

The
AREA PLAN COMMISSION
of Tippecanoe County

Ordinance Committee
Notice of Public Hearing

Date: September 4, 2019

Time: 4:35 PM

Location: Tippecanoe County Office Building

Tippecanoe Room

20 North Third Street

Lafayette, IN

AGENDA

I. APPROVAL OF MINUTES FROM THE AUGUST 7TH MEETING

Documents:

[ORD 08.07.2019.PDF](#)

II. THE WEST LAFAYETTE DOWNTOWN PLAN

An amendment to the *Comprehensive Plan of Tippecanoe County*. To read the draft plan, please visit the county website at www.tippecanoe.in.gov/apc - Ryan O'Gara presenting.

III. CITIZEN COMMENTS

IV. ADJOURNMENT

In accordance with the requirements of Title II of the Americans with Disabilities Act of 1990 ("ADA"), the Area Plan Commission of Tippecanoe County will not discriminate against qualified individuals with disabilities on the basis of disability in its services, programs, or activities. For more information visit www.tippecanoe.in.gov/ada

**AREA PLAN COMMISSION OF TIPPECANOE COUNTY
ORDINANCE COMMITTEE MEETING
MINUTES OF PUBLIC MEETING**

DATE AUGUST 7, 2019
TIME 4:50 PM
PLACE COUNTY OFFICE BUILDING
20 NORTH 3RD STREET
LAFAYETTE, IN 47901

MEMBERS PRESENT

Larry Leverenz
Jerry Reynolds
Gary Schroeder
Jackson Bogan
Carl Griffin
Tom Murtaugh

MEMBERS ABSENT

Gerry Keen

STAFF PRESENT

Sallie Fahey
Kathy Lind
Ryan O’Gara
Chyna Lynch
Zach Williams, Atty.

OTHER ATTENDEES

Bill Miller
Kay Miller
Lisa Dullum
Iris O’Donnell
Silenze Esquivel Benjamin
Nico Ghandhi
Linda Prokopy
Annabel Prokopy
Abby Lee
Lily Shen

Ethan Bledsoe
Margaret Prokopy
Stuti Varma
Julie Peretin
Kay Pairitz
Jennifer Teisling
Diane Trader
Stephen Clevenger
Dan Rhodes
Jake Kastenbaur

Chair Jackson Bogan called the meeting to order.

I. APPROVAL OF MINUTES:

Gary Schroeder moved to approve the minutes from the June 5, 2019 Ordinance Committee meeting. Greg Jones seconded, and the motion passed by unanimous voice vote.

II. SOLAR ENERGY FARMS:

Dan Rhodes introduced himself as the Community Relations Manager for Duke Energy in Indiana. He thanked the Board for hosting him this evening. He said he is here to talk about solar energy, Duke Energy, an IRP and their pending rate case. He hopes that the information presented tonight will help APC with future planning in Tippecanoe County.

Dan displayed a power point presentation and began by giving an overview of Duke Energy. He said Duke is a Fortune 150 company with headquarters in Charlotte, North Carolina. Before it was Duke Energy, the company was known as Cinergy or Public Service Indiana (PSI). Duke is one of the largest energy holding companies in the United States. Across Indiana, Ohio, Kentucky, North Carolina, South Carolina, and Florida, 7.7 million retail electric customers are serviced. Duke Energy owns a natural gas business in five

states that service 1.6 million customers as well as wind and solar facilities in 14 states. A “customer” is defined as the number of meters, not the number of people being served.

Dan presented a map of the Duke Energy Service Territory in Indiana. Their Indiana headquarters are in Plainfield, right outside of Indianapolis. They have a 23,000 square mile service territory with operations in 69 counties. Dan said he is responsible for 8 counties including Tippecanoe. In Indiana alone, there are 840,000 customers as well as many wholesale customers that include IMPA, Hoosier Energy, and Wabash Valley Power. There are approximately 2,700 Duke Energy employees in Indiana and 2,500 contractors. In this part of Indiana, the trucks with ARC logos will provide most of the underground work.

Tom Murtaugh asked what provider serves Metro Indianapolis.

Dan said Indianapolis Power and Light serves Metro Indianapolis. There are 5 investor owned utilities, multiple REMC’s (Rural Electric Membership Cooperative), and municipalities that provide power in the Indiana Service territory. Dan said Duke is proud that their customers are generally happy with their service. 82% of residential customers and 88% of business customers are highly satisfied. 84% of customers are highly satisfied with the service they receive when they contact Duke with a specific issue. Dan said that a large part of his job is helping customers get a resolution when an issue escalates. Duke Energy is invested in the community; roughly \$4 million is given to many local and statewide organizations through grants and volunteer service hours.

Duke Energy has a total capacity of 6,600 megawatts produced at 11 power plants. Currently, these plants are 62% coal-fired, 28% natural gas-fired, 9% syngas-fired and less than 1% are oil-fired, hydro-powered or solar powered. Of the actual energy produced and used in 2018, 90% of the energy was coal-fired which equates to 12.5 million tons of coal.

Duke Energy is a regulated monopoly meaning the IURC, Indiana Utility Regulatory Commission, controls what Duke can charge, build, and most operations. An IRP, Integrated Resource Plan, must be submitted every three years as a requirement for the IURC. An IRP is a 20-year nonbinding comprehensive planning document that forecasts customer demand. This document helps guide long term decision-making. The most recent IRP filed on July 1, 2019 included the retirement of coal-fired generation and the transition into cleaner forms of energy which includes 1,240 megawatts of natural gas, 700 megawatts of wind energy, and 1,650 megawatts of solar power. This will create a significant shift in the capacity of production on the grid. The total capacity produced will increase to about 7,000 megawatts with solar power accounting for roughly 23%.

Historically, coal-fired energy has worked well for Indiana. Indiana, Kentucky, and Southern Illinois have large coal deposits that keep transportation costs low. Coal fired energy currently contributes to 90% of energy capacity however, that is changing. Duke plans to aggressively grow solar, wind, and gas energy production to transition away from coal. Multiple things must be taken into consideration with this transition within the IRP. For instance, there are costs involved with maintaining infrastructure of coal plants that have not met their end of life as well as creating new plants. How a political administration may change regulations as they relate to coal and their impact must also be taken into consideration. This IRP calls for a reduction in current lifespan of 11 coal power plants by a combined 60 years. These changes correlate to the Rate Case in how to transition the costs for the company and the customers.

Dan said on July 2, 2019, the first rate-based case in 15 years in Indiana was filed. Part of the bill that customers receive from Duke Energy have riders that include certain costs. Customers have seen fluctuations in their bill, but this is the first increase in rates in the last 15 years. The goal of this process is to modernize the electric system with energy generation and equipment in the field. For example, implementing new electronic equipment that allows quicker outage response time and isolate issues more quickly to impact fewer people. Costs from implementing mandated regulations are also included in the case. For example, burning coal for many years creates ash that has traditionally been stored in ponds. These ponds are now being required to have different storage which is a costly process. Duke strives to improve reliability and continually improve service. The recently installed new meters allows Duke to communicate with customers faster and making the transitioning of service from one place to another more

efficient. The rate case is a yearlong process with the state; the IURC will ultimately determine what is appropriate based on the request. Public meetings and hearings will be held in multiple counties.

Tippecanoe County has had an increase in vegetation costs. In the last 5 years, the cost of vegetation tripled due to the Emerald Ash Borer. Trees are the biggest causes of outages on the grid particularly in bad weather with wind, rain, and wet soil, trees can fall or break. The Emerald Ash Borer contributes to the likelihood of these occurrences. The increased vegetation management budget is to keep up with the Emerald Ash Borer and keep everything reliable.

Dan said Duke Energy is asking the state for permission to increase rates across all customer classes by approximately 15%. Duke Energy's residential rates are currently the second lowest rates in investor owned utilities in Indiana. If approved for the full request by the state, Duke Energy will still have the second lowest rates in Indiana for residential utility. Dan said Duke Energy provides good value for their service and their prices compare favorably to other utilities. Increasing cost is never easy; there are very few that want to pay more for anything much less a utility. Duke Energy has several programs such as Budget Billing, Helping Hand, Neighborhood Energy Saver, Home Energy Audits, High Bill Alerts, and Personalized Energy Reports for customers who struggle to pay. Duke is concerned about the impact on these customers and is looking to expand these programs. Duke also works with townships to help during times of crisis when customers are unable to pay their bills.

Dan said Duke is very excited about the project off US 231 south of the Rolls Royce building. Duke is currently installing a 1.6-megawatt solar development called the Tippecanoe County Solar Power Plant in Discovery Park. It is in partnership with Purdue Research Foundation. The site is approximately 10 acres with approximately 7,000 solar panels. This site will produce enough electricity annually for about 240 average homes. This site is scheduled to be powered up by the end of this year and is currently ahead of schedule. The Tippecanoe County Solar Power Plant is smaller than the typical power plant. A research agreement has been negotiated to share the data that is captured at this site. It is a unique situation to build a plant this size.

Tom Murtaugh asked what a typical size site would be.

Dan said the average "rule of thumb" for sizing is 5 acres per megawatt. A 10 megawatts site is considered economy of scale. A normal site has a 50-acre footprint. Based on the IRP, 165 of the 50-acre 10 megawatt sites would require 8,250 acres of land or 12.9 square miles. There is high intensity land use involved in solar energy production. Most of the projects proposed with the IRP will be 50-100 megawatt solar farms. These large projects will come about in the next 5-20 years. These solar farms will be dispersed around the state. Duke is not alone in the surge for solar power; NIPSCO, Vectren, and essentially all utilities are increasing solar, wind, and gas power

Sallie Fahey asked if the solar farm near the Indianapolis Airport was owned by Duke Energy.

Dan Rhodes said it is owned by Indianapolis Power and Light. He said it is the largest solar farm in Indiana. The second largest is located by Crane Naval Station near Bloomington.

Sallie Fahey asked if by largest he meant by acreage use or by megawatt.

Dan Rhodes said Duke scales size by megawatt.

Silenze Esquivel Benjamin, 303 W Stadium Street, West Lafayette, IN 47906, asked how many megawatts would be needed to power one home and how many homes will the proposed 1,650 megawatts power.

Dan Rhodes said 1.6 megawatts can power 240 homes.

Multiple audience members made comments that were unrecorded because they did not step up to the podium to speak.

Gary Schroeder suggested to finish the presentation before taking questions

Dan Rhodes agreed and said they will circle back to that question later. He said in terms of developing ordinances for solar energy, the impact of the development needs to be examined. Solar farms can preserve open space while having a 20-30-year lifespan. The panels degrade at approximately 1% each year and eventually lose efficiency after 25-30 years. However, solar farms still have many positive impacts. During the solar farm lifespan, pollinators like bees, butterflies and birds, tend to habituate in areas surrounding the panels. The solar farms do not produce any noise like wind farms. The equipment is easily removed at the end of the lifespan; however, there are concerns related with solar farms as well recycling and what to do with the panels after their lifespan. Dan said another common concern is the glare from the panels. The Tippecanoe Solar Power Plant is located close to the Purdue airport. Duke Energy sought approval from the FAA to ensure the angle of the panels would not interfere with the pilot's sight while landing. When a solar farm is constructed, the land is typically leased rather than bought. The land lease contains the terms of the solar farm end of life like how the land will be restored or if the panels will be updated to continue functioning. These types of terms should be considered when creating ordinances for solar farms as well. Most concerns can be mitigated in different ways. If a solar farm is located by a development where lines of sight is a major concern, shields can be constructed around the area. There are different circumstances to consider while developing ordinances. Location of a solar farm is always important. Duke looks for areas that will make the farm profitable. Affordable land, access, and proximity to transmission lines are key to selecting locations.

Tom Murtaugh asked if the power immediately goes into the transmission lines or if power is stored in a battery.

Dan said power goes straight to the grid. Duke is working on their first battery storage in southern Indiana. Battery storage is becoming part of the future. The demand curve for electricity is different from how it is generated. Solar and wind produce the most during lower demand times of the day. Energy could be stored during the day then used during peak times of the day using battery storage. Battery storage is being developed more and more. Duke is currently developing battery storage at Camp Atterbury in Indianapolis. Duke has a partnership with the military to help develop and implement new technologies.

Jackson Bogan asked what is Duke Energy's oldest solar field.

Dan Rhodes said he was unsure.

Jackson Bogan asked if there were any solar fields that were 15 years old.

Dan Rhodes said he believes so however Duke Energy has been producing solar to a limited degree for about 15 years. Crane Naval, which is the largest ran by Duke, was only opened 3 years ago.

Jackson Bogan asked what kind of changes are being seen with the older fields.

Dan Rhodes said he would follow up with information regarding the oldest solar field.

Larry Leverenz asked if solar panels are becoming more efficient at a rate in which the 20-30-year lifespan is being determined.

Dan said the 20-30-year lifespan was determined because the panels wear out. The reaction lessens over time. He said he does not think there will be a significant technology improvement that will change current plans. Duke does expect to see incremental changes in technology in the amount of energy panels are able to capture. In the last 40 years, the cost of solar energy has decreased by 300%. Duke takes a market-based approach for planning that is becoming easier due to the prices of solar energy decreasing. When considering locations with neighborhoods, lines of sight are the typical push back. This can be managed by screening the locations. Another regulation consideration for ordinance is wetlands. Duke will not place a solar field in a wetland.

Jackson Bogan asked if they would not put a farm in a wetland or flood plain.

Dan Rhodes said Duke will not put a solar field in a wetland or a flood plain. They would do a study to see if the floodplain could support a solar field, but most likely not. In relation to public utility, Duke is exempt from local ordinances through state regulation. Any ordinance produced by the county would not impact Duke. Dan said Duke follows best practices and he does not think the county would have concerns over a project. Duke would take local ordinance into consideration during construction but would not necessarily have to comply. Third party developers would be required to follow the ordinance.

Zach Williams said in his experience, utility companies typically reach out to communities to inquire about their ordinance. He asked if there are any communities that have created these types of ordinances that Duke Energy has worked with that would be good examples to reach out to.

Dan Rhodes said he is not aware of any in Indiana but there are many counties in North Carolina that have created ordinances. North Carolina State University is a great resource in terms of what has been done with Duke's large footprint. North Carolina does not have a state exemption to local ordinances with utilities.

Gary Schroeder asked if wind farm developments were constructed by utility companies or if they are contracted to private companies.

Dan Rhodes said that wind farms are contracted to third party developers. Duke works with a developer to create a power purchase agreement to buy the power produced. This same process is being applied to solar. It is worth considering what the ordinance would be for both wind and solar because both forms of energy will increase tremendously over the next two decades.

Jackson Bogan asked for questions and thanked Dan for his presentation.

III. INTEGRATING CLIMATE CHANGE CONCERNS INTO LOCAL ORDINANCES:

Sallie Fahey started by saying issues of sustainability and resiliency are things that planners think about like how to keep the kind of community that we have while improving and maintaining over a long period of time. Sallie said that she wanted to speak on the difference between sustainability and resiliency. Sustainability relates to structures, buildings and infrastructure that make up our environment as well as the management of natural areas and the agricultural land. Resiliency is the ability to recover quickly and avoid delays when we endure stresses and shocks. Stresses are events that last longer like several years of high unemployment or lack of people to fill jobs. Shock happens then ends more quickly like floods, winter storms, periods of drought or active shooter events. This community has experienced both sustainability and resiliency within planning over the years. Flood Plain zoning dating back to 1965 not allowing residential or roof enclosed buildings to be constructed results in lower loss of life and property during a flood. The complete streets policy implemented since the 1980s requires street connectivity in new subdivisions to ensure internal connectivity. No major development has been permitted since 1970 on anything except sanitary sewer which allows the community to be compact and prevents sprawl. Multi-hazard mitigation planning has been conducted for 10 years to prevent damage to the community in advance of major shocks. This county works hard for air quality attainment; Tippecanoe County is one of the few counties in the state that meets air quality attainment for ozone and particulate matter. Sallie spoke on the packet handout from *Indiana Climate Change Impacts Assessment*. Data shows the comparison of the hot days, cold days, and changes in rainfall in relation to the past. She emphasized that a large part of our economy is agricultural; these reports show the large impact climate change will have on the agricultural economic sector. Regarding further discussions, there is not staff or resources available to do a full sustainability or resiliency plan. However, staff, with the help of citizens, could craft overarching policies that could become a part of the comprehensive plan that guides decisions for amendments to ordinances. There are many resources available such as American Planning Association, the Environmental Resiliency Institute, and Purdue Climate Change Research Center. This conversation is worthy of additional discussion.

Lisa Dullum said Sallie did a great job summarizing her concerns. Last month was the hottest month recorded on planet Earth. She is concerned what the impact will be locally. It would be beneficial to think about climate change proactively and prepare long-term planning. There are plenty of resources and experts on climate change in Tippecanoe County. Lisa thanked the Board and asked for questions.

Dan Rhodes said regarding the question earlier, there would be 250,000 homes powered in the proposed IRP.

Jackson asked if Sallie had anything to add.

Sallie Fahey asked if this topic needs to be put on the agenda for further discussion. If there is such interest, the scope of the project needs to be crafted to see if policy statements should be amended into the comprehensive plan. Or come up with ideas on how our county could be more sustainable or resilient.

Larry Leverenz asked if the Board is looking at the possibility of new policy.

Sallie Fahey said this should be started with new policy. Ordinance amendments will follow policy additions.

Gary Schroeder asked how this applies to land use planning and if this is the body that needs to be addressed. He asked if there are other state or local agencies that are more qualified to set standards.

Sallie Fahey said there are some examples of ordinances that relate to sustainability for instance it is required that one subdivider must stub a street so that the next subdivider can continue the street. These are the types of ordinances we are looking towards.

Gary Schroeder asked how these ordinances effect the state of the climate.

Sallie Fahey said with the example given specifically, if each development had to go back out to the major street without being connected internally, then every school bus, UPS truck, and vehicle would have to go in and then come out.

Gary Schroeder said that is a good plan and maybe it will become more evident as we move through this. It is unclear at this point.

Sallie Fahey said there connections improve efficiency that generally help keep CO2 emissions down.

Tom Murtaugh said staff would need to put together some ideas because it is a difficult topic to discuss.

Jackson Bogan asked how land use equates to the state of the climate. He asked if staff could look further into this and return to this topic at a different meeting.

Sallie Fahey said that staff needs to work on policy first and what actions need to be taken before we have policy. Ordinance amendments or planning activities are actions that would come out of policy statements. Staff will prepare both. It could be as simple as requiring trees in subdivisions. One of the very best things individuals can do is plant a tree.

Jackson Bogan asked for any questions from the committee and reminded the audience that there is a section for comments at the end.

Audience member's comments not recorded because they did not step up to the podium to speak.

IV. A PREVIEW OF THE DOWNTOWN WESTSIDE PLAN

Ryan O'Gara started by saying the committee process wrapped up in June, which had been going on for roughly 7 months. There is a functional working draft of the plan. There will be a presentation held at the

West Lafayette Public Library on August 29, 2019 at 6pm to debut the draft and explain ideas that will initiate a public comment section. Ryan said he will cover everything at the September Ordinance Committee meeting following the library event. After the public comment section, there will be a general revision with the steering committee and begin the plan adoption process. The plan will come to the Ordinance Committee, then APC and ultimately City Council.

Jackson Bogan said he wanted to clarify that a decision has not been made in whether the committee will be proceeding. More information is needed in order to have a discussion regarding sustainability and solar panels. The Committee needs to educate themselves on the matter before having a public discussion.

V. AN UPDATE ON PROPOSED CHANGES TO THE OR ZONE

Ryan said staff is working with Purdue Research Foundation to create a form-based overlay for Discovery Park. Part of the project is to create a mixed-use option in the OR zone that anyone could benefit from that has OR zoned property. This would be connected to the existing footnote from the UZO stating residential areas must be above non-residential on the ground floor. Staff will hold that amendment until the entire package of UZO changes concerning Discovery Park is ready to be submitted.

Jackson Bogan asked if all changes will be submitted at once.

Ryan O'Gara said yes, it will involve multiple UZO changes. It will be tabled until everything is complete. Discussions with Purdue Research Foundation started today to work on the form-based code. Completion is still a few months away.

VI. CITIZEN COMMENTS

Kay Miller, 8143 Old State Road 25 W, Lafayette IN 47905, said this discussion comes at a great time because there is a water summit on August 14 &15 relating to climate change and the abundance of water in Indiana. All public officials are invited to attend free. She said Jack Whitman has been instrumental in planning and organizing this event. He was commissioned by the Indiana Chamber of Commerce to do a water survey for Indiana. He will be presenting his findings in coordination with Purdue. Kay asked if any of the Board members were planning on attending.

Tom Murtaugh asked if the summit was sponsored by the League of Women Voters.

Sallie Fahey said they did not sponsor the event.

Jackson Bogan asked for the dates of the summit.

Kay Miller said it is August 14 &15. She said August 14th is an evening social event at Conner Prairie and August 15th is the major presentation.

Gary Schroeder asked where the summit will take place.

Kay Miller said it is at the Athenaeum in Carmel.

Jerry Reynolds left the meeting at 6:00pm.

Margaret Prokopy, 116 Arrowhead Drive, West Lafayette, IN 47906, said they are a group of West Lafayette High School students that consider climate change to be a pressing issue. She thanked the Board for taking steps towards cleaner energy.

Stuti Varma, 3311 Crawford Street, West Lafayette, IN 47906, said students and kids of the community see this situation of harsh reality regarding the current and resulting climate conditions. In our community alone, people are using energy and resources daily contributing to dangerously rising levels of greenhouse gases and carbon. Climate change and global repercussions are not going away without action. The actions of

our community and population have largely gone unchecked. The solar panels are a good initiative that would push in a positive direction. The goal is to put the community in a position of positive contribution to the environment. There is a need of support of the community and attentiveness from leaders in order to see action. Change that is so overwhelmingly large has never been an easy route but this is necessary. Upcoming generations deserve a habitable planet. We should lead by example and show that if a city like this can take these strides, it is possible in other places. She said in addition, her group would like to suggest forming a Youth Resiliency Council to increase citizen input of youth and information to keep the general public educated. Solar panels have been known for saving money and increasing property values.

Lily Shen, 3413 Covington Street, West Lafayette, IN 47906, said she has lived in Tippecanoe County for her entire life. She has many cherished memories here, whether that be late nights at the neighborhood playground or summer bike rides at Happy Hollow. Everyone should understand why she wants her kids to have the same childhood she was blessed with. She and her friends think that renewable energy is vital for the future of this county. That is why they are encouraging the development of a Youth Resiliency Committee for the county to allow youth to be included in the decision-making process. She thanked the Board for the support expressed to make Tippecanoe County a healthy home for generations to come.

Abby Lee, 3475 Tunbridge Way, West Lafayette, IN 47906, said they see the possible benefits of renewable energy for the environment and the economy. By 2030 it is estimated that temperatures will rise by 1.5 degrees Celsius. If nothing changes, the Purdue Climate Research Center predicts increased heatwave frequency and intensity. This will cause more damage to infrastructure and demand more natural resources as well as do harm to Indiana's agriculture business. Increased climate change can be detrimental to air quality. Choosing not to adhere to clean energy, the renewable resources we use will run out. She asked if Tippecanoe County being willing to support renewable energy will make a difference with rising temperatures. The answer is no, not alone. Renewable energy will inspire the use of clean energy in the future. She asked what the apprehension to using solar panels is. Major changes in a community will face opposition. West Lafayette has shown the push to change to a more sustainable lifestyle. The Board can seek help through climate groups and citizens. Promoting clean energy will give the youth of West Lafayette a place to grow up knowing the community has their future in mind.

Ethan Bledsoe, 613 Kent Avenue, West Lafayette, IN 47906, said he will speak on a personal experience with his research with Purdue's Department of Forestry and Natural Resources. The study looked at effects of draught on Indiana trees. Climate change will have a significant effect on Indiana by 2050. Only a few species of trees in Indiana have the capability to survive draught for extended periods and only these will survive in 2050. Science is undeniable in claims that the impact of climate change is increasing tremendously. The global impacts of climate change include a rise in temperature, warming of oceans, shrinking of ice sheets, rising of sea levels, ocean acidification, impacts on human health and a change in ecosystems. Since the 1950's, the Earth's average temperature has risen 0.9 degrees Celsius. This rise in temperature is largely due to an increase in human made emissions of greenhouse gas. The oceans are taking much of the heat from the human made emissions of greenhouse gases. National Academy of Sciences conducted a study that concluded that the oceans are taking up at least 90% of the excess heat in the atmosphere. Concentrations of carbon dioxide in the atmosphere have been rising. Since 1969, the top 700 meters of ocean increased in temperature 0.4 degrees Celsius. NASA's Gravity Recovery and Climate Experiment found that Greenland ice sheets decreased in mass by 286 billion tons on average per year. Global sea levels have risen 8 inches in the last century. Scientists say the west Antarctic ice sheet holds enough ice to raise global sea levels by 11 feet which could cause global refugee crises, more powerful hurricanes, destroyed economies, food and water crises, and health crises. Impacts from climate change include extreme weather, lower air quality, transmission of diseases through insects and food and water increasingly threatened. Since the beginning of the Industrial Revolution the acidity of ocean water has increased by 30%. Ocean acidification changes the environment of marine life. Without substantial and sustainable reductions in global greenhouse gas emissions, transformative impacts on ecosystems will occur. Coral reef, ice, and sea life ecosystems are experiencing changes. Greenhouse gases are not the only factor causing climate change. If Tippecanoe County uses better methods of making electricity or created policy on the use of solar panels, we could be one step closer to not contributing to the climate change epidemic. Creating a Youth Resiliency Committee for the county would allow youth to be a part of the decision-making process.

Annabel Prokopy, 116 Arrowhead Drive, West Lafayette, IN 47906, said she wanted to remind the Board that they are students and are the ones that will suffer from climate change. Tomorrow is their first day of school. They are here on their last day of summer hoping to influence the Board to save the planet. She said her generation is the last generation that can stop devastating climate change. Students cannot ensure that policies are put into place to end the climate crisis. By 2030, the planet will suffer from irreversible climate change. She said to take the risk with a Youth Resiliency Committee to ensure a safe future. The Board needs to push for solar panel policy and action to decrease the carbon footprint of the city. To get more education on climate change, there is a Climate Leadership Summit in Goshen on September 12th.

Silenze Esquivel Benjamin, 303 W. Stadium, West Lafayette, 47906, said she will share some facts on climate change from the Purdue Climate Research Center. The average number of above 95 degree days per year will increase from 2 to 37 by 2050. The average hottest day of the year will increase to 105 degrees Fahrenheit in 2050 from 95 degrees. The average coldest day of the year will rise to negative 3 degrees Fahrenheit in 2050. There will be an increase in spring rainfall by 16% as well. The average rainfall is expected to increase by 8%. This is crucial due to Indiana's economy being dependent on agriculture. Indiana will see a reduction in water and air quality, delays in fall freezes, increased rainfall, and loss of species. She said to consider these facts when making decisions on policy.

Iris O'Donnell, 3741 Capilano Drive, West Lafayette, IN 47906, thanked the Board for having the conversation on climate change. She said she is offering to be a resource for creating policy. She serves as a resiliency coordinator for the Tippecanoe and Greater Lafayette area through Earth Turner Indiana and educates people on climate change to write policy. Indianapolis, Lawrence, Carmel, and Bloomington Indiana have passed climate resolutions. She asked how she can help with this process.

Jackson Bogan thanked Iris and the students that made presentations. He asked that Iris give Sallie Fahey her contact information. He then asked for comments or questions.

VI. ADJOURNMENT:

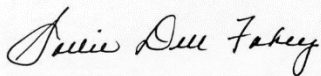
Jackson Bogan moved to adjourn the meeting.

The meeting adjourned at 6:18 p.m.

Respectfully Submitted,

Chyna R. Lynch
Recording Secretary

Reviewed By,



Sallie Fahey
Executive Director