

### Office of the City Attorney

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Kathleen Zuelsdorff, EIS Coordinator Public Service Commission PO Box 7854 Madison WI 53707-7854

RE: Comments from the City of Madison on the Draft of the

Environmental Impact Statement PSCW Docket No. 137-CE-147

Dear Ms. Zuelsdorff:

These comments are filed on behalf of the City of Madison.

In contrast to most transmission lines proposed in Wisconsin, one alternative route for the Rockdale to West Middleton line travels through a highly urbanized area, consisting of a critical and busy transportation corridor, environmentally sensitive areas, and numerous residential, retail and commercial developments. The environmental impacts from such a construction cannot be analyzed in the traditional sense. As will be pointed out below, the Draft Environmental Impact Statement (DEIS) fails or inadequately takes into account a number of the potential impacts of the Beltline route. These impacts should be addressed in the final environmental impact statement, including an analysis of the extent to which the impacts might be mitigated by undergrounding.

#### **Need for the Line**

While the DEIS discusses load growth and alternatives to the line, the analysis is based upon data that is now relatively old. Since the time the line was proposed, the national economy has fallen into a recession and the economy in the region has slowed greatly.

The City of Madison suggests an adequate analysis of the need for the line must include fully updated projections based upon the reduced consumption from the economic changes since the line was first proposed.

#### **Examination of Line Alternatives**

The DEIS is deficient because it only includes one alternative route starting at the Rockdale Substation. It fails to consider what may be the single most promising alternative – a new 345 kV line starting at the Rockdale Substation and paralleling existing transmission lines all the way to the site of the new Cardinal Substation in the town of Middleton.

This route would head west from the Rockdale Substation in the town of Christiana, paralleling the existing double-circuit transmission line (G-CHR21 and X-59) for a distance of approximately 4.5 miles (Segment A). It would then cross I-39/90 and continue to follow the existing double circuit transmission line west cross country and along Wildflower Road, passing just north of Lake Kegonsa in the town of Dunn. It continues to follow the existing 138 kV line west across Highway 14 crossing County Road D and then turning north just east of South Seminole Highway (Segment K2). It then turns west at McKee Road (County Road PD) continuing to follow the existing double circuit line across Highway 18/151 and turning north along Pleasant View Road and then west into the proposed Cardinal Substation. We call this the Rockdale-Cardinal Parallel route. Our estimation using GIS files provided by ATC is that the route is 32.7 miles in length, roughly equal to the Rockdale-Beltline route and significantly shorter than the other three routes considered in the DEIS.

The Rockdale-Cardinal Parallel route follows an existing transmission line for its entire length. Wisconsin Statute Section 1.12 states

In the siting of new electric transmission facilities, including high-voltage transmission lines, as defined in s. 196.491(1)(f), it is the policy of this state that, to the greatest extent feasible that is consistent with economic and engineering considerations, reliability of the electric system, and protection of the environment, the following corridors should be utilized in the following order of priority:

- (a) Existing utility corridors.
- (b) Highway and railroad corridors.
- (c) Recreational trails, to the extent that the facilities may be constructed below ground and that the facilities do not significantly impact environmentally sensitive areas.
- (d) New corridors.

This route more closely follows an existing utility corridor than any of the routes evaluated in the DEIS. This fact alone should have warranted the evaluation of this route in the DEIS. The fact that it is also shorter than three of the routes included in the DEIS is further evidence that its omission has seriously compromised the environmental impact analysis.

The cost analysis in the DEIS has been skewed by the selection of routes. Table 1 below reproduces the cost data for the overhead routes from Figure Vol. 2-41 of the DEIS. The three routes that start at the Albion Substation all have much higher substation costs than the Rockdale-Beltline route. This significantly increases the overall project cost for those three alternatives. Attributing these substation costs to these routes is rational if the substation will only be built to support those lines. If the substation will be built regardless of the route chosen, its entire cost should not be included as a part of those routes. The Substation Cost assumptions bias the analysis toward the Rockdale-Beltline route. A more balanced analysis should have prorated the Albion Substation costs and included another alternative that utilizes the existing Rockdale Substation.

Table 1 also includes the route lengths from Table ES-2 of the DEIS and uses them to calculate the per mile transmission cost for each route. (Note that the length figures in Table ES-2 do not match the lengths stated in the text on pages XXI and XXII.) As might be expected, the per mile cost is highest for the most urban route (Rockdale-Beltline) and lowest for the rural, cross country route (Albion-Southwestern). The total transmission costs for the Rockdale-Beltline route are lower because it is significantly shorter than the other routes included in the evaluation.

To illustrate the limitations of the cost estimates included in the DEIS, we have done a rough calculation using the Rockdale-Cardinal Parallel route discussed above. This route is most similar to the Albion-Fitchbeltline route in terms of terrain and its proximity to urban and suburban development. If we apply the per mile transmission cost from the Albion-Fitchbeltline OH line to the Rockdale-Cardinal Parallel route, the transmission cost is lower than any of the evaluated routes. Since this route would use the existing Rockdale Substation, it would also have the lower substation costs of the Rockdale-Beltline route. If we assume the other project costs will be similar to the Albion-Fitchbeltline route, the total project costs for this route would be lower than any of the evaluated routes and 9% below their average.

We do not propose that this is in any way a substitute for a rigorous cost analysis, but we do hold that it is strong evidence that the DEIS has not considered a full set of alternative routes as required under the Wisconsin Statute. By limiting the analysis to a partial set of alternatives, the DEIS may potentially bias the decision of the PSC.

Table 1. Comparative Cost Analysis

Route	Length	Transmission Costs	Cost per Mile	Substation Costs	Other Project Costs	Total Cost
Albion-Southwestern OH Albion-Fitchwestern OH Albion-Fitchbeltline OH Rockdale-Beltline OH	47.4 45.8 37.9 32.1	146,719,414 155,392,256 159,010,825 142,178,950	3,095,346 3,392,844 4,195,536 4,429,251	47,007,988 47,007,988 47,007,988 36,011,599	38,807,440 39,371,874 39,553,352 37,945,430	232,534,842 241,772,118 245,572,165 216,135,979
Rockdale-Cardinal Parallel	32.7	137,194,036	4,195,536	36,011,599	39,553,352	212,758,987

Similarly, the DEIS briefly mentions the North Madison-Cardinal 345kV line in the Systems Alternatives Comparison (Section 2.9). The DEIS dismisses this alternative with one paragraph of discussion, ostensibly on cost grounds. Detailed cost information on this alternative is not included in the DEIS.

The cost analysis states it was done on a generic basis, without considering routes. Table 2-5 of the DEIS shows a NPV of \$150.7 million for Rockdale – West Middleton but \$211.8 million for the North Madison alternative. Yet we know that the Rockdale-West Middleton Beltline route is estimated at \$214 million, more than the estimate for the North Madison alternative. Nor does this limited analysis examine whether costs might be lower for the North Madison alternative due to the recently completed Huiskamp line.

A full analysis of this alternative would provide the PSC and the public with a more complete picture of the available alternatives.

## **Transportation Impacts**

The Madison Beltline is a major highway, carrying over 100,000 cars per day. The highway and its right-of-way (ROW) were designed for use as a transportation facility, not as a route for high voltage transmission lines. The heavy use of this transportation corridor creates a number of impacts that the DEIS fails to adequately consider. These impacts are outlined below:

- 1. The DOT indicated in its review of this potential route that it was "very undesirable" to use this route for high voltage lines and that it had "serious concerns" about such use. As the State agency with the greatest expertise on the proper use of transportation corridors, the impacts outlined by the DOT are given very little mention in the DEIS. The impacts noted in the DOT's March 9, 2007, paper should be included in the EIS.
- 2. There will be additional crashes on the Beltline if the line is built on it. Some will come during construction, due to constricted travel lanes and the undoubted gawking of motorists at the huge new poles being built. Some will come during maintenance of the lines. Some will come due to the new, large crash barriers that must be constructed on the Beltline to protect the new, large poles. In fact, these barriers may cause automobiles to glance off the protective barrier and back into traffic, causing additional traffic accidents.

The DEIS makes no attempt to gauge these impacts, the costs thereof, or the likely impact on human lives.

- 3. It is also a certainty that, if the Beltline is to expand as planned, at least 43 poles will have to be moved at a cost of \$27 million (see p. 213 of the DEIS). The DEIS does not make clear whether these costs have been rolled into the cost for the Beltline alternative. Nor does the DEIS adequately consider the other impacts of such pole movements on additional ROW required in areas such as the Arboretum, or neighborhoods. This issue is essentially glossed over because of the unknowns associated with how the Beltline expansion would occur, changes in technology, etc. These costs will have a very significant effect on the actual project cost for the Beltline route and should be carefully considered when estimating the costs of each route. It is not clear if these certain costs are factored in to the overall cost comparisons on the project.
- 4. There is no analysis of the potential impact if the Beltline cannot adequately be expanded to serve its primary purpose as a transportation corridor. In such an instance, pressure would increase for a "superbeltline" that would cross southern Dane County. The DEIS includes no analysis of these potential impacts or the costs of these impacts.
- 5. Finally, there is little analysis of tangential safety impacts, such as the differential effects of ice falling off 120 foot poles onto a traffic corridor crowded with cars, as compared with falling into an empty field, or the impact of a downed pole on tens of thousands of automobiles.

The Community Impacts analysis of the Albion-Fitchbeltline and Rockdale-Beltline is also deficient. The DEIS does not provide an analysis of how construction along the Beltline will impact congestion or traffic safety. The DEIS notes the current congested condition of the Beltline and the high number of vehicle crashes that occur because the traffic volume on the Beltline is already exceeding its design capacity. The DEIS does not adequately address the safety issues associated with placing transmission structures within or adjacent to Beltline clear zones. A more complete analysis of the Community Impacts should include estimates of increased fatalities and injuries due to transmission structure encroachment on the Beltline clear zones. The DEIS acknowledges that DOT will likely impose special conditions for construction along the Beltline (such as limiting work hours to nights and weekends). The DEIS does not discuss how such limitations will impact the construction cost of this route, or the potential impacts upon businesses and residences along the route. This is especially problematic for the Rockdale-Beltline route since 12 transmission line structures will be accessed directly from the Beltline or its interchange ramps (p. 207). An estimate of the costs associated with additional traffic delay during construction and maintenance on this route is an important Community Impact that has been overlooked.

The costs of nighttime and helicopter construction along the Yahara Wetlands area, and potential route relocation options in the Broadway, Whitney Way and Watts Road areas should be considered in the base cost estimate of the Beltline Highway route.

### **Impact on City Water Supply**

The DEIS briefly discusses the problem faced at the Beltline-Whitney Way interchange, but is deficient in describing the impacts of the proposed north of the Beltline alternative (p. 206-207). In addition to the impacts on Odana Hills Park, discussed below, the proposal could have a severe impact on the City of Madison's water supply.

The north of the Beltline alternative would run the line right next to City Well No. 12 and a related reservoir, with a large pole placed directly next to the well. Maintenance on Unit Well No. 12 sometimes involves the use of a crane. Operating a crane underneath a high voltage transmission line poses an unacceptable arc flash safety risk to the crane operator and nearby workers. The City simply cannot take the risk of severe injury to workers by bringing a crane into this area, a crane necessary to provide proper maintenance on the Water Utility Well.

Unit Well No. 12 is a year-round workhorse for the Madison Water Utility. It is strategically located at the center of pressure zone 7 and serves customers on both sides of the West Beltline Highway. At 2400 gallons per minute, it is among the City's highest rated capacity wells. Most crucially, it produces some of Madison's highest quality water with relatively low iron and manganese.

### **Impact on Odana Hills Golf Course and Odana Hills Park**

The installation of the transmission line along the Beltline and Odana Golf Course property would require the removal of 50 - 70 mature trees and surrounding vegetation that provide visual screening, course and hole esthetics and framing and environmental and wildlife benefits.

The proposed property for installation of the transmission lines, Odana Hills Golf Course and Odana Hills Park, have deed restrictions requiring the land be only used for park purposes.

The proposed property for installation of the transmission lines adjacent to the Odana Hills Golf Course will be open to and next to people playing golf and subject to measurable static electricity that will radiate from the transmission lines.

The installation of the transmission lines on the Odana Hills Golf Course property will directly effect and require the replacement and realignment of seven (7) holes of the golf course. The cost of reconstruction will approximate to \$1,000,000 and during the construction will reduce golf course operational revenues approximately \$500,000.

The proposed permanent access road through Odana Hills Park will create a physical barrier to a very open public green space; an open public park space that is a great sense of neighborhood and community pride. The access road construction will require the removal of 25 -40 mature trees and associated vegetation which will have an adverse effect on the environment, wildlife and the associated habitats and preservation and conservation of the remaining forest.

### **Impact on the Arboretum**

As an internationally known ecological laboratory, in addition to being a community resource, the University of Wisconsin Arboretum must be examined in close detail for impacts from the project. The DEIS briefly considers the impacts on the Arboretum (p. 215, 216, 220), but is deficient in considering all the impacts.

In addition to the severe impact on the aesthetics from 100-foot poles towering above the Arboretum canopy, the area is home to numerous bird species and bats, which may be impacted by overhead construction. The City of Madison and the UW have been working on a number of stormwater projects in the area. Construction activities and final placement of towers could negatively impact such plans.

Finally, the Arboretum is planning to seek National Historic Landmark status during 2009. The impact of putting transmission lines through a potential national historic landmark should be addressed by the DEIS.

### **Economic Development Impact**

The DEIS is also deficient in considering the economic development and social impacts of the Beltline route.

The DEIS tends to focus on the impact on residences (see p. XXIII and 221) without taking into account the impact on what is a major commercial and retail corridor. A major impact that must be evaluated is the impact on economic development. Portions of this corridor are in the process of redeveloping and have begun to revitalize, but there is clear evidence that businesses are less likely to locate where a large transmission line may impact the views afforded or the ability to locate close to the Beltline.

Property value impacts on office and commercial buildings should be addressed in more detail. A large transmission line passing in front of office buildings will have a deleterious impact on the use of these buildings, and the opportunity to build additional buildings. Many offices enjoy long views to the State Capitol, lakes, Arboretum, etc. These views could be negatively affected by the transmission line. The DEIS says there is very little data to suggest that commercial buildings experience a decrease in value due to proximity to a transmission line, but this based solely on one interview.

The City is well along into (re)developing several key regions of land along the Beltline corridor. Resultantly, several plans have been identified that outline the City of Madison's desire to create new economy employment centers and redevelop obsolete parcels, particularly in troubled neighborhoods. The BioAg Gateway in TIF District #39 is the most easterly region affected. This region's TIF District #39 includes six different private and publicly owned business parks. Overhead transmission lines have the potential to either retard the development of vacant parcels, or as in the case of

Danisco USA Inc., effectively eliminate their Madison land holdings as an option for expansion for this global company. Danisco's recent successful efforts to eliminate their Madison land holdings from all impacts from ATC's proposal is a testimony to economic development impact potential of overhead and/or buried lines. With such a clear example available to the PSC, the economic development impact of line placement must be considered.

The City also is working with developers on the redevelopment of land between Park Street and Fish Hatchery Road on Madison's south side. This neighborhood is one of Madison's more challenging regions. Developers are investigating commercial real estate options for this area in order to bring new jobs, new property tax revenues, and new life and opportunity to this section of the Beltline corridor. Any negative impact, either real or perceived, will diminish the potential to implement the City and neighborhood's plan for this area.

Whereas reliable and plentiful energy supply are important to maintain strong economic development in Greater Madison, so too is not creating infrastructure with negative impacts throughout Madison's major lifeline transportation corridor. The City, in partnership periodically with the DOT, is working on projects along the Beltline corridor that stir private investment. Arbor Gate, a \$40 million office complex by Mortensen Investment Group (MIG), is the only Class A Office space on Madison's south side at Todd Drive. Pristine views to the north are paramount to the successful marketing of the currently vacant top 2 floors for high-end office tenants and premier restaurants. MIG has invested heavily in the installation of energy efficient and sound proofed windows in this nearly all glass facade.

Finally, Rayovac, a subsidiary of Spectrum Group, is located along the Beltline corridor and will have the new ATC overhead lines installed on their property. This global company is currently heavily leveraged during these extremely difficult financial times. Their lease expires in five years. The placement of overhead wires on or adjacent to their former world HQ campus may negatively influence Rayovac in determining whether to renew its lease in 2013, rather than relocating its 400 jobs to Atlanta or some other city. Pacific Cycle is also another global company that is going through business planning transitions and contemplating real estate decisions. These companies can be located anywhere in this country.

The DEIS seems to ignore the potential impacts on business development or redevelopment on the Beltline corridor due to the placement of the ATC line. Without such analysis, the DEIS is deficient.

# **Other Planning and Social Impact Comments**

Views from the wetlands to the Beltline and beyond should be considered in addition to views from the Beltline to the wetlands. The Beltline route will have major impacts on wetlands. But one impact seems to be ignored, namely, what those using the Yahara or other water bodies will encounter if the large transmission line is visible from these waterways.

The criterion that facilities must not unreasonably interfere with the orderly land use and development plans for the area involved (page 11), may not be met if the Beltline Highway route is selected. Numerous City plans, projects and districts will be affected by the transmission line. These include the Stoughton Road Revitalization Project Plan, South Madison Neighborhood Plan, Park-Badger Road Redevelopment Plan and TID 38, Todd Drive TID District 35, Allied Drive TID 29, the BioAg Gateway Plan, the SE Madison TIF District #39, Urban Design Districts 1 and 2, or the Stoughton Road/Highway 51 DOT improvement plans. For example, the DOT plans for the Stoughton Rd/Beltline intersection include a flyover alternative that may be quite elevated and may impact the 70-175 foot elevated lines. The DEIS does not consider this. The DEIS does not adequately address the potential adverse impacts on the implementation of these plans and projects.

The DEIS does not address the socioeconomic status of people impacted by the transmission line. While the number of residential buildings is listed, there is no information about who lives in those buildings. Income, race, age, etc. should all be provided to determine and address environmental justice issues associated with each of the respective routes. Attached to these comments are some very basic data gathered by the City of Madison, demonstrating that the construction of the project along the Beltline will negatively impact the neighborhoods in the County that have some of the highest population of minority residents. This is the exact sort of social impact that the DEIS should take into account when considering a project through an urban area such as the Beltline, but does not appear to be considered at all.

On page 62, the DEIS provides some general values on property values for residential areas, but nothing on retail or commercial. The DEIS states that studies are inconclusive. The DEIS should provide an estimate of the negative impact on property values for all buildings, residential, office and commercial located near the transmission line, as well as considering the economic development impacts outlined above.

# **Conclusion**

The proposed Beltline corridor is different than many routes traditionally considered by the PSC. The potential impacts include many economic and social impacts not associated with construction in less developed areas. The DEIS is deficient in failing to consider these impacts, and the extent to which many of them might be mitigated by undergrounding the line.

Very truly yours,

Michael P. May City Attorney

MPM:pah

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#### Enclosures (2)

cc: Mayor Dave Cieslewicz

Ray Harmon Larry Nelson Tom Heikkinen Brad Murphy Rick Roll Kevin Briski Steve French