

MINUTES OF REGULAR MEETING

CHAMPAIGN COUNTY ZONING BOARD OF APPEALS

**1776 East Washington Street
Urbana, IL 61802**

**DATE: August 29, 2024 PLACE: Shields-Carter Meeting Room
1776 East Washington Street
Urbana, IL 61802**

MEMBERS PRESENT: Brian Andersen, Chris Flesner, Jim Randol, Cindy Cunningham, Thaddeus Bates

MEMBERS ABSENT: Lee Roberts, Ryan Elwell

STAFF PRESENT: Charlie Campo, Jacob Hagman

OTHERS PRESENT: Andy Ehlert

1. Call to Order

The meeting was called to order at 6:30 p.m.

2. Roll Call and Declaration of Quorum

The roll was called, and a quorum was declared present. Mr. Campo said a temporary chair was needed due to Mr. Elwell's absence.

Mr. Andersen nominated Ms. Cunningham, seconded by Mr. Flesner. The motion carried by voice vote.

Ms. Cunningham informed the audience that anyone wishing to testify for any public hearing tonight must sign the Witness Register.

3. Approval of Minutes – None

4. Correspondence – Mr. Campo informed the Board that they have received the new site plan this week for Case 129-AM-24. Mr. Campo continued that he also received an email which was distributed to the Board about case 130-AT-24 from a BESS developer who will address the Board about the proposed amendment.

5. Audience participation concerning matters other than cases pending before the Board –None

6. Continued Public Hearings

Case 129-V-24

Petitioner: Troy Parkhill

Request: Amend the Zoning Map to change the zoning district designation from the R-1 Single Family Residence Zoning District to the B-4 General Business Zoning District.

Location: **A 1.81-acre tract in the Northeast Quarter of the Southeast Quarter of Section 15, Township 20 North Range 7 East of the Third Principal Meridian in Mahomet Township with an address of 503 South Lake of the Woods Rd, Mahomet.**

1 Mr. Campo updated the Board regarding the site plan received earlier in the week. Mr. Campo said the
2 petitioner submitted a revised site plan, which appeared to meet Village of Mahomet specifications. Mr.
3 Campo contacted the petitioner about the site plan, and the petitioner stated they are working on an
4 annexation agreement with the Village of Mahomet. Mr. Campo reached out to the Village to confirm this
5 conversation, and they replied today and confirmed that they are working towards a rezoning upon
6 annexation agreement with the petitioner. The Village said they are currently waiting on the petitioner's
7 application materials.

8
9 Mr. Bates asked if a motion is needed to either continue or dismiss the case. Mr. Campo said that the best
10 course of action is to continue the case as far as possible to give the Village and petitioner time to work
11 out the annexation & rezoning agreements. Mr. Campo said the farthest meeting date they can schedule
12 is November 14th, 2024.

13
14 **Mr. Bates moved to continue Case 129-AM-24 until November 14th, 2024, seconded by Mr. Flesner.**
15 **The motion was carried by voice vote.**

16
17 **Case 130-AT-24**

Petitioner: **Zoning Administrator**

Request: **Amend the Champaign County Zoning Ordinance as follows regarding Battery Energy Storage Systems (BESS):**

1. **Add the following definitions to Section 3.0 Definitions: BATTERY ENERGY STORAGE MANAGEMENT SYSTEM (BESMS), BATTERY ENERGY STORAGE SYSTEM (BESS), TIER-1 BATTERY ENERGY STORAGE SYSTEMS, TIER-2 BATTERY ENERGY STORAGE SYSTEMS.**
2. **Add new paragraph 4.2.1 C.8. to provide that a BATTERY ENERGY STORAGE SYSTEM may be authorized as a SPECIAL USE Permit in the AG-1 and AG-2 Agriculture Districts as a second PRINCIPAL USE on a LOT with another PRINCIPAL USE.**
3. **Amend Section 5.2 as follows:**
 - a. **Add “BATTERY ENERGY STORAGE SYSTEM” to be allowed by Special Use Permit in the AG-1 Agriculture, AG-2 Agriculture, B-1 Rural Trade Center, B-4 General Business, I-1 Light Industry and I-2 Heavy Industry Zoning Districts.**
 - b. **Add Footnotes 32 and 33 regarding TIER-1 and TIER-2 requirements.**
4. **Add new Section 6.1.8 TIER-2 BATTERY ENERGY STORAGE SYSTEMS to establish regulations including but not limited to:**
 - a. **General standard conditions**
 - b. **Minimum lot standards**
 - c. **Minimum separations**

- d. Standard conditions for design and installation**
- e. Standard conditions to mitigate damage to farmland**
- f. Standard conditions for use of public streets**
- g. Standard conditions for coordination with local fire protection district**
- h. Standard conditions for allowable noise level**
- i. Standard conditions for endangered species consultation**
- j. Standard conditions for historic and archaeological resources review**
- k. Standard conditions for acceptable wildlife impacts**
- l. Screening and fencing**
- m. Standard condition for liability insurance**
- n. Operational standard conditions**
- o. Standard conditions for Decommissioning and Site Reclamation Plan**
- p. Complaint hotline**
- q. Standard conditions for expiration of Special Use Permit**
- r. Application requirements**

- 5. Regarding BATTERY ENERGY STORAGE SYSTEMS fees, revise Section 9 as follows:**
 - a. Add new paragraph 9.3.1 K. to add application fees for a BATTERY ENERGY STORAGE SYSTEMS Zoning Use Permit.**
 - b. Add new subparagraph 9.3.3 B.(9) to add application fees for a BATTERY ENERGY STORAGE SYSTEMS SPECIAL USE permit.**

1 Ms. Cunningham informed the audience that anyone wishing to testify in this case must sign the witness
 2 register. She reminded the audience that when they sign the witness register, they are signing an oath.

3
 4 Ms. Cunningham informed the audience that these cases are administrative cases, and as such, the county
 5 allows anyone the opportunity to cross-examine any witness. She said that at the proper time, she would
 6 ask for a show of hands from those who would like to cross-examine, and each person would be called
 7 upon. She said that those who merely cross-examine are not required to sign the witness register but will
 8 be asked to clearly state their name before asking any questions. She noted that no new testimony was to
 9 be given during the cross-examination. She said that attorneys who have complied with article 7.6 of the
 10 ZBA by-laws are exempt from cross-examination.

11
 12 Ms. Cunningham called Andy Ehlert to testify.

13
 14 Andy Ehlert of 410 High St, Pewaukee, WI 53072 approached the microphone. Mr. Ehlert thanked the
 15 Board for allowing him to speak and to go through a prepared presentation. Mr. Ehlert’s company, Engie
 16 North America, is proposing a BESS project in Champaign County near Pintail Road and Highway 150
 17 near the Ameren substation. Mr. Ehlert reviewed the draft ordinance and was interested in the proposed
 18 200-foot setback from the project fence line requirements and wants to propose a different setback
 19 requirement.

20
 21 Mr. Ehlert continued that he is the development project manager for a possible BESS project at the
 22 previously stated location. Mr. Ehlert stated that he will do his best to talk about the draft BESS ordinance
 23 and not his specific project. He continued to read from a prepared statement:

24
 25 To whom it may concern:
 26

1 Engie North America (Engie) Flex Gen Business Unit Development team is appreciative of the
2 opportunity to provide public comment on:

3 Preliminary Draft of Exhibit A: Proposed Amendment as of March 28, 2024; Case 130-AT-24:
4 Section 5 C. Minimum Standard Conditions for Separations for a Tier-2 BATTERY ENERGY
5 STORAGE SYSTEMS from adjacent USES and STRUCTURES.

6 (2): The perimeter fencing shall be at least 200 feet from nearest point on any property line.
7

8 Engie's comments for consideration by the Zoning Board of Appeals of Champaign County pertain to
9 item (2) above. Would the Zoning Board of Appeals of Champaign County consider an alternative with
10 respect to setbacks as follows:

- 11
- 12 1) Setback to be associated with the above-ground equipment rather than the perimeter fencing.
13 When you look at Engie's design, there is about a 75-foot setback from the above-ground
14 equipment to the exterior fencing. Mr. Ehlert wanted the Board to keep that information in mind
15 as he continued his statement.
- 16 2) Rather than the 200-foot setback from fence to property line, impose a less stringent setback
17 (e.g., 50 feet or 75 feet from above-ground equipment to property line) and then include a
18 different setback between above-ground equipment and the closest outer wall of any occupied
19 community building and/or dwelling.
20

21 Rationale: Engie's suggested changes to the setback allow for utilizing smaller parcels of land. Engie is
22 working on a potential BESS project in the county, and they have a 10-acre parcel of land, which is as
23 small as they can get. Smaller parcels might be ideally located near transmission substations and would
24 otherwise be difficult for any development due to limited acreage, while providing an ample meaningful
25 setback to homes and areas frequented by the public. Applying the proposed draft current 200-foot
26 setback, the lease area required for a storage project may reach nearly twice the size of the project
27 fenced footprint itself, discouraging energy storage development. Given the current agricultural use
28 typically targeted to build a BESS project, the ability to use smaller parcels with Engie's suggested
29 setback concept means less agricultural land is re-purposed, which is a benefit to all.
30

31 For reference, similar storage setback rules that Engie is suggesting above have recently been
32 implemented in the Midwest, specifically the Michigan Public Service Commission Solar and BESS
33 Siting Rules of Public Act (PA) 233 which are identified in the State of Michigan's 102nd House
34 Legislature; House Bill 226 (c) (1); legislature.mi.gov/documents/2023-2024/publicact/htm/2023-PA-0233.htm. Mr. Ehlert said he has a contact that the Michigan PSC who is a very useful resource for
35 BESS siting regulations, and her name is Cathy Cole.
36

37
38 Mr. Ehlert said that when thinking about site setbacks, Engie's considers the smaller setback reasonable
39 because it is associated with inhabited dwellings or populated community locations. Mr. Ehlert
40 continued that the 200-foot setback within the project footprint forces companies to find larger pieces of
41 property. Mr. Ehlert stated that it is doable, and in his project's case, they have an ideal site location, if
42 they needed to find another owner interested in leasing a larger acreage, it might result in complications
43 such as overhead powerlines. Mr. Ehlert stressed the importance of being near substations because of the
44 lack of additional powerlines to get power from the BESS to the substation. Mr. Ehlert said he knows
45 that variances for setbacks are a possibility when getting approval for BESS projects. Mr. Ehlert asked if
46 the Board had any questions.
47

48 Mr. Bates asked what a BESS does. Mr. Ehlert said that the renewable energy industry is creating a
49 phenomenon called the "Ducks Belly." Mr. Ehlert continued by stating that as the sun rises and renewables

1 come online, it reduces the need for utility companies to generate power from other means and as a result,
2 those utilities are creating less power. Mr. Ehlert stated that most of the energy needed by communities is
3 between 5 pm and 7 pm, resulting in an imbalance since most of the power renewable sources produce is
4 before those peak times. Mr. Ehlert said that BESS is able to hold onto the produced power and disperse
5 it onto the transmission grid between 4:30 pm and 7 pm.
6

7 Mr. Ehlert said that as solar projects continue to grow and more companies apply for solar farm permits,
8 within the next 10 or 15 years you won't be able to have a solar project without a backup of BESS. Mr.
9 Ehlert stated that some companies are proposing solar projects with BESS, and Engie provides those
10 companies with standalone systems. Mr. Ehlert continued that all of the solar farms creating the power
11 during the day will send that overflowing energy to BESS (Engie currently has 100 MW systems, which
12 provide power for 26,000 local homes for 2 hours). The BESS will disperse the stored energy during the
13 late afternoon hours. Mr. Ehlert said that BESS energy can also be used in emergencies and provide 2
14 hours of 100 MW power.
15

16 Mr. Bates asked about energy coming from renewable sources and asked about Mr. Ehlert's pending
17 project being connected to any renewable sources. Mr. Ehlert responded that it currently is not connected
18 to any renewable sources directly. Mr. Bates asked if Mr. Ehlert was aware of any BESS in Illinois. Mr.
19 Ehlert said his company has none, but he suspects some are in the state. Mr. Ehlert continued that Engie
20 currently has about 12 standalone BESS in California, Texas, and 12 under development in the MISO
21 region, including Champaign, and in other states. Mr. Bates wondered why Engie was considering
22 Champaign County. Mr. Ehlert responded that Engie looks at what types of renewable resources are
23 available in areas and at the regional energy operator (Midcontinent Independent System Operator) level
24 to see what kind of opportunities there are for BESS. Mr. Ehlert stated that Illinois is a very renewable-
25 friendly environment. With the ongoing growth of renewables in the area, companies will need BESS to
26 support those renewable projects. Mr. Bates still followed up, asking why Engie was looking for a location
27 that isn't near any proposed renewable resources. Mr. Ehlert stated that renewable sources only need to
28 be on the grid within the "general area" of the MISO transmission lines.
29

30 Mr. Ehlert said to think about BESS as a regional solution, not just at the city or county level. Mr. Flesner
31 asked if BESS collected power from individuals who have solar arrays on their personal property. Mr.
32 Ehlert answered that individual solar is at the distributional level, Their BESS would be at the transmission
33 level.
34

35 Mr. Randol asked if BESS would only be installed at substations. Mr. Ehlert said that the ideal location
36 for BESS would be near substations because it would reduce the number of overhead power lines and be
37 cost-effective. Mr. Ehlert said that Engie has multiple BESS locations in multiple states, all located within
38 several hundred feet of substations.
39

40 Mr. Randol asked if the BESS units were various sizes depending on the substation size, or all the same
41 size. Mr. Ehlert said all the BESS units he is working with are the same size, which is 100 MW output for
42 a 2-hour timeframe, but Engie does have different-size BESS units available. Mr. Randol asked what kind
43 of batteries are in BESS, and Mr. Ehlert responded that they are lithium-ion batteries. Mr. Randol asked
44 about the footprint size of BESS units. Mr. Ehlert said each BESS comes in something about the size of a
45 semi-trailer and is designed so it can be easily moved and placed. Mr. Ehlert continued that his project is
46 proposed to have 47 clusters of BESS units, and each cluster has 4 semi-sized boxes, which can all fit on
47 10 acres depending on the setback requirements. Mr. Randol asked for clarification about the number of
48 units and clusters on 10 acres. Mr. Flesner said that 47 clusters equals 188 BESS units.
49

1 Mr. Randol asked about fire safety procedures for the BESS units. Mr. Ehlert acknowledged the concern
2 and said that his company currently works with local fire and EMS to do on-site training, but he is unsure
3 about how the fires are extinguished. Mr. Ehlert said he believed that the procedure for BESS fires is to
4 keep it contained to prevent the fire from spreading outside of the project area until the power is cut to the
5 system, similar to how electrical fires for substations are handled.

6
7 Mr. Andersen asked who the proposed BESS units are being operated by. Mr. Ehlert said that Engie owns
8 and operates the units at those locations for the projects they currently have, but they can sign a power-
9 purchase agreement or outright sell the BESS units after the installation has been completed.

10
11 Mr. Campo interjected that the conversation needs to return to the ordinance amendment and not about
12 Engie's pending projects.

13
14 Mr. Andersen said that the electrical grid operators would like these systems because managing high and
15 low demand is hard, and the BESS would help. Mr. Andersen pivoted back to the fencing setback
16 requirement and asked Mr. Campo if a variance could be requested. Mr. Campo compared the BESS
17 ordinance to the current solar farm ordinance and said that petitioners can request waivers of conditions.
18 Mr. Campo said that the ability for similar adjustments will likely be written into the BESS ordinance.

19
20 Mr. Bates asked Mr. Campo why the proposed ordinance for BESS is set at 200 feet for setbacks. Mr.
21 Campo said that much of the BESS ordinance's language is similar to the solar farm ordinance. Mr. Bates
22 asked if the proposed setback was good or not. Mr. Campo said a 200-foot setback is reasonable, but
23 Planning & Zoning is still looking for input from sources such as fire districts and developers. Mr. Bates
24 said that no conclusion would be made at this meeting. Ms. Cunningham said comparing BESS to solar
25 farms is like comparing "apples to oranges" because solar fields don't catch fire. Mr. Bates said that they
26 do catch fire. Mr. Randol commented that the ordinance was only proposed and not approved, which was
27 confirmed by Ms. Cunningham. Mr. Bates asked about petitioners requesting variances, and Ms.
28 Cunningham said those requests aren't being made tonight, but Mr. Ehlert is here to provide feedback for
29 the Board.

30
31 Mr. Ehlert said the Board could keep the 200-foot concept but have that measurement from an inhabited
32 dwelling wall to the equipment or the BESS fence wall. Mr. Ehlert noted that the distance would still
33 provide a safety perimeter. Mr. Ehlert agreed that the comparison between solar farms and BESS is
34 different because solar farms take up more space than BESS. Mr. Ehlert again stressed the inconvenience
35 of the 200-foot setback from the fence to the BESS units. Mr. Ehlert said that the Public Service
36 Commission of Michigan has a 300-foot setback for solar farms to a dwelling which is reasonable. The
37 BESS ordinance's proposed 200 ft setback to the property line would require them to find a larger lot.

38
39 Ms. Cunningham asked Mr. Ehlert if his company has any experience with rural fire districts since all fire
40 districts in rural Champaign County are volunteers and how the 50-foot setback might be a problem during
41 dry times of the year. Mr. Ehlert said he wasn't sure if his company has experience with rural fire districts.
42 Ms. Cunningham expressed concerns about the 50-foot setback between BESS units and property lines
43 because of the delayed response from volunteers who need time to get to fire stations and then get to the
44 location of the fire. Ms. Cunningham said that in her experience as a volunteer firefighter, they were best
45 at containing fires, so they didn't spread, but that containment was a challenge during Fall and drought
46 conditions. Mr. Flesner added that response time in rural districts is a minimum of 15 minutes but likely
47 longer.

48
49 Ms. Cunningham expressed concern about BESS units coming with fire suppression if a fire does occur

1 and asked Mr. Ehlert if his company's BESS units have built-in fire suppression. Mr. Ehlert said he wasn't
2 sure if the BESS units came with fire suppression. Ms. Cunningham said that she has concerns over a
3 smaller setback for BESS units when they don't have fire suppression included.
4

5 Ms. Cunningham asked if the Board had any other questions. Seeing none, she asked staff if they have
6 any additional questions. Mr. Campo had no additional questions but pointed out that a public hearing for
7 a solar farm with BESS units as an accessory use is scheduled for the September 12th meeting. Mr. Campo
8 continued that Mr. Ehlert is discussing setbacks for BESS units as a principal use. Mr. Ehlert said that he
9 understands that fire safety is an issue of which the industry is aware. Mr. Ehlert continued that he knows
10 BESS units come with many questions, and he hopes to address those questions with the Board at a future
11 date.
12

13 Ms. Cunningham thanked Mr. Ehlert for his testimony.
14

15 **Mr. Randol moved to close the witness registry, seconded by Mr. Andersen. The motion carried by**
16 **voice vote.**
17

18 **Mr. Andersen moved to continue the case until 9/26/2024, seconded by Mr. Flesner.**
19

20 Mr. Bates asked about Case 130-AT-24 being continued until 9/26/24 while Case 129-V-24 was continued
21 until 11/14/24. Mr. Bates said he was concerned that one case was being prioritized over another. Mr.
22 Campo said that with the annexation agreement in the works between Mahomet and Mr. Parkhill, the
23 11/14/24 date gave those parties more time to work out the agreement's details without worrying about a
24 deadline from the Board.
25

26 **The motion carried by voice vote.**
27

28 **7. Continued Public Hearings – None**
29

30 **8. Staff Report – None**
31

32 **9. Other Business**

33 **A. Review of Docket**
34

35 Mr. Flesner, Mr. Bates, & Mr. Randol might not be able to attend the 9/12 meeting because of previous
36 commitments, but they will keep the Board updated.
37

38 **10. Adjournment**
39

40 **Mr. Andersen moved to adjourn the meeting, seconded by Mr. Bates. The motion carried by voice**
41 **vote.**
42

43 The meeting adjourned a 7:13 pm.
44

45 Respectfully Submitted,
46

47
48 Secretary of the Zoning Board of Appeals