noonan noted that if SB544 impacts small systems, then the City would have to follow that.

Sherrie Gruder asked if this ordinance supersedes UDC's authority regarding design review.

Kitty Noonan and Brad Murphy responded that the City could review the project based on the state statutes, if something is ugly then staff can see if an alternative site or other restrictions that makes it less ugly but that still follow state statutes.

Kitty Noonan also stated that this is an accessory use so that it is subject to all zoning setbacks. Zoning restrictions the City can still use.

Garrick Maine asked why did this happen in the state statutes?

Kitty Noonan stated that this type of language runs throughout the state statutes, Language regarding energy efficiency, in buildings and transportation, etc. Chapter 196 already has language about promoting this. The state as a whole is promoting energy efficiency and renewable energy.

Bill Bremer asked regarding #9 and NABCEP certification. Who suggested that we include

this?

Kay Schindel indicated that it was his idea. In Madison you need to get a heating license but outside of Madison you don't need this. This would be an additional requirement that then the installer would not need a city license. This Class A4 license for solar thermal, which is the City's heating license.

Paul Muench asked if this belongs in this ordinance?

George Hank indicated that this ordinance deals with zoning and heating codes and that the City has building code issues to deal with in the building code issues. Issues regarding building codes or electrical codes are covered in other areas and are not being addressed with these proposed changes.

Sherrie Gruder asked why consumer protection is in the heating codes?

George Hank indicated that this is good practice, so that the purchaser is doing this with eyes wide open.

Judy Compton stated that consumer protection is a good idea, but wanted to know why we can say no to wood but can't say no to system because of aesthetics?

Kitty Noonan stated that the building code, heating codes, etc are different than zoning codes and that the City can make Madison's building code more restrictive in some cases.

George Hank also stated that in the in zoning code you can not be more restrictive that state statutes allow, but in the building code you can be more restrictive unless specifically stated in the state statutes.

Kay Schindel and Michael Vickerman talked about solar and wind projects.

Michael Vickerman stated that there are not many small wind projects anywhere in the state. He estimates that since 2002, maybe about 30-40 small winds systems exist in the state mainly for rural businesses, such as farms, also technical college campus, and nature centers.

For Small wind Focus on Energy will only give funding for systems that are lower than 170 feet. Above 170 feet they are deemed commercial in nature.

Michael Vickerman further stated that you must have a lot of space that will allow the tower to "lay down" in any director around the tower. This is a safety measure for if the tower were to fail.

In Madison sites that might accommodate wind could be the UW Research Park or a City park, however there are very few sites in Madison where a small wind turbine would work.

Michael Vickerman further stated that currently to build a 20 KW wind system would cost \$100,000, while a 5 KW solar system will cost \$40,000. However, the utilities in WI are offering higher rates (for energy buy back) for solar than wind. So it is not surprising that we don't have any wind in the city.

Sherrie Gruder added that another factor that impacts wind turbine siting is the local wind resource and asked if we have good wind in Madison?

Michael Vickerman indicated that Madison has lots of large trees and buildings, and that we are also in a depression. Madison does not have good wind.

Kay Schindel then showed some pictures of solar systems.

He pointed out that Fire Station #3 is in an historical district in the Willy Street area, but that you can't see the panels from the street.

Solar resources are the same anywhere if you don't have shade and you are facing south.

Solar systems can look like the roofing on standard seam roofs. New buildings can have triangular solar panels to make it look nice. There are roof-integrated panels, heaters for pools.

Judy Compton asked about pole-mounted systems.

Kay Schindel indicated that height would be a huge impact on residential systems because there are expensive, because of the foundation and trenching.

Michael Vickerman stated that a pole-mounted system would be the only option for someone who has a roof at the wrong angle or there is a lot of shade.

Sherrie Gruder asked about #16 and wondered where did that language come from?

Kay Schindel indicated that the code required insulation on pipe but did not specify the type, so that change is to have minimum R-value and can the insulation can withstand UV rays.

Sherrie Gruder indicated that for #15 the committee should work with FOE regarding this language.

Leslie Schroeder indicated that she needed to leave soon, which would mean that we would lose quorum.

Judy Compton then moved approval with the following suggestions for the Plan Commission

- 1) Remove language regarding private restrictions
- 2) Recommend public approval process
- 3) Restrict height for wind turbine
- 4) Consider an alternative to license/certification issue.

There was no second.

Leslie Schroeder then moved approval asked that the Plan Commission consider

- 1) Public comment opportunities
- 2) Determine what considers when deciding if it can be approved administratively or if it goes to the commission

There was general discussion about the motion to clarify what exactly it meant.

Michael Vickerman made a motion that we refer this item to the next meeting and that we start with the ordinance, as is then vote on each amendment that is made.

Judy Compton seconded.

Judy Compton then stated that she needed to talk with Kitty Noonan about Building Codes vs. Zoning codes issues and that she is concerned about public process. Finally, that we should take out the private restrictions section.

The motion to refer was unanimously approved.

Leslie moved and Michael Vickerman seconded.

10922

Presentation and Training of The Natural Step - Sustainability Framework - by Karl Van Lith

Karl started the presentation by going through the agenda. Karl then went through the PowerPoint presentation. (Attached to these minutes.) Judy asked about recycling our computers. Staff indicated that the City sells/gives away some computers and the City also has a contract with Cascade Asset Management to recycle our old computers. Satya wanted to know how do the TNS projects grow? Staff mentioned that the projects do grow and used the energy wasters as an example. The City first determined which buildings use the most energy and now FM is taking steps to reduce energy use at these building. Staff also mentioned Fleet. The TNS project was to develop CAFE standards for our Fleet, but the project now includes a whole host of other initiatives - like AVL/GPS on our fleet, vehicle type, etc. Sherrie also mentioned Green Cleaning, which started out at Monona Terrace and is now used in all City agencies. Judy asked, what is our goal? Staff mentioned the Mpowering Madison goal of reducing the community's CO2 emissions by 100,000 tons by 2011 and the City's CO2 emissions by 15,000 tons by 2011. Committee members then worked on developing their Compelling Vision Headline Karl will compile headlines. (These will be posted to the minutes when available.) Next the group developed and discussed the baseline information they would need to be able to move toward their headline. Finally, the group developed and discussed actions that would need to be taken to achieve their vision. Committee members then shared their actions with the group. Karl passed out the homework and explained it to the group. (Attached to these minutes.)

Attachments: [baselineinformationenergy 6-30-08.pdf](#)
[Overview of The Natural Step.doc](#)
[TNS SC Analysis Worksheet v4 6-30-08.doc](#)
[TNS SDE presentation 6-30-08.ppt](#)
[Visions SDEC for agenda 7-14-08.doc](#)
[SDE Committee Members email from Sherrie Gruder.doc](#)

This item was referred to the September meeting.

ADJOURNMENT

The meeting was adjourned at 6:30 p.m.