

08-1024-EL-ORD

From: Tom Stacy [mailto:stacy@savewesternoh.org]

Sent: Sunday, September 28, 2008 11:24 AM

To: Siegfried, Stuart; Wissman, Kim

Subject: COMMENT on OPSB draft rules for wind energy siting applications

Stuart,

Attached are my comments, red lined into the original. I also have a 10 page paper that attempts to reconcile wind energy in Ohio with the OPSB mission statement. I have not included it at this time, but am interested in how and when I might share it. If you'd like, I will send a draft for off the record review. Let me know if that is appropriate.

In the mean time, attached are my formal, "peer reviewed" responses to the rules draft, warts and all!

Respectfully,

Tom Stacy

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"The debate is over: Global Warming theory's financial impact on you is man-made."

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CHAPTER 4906-17

INSTRUCTIONS FOR THE PREPARATION OF CERTIFICATE APPLICATIONS FOR ELECTRIC
POWER GENERATING WIND FACILITIES

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4906-17-01 APPLICABILITY AND DEFINITIONS.

FOR MY NOTES, THE ACRONYM "D/A" MEANS "DECISION ANALYSIS."

(A) THIS CHAPTER DETAILS THE APPLICATION FILING REQUIREMENTS FOR ALL ELECTRIC POWER GENERATING WIND FACILITIES CONSISTING OF WIND TURBINES AND ASSOCIATED FACILITIES WITH A SINGLE INTERCONNECTION TO THE ELECTRIC GRID

ATTORNEY I SPOKE TO SAYS TO LEAVE THIS OUT. OR IF YOU FACILITY HAS MORE THAN ONE INTERCONNECTION, YOU STILL HAVE TO FILE AN APPLICATION. AND DESIGNED FOR, OR CAPABLE OF, OPERATION AT AN AGGREGATE CAPACITY OF FIVE MEGAWATTS OR MORE.

- IS THE LANGUAGE OF "SINGLE INTERCONNECTION" SUFFICIENT TO DELINEATE THE INTENT OF THE LANGUAGE (AS VERBALLY EXPLAINED BY KIM WISSMAN AND CONCURRED WITH BY SENATOR BILL SEITZ IN THE SUMMER OF 2008) FROM OTHER POTENTIAL INTERPRETATIONS?

- IS IT POSSIBLE FOR A WIND ENERGY FACILITY TO CONNECT TO THE "ELECTRIC GRID" AT MORE THAN ONE POINT, AND FOR ALL WINDMILLS TO BE ABLE TO SERVE MORE THAN ONE INTERCONNECTION FROM TIME TO TIME VIA SWITCH GEAR?

- WOULD THE LANGUAGE ABOVE POTENTIALLY EXEMPT SUCH A FACILITY FROM THE FOLLOWING RULES?

- THE INTENT, AS EXPLAINED TO ME BY KIM WISSMAN, IS TO DEFINE A 'PROJECT OR FACILITY IN ITS ENTIRETY' AS "ALL OF THE WINDMILLS WHOSE OUTPUT IS AGGREGATED INTO A "PROJECT APPLICATION" TO OPSB." I THINK THE LANGUAGE IMPLIES MORE THAN THAT.

(B) AS USED IN THIS CHAPTER:

(1) PROJECT AREA MEANS THE TOTAL WIND POWER FACILITY AND THE BUFFER AREA(S), INCLUDING ASSOCIATED SETBACKS.

PLEASE DEFINE BUFFER AREA. I.E. DO YOU MEAN WINDMILLS AND MINIMUM SETBACKS? IS SUCH A DEFINITION OF BUFFER AREA APPROPRIATE IF THE IMPACTS OF A PROJECT EXTEND FURTHER THAN THAT? NOTE THE ATTACHED GAMESA PROJECT AREA MAP TURNED IN TO DP&L AND PASSED ON TOP FERC. 1.

A BUFFER ZONE SHOULD, IN MY OPINION, INCLUDE AT LEAST A ONE MILE RADIUS AROUND EACH WINDMILL, BUILDING AND THE TRANSFORMER/INTERCONNECT LOCATION.

(2) WIND POWER FACILITY OR FACILITY MEANS ALL THE TURBINES, COLLECTION LINES, ANY ASSOCIATED SUBSTATIONS AND ALL OTHER ASSOCIATED EQUIPMENT.

4906-17-02 PROJECT SUMMARY AND GENERAL INSTRUCTIONS.

(A) AN APPLICANT FOR A CERTIFICATE TO SITE AN ELECTRIC POWER GENERATING WIND FACILITY SHALL PROVIDE A PROJECT SUMMARY AND OVERVIEW OF THE PROPOSED PROJECT. IN GENERAL, THE SUMMARY SHOULD BE SUITABLE AS A REFERENCE FOR STATE AND LOCAL GOVERNMENTS AND FOR THE PUBLIC. THE SUMMARY AND OVERVIEW SHALL INCLUDE THE FOLLOWING:

(1) A STATEMENT EXPLAINING THE GENERAL PURPOSE OF THE FACILITY.

TO WHAT END?

(2) A DESCRIPTION OF THE PROPOSED FACILITY.

(3) A DESCRIPTION OF THE PROJECT AREA SELECTION PROCESS, INCLUDING DESCRIPTIONS OF THE MAJOR ALTERNATIVES CONSIDERED.

WHAT IS THE DEFINITION OF THE PROJECT AREA?

IS THE DEFINITION OF "MAJOR ALTERNATIVES" SUFFICIENT? DOES THIS TERM REFER TO INDIVIDUAL WINDMILL SITES OR TO THE ALTERNATE "PROJECT SITES" FOR THE ENTIRE FACILITY - OR BOTH?

SHOULD FACILITY SITE ALTERNATIVES REQUIRE DISCLOSURE OF ALL WIND SPEED DATA FROM BOTH SITES OF AT LEAST 1 FULL YEAR OF UNINTERRUPTED DATA FROM LIKE ANEMOMETER TOWERS AND EQUIPMENT WITH AT LEAST THREE DATA ALTITUDES OF 100, 145 AND 190 FT. ABOVE GRADE?

SUCH DISCLOSURE WOULD PROVIDE FOR THOROUGH COMPARATIVE ANALYSIS OF THE INCREMENTAL CAPACITY BENEFITS AT ALTERNATIVE SITES, ASSISTING THE BOARD IN MAKING AN ACCURATE DETERMINATION OF THE INCREMENTAL CAPACITY GAINS AND IMPACTS BETWEEN ALTERNATIVE FACILITY SITES.

WITH NO REAL RULES OR GUIDELINES SUGGESTING THE RELATIVE IMPORTANCE OF CARIOUS CONSIDERATIONS, THE APPLICANT MUST DO A LOT OF FINGER CROSSING DURING A LONG AND EXPENSIVE LEASE GATHERING AND

INTERCONNECTION APPLICATION PROCESS WITH LANDOWNERS AND THE RTO.

IS THE APPROVAL CRITERION OF THE OPSB OF IMPORTANCE HERE? HOW SO? MIGHT THE PROCESS OF DETERMINING THE BEST LOCATION FOR A FACILITY BE IMPORTANT TO THE PUBLIC AT LARGE AND IN THE REGION, WHOSE NEEDS AND RISKS YOU ARE CHARGED WITH EVALUATING? I BELIEVE TRANSPARENCY FACILITATES PEACE AND ORDER IN COMMUNITIES.

(4) A DISCUSSION OF THE PRINCIPAL ENVIRONMENTAL AND SOCIOECONOMIC CONSIDERATIONS OF THE PREFERRED PROJECT AREA AND ANY ALTERNATE PROJECT AREA SITES.

I DO NOT UNDERSTAND THE VALUE OF SUCH A VAGUE INCLUSION.

(5) AN EXPLANATION OF THE PROJECT SCHEDULE (A BAR CHART IS ACCEPTABLE).

(B) INFORMATION FILED BY THE APPLICANT IN RESPONSE TO THE REQUIREMENTS OF THIS SECTION SHALL NOT BE DEEMED RESPONSES TO ANY OTHER SECTION OF THE APPLICATION REQUIREMENTS.

(C) IF THE APPLICANT HAS PREPARED THE REQUIRED HARD COPY MAPS USING DIGITAL, GEOGRAPHICALLY-REFERENCED DATA, AN ELECTRONIC COPY OF ALL SUCH DATA, EXCLUDING DATA OBTAINED BY THE APPLICANT UNDER A LICENSING AGREEMENT WHICH PROHIBITS DISTRIBUTION, SHALL BE PROVIDED TO THE BOARD STAFF ON COMPUTER DISK CONCURRENT WITH SUBMISSION OF THE APPLICATION.

I RECOMMEND YOU REMOVE THE ABOVE. IF IT IS PRIVATE FOR SECURITY REASONS OR SOME OTHER PRIVATE REASONS, IT SHOULD BE SUPPLIED UNDER SEAL.

WHAT IS THE PURPOSE OF THE WORDING: "EXCLUDING DATA OBTAINED BY THE APPLICANT UNDER A LICENSING AGREEMENT WHICH PROHIBITS DISTRIBUTION"?

DOES THE LANGUAGE SERVE THE PUBLIC NEED OR INTEREST AND DOES THE LANGUAGE POTENTIALLY OPEN A LOOPHOLE FOR THE APPLICANT? FOR EXAMPLE, THE APPLICANT COULD ENTER INTO A LICENSING AGREEMENT WITH ANY PARTY TO AVOID DISCLOSURE OF ANY DATA IT DEEMS TO BE UNFAVORABLE TO ITS CHANCES OF SITING APPROVAL (INCLUDING WIND SPEED DATA FROM THE PROPOSED AND ALTERNATE SITES) OR FOR ANY OTHER REASON ADVANTAGEOUS TO ITS EXISTENCE.

DOES THAT FACILITATE FULFILLMENT OF THE OPSB MISSION?

(D) IF THE APPLICANT FOR A WIND GENERATION FACILITY ASSERTS THAT A PARTICULAR REQUIREMENT IN CHAPTER 4906-17 OF THE ADMINISTRATIVE CODE IS NOT APPLICABLE, THE APPLICANT MUST PROVIDE AN EXPLANATION WHY THE REQUIREMENT IS NOT APPLICABLE. FURTHER, THE APPLICANT SHALL PROVIDE IN ITS APPLICATION ALL RELEVANT TECHNOLOGICAL, FINANCIAL, ENVIRONMENTAL, SOCIAL AND ECOLOGICAL INFORMATION THAT IS GENERALLY KNOWN IN THE INDUSTRY TO BE OF POTENTIAL CONCERN FOR THE PARTICULAR TYPE OF FACILITY PROPOSED.

DEFINE OR PROVIDE EXAMPLES OF WHAT YOU MEAN HERE. INCLUDING BUT NOT LIMITED TO....

WILL THE PUBLIC HAVE ACCESS TO THE ENTIRE APPLICATION FOR REVIEW? ANTICIPATING THE CLAIM BY APPLICANTS THAT THE ENTIRE APPLICATION CONTAINS COMPETITIVELY SENSITIVE MATERIALS, THIS CLAIM DESERVES CLOSE SCRUTINY.

FIRST, PUBLIC FUNDS AND ENABLING LAWS FACILITATE THE WIND INDUSTRY'S VERY EXISTENCE. SINCE THE PUBLIC PAYS SIGNIFICANTLY FOR THE INDUSTRY, SHOULD THAT PUBLIC HAVE A RIGHT TO REVIEW ALL OF THE DATA IN THE APPLICATION?

I FEEL WIND SPEED DATA IS PART OF THE APPLICANT'S ACTIVITY AND SHOULD BE MADE PUBLIC IN REAL TIME ON AN ONGOING BASIS FROM THE TIME INSTALLED THROUGHOUT THE LIFE OF THE PROJECT.

FURTHERMORE, FOR VARIOUS ACCOUNTABILITY PURPOSES, THE ENERGY INPUTS AND OUTPUTS OF EACH WINDMILL AND ENTIRE FACILITY SHOULD BE AVAILABLE TO THE PUBLIC IN A MANNER EASILY CORRELATED WITH THE WIND SPEED DATA. OTHER NATURAL RESOURCE DATA IS MADE AVAILABLE BY GOVERNMENT ENTITIES AS A REFLECTION OF OUR TREASURY'S CONTRIBUTION TO ITS COLLECTION. WHY SHOULD THIS BE DIFFERENT? SHOULD THE GOVERNMENT FULLY FUND WIND RESOURCE DATA COLLECTION FURTHER TO THE NREL WIND RESOURCE DATABANK ALREADY IN PROGRESS?

4906-17-03 PROJECT DESCRIPTION IN DETAIL AND PROJECT SCHEDULE IN DETAIL.

(A) AN APPLICANT FOR A CERTIFICATE TO SITE AN ELECTRIC POWER GENERATING WIND FACILITY UNDER THIS CHAPTER SHALL PROVIDE A DETAILED DESCRIPTION OF THE PROPOSED GENERATION AND ASSOCIATED FACILITY.

(1) THE APPLICANT SHALL SUBMIT FOR EACH ALTERNATIVE:

(A)(A) — TYPE, NUMBER OF TURBINES, ESTIMATED NET DEMONSTRATED CAPABILITY, ANNUAL CAPACITY FACTOR AND HOURS OF ANNUAL GENERATION.

ANNUAL INFORMATION IS NOT SUFFICIENT TO MEASURE THE TRUE VALUE OF THE GENERATION IS IT? WHY NOT GET AT LEAST HOURLY ANNUAL DATA OR EVEN MINUTE BY MINUTE DATA? THE OPSB PROBABLY DOES NOT HAVE THE RESOURCES TO INTERPRET SUCH DATA, BUT PJM, MISO, AEP, DUKE, AMP AND OTHERS DO. THE SUMMARY OF THIS DATA COULD BE USEFUL IN THE OPSB'S D/A.

ADDITIONALLY, YOU MIGHT CONSIDER REQUIRING AN EXAMPLE FROM TWO COMPARABLE EXISTING FACILITIES (WEATHER AND ACTUAL HOURLY GENERATION COMPS AND LAND FORMS AND POPULATION DENSITY) OVER A ONE YEAR PERIOD. PERHAPS ONTARIO CANADA HOURLY DATA COULD BE A RESOURCE HERE?

MUSTN'T THE CAPACITY FACTOR AND CAPACITY CREDIT OF THE PROPOSED FACILITY BE STATED? ARE THESE NOT IMPORTANT MEASURES OF PUBLIC BENEFIT? IS CAPACITY CREDIT DATA IMPORTANT IN CONTRASTING ALTERNATIVE SITES? THE RULES DON'T MAKE THAT CLEAR.

(B) LAND AREA REQUIREMENT.

(2) THE APPLICANT SHALL SUBMIT A DESCRIPTION OF THE MAJOR EQUIPMENT INCLUDING, BUT NOT LIMITED TO, THE FOOTPRINT OF THE TURBINE, THE HEIGHT OF THE TURBINE INCLUDING ANY FOUNDATION, AND THE BLADE LENGTH.

(3) THE APPLICANT SHALL SUBMIT A BRIEF DESCRIPTION OF THE NEED FOR NEW TRANSMISSION LINE(S) ASSOCIATED WITH THE PROPOSED FACILITY.

ADDITIONALLY, THE PUBLIC MIGHT FURTHER BENEFIT IF THE APPLICANT IS REQUIRED TO SUBMIT A DESCRIPTION OF THE NEED FOR WHATEVER SEGMENT OF DEMAND THEY WILL SERVE, ALONG WITH A LISTING OF TRADITIONAL GENERATION FACILITIES THAT MIGHT BE DECOMMISSIONED EARLY OR NEVER BUILT DUE TO THE ESTIMATED CONTRIBUTIONS OF THIS FACILITY.

(B) DETAILED PROJECT SCHEDULE.

(1) SCHEDULE. THE APPLICANT SHALL PROVIDE A PROPOSED SCHEDULE IN BAR CHART FORMAT COVERING ALL APPLICABLE MAJOR ACTIVITIES AND MILESTONES, INCLUDING:

(A) ACQUISITION OF LAND AND LAND RIGHTS.

(B) WILD LIFE SURVEYS/STUDIES.

THERE IS A CONCERN THAT PERHAPS THESE STUDIES NEED TO BE COMMISSIONED INDEPENDENTLY BY SOME CREDIBLE, SCIENTIFIC GROUP THAT HAS NO POLITICAL, EMOTIONAL OR FINANCIAL STAKE IN THE OUTCOME.

(C) PREPARATION OF THE APPLICATION.

(D) SUBMITTAL OF THE APPLICATION FOR CERTIFICATE.

(E) ISSUANCE OF THE CERTIFICATE.

(F) PREPARATION OF THE FINAL DESIGN.

(G) CONSTRUCTION OF THE FACILITY.

(H) PLACEMENT OF THE FACILITY IN SERVICE.

(2) DELAYS. THE APPLICANT SHALL DESCRIBE THE IMPACT OF CRITICAL DELAYS ON THE EVENTUAL IN-SERVICE DATE.

4906-17-04 PROJECT AREA SITE ALTERNATIVES ANALYSES.

(A) THE APPLICANT SHALL CONDUCT A PROJECT AREA SITE SELECTION STUDY PRIOR TO SUBMITTING AN APPLICATION FOR AN ELECTRIC POWER GENERATING WIND FACILITY. THE STUDY SHALL BE DESIGNED TO EVALUATE ALL PRACTICABLE PROJECT AREA SITES FOR THE PROPOSED FACILITY AREA.

(1) THE APPLICANT SHALL PROVIDE THE FOLLOWING:

(A) A DESCRIPTION OF THE STUDY AREA OR GEOGRAPHIC BOUNDARIES SELECTED, INCLUDING THE RATIONALE FOR THE SELECTION.

(B) A MAP OF SUITABLE SCALE WHICH INCLUDES THE STUDY AREA AND WHICH DEPICTS THE GENERAL PROJECT AREAS WHICH WERE EVALUATED.

(C) A COMPREHENSIVE LIST AND DESCRIPTION OF ALL QUANTITATIVE AND QUANTITATIVE SITING CRITERIA, FACTORS, OR CONSTRAINTS UTILIZED BY THE APPLICANT, INCLUDING ANY EVALUATION CRITERIA OR WEIGHTING VALUES ASSIGNED TO EACH.

SHOULD YOU PROVIDE A LIST OF THESE CRITERIA? A GO/NO-GO OR WEIGHTING DESCRIPTION WOULD BE HELPFUL TO THE DEVELOPER.

(D) A DESCRIPTION OF THE PROCESS BY WHICH THE APPLICANT UTILIZED THE SITING CRITERIA TO DETERMINE THE PROPOSED SITE AND ANY PROPOSED ALTERNATIVE SITE(S).

(E) A DESCRIPTION OF THE SITES SELECTED FOR EVALUATION, THEIR FINAL RANKING, AND THE FACTORS AND RATIONALE USED BY THE APPLICANT FOR SELECTING THE PROPOSED SITE AND ANY PROPOSED ALTERNATIVE SITE(S).

(2) THE APPLICANT SHALL PROVIDE ONE COPY OF ANY CONSTRAINT MAP UTILIZED FOR THE STUDY DIRECTLY TO THE BOARD STAFF FOR REVIEW.

(B) THE APPLICANT SHALL PROVIDE A SUMMARY TABLE COMPARING THE SITES, UTILIZING THE TECHNICAL, FINANCIAL, ENVIRONMENTAL, SOCIOECONOMIC, AND OTHER FACTORS IDENTIFIED IN THE STUDY. DESIGN AND EQUIPMENT ALTERNATIVES SHALL BE INCLUDED WHERE THE USE OF SUCH ALTERNATIVES INFLUENCED THE SITING DECISION.

(C) THE APPLICANT MAY PROVIDE A COPY OF ANY SITE SELECTION STUDY PRODUCED BY OR FOR THE APPLICANT FOR THE PROPOSED PROJECT AS AN ATTACHMENT TO THE APPLICATION. THE STUDY MAY BE SUBMITTED IN RESPONSE TO PARAGRAPHS (A) AND (B) OF THIS RULE, PROVIDED THAT THE INFORMATION CONTAINED THEREIN IS RESPONSIVE TO THE REQUIREMENTS OF PARAGRAPHS (A) AND (B) OF THIS RULE.

4906-17-05 TECHNICAL DATA.

(A) SITE. INFORMATION ON THE LOCATION, MAJOR FEATURES, AND THE TOPOGRAPHIC, GEOLOGIC, AND HYDROLOGIC SUITABILITY OF THE PROPOSED SITE AND ANY PROPOSED ALTERNATIVE SITE(S) SHALL BE SUBMITTED BY THE APPLICANT. IF THIS INFORMATION IS DERIVED FROM REFERENCE MATERIALS, IT SHALL BE DERIVED FROM THE BEST AVAILABLE AND CURRENT REFERENCE MATERIALS. THE APPLICANT SHALL PROVIDE THE FOLLOWING FOR EACH SITE ALTERNATIVE.

"THE BEST AVAILABLE MATERIALS" IS SUBJECTIVE.

THE APPLICANT SHOULD TELL THE BOARD WHICH MATERIALS WERE USED TO DISCERN THE INFORMATION.

(1) GEOGRAPHY AND TOPOGRAPHY. THE APPLICANT SHALL PROVIDE A MAP OF 1:24,000 SCALE CONTAINING A FIVE-MILE RADIUS FROM THE PROPOSED FACILITY AND SHOWING THE FOLLOWING FEATURES:

(A) THE PROPOSED FACILITY.

(B) MAJOR POPULATION CENTERS AND GEOGRAPHIC BOUNDARIES.

(C) MAJOR TRANSPORTATION ROUTES AND UTILITY CORRIDORS.

(D) BODIES OF WATER WHICH MAY BE DIRECTLY AFFECTED BY THE PROPOSED FACILITY.

(E) TOPOGRAPHIC CONTOURS.

(F) MAJOR INSTITUTIONS, PARKS, RECREATIONAL AREAS.

REPLACE WITH "ALL PARKS AND RECREATIONAL AREAS, EXISTING OR PROPOSED, AND ALL INSTITUTIONS SUCH AS"

MAJOR INSTITUTIONS IS NOT WELL DEFINED AND MAJOR IS AN AMBIGUOUS DANGLING MODIFIER. DOES "MAJOR" APPLY TO INSTITUTIONS ONLY OR ALSO PARKS AND RECREATION? WHAT IS A "MAJOR INSTITUTION"? IF IT IS DEFINED IN RULES PREVIOUS, PROVIDE REFERENCE.

EXISTING OR PROPOSED SHOULD APPLY TO ANYTHING THAT COULD BECOME UNVIABLE IF THE APPLICATION IS GRANTED, BECAUSE IT COULD HAVE AN ECONOMIC IMPACT.

(G) RESIDENTIAL, COMMERCIAL AND INDUSTRIAL BUILDINGS AND INSTALLATIONS.

(H) AIR TRANSPORTATION FACILITIES, EXISTING OR PROPOSED.

(2) AN AERIAL PHOTOGRAPH CONTAINING A ONE-MILE RADIUS FROM THE PROPOSED FACILITY, INDICATING THE LOCATION OF THE PROPOSED FACILITY IN RELATION TO SURFACE FEATURES.

(3) A MAP OF 1:4,800 SCALE OF THE SITE, SHOWING THE FOLLOWING EXISTING FEATURES:

(A) TOPOGRAPHIC CONTOURS.

(B) EXISTING VEGETATIVE COVER.

(C) LAND USE AND CLASSIFICATIONS INCLUDING EXISTING OR PROPOSED ZONING.

(D) INDIVIDUAL STRUCTURES AND INSTALLATIONS.

(E) SURFACE BODIES OF WATER.

(F) WATER AND GAS WELLS.

(G) VEGETATIVE COVER THAT MAY BE REMOVED DURING CONSTRUCTION.

BASED ON PERSONAL RESEARCH, IN OHIO, 3,000 TO 5,000 WINDMILLS ARE REQUIRED TO EQUAL THE CAPACITY CREDIT OF A 1 GW THERMAL SOURCE GENERATION FACILITY. THE NUMBER OF TREES TAKEN FOR CONSTRUCTION AND TO REDUCE WIND SHEAR FOR EACH WINDMILL ARE SIGNIFICANT WHEN CONSIDERED IN THIS CONTEXT. DOES THE OPSB RECOGNIZE THIS AND HOW WILL THE INFORMATION BE USED IN THE DETERMINATION OF APPROVAL/DENIAL?

(IF OPSB CONSIDERS RAW PRODUCTION WITH NO POSITIVE CORRELATION TO DEMAND TO BE THE APPROPRIATE MEASURE OF BENEFIT, THEN ONLY 2,000 TO 3,000 WINDMILLS ARE REQUIRED TO GENERATE THE EQUIVALENT ANNUAL ENERGY OUTPUT OF A 1 GW THERMAL SOURCE GENERATOR.)

(4) GEOLOGY AND SEISMOLOGY. THE APPLICANT SHALL PROVIDE A MAP OF SUITABLE SCALE AND A CORRESPONDING CROSS-SECTIONAL VIEW, SHOWING THE GEOLOGICAL FEATURES OF THE PROPOSED FACILITY SITE AND THE LOCATION OF TEST BORINGS. THE APPLICANT SHALL ALSO:

(A) DESCRIBE THE SUITABILITY OF THE SITE GEOLOGY AND PLANS TO REMEDY ANY INADEQUACIES.

(B) DESCRIBE THE SUITABILITY OF SOIL FOR GRADING, COMPACTION, AND DRAINAGE, AND DESCRIBE PLANS TO REMEDY ANY INADEQUACIES.

(5) HYDROLOGY AND WIND. THE APPLICANT SHALL:

(A) PROVIDE THE NATURAL AND THE MAN-AFFECTED WATER BUDGETS, INCLUDING THE TEN-YEAR MEAN AND CRITICAL (LOWEST SEVEN-DAY FLOW IN TEN YEARS) SURFACE FLOWS AND THE MEAN AND EXTREME WATER TABLES DURING THE PAST TEN YEARS FOR EACH BODY OF WATER LIKELY TO BE DIRECTLY AFFECTED BY THE PROPOSED FACILITY.

IT IS COMMON KNOWLEDGE THAT WINDMILLS REQUIRE NO WATER RESOURCE OTHER THAN TO MIX CONCRETE FOR FOUNDATIONS.

IF WATER RUNOFF AND WATERSHED CONTAMINATION IS IMPORTANT TO OPSB HERE, PLEASE SAY SO.

IS THE INTENT HERE TO IMPLY THAT LESS WATER WILL BE CONVERTED TO STEAM BY COAL AND NUCLEAR FACILITIES AND COMBINED CYCLE GAS FACILITIES AS A RESULT OF THE APPROVAL OF THE WINDMILL PROJECT.

IF THIS IS THE CASE, SHOULD THE OPSB NOT REQUIRE THE APPLICANT TO QUANTIFY THESE WATER SAVINGS (AS A PERCENTAGE OF THE TOTAL WATER USAGE) AND THE INHERENT VALUE THEREOF, DIRECTLY ATTRIBUTABLE TO THE WINDMILL PROJECT'S IMPACT ON THE STEAM GENERATOR FACILITY FLEET AFFECTED IN AN INDEPENDENT PEER REVIEWED REPORT?

I FEEL THE D/A WEIGHTING HERE SHOULD BE "ZERO" UNTIL SIGNIFICANT POSITIVE EFFECTS ON GROUND WATER ARE QUANTIFIED AND CORRELATED.

PROVIDE A LIST OF THE VARIOUS ASPECTS TO BE ADDRESSED TO HELP APPLICANT FILL OUT THIS SECTION APPROPRIATELY.

(B) PROVIDE AN ANALYSIS OF THE PROSPECTS OF FLOODS AND HIGH WINDS FOR THE AREA, INCLUDING THE PROBABILITY OF OCCURRENCES AND LIKELY CONSEQUENCES OF VARIOUS FLOOD STAGES AND WIND VELOCITIES, AND DESCRIBE PLANS TO MITIGATE ANY LIKELY ADVERSE CONSEQUENCES.

(C) PROVIDE EXISTING MAPS OF AQUIFERS WHICH MAY BE DIRECTLY AFFECTED BY THE PROPOSED FACILITY.

(B) LAYOUT AND CONSTRUCTION. THE APPLICANT SHALL PROVIDE INFORMATION ON THE PROPOSED LAYOUT AND PREPARATION OF THE PROPOSED SITE AND ANY PROPOSED ALTERNATIVE SITE(S) AND THE DESCRIPTION OF PROPOSED MAJOR STRUCTURES AND INSTALLATIONS LOCATED THEREON.

(1) SITE ACTIVITIES. THE APPLICANT SHALL DESCRIBE THE PROPOSED SITE PREPARATION AND RECLAMATION OPERATIONS, INCLUDING:

(A) TEST BORINGS.

(B) REMOVAL OF VEGETATION.

(C) GRADING AND DRAINAGE PROVISIONS.

(D) ACCESS ROADS.

(E) REMOVAL AND DISPOSAL OF DEBRIS.

(F) POST-CONSTRUCTION RECLAMATION.

(2) LAYOUT. THE APPLICANT SHALL SUPPLY A MAP OF 1:4,800 SCALE OF THE PROPOSED ELECTRIC POWER GENERATING WIND FACILITY, SHOWING THE FOLLOWING FEATURES OF THE PROPOSED AND EXISTING FACILITY AND ASSOCIATED FACILITIES:

(A) ELECTRIC POWER GENERATING WIND TURBINES.

(B) TRANSFORMERS AND COLLECTION LINES.

(C) CONSTRUCTION LAYDOWN AREA(S).

(D) TRANSMISSION LINES.

- (E) SUBSTATIONS.
 - (F) TRANSPORTATION FACILITIES AND ACCESS ROADS.
 - (G) SECURITY FACILITIES.
 - (H) GRADE ELEVATIONS WHERE MODIFIED DURING CONSTRUCTION.
 - (I) OTHER PERTINENT INSTALLATIONS.
- (3) STRUCTURES. THE APPLICANT SHALL DESCRIBE, IN AS MUCH DETAIL AS IS AVAILABLE AT THE TIME OF SUBMISSION OF THE APPLICATION, ALL MAJOR PROPOSED STRUCTURES, INCLUDING THE FOLLOWING:
- (A) ESTIMATED OVERALL DIMENSIONS.
 - (B) CONSTRUCTION MATERIALS.
 - (C) COLOR AND TEXTURE OF FACING SURFACES.
 - (D) PHOTOGRAPHIC INTERPRETATION OR ARTIST'S PICTORIAL SKETCHES OF THE PROPOSED FACILITY FROM PUBLIC VANTAGE POINTS.
 - (E) ANY UNUSUAL FEATURES.
- (4) PLANS FOR CONSTRUCTION. THE APPLICANT SHALL DESCRIBE THE PROPOSED CONSTRUCTION SEQUENCE.
- (5) FUTURE PLANS. THE APPLICANT SHALL DESCRIBE ANY PLANS FOR FUTURE ADDITIONS OF ELECTRIC POWER GENERATING UNITS FOR THE SITE (INCLUDING THE TYPE AND TIMING); AND THE MAXIMUM ELECTRIC POWER GENERATING CAPACITY ANTICIPATED FOR THE SITE.
- (C) EQUIPMENT.
- (1) ELECTRIC POWER GENERATING EQUIPMENT. THE APPLICANT SHALL DESCRIBE THE PROPOSED MAJOR ELECTRIC POWER GENERATING EQUIPMENT FOR THE PROPOSED SITE AND ANY PROPOSED ALTERNATIVE SITE(S).
 - (2) SAFETY EQUIPMENT. THE APPLICANT SHALL DESCRIBE:

- (A) ALL PROPOSED MAJOR PUBLIC SAFETY EQUIPMENT.
- (B) THE RELIABILITY OF THE EQUIPMENT.
- (C) TURBINE MANUFACTURER'S SAFETY STANDARDS. INCLUDE A COMPLETE COPY OF THE MANUFACTURER'S SAFETY MANUAL OR SIMILAR DOCUMENT.
- (3) THE APPLICANT SHALL DESCRIBE ANY OTHER MAJOR EQUIPMENT NOT DISCUSSED IN PARAGRAPHS (C)(2)(A) TO (C)(2)(C) OF THIS RULE.
- (D) REGIONAL ELECTRIC POWER SYSTEM. THE APPLICANT SHALL PROVIDE THE FOLLOWING INFORMATION ON INTERCONNECTION OF THE FACILITY TO THE REGIONAL ELECTRIC POWER GRID.
 - (1) INTERCONNECTION QUEUE(S). THE APPLICANT SHALL PROVIDE THE FOLLOWING INFORMATION RELATING TO ITS GENERATION INTERCONNECTION REQUEST.
 - (A) NAME OF QUEUE.
 - (B) WEB LINK OF QUEUE.
 - (C) QUEUE NUMBER.
 - (D) QUEUE DATE.
 - (2) SYSTEM STUDIES. THE APPLICANT SHALL PROVIDE SYSTEM IMPACT STUDIES ON ITS GENERATION INTERCONNECTION REQUEST. THE STUDIES SHALL SHOW LOCAL AND REGIONAL IMPACTS TO THE TRANSMISSION SYSTEM.

4906-17-06 FINANCIAL DATA.

- (A) THE APPLICANT SHALL STATE THE CURRENT AND PROPOSED OWNERSHIP STATUS OF THE PROPOSED FACILITY, INCLUDING SITE(S), RIGHTS-OF-WAY, STRUCTURES, AND EQUIPMENT. SUCH INFORMATION SHALL INCLUDE TYPE OF OWNERSHIP.
- (B) CAPITAL AND INTANGIBLE COSTS. THE APPLICANT SHALL:
 - (1) SUBMIT ESTIMATES OF APPLICABLE CAPITAL AND INTANGIBLE COSTS FOR THE VARIOUS ALTERNATIVES. THE DATA SUBMITTED SHALL BE CLASSIFIED

ACCORDING TO FEDERAL ENERGY REGULATORY COMMISSION UNIFORM SYSTEM OF ACCOUNTS PRESCRIBED BY THE PUBLIC UTILITIES COMMISSION OF OHIO FOR UTILITY COMPANIES, UNLESS THE APPLICANT IS NOT AN ELECTRIC LIGHT COMPANY, A GAS COMPANY OR A NATURAL GAS COMPANY AS DEFINED IN CHAPTER 4905 OF THE REVISED CODE (IN WHICH CASE, THE APPLICANT SHALL FILE THE CAPITAL AND INTANGIBLE COSTS CLASSIFIED IN THE ACCOUNTING FORMAT ORDINARILY USED BY THE APPLICANT IN ITS NORMAL COURSE OF BUSINESS).

- (2) COMPARE THE TOTAL COSTS PER KILOWATT WITH THE APPLICANT'S SIMILAR FACILITIES, AND EXPLAIN ANY SUBSTANTIAL DIFFERENCES.

DEFINE TOTAL COSTS.

WHY COMPARE THIS PROPOSAL TO ANYTHING THE APPLICANT CAN PROVIDE. DON'T YOU ALREADY HAVE THE COMPS FROM OTHER PERMITS YOU HAVE GRANTED AND MONITOR? HOW WERE TOTAL COSTS DEFINED FOR OTHER GENERATION FACILITIES?

FOR EXAMPLE, DOES IT INCLUDE ANY AND ALL BENEFITS FROM PUBLIC SOURCES?

THESE COULD REASONABLY INCLUDE:

PRODUCTION TAX CREDITS, DOUBLE DECLING ACCELERATED DEPRECIATION WITHOUT PENALTY FOR EARLY SALE, INCREMENTAL VALUE OF SPECIAL FINANCING THROUGH DEPARTMENTS OF STATE OR FEDERATION, IMPACT OF PENALTIES IMPOSED BY STATE FOR NON-COMPLIANCE WITH RENEWABLE ENERGY PORTFOLIO STANDARDS OVER THE PHASE IN PERIOD, TAX ABATEMENTS AND ANY OTHER EXISTING OR EXPECTED (IE CARBON CAP AND TRADE) SOURCES OF REVENUES THAT ARE, IN FACT PUBLIC "COSTS"? HOW WILL THIS DATA BE SUMMARIZED, AND IS THAT SUMMARY MODEL OPEN TO PUBLIC REVIEW ALONG WITH THESE RULE DRAFTS?

SHOULD FINANCIAL IMPACT ON ANY REAL ESTATE EFFECTED BE CALCULATED, AND HOW AND BY WHOM?

- (3) TABULATE THE PRESENT WORTH AND ANNUALIZED COST FOR CAPITAL COSTS AND ANY ADDITIONAL COST DETAILS AS REQUIRED TO COMPARE CAPITAL COST OF ALTERNATES (USING THE START OF CONSTRUCTION DATE AS REFERENCE DATE), AND DESCRIBE TECHNIQUES AND ALL FACTORS USED IN CALCULATING PRESENT WORTH AND ANNUALIZED COSTS.

(C) OPERATION AND MAINTENANCE EXPENSES. THE APPLICANT SHALL:

- (1) SUPPLY APPLICABLE ESTIMATED ANNUAL OPERATION AND MAINTENANCE EXPENSES FOR THE FIRST TWO YEARS OF COMMERCIAL OPERATION. THE DATA SUBMITTED SHALL BE CLASSIFIED ACCORDING TO FEDERAL ENERGY REGULATORY COMMISSION UNIFORM SYSTEM OF ACCOUNTS PRESCRIBED BY THE PUBLIC UTILITIES COMMISSION OF OHIO FOR UTILITY COMPANIES, UNLESS THE APPLICANT IS NOT AN ELECTRIC LIGHT COMPANY, A GAS COMPANY OR A NATURAL GAS COMPANY AS DEFINED IN CHAPTER 4906 OF THE REVISED CODE (IN WHICH CASE, THE APPLICANT SHALL FILE THE OPERATION AND MAINTENANCE EXPENSES CLASSIFIED IN THE ACCOUNTING FORMAT ORDINARILY USED BY THE APPLICANT IN ITS NORMAL COURSE OF BUSINESS).

WHAT MAKES AN APPLICANT'S NORMAL COURSE BUSINESS AN ACCEPTABLE OF MEASUREMENT BY THE BOARD? THERE ARE MORE THAN LARGE, SUCCESSFUL BUSINESSES INVOLVED IN THIS INDUSTRY.

- (2) COMPARE THE TOTAL OPERATION AND MAINTENANCE COST PER KILOWATT WITH APPLICANT'S SIMILAR FACILITIES AND EXPLAIN ANY SUBSTANTIAL DIFFERENCES.

DOES THIS SPECIFICALLY INCLUDE THE MORTGAGE (ROI FOR OWNERS) OF THE DEVICES? IF NOT, IS THAT REQUIREMENT DETAILED ELSEWHERE IN THE RULES?

WHY IS THE VERY EXPENSIVE LATER-IN-LIFE PERIODIC MAINTENANCE SUCH AS MAIN BEARING ASSEMBLIES AND BLADES WHICH MAY LAST 3 TO 6 YEARS NOT INCLUDED IN THIS DISCLOSURE? THESE COULD MAKE UP A SIGNIFICANT PORTION OF THE LONG-TERM OPERATING BUDGET, AND POTENTIALLY MAKE OR BREAK A PROJECT'S LONG TERM VIABILITY AND BENEFIT.

- (3) TABULATE THE PRESENT WORTH AND ANNUALIZED EXPENDITURES FOR OPERATING AND MAINTENANCE COSTS AS WELL AS ANY ADDITIONAL COST BREAKDOWNS AS REQUIRED TO COMPARE ALTERNATIVES, AND DESCRIBE TECHNIQUES AND FACTORS USED IN CALCULATING PRESENT WORTH AND ANNUALIZED COSTS.

(D) DELAYS. THE APPLICANT SHALL SUBMIT AN ESTIMATE OF THE COST FOR A DELAY PRORATED TO A MONTHLY BASIS BEYOND THE PROJECTED IN-SERVICE DATE.

DESCRIBE LOST TO WHOM? CONSEQUENTIAL DAMAGES INCLUDED? ELECTRICITY CONSUMERS? THEMSELVES? THE NEIGHBORS? DEFINE THIS SECTION.

IF YOU ARE FEELING GUILTY ABOUT DRAGGING YOUR FEET ON ISSUING A PERMIT (A REASONABLE CONSIDERATION), MAKE THAT CLEAR. IF ITS INTENT IS SOMETHING ELSE, MAKE THAT CLEAR.

4906-17-07 ENVIRONMENTAL DATA.

(A) GENERAL. THE INFORMATION REQUESTED IN THIS RULE SHALL BE USED TO ASSESS THE ENVIRONMENTAL EFFECTS OF THE PROPOSED FACILITY. WHERE APPROPRIATE, THE APPLICANT MAY SUBSTITUTE ALL OR PORTIONS OF DOCUMENTS FILED TO MEET FEDERAL, STATE, OR LOCAL REGULATIONS. EXISTING DATA MAY BE SUBSTITUTED FOR PHYSICAL MEASUREMENTS.

(B) AIR.

(1) PRECONSTRUCTION. THE APPLICANT SHALL:

(A) SUBMIT AVAILABLE INFORMATION CONCERNING THE AMBIENT AIR QUALITY OF THE PROPOSED SITE AND ANY PROPOSED ALTERNATIVE SITE(S).

WHY?

(B) DESCRIBE APPLICABLE FEDERAL AND/OR OHIO NEW SOURCE PERFORMANCE STANDARDS (NSPS), APPLICABLE AIR QUALITY LIMITATIONS, APPLICABLE NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS), AND APPLICABLE PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENTS.

WHY?

DOES THIS SECTION IMPLY THAT FOR EVERY KWH OF WIND ENERGY PRODUCED, THERE WILL BE AN ATTRIBUTABLE, EQUAL AND INCREMENTAL DECREASE IN EMISSIONS FROM THERMAL GENERATORS? IF SO, CAN THE APPLICANT BE REQUIRED TO SHOW THE PUBLIC ALL PERTINENT DATA TO VALIDATE THIS ASSERTION? PLEASE BE MINDFUL OF THE TIME-AHEAD SCHEDULING AND PLANNING WINDOW(S) IN WHICH WIND ENERGY PRODUCTION CAN BE RELIED, THE GENERATION MIX CHANGES REQUIRED TO ACCOMMODATE THE SAME AT VARIOUS MIX PENETRATION LEVELS, THE INEFFICIENCIES INVOLVED IN A HIGHER VARIABILITY OF SUPPLY AND THE RATE AT WHICH OTHER GENERATION

SOURCES MUST EFFICIENTLY RAMP UP OR DOWN, POTENTIALLY AFFECTING THEIR AVERAGE RATE OF EMISSIONS PER UNIT OF ENERGY OVER TIME.

IS IT SUPPOSED BY THE APPLICANT OR DEPARTMENTS AND AGENCIES OF THIS STATE THAT THIS FACILITY WILL HAVE NEGLIGIBLE IMPACT ON THE GENERATION MIX AND ON VARIABILITY? IF SO, PLEASE CONSIDER THAT IMPLIES THAT THE APPLICANT'S PROPOSED FACILITY, AND IN EVENTUALITY THE FULLY DEPLOYED PLAN FOR OHIO WIND ENERGY HAS LITTLE MEANINGFUL BENEFIT TO OHIO'S CAPACITY GENERATION CAPABILITIES. IS CAPACITY GENERATION NOT PART OF THE OPSB CHARTER? IF SO, AND THE FORMER TENETS ARE TRUE, HOW IS IT THAT AN APPLICATION FOR A WIND ENERGY FACILITY PERMIT WOULD BE GRANTED? LOOK AT THE FACILITY IN THE CONTEXT OF A LARGE NUMBER OF SUCH FACILITIES OVER THE NEXT DECADE, THEN THE PENETRATION WILL, MOST CERTAINLY AFFECT EMISSIONS EFFICIENCIES AND TRADITIONAL SOURCE MIX AND COSTS. AS A CAPACITY RESOURCE, WIND ENERGY REQUIRES 90+% COMPANION GENERATION, FOR WHEN THE WIND IS NOT BLOWING, THERE IS NO AVAILABLE CAPACITY FROM WIND.

(C) PROVIDE A LIST OF ALL REQUIRED PERMITS TO INSTALL AND OPERATE AIR POLLUTION SOURCES. IF ANY SUCH PERMIT(S) HAVE BEEN ISSUED MORE THAN THIRTY DAYS PRIOR TO THE SUBMITTAL OF THE CERTIFICATE APPLICATION, THE APPLICANT SHALL PROVIDE A LIST OF ALL SPECIAL CONDITIONS OR CONCERNS ATTACHED TO THE PERMIT(S).

WHY?

DOES THIS SECTION IMPLY THAT THE WIND FACILITY OPERATORS WILL REQUIRE ADDITIONAL PERMITS TO ALLOW ITS COMPANION GENERATION FACILITIES (WHICH ARE ULTIMATELY REQUIRED BUT NOT LISTED AS PART OF THIS PROJECT) TO EMIT THEORETICALLY DAMAGING AND KNOWN SUBSTANCES (AKA CARBON DIOXIDE) AT A HIGHER RATE THAN THEY OTHERWISE WOULD TO ACCOUNT FOR THE ONGOING RATES OF CHANGE IN WIND ENERGY OUTPUT? IF SO, THAT SHOULD BE SPELLED OUT. PEER REVIEW AGREES IT WOULD BE GOOD TO INCLUDE A REQUEST OF THIS INFORMATION.

WILL THERE BE PERMITS REQUIRED FOR POTENTIAL DUST EMISSIONS FROM GRADED ROADS AND CONSTRUCTION SITES (APPROXIMATELY 4 ACRES

PER DEVICE) IN TIMES OF LOW RAINFALL? IF DUST INHIBITING
CHEMICALS ARE USED, SEE WATER QUALITY, BELOW.

PROPOSALS SHOULD BE REQUIRED TO QUANTIFY POTENTIAL DUST IMPACTS
BASED ON VARIOUS WEATHER POSSIBILITIES.

(D) DESCRIBE HOW THE PROPOSED FACILITY WILL ACHIEVE COMPLIANCE
WITH THE REQUIREMENTS IDENTIFIED IN PARAGRAPHS (B)(1)(B) AND
(B)(1)(C) OF THIS RULE, IF APPLICABLE

(2) CONSTRUCTION. THE APPLICANT SHALL DESCRIBE PLANS TO CONTROL
EMISSIONS DURING THE SITE CLEARING AND CONSTRUCTION PHASE.

EMMISSIONS OF WHAT?

(C) WATER.

(1) PRECONSTRUCTION. THE APPLICANT SHALL:

(A) PROVIDE A LIST OF ALL PERMITS REQUIRED TO INSTALL AND OPERATE
THE PROPOSED FACILITY.

(B) ON A MAP OF 1:24,000 SCALE, SHOW THE LOCATION AND SAMPLING
DEPTHS OF ALL WATER MONITORING AND GAUGING STATIONS USED IN
COLLECTING PRECONSTRUCTION SURVEY DATA. SAMPLES SHALL BE
COLLECTED BY STANDARD SAMPLING TECHNIQUES AND ONLY IN
BODIES OF WATER LIKELY TO BE AFFECTED BY THE PROPOSED FACILITY.
INFORMATION FROM U.S. GEOLOGICAL SURVEY (USGS), OHIO
ENVIRONMENTAL PROTECTION AGENCY, AND SIMILAR AGENCIES MAY
BE USED WHERE AVAILABLE, BUT THE APPLICANT SHALL IDENTIFY ALL
SUCH SOURCES OF DATA.

SHOULD NOT ALL PUBLIC AND PRIVATE PROGRAMS PROMOTING WATER
HABITAT AND SPECIES PROPAGATION BE LISTED HERE? FOR INSTANCE,
OHIO TAX PAYERS FUND A TROUT STOCKING AND HABITAT
PRESERVATION EFFORT IN THE MAD RIVER IN LOGAN AND CHAMPAIGN
COUNTIES.

(2) CONSTRUCTION. THE APPLICANT SHALL:

(A) INDICATE, ON A MAP OF 1:24,000 SCALE, THE LOCATION OF THE WATER MONITORING AND GAUGING STATIONS TO BE UTILIZED DURING THE CONSTRUCTION.

(B) ESTIMATE THE QUALITY AND QUANTITY OF AQUATIC DISCHARGES FROM THE SITE CLEARING AND CONSTRUCTION OPERATIONS, INCLUDING RUNOFF AND SILTATION FROM DREDGING, FILLING, AND CONSTRUCTION OF SHORESIDE FACILITIES.

...AND IN HILLY REGIONS FEEDING HEADWATERS OF SENSITIVE HABITATS (MAD RIVER AND DARBY CREEK).

(C) DESCRIBE ANY PLANS TO MITIGATE THE ABOVE EFFECTS IN ACCORDANCE WITH CURRENT FEDERAL AND OHIO REGULATIONS.

WILL APPLICANTS BE REQUIRED TO ACCOUNT FOR UNUSUAL RAINFALL AMOUNTS AND RATES, AND THE USE OF DUST CONTROL CHEMICALS AND THEIR POTENTIAL EFFECT ON FISH IN THE ABOVE ANALYSIS?

(D) DESCRIBE ANY CHANGES IN FLOW PATTERNS AND EROSION DUE TO SITE CLEARING AND GRADING OPERATIONS.

CRANES WEIGH 1,000,000 POUNDS AND IN BENTON COUNTY, INDIANA, SINK 18" INTO SOIL/LAND SURFACE AT EACH PATH AND PASS, POTENTIALLY SIGNIFICANTLY ALTERING FLOWS IN VARIOUS WATERSHEDS. THEIR COUNTY SOIL AND WATER DISTRICT IS OVERWHELMED DEALING WITH THIS ISSUE. WHO BEARS THIS COST? HOW IS THAT COST DESCRIBED IN THE APPLICATION.

WILL THE MEMBERS OF THE OPSB CONSIDER ALSO THE SUBSURFACE FARM FIELD DRAIN TILES THAT WILL BE SEVERED FROM TRENCHING CONNECTION CABLE WAYS BETWEEN WINDMILLS? WILL THIS DAMAGE POTENTIALLY RESULT IN FLOODING OF FIELDS, LOWERING CROP YIELDS AND POTENTIALLY AFFECTING WATER QUALITY DOWN STREAM DUE TO SURFACE DISCHARGE OF PESTICIDES AND FERTILIZERS THAT WOULD ORDINARILY BE SUBJECT TO SOIL INFILTRATION ON ITS WAY INTO THE SEVERED TILES?

(3) OPERATION. IN ORDER TO ASSESS THE EFFECTS OF FACILITY OPERATION ON WATER QUALITY, THE APPLICANT SHALL:

(A) DESCRIBE THE SCHEDULE FOR RECEIPT OF THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM PERMIT.

(B) PROVIDE A QUANTITATIVE FLOW DIAGRAM OR DESCRIPTION FOR WATER AND WATER-BORNE WASTES THROUGH THE PROPOSED FACILITY RESULTING FROM RUN-OFF FROM SOIL OR OTHER SURFACES.

HERE IS WHERE SEVERED TILEWAYS FROM TRENCHING AND ALTERED WATERSHEDS AND CRUSHED TILES DUE TO CRANE INGRESS/EGRESS MIGHT BE DESCRIBED AS AS ABOVE.

(C) DESCRIBE HOW THE PROPOSED FACILITY INCORPORATES MAXIMUM FEASIBLE WATER CONSERVATION PRACTICES CONSIDERING AVAILABLE TECHNOLOGY AND THE NATURE AND ECONOMICS OF THE VARIOUS ALTERNATIVES.

(D) SOLID WASTE.

(1) PRECONSTRUCTION. THE APPLICANT SHALL:

(A) DESCRIBE THE NATURE AND AMOUNT OF DEBRIS AND SOLID WASTE ON THE SITE.

(B) DESCRIBE ANY PLANS TO DEAL WITH SUCH WASTES.

(2) CONSTRUCTION. THE APPLICANT SHALL:

(A) ESTIMATE THE NATURE AND AMOUNTS OF DEBRIS AND OTHER SOLID WASTE GENERATED DURING CONSTRUCTION OPERATIONS.

(B) DESCRIBE THE PROPOSED METHOD OF STORAGE AND DISPOSAL OF THESE WASTES.

(3) OPERATION. THE APPLICANT SHALL:

(A) ESTIMATE THE AMOUNT, NATURE, AND COMPOSITION OF SOLID WASTES GENERATED DURING THE OPERATION OF THE PROPOSED FACILITY.

WILL OPSB CONSIDER THE BULK OF WASTE BLADES OVER TIME? IS THERE AN ENVIRONMENTALLY FRIENDLY AND TIMELY MEANS OF BLADE DISPOSAL

AND/OR RECLAIM? DAMAGED BLADES AT GROUND LEVEL OFFER AN ATTRACTIVE NUISANCE PER THE ATTACHED PHOTOGRAPH.

(B) DESCRIBE PROPOSED METHODS FOR STORAGE, TREATMENT, TRANSPORT, AND DISPOSAL OF THESE WASTES.

IS THE GEAR OIL USED IN THESE PROJECTS SAFE FOR SKIN CONTACT AND SPILLAGE OR DOES IT REQUIRE FULL CONTAMINATION SUITS AND RESPIRATORS? WHAT ARE THESE LUBRICANTS AND ARE THEIR MSDS DETAILS REQUIRED BY OPSB TO BE SUPPLIED WITH THE APPLICATION AND FOR REVIEW BY OSHA AND OTHER INTERESTED DEPARTMENTS OF STATE? WHAT BECOMES OF ANY HAZARDOUS MATERIALS IN CASE OF FIRE OR TOWER COLLAPSE? IS THERE A PROCEDURE COMMENSURATE WITH OHIO AND FEDERAL EPA REGULATIONS ON FILE WITH THOSE DEPARTMENTS?

(4) LICENSES AND PERMITS. THE APPLICANT SHALL DESCRIBE ITS PLANS AND ACTIVITIES LEADING TOWARD ACQUISITION OF WASTE GENERATION, STORAGE, TREATMENT, TRANSPORTATION AND/OR DISPOSAL PERMITS. IF ANY SUCH PERMIT(S) HAVE BEEN ISSUED MORE THAN THIRTY DAYS PRIOR TO THE SUBMITTAL OF THE CERTIFICATE APPLICATION, THE APPLICANT SHALL PROVIDE A LIST OF ALL SPECIAL CONDITIONS OR CONCERNS ATTACHED TO THE PERMIT(S).

4906-17-08 SOCIAL AND ECOLOGICAL DATA.

(A) HEALTH AND SAFETY.

(1) DEMOGRAPHIC. THE APPLICANT SHALL PROVIDE EXISTING AND TEN-YEAR PROJECTED POPULATION ESTIMATES FOR COMMUNITIES WITHIN FIVE MILES OF THE PROPOSED SITE(S).

WE ARE OF COURSE HOPEFUL THIS AND ALL IMPORTANT DATA REQUIRED WILL BE USED TO DETERMINE THE PROJECT'S VIABILITY AND ADVISABILITY.

WILL THE OPSB COMPARE THE REQUIRED DATA TO ALL EXISTING WIND ENERGY PROJECT POPULATION DENSITY DATA AND SHARE THESE RESULTS WITH THE PUBLIC? WILL THE REQUESTED DATA BE COMBINED WITH AESTHETIC AND OUTDOOR RECREATION DATA TO CONSTRUCT A PICTURE OF THE CAUSES OF POPULATION DENSITY IN AND NEAR TO THE PROPOSED SITE? WILL THE

OPSB CONTRAST THESE REASONS WITH REASONS FOR POPULATION DENSITY AT EXISTING WINDENERGY SITES? IN LOGAN AND CHAMPAIGN COUNTIES, THE REASON FOR RURAL HOMESTEADS HAS MORE TO DO WITH REGIONALLY UNIQUE AESTHETICS AND NATURAL SURROUNDINGS THAN IN MANY OTHER AREAS WHERE WIND ENERGY FACILITIES HAVE BEEN CONSTRUCTED.

WILL THE OPSB CONSIDER THE APPRAISED VALUE OF ALL OF THE HOMESTEADS IN THE PROJECT BOUNDARY AND SURROUNDING AREA AND COMPARE THIS WITH SAME FROM EXISTING WIND ENERGY FACILITIES? IS THAT DATA OF ANY INTEREST TO OPSB IN THE FAIR ANALYSIS OF POTENTIAL ECONOMIC IMPACT OF THE FACILITY?

FUTURE REAL ESTATE TRANSACTIONS IN THE AFFECTED AREA OF ANY PERMITTED FACILITY SHOULD BE TRACKED USING METRICS SUCH AS:

ASKING PRICE VS. SELLING PRICE

SELLING PRICE SCALED TO GENERAL REAL ESTATE MARKET CONDITIONS.

CHANGE IN LAND USE SUBSEQUENT TO TRANSACTION.

TIME A PROPERTY REMAINS ON THE MARKET BEFORE BEING PURCHASED.

ANY SPECIAL REASONS THE PROPERTY DID SELL (I.E. BOUGHT BY WIND DEVELOPER TO AVOID NEGATIVE IMPACT ON PROPERTY VALUE STUDIES).

(2) NOISE. THE APPLICANT SHALL:

(A) DESCRIBE THE CONSTRUCTION NOISE LEVELS EXPECTED AT THE NEAREST PROPERTY BOUNDARY. THE DESCRIPTION SHALL ADDRESS:

(I) DYNAMITING ACTIVITIES.

(II) OPERATION OF EARTH MOVING EQUIPMENT.

(III) DRIVING OF PILES.

(IV) ERECTION OF STRUCTURES.

(V) TRUCK TRAFFIC.

(VI) INSTALLATION OF EQUIPMENT.

(B) EVALUATE AND DESCRIBE THE OPERATIONAL NOISE LEVELS EXPECTED AT THE NEAREST PROPERTY BOUNDARY, UNDER BOTH DAY AND NIGHT

TIME CONDITIONS. THE APPLICANT SHALL USE GENERALLY-ACCEPTED COMPUTER MODELING SOFTWARE OR SIMILAR METHODOLOGY, INCLUDING CONSIDERATION OF BROADBAND, TONAL, AND LOW-FREQUENCY NOISE LEVELS.

(SHARE WITH RICK JAMES.)

(C) INDICATE THE LOCATION OF ANY NOISE-SENSITIVE AREAS WITHIN ONE MILE OF THE PROPOSED FACILITY.

PLEASE DEFINE NOISE SENSITIVE AREAS. WILL THE OPSB INCLUDE LOW FREQUENCY VIBRATION/NOISE AS PART OF THIS REQUIREMENT? FOR INSTANCE, IF DEAF PERSONS RESIDE IN THE IMPACT ZONE, AND RELY ON LOW FREQUENCIES FOR PERCEPTION TO A GREATER EXTENT, WOULD THOIS CONSTITUTE A "NOISE-SENSITIVE AREA" IN THE SUBSONIC RANGE?

(D) DESCRIBE EQUIPMENT AND PROCEDURES TO MITIGATE THE EFFECTS OF NOISE EMISSIONS FROM THE PROPOSED FACILITY DURING CONSTRUCTION AND OPERATION.

THIS DESCRIPTION OF EQUIPMENT AND PROCEDURES SHOULD INCLUDE A PRESCRIBED PERIODIC BLADE AND ROTOR BEARING REPLACEMENT SCHEDULE BASED ON INCREASED NOISE AS MEASURED BY AN INDEPENDENT ENTITY SUCH AS E-COUSTIC SOLUTIONS OF OKEMOS, MI?

ANNUAL STUDIES WITH FILING OF NOISE COMPLIANCE SHOULD BE REQUIRED, ALONG WITH WHAT THE MITIGATION AND/OR PENALTIES FOR FALLING OUT OF COMPLIANCE AT A LATER TIME.

A STANDARD FOR NOISE ?

(3) WATER. THE APPLICANT SHALL ESTIMATE THE IMPACT TO PUBLIC AND PRIVATE WATER SUPPLIES DUE TO CONSTRUCTION AND OPERATION OF THE PROPOSED FACILITY.

TO WHAT END?

(4) ICE THROW. THE APPLICANT SHALL EVALUATE AND DESCRIBE THE POTENTIAL IMPACT FROM ICE THROW AT THE NEAREST PROPERTY

BOUNDARY, INCLUDING ITS PLANS TO MINIMIZE POTENTIAL IMPACTS IF WARRANTED.

IS THIS REQUIREMENT REDUNDANT? TO OUR KNOWLEDGE, THERE EXIST ONLY THREE STUDIES, ALL THEORETICAL. ARE THE STUDIES AVAILABLE DETAILED ENOUGH TO CONSIDER THE EFFECTS OF WEATHER CONDITIONS FROM JANUARY 28TH, 2008 AND SEPTEMBER 14TH, 2008 WITH RESPECT TO HIGH WIND SPEEDS?

(5) BLADE SHEAR. THE APPLICANT SHALL EVALUATE AND DESCRIBE THE POTENTIAL IMPACT FROM BLADE SHEAR AT THE NEAREST PROPERTY BOUNDARY, INCLUDING ITS PLANS TO MINIMIZE POTENTIAL IMPACTS IF WARRANTED.

THERE ARE CASES, INCLUDING ONE FROM PENNSYLVANIA LAST YEAR, WHERE A SHATTERED BLADE CAME TO REST 1/2 MILE FROM THE TURBINE THAT CAST IT OFF. THE SECTION WEIGHT IS NOT KNOWN BUT CAN BE ESTIMATED FROM PHOTOGRAPHS.

(6) SHADOW FLICKER. THE APPLICANT SHALL EVALUATE AND DESCRIBE THE POTENTIAL IMPACT FROM SHADOW FLICKER AT ADJACENT RESIDENTIAL STRUCTURES AND PRIMARY ROADS, INCLUDING ITS PLANS TO MINIMIZE POTENTIAL IMPACTS IF WARRANTED.

WHY ONLY STRUCTURES? IS IT NOT THE RIGHT OF A PROPERTY OWNER TO ENJOY THEIR ENTIRE PROPERTY FREE OF SUCH NUISANCE INTRUSIONS? READING AND ENJOYING NATURE ARE THE PRIMARY PROBLEMS AT RESIDENTIAL PROPERTIES.

AT TIMES OF DAY CONSIDERED HIGH VALUE FROM AN AESTHETIC AND USE STANDPOINT INCLUDE THE PERIODS OF SUNRISE AND THE HOUR FOLLOWING IT, AND SUNSET AND THE HOUR OR TWO PRECEDING IT. THESE ARE TIMES WHEN SHADOWS ARE A PROBLEM DUE TO THEIR LONGER LENGTH FROM LOW SUN ANGLE.

(B) ECOLOGICAL IMPACT.

(1) SITE INFORMATION. THE APPLICANT SHALL:

(A) PROVIDE A MAP OF 1:24,000 SCALE CONTAINING A ONE HALF-MILE RADIUS FROM THE PROPOSED FACILITY, SHOWING THE FOLLOWING:

(I) THE FACILITY BOUNDARY.

(II) UNDEVELOPED OR ABANDONED LAND SUCH AS WOOD LOTS, WETLANDS, OR VACANT FIELDS.

(B) PROVIDE THE RESULTS OF A SURVEY OF THE VEGETATION WITHIN THE SITE BOUNDARY AND WITHIN A ONE-FOURTH MILE DISTANCE FROM THE SITE PERIMETER.

(C) PROVIDE THE RESULTS OF A SURVEY OF THE ANIMAL LIFE WITHIN THE SITE BOUNDARY AND WITHIN A ONE-FOURTH MILE DISTANCE FROM THE SITE PERIMETER.

(D) PROVIDE A SUMMARY OF ANY STUDIES WHICH HAVE BEEN MADE BY OR FOR THE APPLICANT ADDRESSING THE ECOLOGICAL IMPACT OF THE PROPOSED FACILITY.

(E) PROVIDE A LIST OF MAJOR SPECIES FROM THE SURVEYS OF BIOTA. "MAJOR SPECIES" ARE THOSE WHICH ARE OF COMMERCIAL OR RECREATIONAL VALUE, OR SPECIES DESIGNATED AS ENDANGERED OR THREATENED IN ACCORDANCE WITH U.S. AND OHIO THREATENED AND ENDANGERED SPECIES LISTS.

COULD THE APPLICANT BE REQUIRED TO SHOW THE AMOUNT OF FOREST INTERIOR AS DEFINED BY NFS THAT WILL BE DISRUPTED OR ELIMINATED DUE TO PROJECT?

(2) CONSTRUCTION. THE APPLICANT SHALL:

(A) ESTIMATE THE IMPACT OF CONSTRUCTION ON THE UNDEVELOPED AREAS SHOWN IN RESPONSE TO PARAGRAPH (B)(1)(A) OF THIS RULE.

(B) ESTIMATE THE IMPACT OF CONSTRUCTION ON THE MAJOR SPECIES LISTED UNDER THE PARAGRAPH (B)(1)(E) OF THIS RULE.

(C) DESCRIBE THE PROCEDURES TO BE UTILIZED TO MINIMIZE AND MITIGATE BOTH THE SHORT-TERM AND LONG-TERM IMPACTS DUE TO CONSTRUCTION.

(3) OPERATION. THE APPLICANT SHALL:

(A) ESTIMATE THE IMPACT OF OPERATION ON THE ~~INDICATED AREAS~~ SHOWN IN RESPONSE TO PARAGRAPH (B)(1)(A) OF THIS RULE; AND

WHAT ABOUT THE IMPACT ON FUTURE POTENTIAL DEVELOPMENT OF THESE AREAS? SOME FUTURE DEVELOPMENTS WILL BE PRECLUDED. SHOULD THAT BE A CONSIDERATION?

(B) ESTIMATE THE IMPACT OF OPERATION ON THE MAJOR SPECIES LISTED UNDER PARAGRAPH (B)(1)(E) OF THIS RULE.

(C) DESCRIBE THE PROCEDURES TO BE UTILIZED TO MINIMIZE AND MITIGATE AND MINIMIZE BOTH THE SHORT-TERM AND LONG-TERM IMPACTS OF OPERATION.

(D)(D) DESCRIBE ANY PLANS FOR POST-CONSTRUCTION MONITORING OF WILDLIFE IMPACTS.

WILL THE OPSB CONSIDER THE ABOVE ECOLOGICAL DATA IN THE CONTEXT OF THE AMOUNT OF IMPACT PER CAPACITY? IF NOT, IS IT FAIR TO CONCENTRATE GENERATION FACILITIES WHOSE FOOTPRINT AND IMPACT ARE FAR SMALLER PER UNIT OF ENERGY NOT TO DO SO?

(C) ECONOMICS, LAND USE AND COMMUNITY DEVELOPMENT.

(ENTIRE SECTION SHOULD INCLUDE THE WORD "PROPOSED" WITH "EXISTING.")

(1) LAND USES. THE APPLICANT SHALL:

(A) PROVIDE A MAP OF 1:24,000 SCALE INDICATING GENERAL LAND USES, DEPICTED AS AREAS ON THE MAP, WITHIN A FIVE-MILE RADIUS OF THE SITE, INCLUDING SUCH USES AS RESIDENTIAL AND URBAN, MANUFACTURING AND COMMERCIAL, MINING, RECREATIONAL, TRANSPORT, UTILITIES, WATER AND WETLANDS, FOREST AND WOODLAND, PASTURE AND CROPLAND.

(B) PROVIDE THE NUMBER OF RESIDENTIAL STRUCTURES WITHIN 11,000 FEET OF THE BOUNDARY OF THE PROPOSED FACILITY,

1,000 FT.? WHY?

WHAT IS THE DEFINITION HERE OF "FACILITY" - A SINGLE TURBINE OR A PROJECT BOUNDARY? IT SHOULD BE THE ENTIRE PROJECT.

IN ADDITION TO IDENTIFYING THEM LIST THE IMPACT ON THEM.

AND IDENTIFY ALL RESIDENTIAL STRUCTURES FOR WHICH THE NEAREST EDGE OF THE STRUCTURE IS WITHIN 100 TYP0 - 1,000 FEET OF THE BOUNDARY OF THE PROPOSED FACILITY. (OR DID YOU MEAN 10,000?)

CONTEXT AND DISTANCE: WHY IS 1,000 FEET USED HERE? WHY NOT 2,600 FT. OR 3,000 FT. OR ONE MILE OR 750 FT OR 1.5 TIMES HEIGHT FROM HORIZONTAL BLADE TIP? IS THIS SAFETY, AESTHETICS, SHADOW, NOISE OR ALL OF THE ABOVE? WHY IS THE STRUCTURE USED INSTEAD OF THE PROPERTY LINE? FUTURE STRUCTURES COULD BE PART OF THE PLAN FOR ANY AREA NON-PARTICIPATING PROPERTY OWNER. I.E. DEVELOPER BOUGHT A FARM WITH INTENT TO SUBDIVIDE. I.E. RURAL RESIDENTIAL PROPERTY DEVELOPED WITH A FUTURE HOME FOR SALE OR FOR A RELATIVE IN MIND. IS IT REASONABLE TO CONSIDER THE PROVEN PERCENTAGE GAIN OF CAPACITY AND AIR QUALITY PUBLIC BENEFITS OF EACH INDIVIDUAL WINDMILL?

(C) DESCRIBE PROPOSED LOCATIONS FOR WIND TURBINE STRUCTURES FROM PROPERTY LINES AND HABITABLE, RESIDENTIAL STRUCTURES, CONSISTENT WITH NO LESS THAN THE FOLLOWING MINIMUM REQUIREMENTS:

(I) ~~(H)~~—THE DISTANCE FROM A WIND TURBINE BASE TO THE PROPERTY LINE OF THE WIND FARM PROPERTY

WHAT IS THE DEFINITION OF "WIND FARM PROPERTY" HERE? DOES THIS DEFINITION INCLUDE OR EXCLUDE ADJACENT PROPERTIES ALSO UNDER LEASE TO THE SAME OR DIFFERENT DEVELOPERS?

(II) SHALL BE AT LEAST ONE AND ONE-TENTH TIMES THE TOTAL HEIGHT OF THE TURBINE STRUCTURE AS MEASURED FROM ITS BASE TO THE TIP OF ITS HIGHEST BLADE.

(III) ~~(H)~~—THE WIND TURBINE SHALL BE AT LEAST SEVEN HUNDRED FIFTY FEET IN HORIZONTAL DISTANCE FROM THE TIP OF THE TURBINE'S NEAREST BLADE AT NINETY DEGREES TO THE EXTERIOR OF THE NEAREST, HABITABLE, RESIDENTIAL STRUCTURE, IF ANY,

LOCATED ON ADJACENT PROPERTY AT THE TIME OF THE
CERTIFICATION APPLICATION.

WHAT ABOUT DWELLINGS LOCATED ON THE SAME PROPERTY? WHO IS RESPONSIBLE
FOR THE HEALTH AND SAFETY OF THE PEOPLE (INCLUDING CHILDREN, ELDERLY AND
THOSE OTHERWISE ABSENT THE CAPACITY TO CHOOSE THEIR PLACE OF DWELLING OR
EVALUATE THEIR OWN SAFETY) INHABITING DWELLINGS LOCATED ON THE WIND
ENERGY FACTORY PROPERTY? WHAT IF A RESIDENCE IS ALSO USED FOR FOSTER
CARE OR CONVALESCENT CARE AND ITS OWNER IS OR IS NOT RECEIVING
REMUNERATION OR FINANCIAL CONSIDERATION OF ANY KIND FOR THIS USE? ARE
OTHER AGENCIES THEN BROUGHT INTO THE DISCUSSION?

(III) MINIMUM SETBACKS MAY BE WAIVED IN THE EVENT THAT ALL
OWNERS OF PROPERTY ADJACENT TO THE TURBINE AGREE TO SUCH
WAIVER, PURSUANT TO RULE 4906-1-03 OF THE ADMINISTRATIVE
CODE.

SAFETY IS ARGUABLY ALREADY COMPROMISED IN THE STATE LAW
MINIMUM SETBACKS, WHEN COMPARED TO WINDMILL
MANUFACTURER SAFETY STANDARDS. WHO IS LIABLE FOR
DAMAGES DUE TO MISINFORMED DECISIONS OF HOMEOWNERS,
PRESUMABLY MADE IN ACCORDANCE WITH THIS PROVISION IN
OPSB RULES? WHAT IS THE IMPLICATION WHEN SELLING THAT
WAIVERED HOME LATER? WHAT LAW WILL ADVISE AND EDUCATE
THE PROSPECTIVE BUYER OF THE SAFETY COMPROMISE SELLER HAS
MADE?

(D) ESTIMATE THE IMPACT OF THE PROPOSED FACILITY ON THE ABOVE LAND
USES WITHIN A ONE-MILE RADIUS.

(E) IDENTIFY STRUCTURES THAT WILL BE REMOVED OR RELOCATED.

(F) DESCRIBE FORMALLY ADOPTED PLANS FOR FUTURE USE OF THE SITE AND
SURROUNDING LANDS FOR ANYTHING OTHER THAN THE PROPOSED
FACILITY.

(G) DESCRIBE THE APPLICANT'S PLANS FOR CONCURRENT OR SECONDARY
USES OF THE SITE.

(2) ECONOMICS. THE APPLICANT SHALL:

(A) ESTIMATE THE ANNUAL TOTAL AND PRESENT WORTH OF CONSTRUCTION AND OPERATION PAYROLL.

IS THIS ASKED OF ALL GENERATION PROJECTS INCLUDING NATURAL GAS, COAL AND NUCLEAR? IF NOT, WHY ASK HERE? IS THE ANSWER TO THIS QUESTION OF IMPORT TO THE GRANTING OR DENYING THE PROJECT PERMIT FROM THE OPSB? HOW SO? IS IT IMPLIED THAT THE MORE PEOPLE ARE EMPLOYED, THE BETTER? IS THIS CONSISTENT WITH ATTEMPTS TO MINIMIZE RETAIL ELECTRICITY RATES? EXTRAPOLATE OVER A LARGE NUMBER OF FACILITIES - SAY 10,000 TURBINES, 200 PROJECTS. IS IT ALSO IMPORTANT TO DISTINGUISH BETWEEN JOBS AND VALUE THEREOF ACRUED TO OHIOANS VS. TRANSIENT (OUT OF STATE) LABOR?

(B) ESTIMATE THE CONSTRUCTION AND OPERATION EMPLOYMENT AND ESTIMATE THE NUMBER THAT WILL BE EMPLOYED FROM THE REGION.

(C) ESTIMATE THE INCREASE IN COUNTY, TOWNSHIP, AND CITY TAX REVENUE ACCRUING FROM THE FACILITY.

IS THE ESTIMATE A PROMISE OR LEGALLY BINDING CONTRACT? IS THERE A PENALTY FOR BREACH OF SAME? IS A SCHEDULE OF REDUCTION OF STATE SCHOOL SUPPORT BASED ON LOCAL CONTRIBUTION PART OF THIS ANALYSIS? IS SUCH AN ANALYSIS NOT PART OF THE INTENT OF THIS SECTION - TO DETERMINE THE INCREMENTAL BENEFIT, INCLUDING TO LOCAL SCHOOLS, FROM THOSE TAX DOLLARS? IF OTHER REVENUE SOURCES BENEFITING THE COMMUNITY DECREASE AS A RESULT OF TAXES FROM GENERATION PROJECT, DOES THAT NOT ALSO INTEREST THE BOARD IN THIS CONTEXT?

(D) ESTIMATE THE ECONOMIC IMPACT OF THE PROPOSED FACILITY ON LOCAL COMMERCIAL AND INDUSTRIAL ACTIVITIES.

(3) PUBLIC SERVICES AND FACILITIES. THE APPLICANT SHALL DESCRIBE THE PROBABLE IMPACT OF THE CONSTRUCTION AND OPERATION ON PUBLIC SERVICES AND FACILITIES.

(4) IMPACT ON REGIONAL DEVELOPMENT. THE APPLICANT SHALL:

(A) DESCRIBE THE IMPACT OF THE PROPOSED FACILITY ON REGIONAL DEVELOPMENT, INCLUDING HOUSING, COMMERCIAL AND INDUSTRIAL DEVELOPMENT, AND TRANSPORTATION SYSTEM DEVELOPMENT.

WHO IS ACCOUNTABLE FOR THIS "ESTIMATE'S" ACCURACY AND HOW WILL THE INFORMATION BE USED BY THE OPSB IN DETERMINATION OF PROJECT DENIAL OR APPROVAL? IS THE SAME METRIC APPLIED TO ALL GENERATION PROJECTS?

(B) ASSESS THE COMPATIBILITY OF THE PROPOSED FACILITY AND THE ANTICIPATED RESULTANT REGIONAL DEVELOPMENT WITH CURRENT REGIONAL PLANS.

WHOSE REGIONAL PLANS? MINE? MY NEIGHBORS? ELECTED OFFICIALS OF TOWNSHIPS, COUNTIES OR STATE? INDEPENDENT LAND USE COMMISSIONS? THE GOVERNOR'S? WHAT IS THE OPSB TO DO HERE OTHER THAN CREATE A CHECKMARK IN A BOX?

(D) CULTURAL IMPACT.

(1) THE APPLICANT SHALL INDICATE, ON THE 1:24,000 MAP REFERENCED IN PARAGRAPH (C)(1)(A) OF THIS RULE, ANY REGISTERED LANDMARKS OF HISTORIC, RELIGIOUS, ARCHAEOLOGICAL, SCENIC, NATURAL OR OTHER CULTURAL SIGNIFICANCE WITHIN FIVE MILES OF THE PROPOSED SITE.

DEFINE "OTHER CULTURAL SIGNIFICANCE"? EXAMPLES? MUST THE CULTURAL SIGNIFICANCE DEFINED AS "REGISTERED LANDMARKS"?

MUST IT ALSO BE REGISTERED PRIOR TO THE APPLICATION DATE OR CONSIDERED BY SOME BODY OF AUTHORITY OR JUST SUGGESTED BY AN INFORMAL GROUP OF CITIZENS? THE OPSB SHOULD SHARE THEIR EVALUATION MATRIX WITH THE DEVELOPER AND THE PUBLIC, ALONG WITH THE JUSTIFICATION FOR ITS INDIVIDUAL WEIGHTINGS. SHOULD HIS MATRIX BE OPEN TO PUBLIC AND ICARR REVIEW BEFORE BEING ADOPTED?

(2) THE APPLICANT SHALL ESTIMATE THE IMPACT OF THE PROPOSED FACILITY ON THE PRESERVATION AND CONTINUED MEANINGFULNESS OF THESE LANDMARKS AND DESCRIBE PLANS TO MITIGATE ANY ADVERSE IMPACT.

WHY IS THE APPLICANT DEEMED BY OPSB TO BE AN AUTHORITY ON "MEANINGFULNESS" OF LANDMARKS IN AN AREA THEY ARE COMING TO EXPLOIT FOR PROFIT? HOW WILL THE OPSB USE THE APPLICANT'S AUTHORITATIVE OPINION IN THEIR DECISION ANALYSIS?

- (3) LANDMARKS TO BE CONSIDERED FOR PURPOSES OF PARAGRAPHS (D)(1) AND (D)(2) OF THIS RULE ARE THOSE DISTRICTS, SITES, BUILDINGS, STRUCTURES AND OBJECTS WHICH ARE RECOGNIZED BY, REGISTERED WITH, OR IDENTIFIED AS ELIGIBLE FOR REGISTRATION BY THE NATIONAL REGISTRY OF NATURAL LANDMARKS, THE OHIO HISTORICAL SOCIETY, OR THE OHIO DEPARTMENT OF NATURAL RESOURCES.

IS THAT ENOUGH? ARE THERE THINGS THAT HAVE A CULTURAL IMPACT WHICH ARE NOT REGISTERED LANDMARKS?

- (4) THE APPLICANT SHALL INDICATE, ON THE 1:24,000 MAP REFERENCED IN PARAGRAPH (C)(1)(A) OF THIS RULE, EXISTING AND FORMALLY ADOPTED LAND AND WATER RECREATION AREAS WITHIN FIVE MILES OF THE PROPOSED SITE.

FORMALLY ADOPTED BY WHOM?

- (5) THE APPLICANT SHALL DESCRIBE THE IDENTIFIED RECREATIONAL AREAS WITHIN ONE MILE OF THE PROPOSED SITE IN TERMS OF THEIR PROXIMITY TO POPULATION CENTERS, (REGIONAL) UNIQUENESS, TOPOGRAPHY, VEGETATION, HYDROLOGY, AND WILDLIFE; ESTIMATE THE IMPACT OF THE PROPOSED FACILITY ON THE IDENTIFIED RECREATIONAL AREAS AND DESCRIBE PLANS TO MINIMIZE AND MITIGATE ANY ADVERSE IMPACT.

- (6) THE APPLICANT SHALL DESCRIBE MEASURES THAT WILL BE TAKEN TO MINIMIZE ANY ADVERSE VISUAL IMPACTS CREATED BY THE FACILITY INCLUDING BUT NOT LIMITED TO, SITE LOCATION, LIGHTING AND FACILITY COLORATION. IN NO EVENT SHALL THESE MEASURES CONFLICT WITH RELEVANT SAFETY REQUIREMENTS.

(E) PUBLIC RESPONSIBILITY. THE APPLICANT SHALL:

- (1) DESCRIBE THE APPLICANT'S PROGRAM FOR PUBLIC INTERACTION FOR THE SITING, CONSTRUCTION, AND OPERATION OF THE PROPOSED FACILITY, I.E., PUBLIC INFORMATION PROGRAMS.

WITHOUT A RECOMMENDED GUIDELINE FROM A GOVERNING BODY IN ADVANCE, HOW CAN THIS BE USED CONSTRUCTIVELY AND AS A CONTRIBUTOR TO THE DETERMINATION OF PROJECT VIABILITY BY OPSB?

- (2) DESCRIBE ANY INSURANCE OR OTHER CORPORATE PROGRAMS FOR PROVIDING LIABILITY COMPENSATION FOR DAMAGES TO THE PUBLIC RESULTING FROM CONSTRUCTION OR OPERATION OF THE PROPOSED FACILITY.

BE CERTAIN THESE INSURANCES ARE KNOWN BY THE INSURANCE COMPANY TO COINCIDE WITH STATE MINIMUM SETBACK REQUIREMENTS AND SITING DETERMINATIONS OF THE MEMBERS OF THE OPSB!

- (3) EVALUATE AND DESCRIBE THE POTENTIAL FOR THE FACILITY TO INTERFERE WITH RADIO AND TV RECEPTION, AND IF WARRANTED, DESCRIBE MEASURES THAT WILL BE TAKEN TO MINIMIZE INTERFERENCE.

WE HAVE EVIDENCE OF INTERFERENCE WITH BOTH SATELLITE AND UHF/VHF RECEPTION!

- (4) EVALUATE AND DESCRIBE THE POTENTIAL FOR THE FACILITY TO INTERFERE WITH MILITARY RADAR SYSTEMS, AND IF WARRANTED, DESCRIBE MEASURES THAT WILL BE TAKEN TO MINIMIZE INTERFERENCE.

- (5) EVALUATE AND DESCRIBE THE ANTICIPATED IMPACT TO ROADS AND BRIDGES ASSOCIATED WITH CONSTRUCTION VEHICLES AND EQUIPMENT DELIVERY. DESCRIBE MEASURES THAT WILL BE TAKEN TO REPAIR ROADS AND BRIDGES TO AT LEAST THE CONDITION PRESENT PRIOR TO THE PROJECT.

- (6) DESCRIBE THE PLAN FOR DECOMMISSIONING THE PROPOSED FACILITY, INCLUDING A DISCUSSION OF ANY FINANCIAL ARRANGEMENTS DESIGNED TO ASSURE THE REQUISITE FINANCIAL RESOURCES.

(F) AGRICULTURAL DISTRICT IMPACT. THE APPLICANT SHALL:

- (1) IDENTIFY ON A MAP OF 1:24,000 SCALE ALL AGRICULTURAL LAND, AND SEPARATELY ALL AGRICULTURAL DISTRICT LAND, EXISTING AT LEAST SIXTY DAYS PRIOR TO SUBMISSION OF THE APPLICATION LOCATED WITHIN THE PROPOSED FACILITY SITE BOUNDARIES.

WHAT WILL BE THE IMPACT OF AND THE NATURE OF IT?

- (2) PROVIDE, FOR ALL AGRICULTURAL LAND IDENTIFIED UNDER PARAGRAPH (F)(1) OF THIS RULE, THE FOLLOWING:

- (A) A QUANTIFICATION OF THE ACREAGE IMPACTED, AND AN EVALUATION OF THE IMPACT OF THE CONSTRUCTION, OPERATION, AND MAINTENANCE OF THE PROPOSED FACILITY ON THE FOLLOWING AGRICULTURAL PRACTICES WITHIN THE PROPOSED FACILITY SITE

BOUNDARIES:

- (I) FIELD OPERATIONS (I.E., PLOWING, PLANTING, CULTIVATING, SPRAYING, HARVESTING, ETC.).

- (II) IRRIGATION.

- (III) FIELD DRAINAGE SYSTEMS.

- (IV) ANY OTHER IMPACT ON AGRICULTURAL PRACTICES NOT LISTED ABOVE. OR EXPAND THIS LIST. CUAV AS AN AEXAMPLE.

ALSO EXISTING AND PROPOSED MIGHT BE PRUDENT

- (B) A DESCRIPTION OF ANY MITIGATION PROCEDURES TO BE UTILIZED BY THE APPLICANT DURING CONSTRUCTION, OPERATION, AND MAINTENANCE TO REDUCE IMPACTS TO THE AGRICULTURAL LAND.

- (3) (3) — PROVIDE, FOR ALL AGRICULTURAL LAND IDENTIFIED UNDER PARAGRAPH (F)(1) OF THIS RULE, AN EVALUATION OF THE IMPACT OF THE CONSTRUCTION AND MAINTENANCE OF THE PROPOSED FACILITY ON THE VIABILITY AS AGRICULTURAL LAND OF ANY LAND SO IDENTIFIED. THE EVALUATION SHALL INCLUDE IMPACTS TO CULTIVATED LANDS, PERMANENT PASTURE LAND, MANAGED WOODLOTS, ORCHARDS, NURSERIES, LIVESTOCK AND POULTRY CONFINEMENT AREAS AND AGRICULTURALLY RELATED STRUCTURES. CHANGES IN LAND USE AND CHANGES IN METHODS OF OPERATION MADE NECESSARY BY THE PROPOSED FACILITY SHALL BE EVALUATED.