I&M Exhibit: _____

INDIANA MICHIGAN POWER COMPANY

PRE-FILED VERIFIED DIRECT TESTIMONY

OF

DAVID S. ISAACSON

Cause No. 45933

Content

DIRECT TESTIMONY OF DAVID S. ISAACSON
ON BEHALF OF
INDIANA MICHIGAN POWER COMPANY

I. Introduction of Witness

Q1. Please state your name and business address.

My name is David S. Isaacson. My business address is Indiana Michigan Power Center, P.O. Box 60, Fort Wayne, Indiana 46801.

Q2. By whom are you employed and in what capacity?

I am employed by Indiana Michigan Power Company (I&M or Company) as Vice President of Distribution Operations.

Q3. Please describe your educational and professional background.

I graduated from Michigan State University in 1985 with a Bachelor of Science Degree in Forestry Management and from Indiana Wesleyan University in 1993 with a Master of Business Administration Degree.

Beginning in 1986, I worked at I&M in the Forestry Department and in asset utilization. In 2001, I joined Spectrum Engineering as the Director of Business Operations. In 2007, I returned to I&M and progressed through positions of increasing responsibility, including Region Forestry Supervisor, Distribution System Manager for I&M's Muncie district, and Region Support Manager. In 2013, I became I&M's Distribution Dispatch Manager and was responsible for the operation of I&M's electrical distribution grid. In 2014, I became Distribution Projects Manager and in 2016 was promoted to Director of Distribution Risk and Project Management; in these positions I was responsible for all phases of I&M's distribution projects, including planning, design, engineering, procurement, and construction. I was promoted to my current position in 2019.

Q4. What are your responsibilities as Vice President of Distribution Operations?

I am responsible for overseeing the planning, construction, operation, and maintenance of I&M's distribution system. My duties include the safe and reliable delivery of service to I&M's customers, the oversight and management of service extension to new customers, and the restoration of service when outages occur. My responsibilities also include overseeing I&M's distribution system reliability programs including vegetation management. I report directly to I&M's President and Chief Operating Officer.

Q5. Have you previously submitted testimony in any regulatory proceedings?

Yes. I submitted testimony before the Indiana Utility Regulatory Commission (Commission) in Cause Nos. 43663, 44542, 45235, and 45576.

II. Purpose of Testimony

Q6. What is the purpose of your testimony in this proceeding?

The purpose of my testimony is to provide an overview of I&M's distribution system and to support its distribution planning and expenditures. I will begin by discussing the condition of I&M's distribution system and the metrics the Company uses to measure the reliability of its distribution system.

I will then present the Company's Distribution Management Plan (the Plan), a comprehensive, forward-looking capital and operations plan under which the Company continues to make significant investments to maintain and improve the reliability and resiliency of its distribution system, to enhance safety, and to leverage technology to benefit the grid.

I will address I&M's Advanced Meter Infrastructure (AMI), providing a program status update. Additionally, I will include an overview of I&M's recently submitted Infrastructure Investment and Jobs Act (IIJA) grant requests, and the

Company's distribution investments in its Advanced Distribution Management System (ADMS), the related Distributed Energy Resource Management System (DERMS), and developments in Field Mobility.

I will then summarize and support the projected level of distribution operations and maintenance (O&M) expenses during the forward-looking test period of January 1, 2024, through December 31, 2024 (Test Year).

I also support the forecast distribution capital investment from January 1, 2023, through December 31, 2024 (Capital Forecast Period).

Q7. Are you sponsoring any attachments or workpapers in this proceeding?

I am sponsoring the following attachments:

Attachment DSI-1	Distribution Vegetation Management Program (2023-2024)
Attachment DSI-2	Asset Renewal Management Plan
Attachment DSI-3	Combined Projects Management Plan
Attachment DSI-4	Grid Modernization Management Plan
Attachment DSI-5	IIJA Grant Applications of Projects

I also co-sponsor workpaper WP-A-O&M-6.

Q8. Were the attachments that you are sponsoring prepared or assembled by you or under your direction?

Yes.

Q9. Please explain how I&M's support for the forecast Distribution Management Plan expenditures is organized in I&M's case-in-chief.

The Distribution Management Plan section of my testimony contains:

- A definition of I&M's Distribution Management Plan,

- Key objectives and goals of the Plan,
- Explanation of how activities in the Plan will be completed,
- Explanation of how cost estimates were developed,
- Description of the Categories and Activities included in the Plan, and a
- Detailed Section on each Category and Activity in the Plan.

Figure DSI-5 includes references to the appropriate figures and attachments in my testimony that provide additional details for each activity in the Plan. In summary, the attachments to my testimony provide a comprehensive list of each project, including location, work scopes (measured in feet, miles, or units), implementation year (2023 and 2024), and cost by year (2023 and 2024) for each project in the Plan.

In addition to my testimony and attachments, distribution plant activity for forecasted plant balances is provided by Company witness Sloan in Attachment SAS-8.

Forecasted distribution capital expenditures are included in I&M's "Project Life File," which is included in Company witness Sloan's workpaper WP-SAS-9. This workpaper contains a project-by-project line-item support for all forecast distribution capital costs, including a project name breakdown between transmission and distribution, project type, and forecasted expenditures by month for 2023 and 2024.

The Project Life File also includes detailed monthly cost projections for plant in service and construction work in progress for the distribution capital projects included in the forecast.

Q10. Please summarize your testimony.

I&M Distribution Operations continues to realize improvements in reliability performance, while providing safe operations and controlling its operating costs. The process of identifying, qualifying, and prioritizing program and project work

is showing positive results and, with the increasing use of technological improvements, I&M is building its resiliency.

Based on results, I&M's Vegetation Management Program continues to have a positive impact on overall reliability. Per the Company's plan, I&M completed the initial four-year cycle, covering all overhead primary lines, by the end of 2021. The next four-year rotation period began in 2022. Continuation of this program is reasonably expected to further improve reliability and avoid returning to a system challenged by controllable vegetation-caused service interruptions.

In addition to vegetation management, the proposed continued investment in the distribution system will support positive reliability and resiliency results for our customers.

I&M remains focused on three key principles:

- Continuing reliability improvement,
- Utilizing technology to increase operational efficiency and resiliency of the Company's system, and
- Positioning I&M for changes in regulatory requirements and customer expectations.

Using these principles, the Company has prepared a portfolio of programs and projects under its Distribution Management Plan necessary to ensure the Company's distribution system continues to operate in a safe manner, while providing for continuous reliability improvement to enhance each customer's experience.

In 2021, the Company began replacing its existing Automatic Meter Reading (AMR) infrastructure with AMI technology, with the expectation of being completely converted by the end of 2024. This activity, along with additional grid modernization projects will be discussed in my testimony along with additional investments in ADMS/DERMS and Field Mobility.

To conclude the capital investments, the Company has prepared a portfolio of incremental investments to support grant applications submitted under the IIJA.

Company witness Osterholt provides the details of these in his testimony, while I outline the operational aspects in my testimony below.

Regarding O&M, the primary areas of distribution O&M expense are ongoing O&M (including underground locate services, minor storm recovery and facility repairs), Vegetation Management O&M, and Major Storm O&M. As in past filings, these costs are representative of distribution service activities that are necessary to serve I&M's customer base and maintain safety and improve the service reliability of I&M's distribution system.

Lastly, the Major Storm Reserve helps I&M preserve the core O&M necessary to maintain the reliability of its distribution system, while ensuring that I&M customers pay rates that reflect the true costs of a major storm – no more and no less.

Q11. Does the Test Year level of distribution investment and O&M expense support the reliability, resiliency, and stability of the Company's distribution system?

Yes, the Test Year level of distribution investment and O&M expense support the reliability, resiliency, and stability of the Company's distribution system, which is further explained in my testimony.

III. Distribution System Overview

Q12. Please provide an overview of I&M's distribution system in Indiana.

I&M serves approximately 482,000 customers in eastern and central Indiana in a service area that covers approximately 3,200 square miles and includes 118 cities and communities and 24 counties. I&M's Indiana distribution system includes approximately 208 substations, 15,300 miles of distribution lines consisting of 12,100 miles of overhead line primarily supported on wood poles,

and 3,200 miles of underground cable. I&M serves four Indiana cities via underground networks – Fort Wayne, Muncie, Elkhart, and South Bend.

Q13. How would you generally characterize I&M's existing distribution assets?

While programs and projects aimed at reliability improvements have continued to show positive results, overall asset health remains challenged due to the continuing aging of our plant. Much of I&M's system was built in the 1960's and 1970's when I&M's territory experienced growth and an increasing portion of assets are now reaching the end of their expected design lives.

While not the only factors, age and end of design life tend to provide a good indication of when an asset will most likely fail. Older assets can be harder to repair when they fail because it is often difficult to obtain parts for aging equipment. Lastly, aged assets also pose potential safety risks from failures during operation.

IV. Reliability Metrics and System Performance

Q14. How does the Company measure the reliability of its distribution system?

I&M primarily uses the System Average Interruption Duration Index (SAIDI), the System Average Interruption Frequency Index (SAIFI), and the Customer Average Interruption Duration Index (CAIDI) to gauge service reliability. These are the primary indices used in the annual I&IM Electric Reliability Report filed in Indiana and are used across the electric utility industry in general. The Institute of Electrical and Electronics Engineers (IEEE) Standard 1366-2012 describes SAIDI, SAIFI, and CAIDI as follows:

- SAIDI indicates the time the average customer is without service due to sustained interruptions. It is total Customer Minutes of Interruption (CMI) divided by the number of customers served.

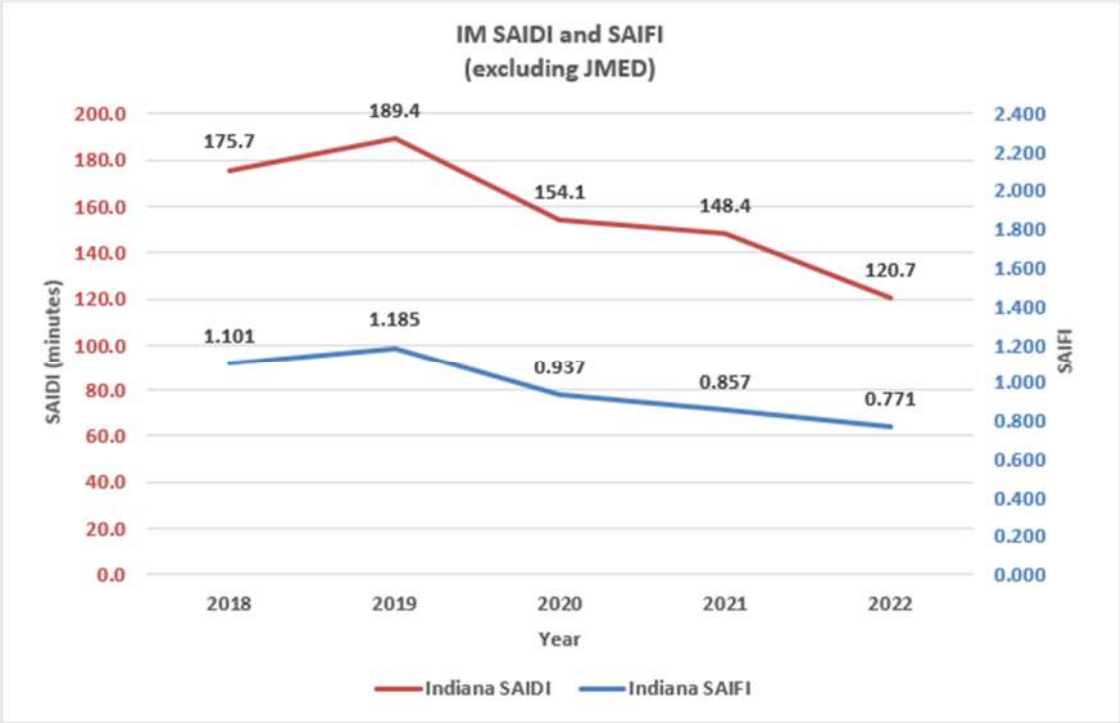
- SAIFI indicates how often the average customer experiences a sustained interruption. It is the total number of customers interrupted divided by the number of customers served.
- CAIDI represents the average time required to restore service. It is total CMI divided by the number of customers interrupted.

The IURC's definitions for these terms are consistent with the IEEE Standard.

Q15. Please summarize the Company's recent reliability performance in Indiana.

I&M strives to provide customers with the best reliability it can with the existing resources and system conditions. Investments in the distribution system through the Company's Distribution Management Plan have resulted in overall system reliability, measured in terms of SAIDI without Major Event Days (MED) improvements of over 31% over the past five years (2018 to 2022). In just the past year, from the end of 2021 to the end of 2022, SAIDI improved by 18.7%, with notable improvements in vegetation, failed equipment/lightning, and station/transmission line caused events. These improvements in reliability affirm that the type of work I&M has been performing and its prioritization process is making a positive impact. Continuing these efforts, implemented under I&M's Distribution Management Plan, mitigates ongoing challenges, such as aging assets and vegetation. The chart below shows both SAIDI and SAIFI improvements.

Figure DSI-1. Reliability Improvement 2018-2022



Q16. What specific areas of reliability improvement have occurred across I&M's Indiana service territory?

As shown in *Figure DSI-1*, the number of events and the customer minutes of interruption (shown in terms of SAIDI and SAIFI) have continued to improve since 2019. *Figure DSI-2* outlines the primary causes of accrued reliability issues, depicted as the number of events and the customer minutes of interruption in terms of SAIDI. The key take-away from this summary is that reliability has improved over the past five years in each area of primary investments. For example, Vegetation-caused SAIDI is down almost 30% from 2018 to 2022. Likewise, SAIDI attributed to Equipment Failure is down 34%, Station is down nearly 75%, Transmission Line is down nearly 54% and Lightning has dropped over 78% during this period. Total SAIDI has improved over 31% which has a positive effect on our customers' collective experience.

One final note is that, while both Vegetation and Equipment Failure events have improved, these continue to be the primary causes of outages in I&M's Indiana service territory. However, continued investments in these areas, as outlined in my testimony, are expected to show further improvements to I&M customers' service reliability.

Figure DSI-2. Principal Outage Causes in SAIDI (Excluding MEDs - Indiana)

Cause	2018	2019	2020	2021	2022	Avg
Vegetation*	39.7	42.0	31.9	45.7	27.9	37.4
Equipment Failure	38.3	33.0	31.8	28.1	25.2	31.3
Station	26.5	31.1	22.0	20.7	6.7	21.4
Vehicle Accident	19.1	27.0	24.6	18.9	20.7	22.1
Transmission Line	22.7	20.5	7.5	2.9	10.5	12.8
Unknown	7.3	9.5	5.7	12.8	8.8	8.8
Scheduled	8.0	6.9	6.6	5.4	6.2	6.6
Other**	2.7	12.0	14.4	6.6	8.2	8.8
Lightning	7.0	2.6	4.2	2.7	1.5	3.6
Animal	4.4	4.9	5.2	4.7	4.9	4.8
Total	175.7	189.4	154.1	148.4	120.7	157.6

* Vegetation includes both inside and outside the right-of-way, as well as vines.

** Other causes include contamination/flashover, customer equipment, fire, foreign object, other utility, overload, customer, and vandalism.

Q17. Does I&M have some indication of how it is improving on restoring service once an actual service interruption occurs?

Yes, though this is difficult to specifically quantify. Despite the increased frequency of inclement weather (see *Figure DSI-3*) over the past few years, I&M has seen an improvement in response and recovery, which is referred to as system resiliency, or the improved ability to recover following a significant event.

Figure DSI-3. Weather Alerts and Major Events on I&M's System by Year

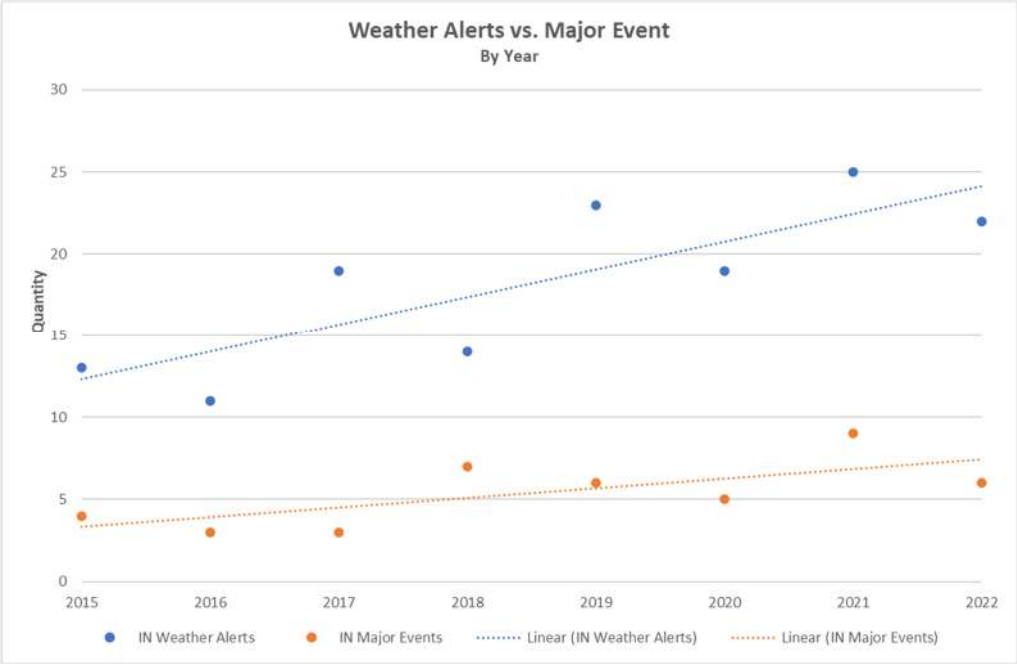


Figure DSI-4 provides the comparison of one relatively recent example, which is the Derecho event I&M experienced in June of 2022. The unique aspect of this major event was that a similar type and duration derecho occurred nearly 10 years prior, with much different results. *Figure DSI-4* highlights those positive differences. Despite similar straight line wind speeds across our territory, the Company saw a significant lower number of outage cases and considerably faster restoration times during the 2022 derecho.

Figure DSI-4. Impact Comparison of Similar Events

Resiliency Comparative		
	2012 Derecho	2022 Derecho
Peak Wind Speed	91 mph	98 mph
Circuit Level Outages	75	30
Customers Affected	105,800	40,700
Restoration Duration	8 days	4 days

Q18. To what does I&M attribute this improvement in resiliency?

While it is difficult to directly correlate investments or activities to the response and recovery improvement specific to each event, a number of factors have been identified as likely contributors to these results. Those include the following, which will be explained further in later portions of my testimony:

- Continued asset renewal investments with more robust, system hardening construction standards.
- Grid modernization investments, such as DACR and AMI.
- Continued process improvements pertaining to I&M's Incident Command Structure (ICS) and Regional Mutual Assistance Groups (RMAGs).

Q19. Is I&M committed to further improving its distribution system?

Yes. The primary basis for many of the projects planned for 2023 and 2024 is improving reliability, expanding resiliency, and sustaining a good overall system performance, which requires ongoing, active engagement and investment. Therefore, I&M cannot pause these activities for the simple facts that trees continue to grow, assets continue to age, and quicker recovery through resiliency efforts is a reasonable customer expectation. For this reason, I&M remains committed to maintaining and further improving customer experience through the ongoing efforts outlined in my testimony.

V. Distribution Management Plan

Q20. What is I&M's Distribution Management Plan?

The purpose of the Plan is to define and itemize a portfolio of programs and projects that ensure our system operates in a safe manner, provides for continuous improvement in reliability and resiliency, and thereby enhances our customers' experience. In this collective portfolio of work, the *programs*

represent specific work activities that are perpetual in nature such as vegetation management. By contrast, *projects* represent activities with a defined start and end date, such as the AMR to AMI conversion.

My testimony focuses on the two-year period from 2023-2024 of the Plan, which reflects the Capital Forecast Period.

Q21. What are the key objectives of the Plan?

I&M remains focused on developing and executing a comprehensive Plan that is centered around six key objectives:

1) *Maintain and improve safety* – The safety of the public, I&M's employees, and its business partners is the first priority. Safety is a foundational element of all of I&M's planned distribution system improvements. In addition, I&M has designed specific programs, such as inspections and replacing aging assets, to reduce the probability of safety incidents.

2) *Improve the customer experience* – A key principle for I&M's distribution planning efforts is focusing on the customer experience. This means being prepared to extend new service to customers constructing facilities within I&M's service territory. It also means establishing programs and projects aimed at reducing the number of outages, selecting investments that allow the Company to respond and restore service quicker when an outage does occur, and giving customers' tools and information that will allow them to use electricity more efficiently.

3) *Enhance system resiliency* - The Plan focuses on enhancing the resilience of the system through system upgrades as well as leveraging grid modernization technologies which will automate and expedite the restoration of power following interruptions in service. With the systematic deployment of AMI across I&M, operational resiliency is enhanced, as discussed later in my testimony.

4) *Accommodate new loads and supply sources at the Distribution level* – I&M is working to modernize its distribution system to integrate and

optimize the use of new technologies and services. Updates in monitoring and operational technology, such as with ADMS/DERMS, will allow the distribution system to incorporate distributed energy resources (DER); to be able to respond to generation changes or load changes; to maintain power quality and reliability; and to ensure real-time, dynamic communication with these technologies.

5) *Maintain system flexibility* – Over time, I&M will continue to respond to changing conditions and modify its Plan accordingly. This may include introducing additional programs, modifying programs, or shifting resources between programs to address emerging priorities and/or conditions. For example, the challenges in recent years due to material availability have required I&M to maintain work plan flexibility while effectively and efficiently responding to the needs of customers, the changing demands on the distribution system, and changes in equipment and technology.

6) *Enhance data collection and utilization* – I&M is continuing its systematic installation of AMI to allow for two-way communications. This provides both operational and customer usage benefits through access to near real-time data at the customer premises.

Q22. How did I&M develop the programs and projects included within its Plan?

I&M developed the Plan by focusing on several inputs to determine the programs and projects that would continue to enhance distribution system safety, reliability, and resiliency for I&M's customers. These inputs include:

- *Analysis of Circuit Performance* – Evaluating circuit performance aids in understanding issues that are causing outages, as well as what efforts are needed to improve performance. Circuit performance data is circulated to the field personnel who use their knowledge to assist with prioritizing projects.

- *Engineering Expertise* – I&M's engineers provide insight into equipment performance, including the equipment's failure characteristics. By design, engineering works closely with I&M field personnel, who know where failures occur, what causes outages, and which areas or types of equipment have the greatest frequency of incidents.
- *Field Personnel* - Although I&M's engineering analyses may show that an asset is operating beyond its expected design life, local I&M field personnel responsible for inspecting and maintaining these assets contribute to decisions on whether assets should be replaced.
- *Inspection Results* – I&M systematically conducts inspections of its distribution equipment. Results from these inspections are used to prioritize its asset renewal and reliability programs. This proactive approach helps identify issues that may otherwise go undetected and result in interruptions or public safety issues if left unmitigated.
- *Load Forecasting* – I&M performs an annual load forecast study. These studies take into account historical load growth patterns, new customer load and DER information, and planned system configuration changes. The projected load on all circuits and stations are assessed for potential capacity constraints or other planning criteria violations. Any such violations or system needs are factored into the development of solutions and projects.

Q23. Are there any other factors I&M considers in implementing the Plan?

Yes. I&M continuously monitors and evaluates the following elements, which influence both the actual work and the timing of that work throughout the calendar year:

- *Customer Service and Public Project Relocation (PPR) Projects* – There are several day-to-day customer service activities that I&M must perform, such as installing new service, restoring outages, and

relocating distribution facilities to accommodate road construction, water and sewer line installation, and the like. Customer service and PPR projects (typically initiated by local, county and state governing authorities) often arise throughout the year, requiring crews to be assigned in order to meet in-service deadlines. I&M factors this into its Plan and estimates both the volume of this work and the timing, based on historical experience and future projections. Because these activities are not perfectly predictable, in terms of what, when and where, a degree of flexibility in the work plan schedule is required to allow these customer service activities to be appropriately prioritized.

- *Workforce Availability* – I&M uses a mix of internal and external labor in order to execute its distribution projects in a cost-effective manner. In recent years, the craft labor market has realized high demand within the I&M service territory, making it necessary to plan further in advance and remain actively engaged with market changes. Similarly, inclement weather often causes periodic delays in work completion while crews work to repair damage on I&M's system or other utility systems (via Mutual Assistance). I&M factors a certain amount of these interruptions into the Plan schedule, adjusting as necessary when more time is taken for these activities than projected. Restoration work, as with Customer Service, takes a priority and is reactive by its nature, which also impacts scheduling of work plans.

- *Materials Availability* – Material availability and lead times for ordering materials has been the most dynamic influence in the past two years, creating a need for greater flexibility and a wider selection of viable material solutions in order to meet needs. Similarly, having a broad portfolio of work enables the Company to adjust if/when necessary to address such issues.

- *Scheduling Considerations* – Some projects, such as those requiring station outages, must be scheduled in coordination with PJM. Dynamic system loading – which is influenced by weather, other

projects, and unanticipated outages – also influences the timing of project work. These considerations are factored into I&M's planning and are reviewed weekly so that assignments can be adjusted as schedule changes occur.

- *Financial Parameters* – The costs of distribution projects are also a key factor in I&M's distribution planning. The manner of how the work is completed and the timing is influenced by cost to optimize efficiency and cost effectiveness.
- *System Interruptions/Storms* – Though unpredictable in terms of "when", based on experience, I&M has built in a certain volume of interruption response that can affect the timing of certain projects. I&M has taken measures to mitigate against this affecting the overall work plan; the key is that it is a consideration in the development of the overall Plan that is important to factor into the comprehensive view.

Q24. How does I&M balance the investments in each of the areas included within the Plan?

The portfolio of programs and projects takes into consideration the balanced needs of customers, available resources (including design and construction talent as well as materials) and future demands anticipated on the system. It considers both reliability (such as with the Vegetation Management Program and asset renewal projects) and resiliency (DACR and AMI investments).

Q25. How does I&M assign value and prioritize these projects?

Given the wide variety of potential work that can be done to enhance and improve operational performance, a consistent manner of project evaluation and subsequent selection and prioritization is needed. To perform this comparative analysis, I&M utilizes historical data such as CMI, outage frequency and customers impacted to determine projects that would most significantly impact

future reliability. Additional factors such as presence of obsolete equipment, accessibility issues as well as input from the field and dispatching group are considered to inform decision making that would impact both safety and reliability.

Other factors such as timing of projects, updated performance data, and resource availability also weigh into the planning process.

Q26. How does I&M develop cost estimates for the Plan?

The cost estimates for the programs in the Distribution Management Plan are developed from the body of experience I&M has gathered by performing these projects and programs over time. This experience establishes a basis for both the labor and materials required, forming the parametric estimate specific to each particular unit and/or type of work. These unit cost estimates incorporate labor, material, stores, equipment, and related overheads. I&M then creates project scopes, including equipment specifications and construction standards, utilizing input from I&M employees who have day-to-day responsibility for operating and maintaining the distribution system. Once the scope is finalized, it is combined with the parametric estimates to determine the functional project cost estimate.

Q27. How does I&M monitor and evaluate the progress and costs of the Plan?

I&M utilizes proven industry standards in project management to guide all facets of the Plan, including development, project initiation, execution, monitoring, and closing process. The matrixed team, collectively referred to as the Project Management Office (PMO) evaluates progress, quality, adjustments, and costs, which provides transparency and accountability for all programs and projects in the Plan.

Q28. What are the main categories of investments in the Plan?

The Plan involves four primary categories of investments, which are implemented through five activities, as shown in *Figure DSI-5*.

Figure DSI-5. Distribution Management Plan Categories & Activities

Category	Activity	Details	Description
Reliability Enhancement	Vegetation Management	Attachment DSI-1 – Distribution Vegetation Management Program (2023-2024)	I&M will maintain the proactive, cycle-based Vegetation Management Program to meet customer expectations for fewer and shorter outages.
	Asset Renewal	Attachment DSI 2 - Asset Renewal Management Plan	I&M has developed a suite of programs to replace aging infrastructure and harden the system to improve reliability and resiliency.
Distribution Asset Management	Combined Projects (Capacity Additions, Station & Line Components)	Attachment DSI-3 - Combined Projects Management Plan	I&M has identified specific asset renewal and reliability projects that are needed to address contingency capacity constraints, improve outage recovery, replace or upgrade aging or obsolete station equipment and perform voltage conversions of select stations and distribution circuits.
Risk Mitigation	Infrastructure Inspection Programs and Underground Locates	Figure DSI-11 - Risk Mitigation Programs 2023- 2024	I&M performs inspections designed to identify potential issues on the distribution system, promoting public safety.
Grid Modernization	Resiliency Improvement via System Response and Monitoring Projects	Attachment DSI-4 - Grid Modernization Management Plan	I&M has identified technologies that will help I&M monitor, protect, and improve the operation and resiliency of its distribution system and also technology that will reduce system level capacity needs.

Reliability Enhancement Category: Vegetation Management

Q29. Please summarize the status of the Company's Vegetation Management Program reflected in the Capital Forecast Period and Test Year O&M.

As discussed in previous Cause Nos. 44967, 45235 and 45576, I&M's Vegetation Management Program has moved from a reactive approach to

proactively managing vegetation (trees, brush, and vines) on a systematic, cycle-based approach. This systematic approach began with an initial four-year reclamation period (2018-2021) which included the initial expansion of overhead conductor clearance zones (the space surrounding a distribution line) to better address ongoing service interruptions caused by vegetation. I&M's second four-year cycle began in 2022 and will continue through 2025. This involves a continuation of selective clearance zone widening in areas where performance has been problematic and the ongoing remediation of hazard trees (those most likely to fall and damage overhead conductors and/or equipment). Coupled with these targeted efforts, I&M is continuing to perform remedial vegetation management, to maintain clearance zones and rights-of-ways to their previously prescribed width.

Figure DSI-6 summarizes the mileage covered in 2022 and the forecasted miles of work in 2023 and 2024 ("Second Cycle"). *Figure DSI-7* shows I&M's historical and forecast vegetation management costs.

Figure DSI-6. Vegetation Management Program (Overhead Primary Line Miles)

Annual Distribution Line Miles Maintained	2022	2023	2024
	2,695	2,534	2,536

Figure DSI-7. Vegetation Management Program Capital and O&M Expenditures (Indiana - $000 – Excluding Allowance for Funds Used During Construction (AFUDC))

Cost Type	2022 Actual	2023 Forecast	2024 Forecast
Capital	$10,895	$8,928	$9,222
O&M	$16,216	$15,375	$15,377

Further detail regarding the Vegetation Management Program can be found in Attachment DSI-1, which presents line miles of clearance zone widening and remedial trimming by circuit, total line miles, and maps of the locations of vegetation management activity for 2023-2024.

Q30. What are the drivers and benefits of I&M's Vegetation Management Program?

Vegetation management continues to be one of the most impactful investments I&M can make to improve overall reliability. During the initial five years of this cycle-based program (2018-2022), I&M's vegetation-caused SAIDI has favorably declined by nearly 40% (from the end of 2017 to the beginning of 2023). Continuing this program will further improve reliability and avoid returning to a system plagued by controllable vegetation-caused service interruptions.

Q31. What amount has I&M spent in vegetation management expense since the inception of this cycle-based approach in 2018?

I&M has averaged over $16.7 million annually in vegetation management expense over the first five years of this cycle-based approach (2018-2022). This is more than the Commission's May 11, 2020 Order in Cause No. 45235 allocating an average of $16.2 million per year for this work. It is also consistent with the Commission's February 23, 2022 Order approving the settlement agreement in Cause No. 44576 which adopted this same amount in the revenue requirement.[1]

Q32. What is I&M proposing for vegetation management expense in this current case?

Due to the work performed and the results realized, I&M projects a reduced annual cost of $15,376,000 during each of the years 2023 and 2024. This represents a reduction of approximately 5% in actual dollars from recent cases.

[1] The settlement in Cause 45576 (p. 10) provided that "*Any matters not addressed by this Settlement Agreement will be adopted as proposed by I&M in its direct case."* As shown by my rebuttal testimony in that proceeding (p 3), the $16.2 million for vegetation management expense presented in my direct testimony was not challenged.

Reliability Enhancement Category: Asset Renewal

Q33. Please summarize I&M's asset renewal projects reflected in the Capital Forecast Period and Test Year O&M.

I&M's asset renewal projects focus on replacing aged infrastructure with the purpose of ensuring the distribution system remains reliable and safe:

- *Overhead Line Rebuild Projects* – I&M constructs/reconstructs overhead lines and associated equipment to current design standards. Replacement of aged overhead facilities reduces the likelihood of unplanned outages due to equipment failure, and subsequently enhances resiliency through use of current standards. In addition, overhead rebuilds enhance safety for customers and I&M personnel by decreasing the likelihood of downed lines or equipment failure.
- *Pole Replacement/Reinforcement Projects* – I&M replaces poles that no longer appear to have the integrity (based on condition of the pole) needed to support the current overhead infrastructure. Externally, poles may appear to be in good condition, but may have deteriorated internally or below the ground line to the point where they no longer are sufficiently strong enough to withstand horizontal loads produced by wind, or vertical loads caused by elements such as ice.
- *Underground Residential Distribution (URD) Cable and Live-Front Transformer Replacement Projects* – I&M identifies deteriorated or unjacketed cable in need of replacement and simultaneously replaces live-front padmount transformers.
- *Underground Station Exit Cable Replacement Projects* – For these projects, I&M identifies and replaces aging underground station exit cables. A failure on this critical portion of the circuit interrupts service to all customers served on the affected circuit.

- *Underground (UG) Network Rebuild Projects* – I&M replaces aging network secondary and primary components in the I&M South Bend, Elkhart, Fort Wayne, and Muncie networks.

Q34. What are the drivers and benefits of the asset renewal projects?

A growing portion of I&M's distribution assets are reaching the end of their expected design lives. Although age is not the only factor for failure, assets that are approaching or exceeding the end of design life are much more likely to fail. These concerns are compounded when multiple assets begin to reach the end of their design life in the same general time span, creating a compounding effect on the number of outages and the length of time it takes to restore service after an outage. In addition, older assets tend to be harder to recover or replace after a failure, because it is often difficult to obtain available parts for aging equipment. Older assets also pose inherent safety risks – equipment that is operating after the end of its design life has a higher incidence of catastrophic failure during operation.

These factors prompted I&M to plan the comprehensive set of asset renewal projects discussed here. Without these planned projects, I&M would likely experience more asset failures and the quality of service to customers would unnecessarily suffer.

Q35. What is the work scope and timing of I&M's asset renewal projects?

Figure DSI-8 shows the cumulative amount of work planned, by year, specific to the asset renewal and reliability projects scheduled for the 2023-2024 Capital Forecast Period:

Figure DSI-8. Asset Renewal Cumulative Work Scope (Indiana)

	Units	2023	2024
Overhead Rebuild –			
Single Phase Line Rebuild	Miles	69.2	59.7
Three Phase Line Rebuild	Miles	36.7	36.2
Circuit Ties	Miles	17.9	20.0
Voltage Conversion	Miles	1.0	1.0
Sectionalizing	Units	18	17
Recloser Replacement	Units	38	37
Capacitor Replacement	Units	21	21
Porcelain Cutout & Lightning Arrester Replacement	Units	9,069	9,065
Crossarm Replacement	Units	1443	1019
Open Wire Secondary Replacement	Miles	22	26
Pole Replacement/Reinforcement	Units	1,400	1,405
URD Cable and Live-Front Transformer Replacement	Miles	21.0	32.6
Underground Station Exit Cable Replacement	Feet	10,360	4,480

Q36. What are the costs of the asset renewal projects?

Figure DSI-9 provides the projected capital expenditures for the asset renewal projects over the 2023-2024 Capital Forecast Period.

Figure DSI-9. Asset Renewal Projects Capital Expenditures (Indiana -$000 - Excluding AFUDC)

	2023	2024
Overhead Rebuild –		
Single Phase Line Rebuild	$8,215	$7,542
Three Phase Line Rebuild	$10,420	$10,934
Circuit Ties	$5,046	$6,012
Voltage Conversion	$355	$360
Sectionalizing	$330	$329
Recloser Replacement	$310	$325
Capacitor Replacement	$373	$394
Porcelain Cutout & Lightning Arrester Replacement	$3,035	$3,251
Crossarm Replacement	$2,975	$2,300
Open Wire Secondary Replacement	$2,217	$2,794
Pole Replacement/Reinforcement	$6,076	$6,458
URD Cable and Live-Front Transformer Replacement	$6,032	$9,940
Underground Station Exit Cable Replacement	$2,336	$1,079
UG Network Rebuild Program	$3,724	$2,381
Total	$51,445	$54,098

Q37. Please describe Attachment DSI-2.

Attachment DSI-2 provides a description of each project by circuit, the amount of line miles and units of the projects, the estimated labor and material costs, and the locations of the affiliated projects. I discuss how these cost estimates were prepared in Q26.

Distribution Asset Management Category: Combined Projects

Q38. Please summarize I&M's Combined Projects reflected in the Capital Forecast Period and Test Year operating expenses and the drivers and benefits for these projects.

Each year, I&M completes various distribution projects, termed "Combined Projects" that are not included in the Reliability Enhancement, Risk Mitigation, or

Grid Modernization Categories listed in *Figure DSI-5.* These projects are necessary to:

- address capacity (system needs driven by customer load increases) and contingency capacity constraints, such as the ability to serve customers from another location, thereby reducing the length of an outage,
- improve outage recovery, to replace or upgrade aging or obsolete station equipment,
- implement Supervisory Control and Data Acquisition (SCADA), and
- perform voltage conversions of select stations and distribution circuits.

To develop these Combined Projects, several I&M groups, including planning, engineering, and the Distribution Dispatching Center (DDC) work together to review I&M's distribution system to identify potential issues. I&M uses computer models that perform power flow analyses which take into consideration assessed load forecasts based on known changes and identifies potential overload conditions and other system constraints. In addition, I&M reviews asset health information collected through field inspections to identify equipment conditions. Based on the system performance and equipment conditions, I&M prioritizes and selects the Combined Projects that help improve the reliability of the system, increase the ability to serve changing load, promote safety and enhance the technological capabilities of I&M's system.

Q39. What are the work scopes and timing of I&M's planned Combined Projects?

I&M's Combined Projects that are planned to go into service during 2023-2024 are detailed in Attachment DSI-3, which includes descriptions of each project, work scopes for each project, estimated cost of each project and maps (by year) depicting the geographical location of each project.

Q40. What are the costs of the Combined Projects?

Figure DSI-10 provides I&M's projected capital expenditures for Combined Projects that will be placed in-service over the Capital Forecast Period.

Figure DSI-10. Combined Project Capital Expenditures to Place in Service (Indiana - $000 - Excluding AFUDC)

	Through 2022	2023	2024	Total Plant in Service	Year in Service
3M Station	$2,099	$45	-	$2,144	2023
Beckwith Station	$30	$764	-	$794	2023
Blaine Street Station	$6,897	-	-	$6,897	2023
Colfax Station	$711	$1,606	-	$2,317	2023
Deer Creek CB	$25	$252	-	$277	2023
Kingsland CB	$44	$252	-	$296	2023
Virtue Station Land Purchase	$24	$166	-	$190	2023
Pleasant Murray D Line	$440	$1,062	-	$1,502	2023
RV Capital Station	$1,839	$2,478	-	$4,317	2023
Van Buren Station	$745	$505	-	$1,250	2023
Wabash Ave Station	$845	$304	-	$1,149	2023
Total Value of Combined Projects to place in service in 2023				**$21,133**	
Ameriplex Station	$2,762	$4,296	$703	$7,761	2024
Ellison Rd Station	$33	$126	$988	$1,147	2024
Kekionga Land Purchase	$3	$25	$869	$897	2024
Randolph CB	$16	$886	$338	$1,240	2024
S Elwood	$17	$379	$192	$588	2024
Total Value of Combined Projects to place in service in 2024				**$11,633**	

Risk Mitigation Category

Q41. Please summarize the Company's Risk Mitigation programs reflected in the Capital Forecast Period and Test Year operating costs.

The following Risk Mitigation programs have been put in place to ensure I&M maintains an active and engaged focus on public safety:

- *Underground Locates* – Per statutory rules, I&M is required to locate its underground facilities, when requested, within two working days in order to protect the public from inadvertently digging into buried energized facilities owned by the Company. I&M strictly adheres to the statutory requirements around timely and accurate location identification of its underground facilities and utilizes trained, responsive business partners to perform this work.
- *Pole Inspections* – To ensure the integrity of its overhead pole plant, I&M systematically inspects its distribution poles on a ten-year cycle. Those poles that are determined to meet American National Safety Institute (ANSI) strength requirements, based on the height, diameter, and class of the pole, are treated with preservatives to prevent any further degradation from potential decay or insects between inspections. In contrast, poles deemed insufficient to continue supporting the overhead infrastructure are designated for replacement.
- *Underground Residential Distribution (URD) Equipment Inspections* – I&M inspects the above ground equipment of the URD system (e.g., pedestals, padmount transformers, and primary risers) to identify potential safety risks and equipment indicating a need of repair or replacement. These systematic inspections are scheduled to physically inspect all of these facilities over a five-year period.
- *Overhead Line Inspections* – I&M inspects overhead facilities and equipment to identify potentially hazardous conditions due to deteriorated or damaged equipment. These situations are resolved immediately, if determined to be necessary, or are scheduled for repair/replacement if the circumstance allows. These systematic inspections are scheduled to physically inspect all of these facilities over a five-year period.

- *Contact Voltage Inspections* – I&M inspects downtown underground network areas to detect possible stray voltage on any metallic equipment or structure in close proximity to network facilities to ensure public safety. As with other inspections, issues are resolved in a timely manner depending on the test results. Contact Voltage Inspections are performed across the four underground network systems on an annual cycle.

Q42. What are the drivers and benefits of the Company's Risk Mitigation programs?

As mentioned earlier, the Risk Mitigation programs are intended to identify and remediate assets that may pose a potential reliability and/or safety risk to the public or employees.

Q43. What are the work scopes and timing of the Company's planned Risk Mitigation programs?

Figure DSI-11 provides a description, number of units, and the estimated costs of the Risk Mitigation program work plan for 2023-2024.

Figure DSI-11. Risk Mitigation Programs (Indiana - O&M - $000)

Inspection Program	Projected Units	Description	2023	2024
Wood pole inspection	36,000	Comprehensive pole inspection and treatment (poles)	$721	$743
URD Equipment Inspection	16,955	Inspect above ground structures (padmounts, enclosures, pedestals)	$118	$121
URD Locates	294,000	Locate underground facilities (locations assigned)	$3,357	$3,457
Overhead Line Inspection	3,200	Inspect overhead distribution lines (miles)	$274	$282
Contact Voltage Inspection	4	Inspect downtown business district network areas (cities)	$56	$58
Total			**$4,526**	**$4,661**

Grid Modernization Category

Q44. Please summarize I&M's Grid Modernization projects reflected in the Capital Forecast Period and Test Year operating costs.

I&M's Grid Modernization projects are designed to leverage technology for the purpose of improving system resiliency and functionality. This provides more timely information, allowing I&M to respond quicker once an event occurs.

The Grid Modernization projects that are planned for the Capital Forecast Period and Test Year include:

- *Advanced Metering Infrastructure (AMI)* – AMI refers to systems that measure, collect, and analyze energy usage from meters through a communications network. This infrastructure includes hardware, such as meters that enable two-way communications (AMI meter), the communications network, customer information systems, and meter data management systems.
- *Conservation Voltage Reduction (CVR)* - I&M's CVR projects are designed to utilize technology to adjust the voltage and power profile on a distribution circuit. CVR is a grid modernization technology that allows the voltage on specific circuits to be reduced, thereby optimizing the efficiency of power delivered. When taken collectively, across a number of circuits, it can provide a cumulative amount of energy savings and can reduce system level capacity needs, resulting in a reduced cost of service to our customers.
- *Distribution Automation Circuit Reconfiguration (DACR)* – DACR consists of creating circuit ties coupled with smart recloser technology that isolate an outage condition and automatically reconfigure the power supply to minimize the duration customers are affected. These smart devices allow for remote monitoring and control as well as automated reconfiguration capacity which significantly enhances I&M's ability to respond faster and with more precision to an outage

event. I&M will subsequently dispatch its personnel to the affected area to resolve the issues that caused the initial event.

- *Grid Modernization Station Projects* - Grid Modernization Station Projects are multi-year project work that includes hardware and software components installed at distribution substations. These systems provide remote visibility and control into a station and are set to provide real-time information on various hardware components such as CVR and DACR programs.
- *Distribution Line Sensors* – These devices are attached to overhead distribution lines and continuously monitor parameters (e.g., current, voltage, fault currents) of the lines. By analyzing the data from the sensors placed at strategic locations, I&M's engineers are able to understand and resolve any power quality issues caused by failing equipment or specific system conditions.
- *Smart Reclosers* (Stand Alone) – Smart reclosers are standard recloser units equipped with communication and control technology that allows for remote monitoring and operation of these devices. Smart Reclosers are included as a part of all DACR projects; this category of investment is specifically for stand-alone units not incorporated as part of another protection scheme.
- *Smart Circuit Ties* – I&M's Smart Circuit Tie program upgrades circuits by incorporating smart reclosers in areas that could be used to reconfigure circuits following an outage event. This will allow the DDC to remotely evaluate the loading configuration of circuits prior to restoring service without having to wait on a field resource to take measurements or reconfigure connections between circuits.

Q45. What are the benefits of I&M's Grid Modernization projects?

The majority of I&M's Grid Modernization projects improve resiliency of the system by providing real-time information of event occurrences, allowing I&M to

provide a more rapid response. For example, the DACR projects completed through 2022 (a total of 24 schemes on portions of 50 circuits) have cumulatively avoided over 1.5 million minutes of interruption to I&M's Indiana customers, as shown in *Figure DSI-12*.

Figure DSI-12. DACR

Indiana	Actuals			Planned		
DACR	**2020**	**2021**	**2022**	**2023**	**2024**	**Total ('20-'24)**
Number of Circuits	12	20	18	28	46	124
Number of Schemes	5	10	9	14	22	60
Number of Customers Impacted	14,160	19,708	19,756	35,190	60,582	134,590
Number of Operations	0	5	5	4	N/A	14
Customer Minute Interruptions (CMI) Savings[2]	0	462,556	755,803	*287,485	N/A	1,505,843

*Year To Date: 6/30/23

Additionally, these projects enhance grid safety and operation through early detection of potential component failures. This technology will better position the system to incorporate emerging technologies pertaining to energy storage and microgrids if/when they become effective options to further enhance the flexibility and reliability of the system.

Distribution Line Sensors, Smart Reclosers, and Smart Circuit Ties further improve distribution resiliency through a number of avenues. Smart Reclosers reduce the number of customers impacted by a fault, while Smart Circuit Ties allow I&M to facilitate manual recovery remotely following a fault. Additionally, both Smart Reclosers and Smart Circuit Ties provides the ability for I&M qualified personnel to remotely disconnect power during events involving public safety, saving time and providing an added measure of safety. Similarly, smart devices allow for remote restoration once repairs are made to return the affected part of the system back to normal operating conditions.

[2] CMI savings for a given DACR event is calculated as the number of outage minutes reduced for customers restored by DACR, estimated at an average of 90 minutes, multiplied by the total number customers restored.

Q46. What are the work plans and expected costs of I&M's Grid Modernization projects during the Capital Forecast Period?

The Grid Modernization work plan is shown in *Figure DSI-13*. Capital expenditures for the Capital forecast related to the Company's distribution Grid Modernization projects are shown in *Figure DSI-14*. Attachment DSI-4 contains additional details including descriptions of Grid Modernization projects (except AMI) by type of project, circuit, estimated labor and material costs, and maps of locations of the projects. AMI details are provided in Section VI.

Figure DSI-13. Summary of Grid Modernization Work Plan (Indiana)

Grid Modernization	Units	2023	2024
AMI	Meters	128,230	107,317
CVR	Circuits	35	61
DACR	Schemes	14	22
Grid Modernization Station Projects	Station	1	1
Distribution Line Sensors	Units	117	120
Smart Reclosers (Stand Alone)	Units	54	30
Smart Circuit Ties	Line Miles	23.7	19.1

Figure DSI-14. Grid Modernization Project Capital Expenditures ($000 - Indiana – Excluding AFUDC)

Grid Modernization	2023	2024
AMI[3]	$38,018	$14,287
CVR	$9,250	$18,114
DACR	$11,591	$14,236
Grid Modernization Station Projects	$512	$554
Distribution Line Sensors	$267	$286
Smart Reclosers	$2,784	$1,839
Smart Circuit Ties	$8,573	$6,900
Totals	**$70,995**	**$56,216**

VI. AMI Deployment

Q47. What are I&M's current implementation status and plans regarding the deployment of AMI across the Company's Indiana service territory?

As detailed in Cause No. 45576, I&M began deploying AMI across its Indiana service territory over a four-year period beginning in 2021 and concluding in 2024. Prior to January 1, 2023, I&M had installed 250,415 AMI meters in Indiana at an overall project cost of $57.72 million. *Figure DSI-15* provides the

[3] This reflects the total cost of I&M Indiana AMI Capital expense.

forecasted remaining activities and costs in 2023-2024 to complete this overall project.

Figure DSI-15. AMI Total Investment ($000 Excluding AFUDC)

	Through 2021 (actual)	2022 (actual)	2023 (estimated)	2024 (estimated)	Total Project
Meters Installed	69,338	181,077	113,294	123,367	487,076
Meters Procured	102,483	160,928	213,416	31,104	507,931[4]
Investment ($M)[5]	$23,455	$34,265	$38,018	$14,287	$110,025

Q48. Has the Company deployment plan been impacted by the global supply chain constraints on microchips used in AMI technology?

Yes. I&M's original deployment plan has been delayed by deliveries of AMI meters. The Company has worked diligently to be flexible with its implementation resources and adapt its plans as AMI meters become available. Compared to the original deployment schedule presented in Cause 45576, the Company has had to adjust the AMI schedule and move more meters into 2023 and 2024, with expectations to still complete the full AMI deployment by the end of 2024.

VII. Distribution Capital Expenditures

Q49. What capital expenditures are you supporting in this proceeding?

I am supporting distribution capital expenditures during the Capital Forecast Period from January 1, 2023, through December 31, 2024. This twenty-four-month period commences after the conclusion of the historical base period and continues through the end of the Test Year. These amounts are provided on a

[4] The difference of 20,855 meters represents regular business meters purchased on project Purchase Order (PO), then reclassed to operational budget.

[5] Additionally includes customer communications & engagement costs, internal labor and miscellaneous materials.

Total Company basis, unless otherwise indicated, with Company witness Duncan supporting the jurisdictional allocation of costs.

Q50. How is the total amount of capital expenditures to be made in I&M's distribution system determined?

I&M has reviewed its distribution system in order to determine the level of work that needs to be completed, including I&M's Distribution Management Plan, in order to maintain the integrity of I&M's system and provide, reliable and resilient electric service. Projects are based on sound engineering plans, and I&M's cost estimates are derived from Company experience and proven, effective methods. I&M's forecasting process is described further by Company witness Sloan.

Q51. Please describe the major categories of distribution investments.

Figure DSI-16 shows total Company distribution capital expenditures during the Capital Forecast Period excluding AFUDC:

Figure DSI-16. Distribution Capital Expenditures ($000 – Total Company – Excluding AFUDC)

Category	2023	2024	Total
Vegetation Management	$8,928	$9,222	$18,150
Asset Renewal and Reliability	$71,837	$74,817	$146,654
Combined Projects	$47,702	$48,318	$96,020
Grid Modernization	$83,997	$70,112	$154,109
Customer Service, City and State Requirements, and Other	$84,203	$86,231	$170,434
Totals	**$296,667**	**$288,700**	**$585,367**

Capital expenditures related to vegetation management, asset renewal and reliability, combined projects, and grid modernization are described in connection with the Distribution Management Plan. Capital expenditures for Customer Service, City and State Requirements, and Other relate to the installation of service to new customers, and the relocation of distribution

facilities to accommodate projects (such as road construction) and the capital required for service restoration.

Q52. What amount of distribution capital investment will be placed in service during the Capital Forecast Period?

Figure DSI-17 shows the amount of distribution capital investment (including AFUDC) that will be placed in service during the Capital Forecast Period.

Figure DSI-17. Distribution Additions to Electric Plant in Service (Total Company - Including AFUDC)

Category	2023-2024 Additions to EPIS
Vegetation Management	$17,919,993
Asset Renewal and Reliability	$155,548,345
Combined Projects	$113,204,082
Grid Modernization	$165,464,806
Customer Service, City and State Requirements, and Other	$168,114,100
Total	**$620,251,326**

VIII. IT Investments Impacting Distribution Operations

Q53. Company witness Brenner discusses the IT projects associated with Advanced Distribution Management Systems (ADMS) and Distribution Energy Resource Management System (DERMS) technology. How will those systems benefit Distribution Operations in I&M?

The ADMS with DERMS module will provide the following benefits to Distribution:

1. *Enhanced Operational Decision Making* - The currently utilized Outage Management System (OMS) and Distribution Management System (DMS) are separate systems thereby creating limitations to the end-to-end

situational awareness available for the Distribution System Dispatchers. The Dispatchers must currently transition between the two systems to perform their work. The ADMS system will have integrated OMS and DMS systems. Additionally, the existing systems are unable to provide an accurate real-time power flow analysis due to system limitations. As the complexity of the distribution network continues to increase, making operational decisions based on real-time power flow analysis is increasingly necessary. ADMS will resolve that and help make decisions based on real-time power flow and active conditions occurring on the electric distribution network.

2. *DER Integration and Management* - The current DMS provides basic, limited support for DER. DERs can be visualized on the map and monitored as a stand-alone asset in the system, but there are limitations related to the integration of DERs into the network model and power flow analysis. These limitations hinder I&M's ability to manage the much larger DER penetration that is expected in the coming years, especially the scale and complexity associated with significant penetrations of electric vehicles and solar, and DERs participating in wholesale markets as allowed by FERC Order 2222. Another important aspect related to DER is the ability to exchange individual and aggregated DER data with other operational systems such as the Transmission Energy Management System (EMS). Moving forward, AEP/I&M need to exchange a robust set of real-time system operating equivalencies between transmission and distribution operations systems to ensure each system is considered during the operation of the other. This will become increasingly important as large numbers of DERs create two-way power flows that can impact both transmission and distribution electrical networks.

3. *Enhanced Grid Modernization Benefits* - The fully integrated nature of ADMS will enhance the dynamic reconfiguration of the DACR and CVR technologies with improved power flow models and situational awareness of the network based on real-time conditions. This would allow I&M and our

customers to realize additional benefits from more extensive reconfiguration capabilities and active voltage control.

Q54. When does I&M expect the ADMS and DERMS system to be fully integrated and providing benefits to I&M's customers?

I&M plans to place ADMS in service in 2024. A contract and statement of work with the selected vendor and system integrator was executed in September 2022 for an enterprise-wide ADMS solution. Immediately following, AEP kicked off the project, and entered a planning phase to finalize the roadmap and resource plans. Once the planning phase is completed later in 2023, the project will move into the implementation and testing phase which is expected to conclude at the end of 2024.

Q55. Please describe the benefits that I&M Distribution Operations will gain from the implementation of the Field Mobility program described by Company witness Brenner.

The Field Mobility program will provide the following benefits to I&M Distribution Operations:

1. *Improved Operational Efficiency* - Currently, Distribution processes associated with the coordination and execution of service restoration efforts, and construction work orders are labor intensive, involving multiple physical hand-offs of paper packets, and requiring repetitive manual steps to complete, communicate and close out this work. The Field Mobility program deploys cellular connected devices running specialized software to facilitate the real-time recording and transmittal of field work detail. By enabling the elimination of several manual aspects and avoiding delays in the exchange/communication of required information, the Field Mobility program will help to streamline procedures, providing time savings and efficiency gains for both field and back-office personnel.

2. *Optimization of Cost* - Once fully implemented, the Field Mobility program will allow for the elimination of inefficient mobile data computers. The new, more efficient technology will provide increased speed and ease of onboarding and assigning field resources.
3. *Increased Safety and Reliability* - The real-time communication and reporting capabilities enabled by the Field Mobility program will provide enhanced situational awareness for Distribution Operations employees. This allows for quicker and more accurate damage assessment, facilitating more effective restoration times during outage events. Additionally, the timelier identification, communication, and mitigation of hazards, is expected to improve the overall customer experience.

Q56. When does I&M expect the Field Mobility program to be operational and in use by the Distribution Operations team?

There are several components to the Field Mobility program, and the implementation of some portions has already kicked off. Partial value realization is expected to begin in 2023, with a target to have the full solution placed in service by the end of 2024.

IX. IIJA Federal Grant Programs

Q57. Company witness Osterholt discusses a number of potential distribution projects the Company is proposing for IIJA grant funding. Are you familiar with these projects?

Yes. Working in conjunction with Company witness Osterholt and based on the parameters provided for submitting requested projects to IIJA grant funding consideration, my organization helped develop the distribution projects submitted as part of applications for IIJA Topics 1, 2, and 3 for I&M based on the benefits that could be derived by its customers.

Q58. Can you please summarize the distribution related projects the Company has submitted for potential grant funding?

The Federal Government approved the IIJA in 2022. As a result, the Department of Energy established the Grid Resilience & Innovation Partnerships (GRIP) Program Request for Information (RFI) Package. These programs aim to transform resilience; catalyze and leverage private sector capital for infrastructure deployment; and advance community benefits including community/labor engagement, US workforce development, diversity, equity inclusion, and accessibility benefits flowing to disadvantaged communities. I&M continues to pursue funding through all three programs and is working through the application process at both the federal and state level in pursuit of grant funding. Company witness Osterholt provides the detail in regard to this process.

Figure DSI-18 below summarizes the Company's current grant applications in pursuit of IIJA funding.

Figure DSI-18. Infrastructure Investment and Jobs Act Proposal

Description	Units	Qty
Undergrounding of Overhead Lines	Miles	2.652
DACR Schemes	Schemes	24
Line Sensors	Sensors	207
Energy Storage Installations for Reliability	Installations	11
Renewable Coupled Energy Storage Installations	Installations	2
System Connectivity and Modeling Software (Sensewaves)	-	-
Software To Manage Dynamic Grid (ADMS/ DERMS)	-	-
Rural "Middle Mile" Broadband Fiber	Miles	265

Below is a brief outline of each of these proposed items and the value these investments offer in conjunction with the grant submittal parameters.

- *Undergrounding of Overhead Lines* - Involves the burial of existing overhead line assets to enhance/improve reliability by reducing

exposure to trees, vehicles, storm damage, and other risks that can impact overhead lines.

- *Distribution Automation Circuit Reconfiguration (DACR) and Line Sensors* - These categories are defined in the Grid Modernization section V.E. and involve pulling forward, in time, future projects that are planned past 2024.
- *Energy Storage Installations for Reliability* - These projects specifically cover battery storage and are considered a Non-Wires Alternative solution. Selection of these projects is intended to improve reliability in remote areas of the I&M distribution grid.
- *Renewable Coupled Energy Storage Installations* - These are battery storage projects intended to optimize output of existing solar installations.
- *System Connectivity and Modeling Software (Sensewaves)* - This consists of a modeling software which will assist in producing an AMI-based load flow model of the Indiana grid.
- *Software To Manage Dynamic Grid (ADMS/DERMS)* - Described in Section VIII.
- *Rural "Middle Mile" Broadband Fiber* - The installation of fiber as part of the IIJA rural broadband initiative will provide incremental benefits to the distribution system in the form of improved communications systems, while providing a key backbone of fiber into portions of the I&M service territory that currently have little, if any, significant comprehensive broadband options.

Q59. Are the projects described above a part of the Company's Distribution Management Plan?

No. Some categories of projects included under IIJA are similar to what is in the Plan. The projects related to the IIJA proposals is in addition to the work

included in the Company's Distribution Management Plan budget for the Capital Forecast Period. As noted above, in some instances grant funding will allow projects (and associated benefits) to be pulled forward to an earlier deployment schedule.

Q60. Will the Company complete these projects if the Company does not obtain grant funding?

Each project will have to be evaluated on its particular merits and benefits vs. other investments should grant funding not be extended (in part or in total). Because some of the proposed IIJA projects are similar to ones currently in the Distribution Management Plan, it is likely that they will be completed at some point in the future if grant funding is not available.

X. Distribution Operations & Maintenance Expense

Q61. What O&M expenses are you supporting in this proceeding?

I am sponsoring I&M distribution overall work plans, which includes Test Year O&M expenses. I participate in the prioritization and allocation of I&M's O&M expenses based on work plan development process discussed by Company witness Sloan.

Q62. What are the historical base period and forward-looking Test Year levels of distribution O&M that you are supporting in this filing?

I am supporting historical base period (calendar year 2022) distribution O&M expense of $85.3 million and Test Year O&M expense of $90.4 million. I present O&M figures on a Total Company basis, unless otherwise indicated, while Company witness Duncan supports the Indiana jurisdictional allocation in this proceeding.

Q63. Have market influences (labor, supplies, inflation) had an impact on I&M's costs?

Yes. Over that past two years, the overall electric industry has seen a number of factors that directly influence operational costs. These impacts are seen primarily in resource availability, increasing minor storm events, supply chain challenges, and overall inflationary activities.

Resources, primarily in line and engineering labor, have been influenced by an overall increase in activity around building and upgrading existing infrastructure by many utilities. This incremental activity, along with general supply chain constraints (materials, assembly, and delivery) have tightened certain supplies. All of these have relatedly impacted inflation on labor, equipment, operations, and materials. As Company witness White has provided, the Consumer Price Index hit a peak of 8.9% year over year growth in June of 2022. Offsetting against these market drivers has been the ongoing focus by the Company on reducing expenses.

Q64. Is I&M requesting an update to its Major Storm Reserve expense recovery in this case?

Yes.[6]

Q65. Please explain the Major Storm O&M recovery that I&M is proposing.

In Cause No. 44075, the Commission approved a Major Storm Reserve for I&M based on I&M's five-year average of major storm expense. The reserve allows I&M to carry over costs associated with major storm restoration year to year, so I&M does not have to spend funds already allocated to other O&M projects to address major storms. I&M is proposing a similar methodology be applied in

[6] The term "Major Storm" is based on the methodology outlined in IEEE Standard 1366-2012, IEEE Guide for Electric Power Distribution Reliability Indices.

this Cause, with figures updated to reflect the major storm costs incurred in Indiana during the period of 2018-2022.

Q66. What have I&M's Major Storm expenses been from 2018-2022?

As shown in *Figure DSI-19*, I&M's annual major storm costs in Indiana have been as high as $15.7 million and as low as $2.0 million in the last five years. As this shows and as has been apparent in previous years, annualized storm costs continue to fluctuate based on the size and scope of these unpredictable events. As with overall O&M expenses, these costs too are impacted by more recent inflationary factors.

Figure DSI-19. Major Storm Expense ($000)

Year	Major Storm Costs
2018	$2,036
2019	$3,713
2020	$5,753
2021	$11,886
2022	$15,654
5-Year Average	**$7,808**

Company witnesses Seger-Lawson and Ross discuss the Company's Major Storm Reserve adjustment.

Q67. What are the primary drivers in the increase in the Company's Major Storm costs in 2021 and 2022?

Major storm expenses have seen a dramatic uptick in the past two years due to a complex number of factors, all of which influence the realized costs. First, the number and severity of major events has been increasing, as seen in *Figure DSI-3*, which impacts the total cost. Second, the costs associated with recovery on each event are reflective of the inflationary costs of personnel, equipment, operations, and materials.

Q68. Does the Company anticipate that the level of Major Storm costs experienced in 2021 and 2022 is indicative of future Major Storm costs?

This is hard to predict, but if the past two-year trend is any indication of future costs, then yes. That said, a primary advantage of having a Major Storm Reserve is that if these costs are not realized, then customers will not incur these expenses in that particular year.

Q69. What is the Company proposing as the Major Storm Reserve amount in this proceeding?

I&M is requesting the Major Storm Reserve be increased to $7,808,470, based on the methodology consistent with past approved Causes. This amount represents I&M's five-year average (2018-2022) of Indiana distribution major storm expense. Please see WP-A-O&M-6, which I co-sponsor with Company witness Ross for further support.

Q70. What benefits does the Major Storm Reserve convey to I&M's customers?

The Major Storm Reserve allows I&M to recover the true costs of a major storm without the need to use other funds already allocated to other necessary distribution O&M activities, such as reliability-related activities. Also, the Major Storm Reserve ensures that I&M customers pay rates that reflect the true costs of a major storm – no more and no less.

Q71. Is the Test Year level of distribution O&M expense reflected in the Company's filing representative of the distribution O&M expense necessary to provide ongoing safe and reliable service?

Yes.

Q72. Does this conclude your pre-filed verified direct testimony?

Yes.

VERIFICATION

I, David S. Isaacson, V.P. of Distribution at Indiana Michigan Power Company, affirm under penalties of perjury that the foregoing representations are true and correct to the best of my knowledge, information, and belief.

Date: 8/8/2023

David S. Isaacson

Distribution Vegetation Management Program (2023-2024)

Distribution Vegetation Management – 2023			
Map Reference Number	**STATION**	**CIRCUIT**	**CIRCUIT MILES**
1	Albion	City	17.18
2	Anthony	Wallace	7.53
3	Bixler	Allen Chapel	3.55
4	Clipper	Garrett	18.97
5	Colony Bay	Dicke	13.08
6	Colony Bay	Getz	11.16
7	County Line	Leo	32.23
8	Fulton	Edsall	1.10
9	Hadley	Arcola	4.29
10	Hadley	Blake	5.58
11	Hadley	Sutton	5.93
12	Hamilton	Hamilton	89.75
13	Harlan	Notestine	58.41
14	Harper	Tanglewood	16.09
15	Harvest Park	Main Street	13.86
16	Hillcrest	Dunbar	13.98
17	Hillcrest	Southtown No. 1	5.23
18	Hillcrest	Ventura	17.00
19	Hillcrest	Warfield	7.85
20	Illinois Road	Scott	7.31
21	Industrial Park	Centennial	3.32
22	Industrial Park	Production	0.57
23	Ligonier	Cavin Street	22.01
24	Ligonier	Gerber Street	4.99
25	Ligonier	Grant	3.14
26	Melita	Fairfield	6.34
27	Melita	Harmar	2.21
28	Melita	Oakdale	4.50
29	Melita	Oxford	9.75
30	Melita	Wayne	4.43
31	Monroe	Monroe	55.45
32	Muldoon Mill	Monmouth	27.64
33	Noble	Avilla	13.85
34	Ossian	Baker	6.80
35	Parnell	Northcrest	5.33

36	Parnell	Summerfield	12.83
37	Pleasant	Yoder	44.73
38	Reed	Parker	6.77
39	Reed	Stellhorn	7.90
40	Saturn	Dunfee	10.84
41	Saturn	Laud	34.25
42	Sorenson	Vine Street	14.34
43	Sorenson	Redding Rd	11.39
44	South Berne	Geneva	24.36
45	South Decatur	Tyndall	9.42
46	Spring	Highland	5.54
47	Spy Run	Centlivre	3.33
48	Spy Run	Columbia	2.40
49	Spy Run	Delaware	7.61
50	Spy Run	Eastbrook	2.80
51	Spy Run	Goshen	13.72
52	Spy Run	Rumsey	8.39
53	State Street	Lahmeyer	8.31
54	Thomas Rd	Parkwest	5.17
55	Trier	Buckingham	1.20
56	Trier	Walden	5.29
57	Trier	West	23.47
58	Wallen	Irene Byron	9.44
59	Waynedale	Avalon	15.55
60	Waynedale	Covington	9.09
61	Wayne Trace	Meyer	18.92
62	Wayne Trace	Paulding	22.70
63	Blaine Street	North	9.2
64	Blaine Street	Heekin Park	3.7
65	Cross St	West (2)*	9.6
66	Daleville	Yorktown	16.1
67	Daleville	Daleville*	41.3
68	Deer Creek	West	26.1
69	Dooville	Commerce	1.7
70	Dooville	Hanfield	33.8
71	Dooville	Farrville	49.5
72	Elmridge	Hines Road	16.8
73	Elwood	Commercial	1.0
74	Farmland	Bears	75.9
75	Farmland	Plum	19.7
76	Gas City	Jonesboro	60.4

77	Grant	Sweetser	14.3
78	Grant	North 12kV	9.7
79	Haymond	Whitely	12.0
80	Hummel Creek	South	54.1
81	Jay	Milgrove	99.2
82	Jay	Redkey*	39.9
83	Jobes	E. Commercial	0.1
84	Jobes	C Commercial	0.2
85	Kenmore	Hospital	7.5
86	Kenmore	Briad Road	8.5
87	Kenmore	Euclid	6.1
88	Marion Plant	East	8.9
89	Mayfield	Waterworks	30.0
90	McGalliard	Mall	5.6
91	McGalliard	West	10.6
92	Mississinewa	River	1.3
93	Mississinewa	Raceway	9.6
94	Montpelier	Montpelier	9.6
95	Pennville	Pennville	78.6
96	Rock Creek	Buckeye	40.8
97	Rosehill	Rosehill	54.1
98	Selma Parker	Parker	64.5
99	South Elwood	Excello	10.4
100	South Side	East	16.9
101	South Side	Commercial	9.2
102	South Summitville	Goblins	39.6
103	South Summitville	Cleveland	29.0
104	Strawboard	Dodge Creek	55.8
105	Twenty-First Street	Hackley	4.0
106	Twenty-First Street	Arcadia	6.9
107	Utica	Forest Park	5.6
108	Conant	No 3	8
109	Darden	Douglas	17
110	Dunlap	River Manor	21.25
111	Dunlap	No 3	9.13
112	East Side	Park Jefferson	4.4
113	Elcona	No 2	2.02
114	Elkhart Hydro	No 2	3.6
115	Elkhart Hydro	No 1	10.28
116	German	Berlin	5.02
117	German	Hamburg	18.23

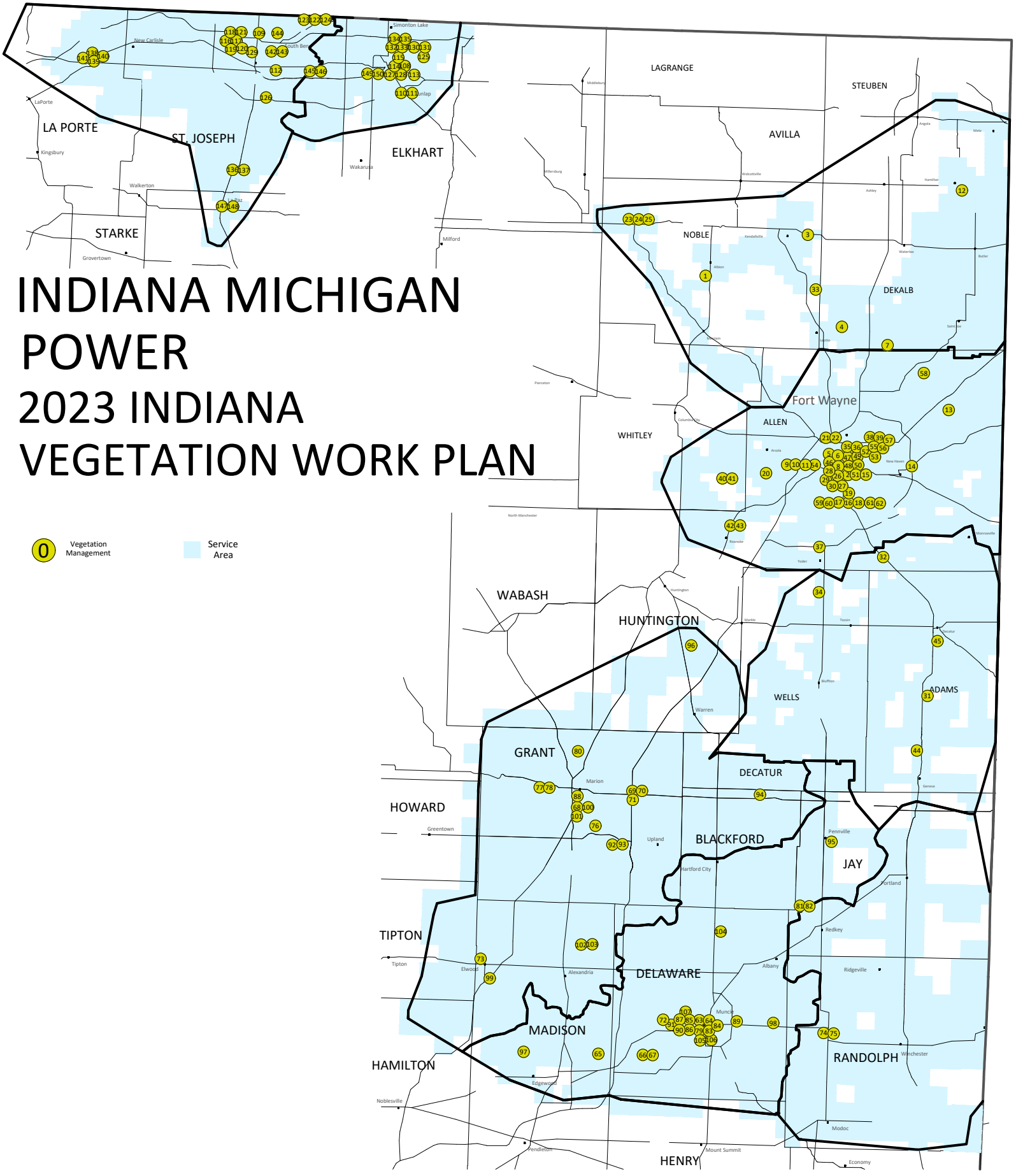
118	German	Audi	3.08
119	German	BMW	3.59
120	German	Munich	3.77
121	German	Porsche	8.76
122	Granger	No 1 (2)	3.9
123	Granger	No 4	10.14
124	Granger	No 1	6.1
125	Greenleaf	North	4.7
126	Ireland Road	No 3	3.8
127	Lusher Avenue	Woodland	5.9
128	Lusher Avenue	Railroad	7.01
129	Muessel	Portage	8.64
130	Northland	No 1	6
131	Northland	No 2	10
132	Osolo	No 1	7.67
133	Osolo	No 3	19.82
134	Osolo	No 5	8.92
135	Osolo	No 6	13.45
136	Quinn	Pleasant	31.84
137	Quinn	Lakeville	64.38
138	Silver Lake	Rolling Prairie (3)	7.4
139	Silver Lake	Rolling Prairie (2)	9.9
140	Silver Lake	Rolling Prairie (4)	9.9
141	Silver Lake	Rolling Prairie (5)	9.9
142	South Bend	No 3 (2)	7.7
143	South Bend	No 2	14.98
144	Swanson	No 1	26.01
145	Twin Branch	No 1	52.94
146	Twin Branch	No 3	27.53
147	Vintage	Lapaz	16.02
148	Vintage	Plymouth	14.27
149	Whitaker	Baugo	15.7
150	Whitaker	Moose	23.7
		Total	2533.92
	Estimated O&M	$15,375,000	
	Estimated Capital	$8,928,000	

Distribution Vegetation Management – 2024			
Map Reference Number	**STATION**	**CIRCUIT**	**CIRCUIT MILES**
1	Adams	Linn Grove	63.86
2	Anthony	Bowser	12.12
3	Aviation	Warthog	17.02
4	Aviation	Raptor	0.47
5	Aviation	Apache	3.28
6	Bixler	Industrial	0.74
7	Bixler	Grand Army	4.06
8	Bixler	Marion	1.40
9	Butler	City	56.49
10	Butler	West	53.70
11	Churubusco	Blue Lake	29.50
12	Colony Bay	Colony	5.47
13	Colony Bay	Inverness	7.90
14	Colony Bay	Medical Park	2.62
15	Decatur	Krick	11.73
16	Decatur	Root	27.43
17	Diebold Rd	Martin	2.17
18	Ferguson	Baer Field	3.06
19	Glenbrook	Ley Road	5.94
20	Glenbrook	Northrop	6.93
21	Hadley	Hickory Pointe	6.31
22	Hamilton	Factory	37.84
23	Harlan	Springfield	9.61
24	Harvest Park	Rail	4.38
25	Industrial Park	Harris	6.93
26	Industrial Park	Progress	2.86
27	Industrial Park	Summit	5.66
28	Industrial Park	Wells	8.60
29	IU-Purdue	College Park	10.41
30	IU-Purdue	Market Place	8.34
31	Kendallville	Central	7.15
32	Kendallville	Kraft	1.43
33	Liberty Center	Poneto	61.23
34	Ligonier	Kimmell	19.21
35	Lincoln	Hartzell	12.66
36	Lincoln	Maysville	22.47
37	Lincoln	Moeller	0.06

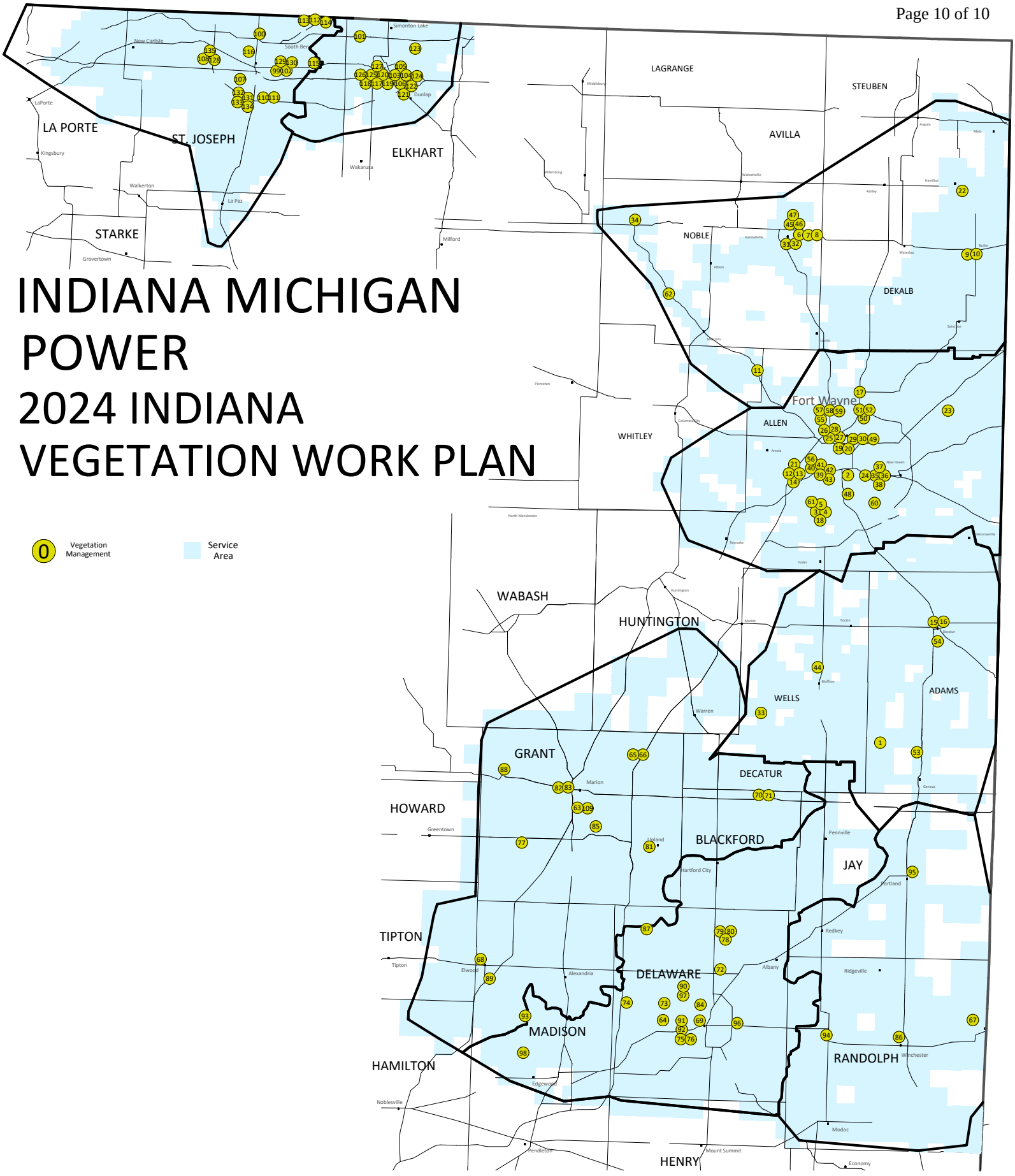
38	Lincoln	Parrott	16.17
39	McKinley	Ardmore	8.20
40	McKinley	Engle	11.90
41	McKinley	Hale	12.04
42	McKinley	Phenie	8.78
43	McKinley	Taylor	10.51
44	Murray	Murray	16.17
45	North Kendallville	Hospital	5.37
46	North Kendallville	Publix	12.83
47	North Kendallville	Village	21.22
48	Pettit	Belmont	13.98
49	Reed	Bohde	15.70
50	Robison Park	Auburn Road	9.28
51	Robison Park	Plaza	0.93
52	Robison Park	Dupont	22.72
53	South Berne	Forest Park	10.84
54	South Decatur	Gage	38.96
55	Summit	Innovation	1.04
56	Thomas	Bieneke	7.62
57	Wallen	Cook	6.73
58	Wallen	Honeywell	8.39
59	Wallen	Pine Valley	9.82
60	Wayne Trace	Stinson	20.54
61	Waynedale	Lakewood	19.58
62	Wolf Lake	Market	10.43
63	Deer Creek	North 12kV	9.3
64	Arnold Hogan	Cammack	22.7
65	Van Buren	Landess	26.0
66	Van Buren	Van Buren	45.4
67	Randolph	Sawmill	0.3
68	Elwood	Leisure	133.9
69	Haymond	Riverside	11.2
70	Montpelier	East	86.2
71	Montpelier	Roll	97.9
72	Royerton	Eden Church	44.1
73	Lantern Park	Nebo	7.1
74	Jones Creek	Killbuck	7.9
75	Fuson	Battery	0.8
76	Fuson	Mt Pleasant	0.7
77	Pipe Creek	Cole	74.5
78	Strawboard	Dodge Creek	55.8

79	Strawboard	Holdren	5.0
80	Strawboard	Klearwater	11.1
81	Upland	West 12kV	12.4
82	West End	South	11.6
83	West End	Joker	10.5
84	McGalliard	Morningstar	14.4
85	Gas City	E.-12KV	13.1
86	Winchester	Fountain	41.4
87	Gaston	Wheeling Pike	34.6
88	Mier	Sweetster	64.2
89	South Elwood	Dundee	46.8
90	Wes Del	Anthony	31.1
91	Utica	Nichols	2.5
92	Utica	Industrial Park	15.1
93	Linwood	Linwood	41.2
94	Farmland	Wildcat	14.1
95	Portland	East	26.0
96	Mayfield	Springwater	18.6
97	Wes Del	Dice Acres	15.1
98	Rosehill	Rosehill	54.1
99	East Side	Wilson	16.4
100	Darden	Auten Road	23.03
101	Cleveland	Park Forest	31.61
102	East Side	Ironwood	15.71
103	Lusher Avenue	No 1	14.95
104	Lusher Avenue	No 3	4.69
105	Lusher Avenue	No 4	7.01
106	Lusher Avenue	No 5	4.87
107	Kankakee	No 1	11.53
108	Lydick	Town	71.82
109	South Side	No 2	13.75
110	Ireland Rd	No 1	17.8
111	Ireland Rd	No 4	14.21
112	Granger	No 4	10.14
113	Granger	No 5	17.39
114	Granger	No 6	3.56
115	Capital Ave	Penn	18.68
116	Muessel	Brookfield	11.48
117	Concord	No 2	10.78
118	Concord	No 3	4.42
119	Concord	No 5	6.48

120	Concord	No 6	8.63
121	Dunlap	No 1	13.69
122	Dunlap	No 2	6.84
123	Northland	No 3	5.75
124	Elcona	No 3	28.61
125	Whitaker	No 5	14.87
126	Whitaker	No 6	17.07
127	Whitaker	No 9	10.83
128	Lydick	No 1	29.97
129	East Side	Adams	15.77
130	East Side	IUSB	1.91
131	Jackson Rd	Lafayette	15.52
132	Jackson Rd	Scottsdale	6.7
133	Jackson Rd	Michigan St	11.89
134	Jackson Rd	Roosevelt	26.08
135	Lydick	No 3	24.12
		Total	2536.33
	Estimated O&M	$15,377,000	
	Estimated Capital	$9,222,000	



INDIANA MICHIGAN POWER
2023 INDIANA VEGETATION WORK PLAN


LA PORTE
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AVILLA
NOBLE
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WHITLEY
ALLEN
Fort Wayne
WABASH
HUNTINGTON
WELLS
ADAMS
GRANT
DECATUR
HOWARD
BLACKFORD
JAY
TIPTON
DELAWARE
MADISON
RANDOLPH
HAMILTON
HENRY
Vegetation Management
Service Area

Asset Renewal Management Plan

Note that estimates are Class 3 estimates

Single Phase Line Rebuild 2023				
Map Reference Number	**Station**	**Circuit**	**Description**	**Miles**
1	German	Hamburg	Reconductor 4 CU with 2AA from JO0186000010 to JO0186000085	0.33
2	German	Hamburg	Reconductor 4 CU with 2AA from JO0186000085 to JO186000102	0.54
3	Marquette	Springville	Reconductor 4 AS with 2-#2AA from LP0211000188 to LP0211000201	0.63
4	Marquette	Springville	Install and reconfigure line from LP0232000025 to LP0211000188.	0.13
5	Three Oaks	Cannon	Reconductor 4 AS with 2-#2AA from LP0113000001 to LP0112000002.	1.43
6	Marquette	SR 39	Reconductor 4 AS with 2-#2AA from LP0146000013 to LP0146000036	1.04
7	County Road 4	Simonton Lake	Reconductor 4 AS with 2-#2AA Single Phase line from EL0126000199 to EL0126000272.	0.55
8	Marquette	Mc	Reconductor 4 AS with 2-#2AA from LP0206000020 to LP0184000002.	0.81
9	Darden	East	Reconductor 4 AS with 2-#2AA from JO0188000199 to JO0188000226. .	0.51
10	Gravel Pit	Slate	Reconductor 4AS with 2-2AA from JO0388000007 to JO0412000048 & JO0388000037.	1.00
11	Cleveland	Park Forest	Reconductor 4 AS with 2-#2AA from EL0122000129 to EL0122000053	0.72
12	Conant	No 3	Reconductor 4 AS and 4 CU with 2-2AA from EL0213000003 to EL0213000185.	0.44
13	Conant	No 3	Reconductor 4 AS and 4 CU with 2-#2AA from EL0212000006 to EL0212000068	0.33
14	East side	Ironwood	Reconductor .1 mi from JO0328000269 to JO0328000265	0.10
15	Silver Lake	LaPorte	Reconductor 4 AS and 4 CU with 2-#2AA from LP0327000012 to LP0349000007. Part 1	2.77
16	Silver Lake	Galena	Reconductor 4 AS with 2-#2AA from LP0129000054 to LP0131000024	1.97
17	Elcona	Country Club	Reconductor 4 AS with 2-#2AA from EL0257000037 to EL0278000016.	0.95
18	Silver Lake	Galena	Reconductor .37 mi from LP0173000029	0.37
19	East Side	Hastings	Reconductor mixed 4 Cu and As to 2-#2AA from JO0261000371 to JO0261000380	1.01
20	Butler	West	Replace 4CU & 6ACC with 2-#2AA from DK0259000020 to DK0302000154	1.42
21	Butler	West	Replace 4CU & 6ACC with 2-#2AA from DK0259000020 to DK0302000154	1.04

22	Hamilton	Hamilton	Reconductor single phase line. Replace 2-#2AS with 2-#2AA from DK0140000012 to DK0141000028	1.09
23	St. Joe	West	Replace 4AS with 2-#2AA from DK366-1 to DK345-6	1.11
24	Woods Road	North	Replace 5CU with 2-#2AA from NO484000031 to NO0460000057	1.17
25	Woods Road	North	Replace 6CU and 2CU with 2-#2AA from NO0484000031 to DK0417000031	1.82
26	Adams	Linn Grove	Replace #4 ACSR with 2#2AA from WE368-41 to WE388-29	1.50
27	Berne	Swiss	Replace 6CU with 2-#2AA from AD0372000029 to AD0373000035	1.26
28	Kingsland	Tocsin	Replace #5CU and #4AS with 2-#2AA from WE0194000016 to WE0195000124	1.12
29	Liberty Center	Poneto	Replace 4AS with 2-#2AA from WE364-12 to WE405-19	1.46
30	Liberty Center	Poneto	Replace WE381-50 to WE382-1	0.38
31	Liberty Center	Poneto	Replace WE382-4 to WE384-32	1.55
32	Limberlost	Tomato	Replace 4CU & 5CU with 2-#2AA from AD0423000031 - AD0426000097	1.42
33	Limberlost	Tomato	Replace 4CU & 5CU with 2-#2AA from AD0423000031 - AD0426000097	1.00
34	Limberlost	Tomato	Replace 4CU & 5CU with 2-#2AA from AD0423000031 - AD0426000097	1.00
35	South Decatur	Gage	Reconductor 2-4AS with 2-#2AA from AD0200000009 to AD0201000072	1.54
36	Anthony	McMillen	Replace 4CU with 2-#2AA from AL507-749 to AL507-310	0.07
37	Grabill	Page	Reconductor 4CU with 2-2#AA from AL0249000024 to AL0222000131 at Popp Road and Hardisty Road.	0.36
38	Harlan	Notestine	Replace 4AS with 2-#2AA from AL0229000109 to AL0233000021	1.24
39	Harper	Tanglewood	Replace #6ACC and #4CU with 2-#2AA from AL0453000124 to AL0482000248	0.42
40	Harper	Tanglewood	Replace #4AS and #2AS with 2-#2AA from AL0483000843 to AL0483000849	0.35
41	Harper	Tanglewood	Replace 2-#5CU with 2-#2AA from AL0454000063 to AL0454000081	0.25
42	Harper	Tanglewood	Replace #4CU and #2CU with 2-#2AA from AL0454000110 to AL0483000446	0.21
43	Melita	Wayne	REPLACE POLES AND WIRE FROM AL476-788 TO AL476-1706	0.11
44	Reed	Brookside	Replace 2-#2AS with 2-#2AA AL0335000566	0.47
45	Summit	Huguenard	Single phase rebuild from AL0267000001 - AL0296000011	0.17
46	Wayne Trace	Paulding	Single phase rebuild AL0508000099 - AL0508000104	0.94
47	Wayne Trace	Stinson	Replace 4AS, 5CU, & 6CU with 2-#2AA from AL596-96 to AL596-57	1.08
48	Waynedale	Avalon	Single phase rebuild from AL562-396 to AL562-349	0.50
49	Waynedale	Lakewood	Rebuild Line from AL532-301 to AL532-308	0.42
50	Waynedale	Lakewood	Single phase rebuild from AL532-173 to AL532-784 #2AL	0.27
51	Monroe	Monroe	Reconductor AD0307000011, AD0307000019	0.42

52	Harper	Minich	Replace 5CU & 6CU with 2-#2AA from AL572-53 to AL600-3	0.91
53	Waynedale	Lakewood	Replace 5CU & 6CU with 2-#2AA from AL532-795 to AL532-291	0.31
54	Wayne Trace	Paulding	Replace 4CU with 2-#2AA from AL536-266 to AL536-273	0.71
55	Adams	Linn Grove	Replace 2-#4AS with 2-#2AA from WE0348000065 to WE0349000056	1.00
56	Dean	Hackleman	Rebuild 1 Phase, replace 4AS and 6ACC W/2AA GR82-124 to GR82-104	1.00
57	Dean	Hackleman	Rebuild 1 Phase, replace 4AS and 6ACC W/2AA	1.00
58	South Elwood	Country Club	Replace 6A CC with 2AA GR82-104 to GR71-57	0.55
59	South Elwood	Country Club	Replace 4CU with 2AA TI70-412 to TI70-1	1.07
60	Daleville	Daleville	Replace 4AS with 2AA DE92-19 to DE92-16	0.89
61	Daleville	Daleville	Replace 4CU with 2AA DE91A3-102 to DE91A3-36	0.41
62	Winchester	Fountain Park	Replace 6CU and 4CU with 2AA RA51B4-23 to RA51B4-13	0.16
63	Winhester	Fountain Park	Replace 6CU with 2AA RA51B4-38 to RA51B4-273	0.13
64	Winchester	Fountain Park	Replace 4AS and 6CU with 2AA RA51B1-54 to RA51B1-56	0.07
65	McGalliard	Morningside	Rebuild 4CU and 6A CC to 2AA DE57A2-111 to DE57A2-20	0.55
66	McGalliard	Morningside	Rebuild 4CU and 6A CC to 2AA DE57A2-12 to DE57A2-3	0.25
67	McGalliard	Morningside	Rebuild 4CU and 6A CC to 2AA DE57A2-53 to DE57A2-47	0.14
68	McGalliard	Morningside	Rebuild 4CU to 2AA DE56C4-79 to DE56C4-93	0.25
69	McGalliard	Morningside	Rebuild 4CU to 2AA DE57A2-111 to DE56C4-12	0.16
70	McGalliard	Morningside	Rebuild 4CU to 2AA DE67A2-82 to DE56C4-8	0.13
71	Marion Plant	North	Replace 4AS with 2AA GR29-83 to GR40-169	0.68
72	Upland	North	Replace 4AS with 2AA GR65-204 to GR66-97	1.14
73	Upland	North	Replace 6CU and 4CU with 2AA GR76C3-50 to GR76C3-31	0.54
74	Upland	North	Replace 6A CC, 4CU and 4AS with 2AA GR76C3-4 to GR66-40	1.72
75	Pennville	Pennville	Rebuild 1 Phase, Replace 4CU with 2AA JA0057000216 to JA0058000063	1.01
76	Pennville	Pennville	Rebuild 1 Phase, Replace 4CU with 2AA JA0058000063 to JA0058000035	0.92
77	Pennville	Pennville	Rebuild 1 Phase, Replace 4CU with 2AA JA0058000035 to JA0059000033	0.99
78	Pennville	Pennville	Rebuild 1 Phase, Replace 4CU with 2AA JA0059000033 to JA0059000001	0.77
79	Montpelier	Roll	Replace 4AS with 2AA,BL3-294 to WE86-68	1.00
80	Montpelier	Roll	Replace 4AS with 2AA, WE86-68 to WE87-154	0.98
81	Hummel Creek	South	Replace 4AS and 4CU with 2AA GR7-27 to HU89-4	1.07
82	Hummel Creek	South	Replace 4CU and 6A CC with 2AA HU89-4 to HU89-1	1.07
83	Peacock	Summitville	Replace 4AS with 2AA MA6-50 to MA7-142	1.17
84	Peacock	Summitville	Replace 4AS with 2AA MA7-142 to MA7-184	0.47

85	Peacock	Summitville	Replace 4CU and 4AS with 2AA MA7-195 to MA7-208	0.74
86	Peacock	Summitville	Rebuild 4AS and 4CU to 2AA MA7-17 to MA8-49	2.26
87	Peacock	Summitville	Rebuild 4AS and 4CU to 2AA MA15A2-8 to MA15A2-12	0.13
			Total	69.2
			Estimated Labor Cost	$7,147,107
			Estimated Material Cost	$1,067,959
			Estimated Total Capital	$8,215,066

Single Phase Line Rebuild 2024				
Map Reference Number	**Station**	**Circuit**	**Description**	**Miles**
1	Marquette	SR39	Reconductor 4CU with 2-2AA from LP0125000157 to LP0127000009. W 1000 N, East of St Rd 39.	1.47
2	Swanson	No 2	Reconductor 4 AS with 2-#2AA from JO0117000001 to CA0604000028	0.51
3	Gravel Pit	Marble	Reconductor 4AS with 2AA from JO0343000003 to JO0343000133	0.40
4	Lydick	Town	Reconductor mixed 4 AS, 6 CU, and 6 AA with 2-#2AA from JO0298000020 to JO0320000015	0.81
5	Swanson	No 2	Reconductor mixed 4 AS and 4 CU with 2-#2AA from JO0140000060 to JO0140000097	0.29
6	South Side	Wildcat	Reconductor 4 Cu to 2-2 AA from JO0305000863 to JO0306000775	0.35
7	South Side	Wildcat	Reconductor 4 Cu to 2-2 AA from JO0327000309 to JO0327000339	0.53
8	TWIN BRANCH	NO 1	Reconductor 4 AS & 4 Cu to 2-2 AA from JO0292000007 to JO0291000172	0.81
9	East Side	Adams	Reconductor 4 Cu to 2-2 AA from JO0260000391 to JO0260000628	0.42
10	East Side	Adams	Reconductor 4 AS to 2-2 AA from JO0306000469 to JO0306000507	0.34
11	Pine Road	South	Reconductor 4 Cu to 2-2 AA from JO0231000018 to JO0231000360	0.29
12	Pine Road	South	Reconductor 4 Cu to 2-2 AA from JO0231000287 to JO0231000316	0.51
13	East Side	Adams	Reconductor 4 Cu to 2-2 AA from JO0260000441 to JO0260001019	0.20
14	South Side	Wildcat	Reconductor 4 Cu to 2-2 AA from JO0305000889 to JO0305000899	0.20
15	Elkhart Hydro	Gym	Reconductor 6 Cu to 2-2 AA from EL0189000371 to EL0189000753	0.85
16	Beech Road	McKinley	Reconductor 4 AS to 2- 2 AA from JO0243000198 to JO0243000295	0.85
17	Beech Road	McKinley	Reconductor 4 AS to 2-2 AA from JO0243000057 to JO0243000236	0.22
18	Conant	No 3	Reconductor 4 AS with 2-#2AA from EL0212000156 to EL0212000257	0.29

19	Marquette	MC	Reconductor 4 AS with 2-#2AA from LP0185000087 to LP0185000031.	0.31
20	Lydick	Town	Reconductor 4 AS and 4 CU with 2-#2AA from JO0229000001 to JO0204000130.	0.22
21	Lusher Avenue	Warrior	Reconductor 4 AS with 2-#2AA from EL0253000031 to EL0253000525	0.35
22	Lusher Avenue	Warrior	Reconductor 4 AS with 2-#2AA from EL0252000324 to EL0252000329	0.48
23	West Side	No 1	Reconductor 4 AS with 2-#2AA from JO0232000104 to JO0232000537	0.11
24	West Side	No 1	Reconductor 4 AS with 2-#2AA from JO0232000102 to JO0232000546	0.19
25	West Side	No 1	Reconductor 4 AS with 2-#2AA from JO0232000109 to JO0232000590	0.23
26	Osolo	No 5	Reconductor 4 AS with 2-#2AA from EL0191000444 to EL0191000460	0.23
27	Ireland Road	No 1	Reconductor 4 AS with 2-#2AA from JO0353000032 to JO0354000021	0.96
28	Osolo	No 5	Reconductor mixed 4 AS and CU with 2-#2AA from EL0190000288 to EL0190000662	0.64
29	New Carlisle	Hudson	Reconductor 4 AS and 4 CU with 2-#2AA from LP0176000204 to LP0175000328	3.60
30	Countryside	Homestead	Reconductor 4 AS with 2-#2AA from EL0317000221 to EL0317000014	0.63
31	Countryside	Homestead	Reconductor 4 AS with 2-#2AA from EL0317000016 to EL0337000036	0.75
32	Countryside	Homestead	Reconductor 4 Cu with 2-#2AA from EL0318000033 to EL0318000098	0.55
33	Northland	No 5	Reconductor 4 AS with 2-#2AA from EL0133000003 to EL0112000024	0.33
34	Vintage	Lapaz	Reconductor 4 Cu with 2-#2AA from JO0556000046 to MR0111000007	0.90
35	Vintage	Lapaz	Reconductor 4 AS & 4 Cu with 2-#2AA from MR0133000023 to MR0156000026	1.67
36	Northland	No 5	Reconductor 4 AS with 2-#2AA from EL0151000401 to EL0151000025	0.44
37	East Side	Wilson	Replace 4 CU with 2-#2AA from JO0236000201 to JO0236000257	0.20
38	East Side	Wilson	Reconductor 4 Cu with 2-#2AA from JO0236000204 to JO0236000260	0.36
39	East Side	Wilson	Reconductor mixed 4 AS and CU with 2-#2AA from JO0236000409 to JO0236000425	1.09
40	Capital Avenue	Penn	Reconductor mixed 4 Cu and As from JO0240000027 to JO0240000060	0.98
41	Northland	No 5	Reconductor AS with 2-#2AA from EL0134000010 to EL0134000005	0.84
42	Darden Road	North 12kV	Reconductor mixed 4 AS and CU with 2-#2AA from JO0115000174 to JO0115000121	0.66
43	Capital Avenue	Penn	Reconductor 4 Cu from JO0265000153 to JO0265000171	1.45
44	Kankakee	Sample	Reconductor 4 CU with 2-#2AA from JO0256000726 to JO0256000716	0.19
45	Northland	No 5	Reconductor 4 AS with 2-#2AA from EL0133000001 to EL0112000030	0.41

46	Northland	No 5	Reconductor 4 AS with 2-#2AA from EL0110000011 to EL0110000001.	0.50
47	Northland	No 5	Reconductor 4 AS with 2-#2AA from EL0193000201 to EL0193000342.	0.15
48	Northland	No 5	Reconductor 4 AS with 2-#2AA from EL0175000129 to EL0154000006	0.49
49	Northland	No 5	Reconductor 4 CU with 2-#2AA from EL0151000164 to EL0151000077	0.30
50	Darden Road	North 12kV	Reconductor 4 AS with 2-#2AA from JO0115000333 to JO0115000465	0.89
51	County Line	Dekalb	[1] Multiphase 2PH to 3PH 4-2AA from DK0403000102 to DK0382000096	0.58
52	County Line	Dekalb	[2] Replace 4-2AA with 3-556AL & 1-4/0AA from DK0465000011 to DK0466000104	0.53
53	Hamilton	Factory	Replace3-4/0AA & 1-1/0AA with 4-2AA from ST0429000063 to ST0429000071	0.09
54	Kendallville	Publix	[1] Replace 300CU, 4/0CU, 2CU, & 3/0AA with 3-556AL & 1-4/0AA from NO241-1306 to NO241-263	0.92
55	Kendallville	Publix	[2] Replace 0.31 miles of 4-6CU with 4-2AA from NO241-176 to NO241-177	0.31
56	St. Joe	East	[2] Reconductor 4/0 AA and 1/00 AA with 4-#2AA from DK0411000186 to DK0411000119	0.29
57	St. Joe	East	[1] Reconductor 4/0 AA and 1/0 AA with 4-#2AA from DK0410000209 to DK0432000060	0.54
58	St. Joe	West	Reconductor 4-4CU with 4-2AA from AL0120000005 to AL0119000018	0.27
59	St. Joe	West	Reconductor 4-4CU & 4-6ACC with 3-556AL & 1-4/0AA from DK0472000157 to DK0470000029	1.46
60	Adams	Vera Cruz	Multiphase 2PH to 3PH 3-556AL & 1-4/0AA from WE0291000111 to WE0320000079	2.00
61	Ossian	Lafever	Replace 0.49 miles of 3-2CU & 1-101AS with 3-556AL & 1-4/0AA from WE151-21 to WE151-94	0.49
62	Hadley	Flaugh	Reconductor and Multiphase 4 AS and 4-4 CU with 4-#2AA from AL0357000011 to AL0357000010	0.13
63	Harlan	Thimler	[1] Replace 3-4/0AS & 1-101AS with 3-556AL & 1-4/0AA from AL0175000065 to AL0176000002	1.05
64	Harlan	Thimler	[2] Replace 4/0AS & 101AS with 3-556AL & 1-4/0AA from AL0176000002 to AL0122000001	1.16
65	Milan	Warrior	Reconductor 4AS and 2AS with 4-2AA from AL0372000254 to AL0372000234	0.83
66	Liberty Center	Poneto	Replace 5CU & 6CU with 2AA from WE0321000077 to WE0307000001	1.07
67	Arnold Hogan	Cammack	Replace 4 CU with 2AA DE0064C20368 to DE0064C20872	0.59
68	Strawboard	Dodge Creek	Replace 2-6A CC with 2-2AA DE6-93 to DE7-32	0.99
69	Strawboard	Dodge Creek	Replace 2-6A CC with 2-2AA DE7-32 to DE7-51	0.71
70	Strawboard	Dodge Creek	Replace 2-6A CC with 2-2AA DE7-51 to DE8-50	0.89
71	Strawboard	Dodge Creek	Replace 2-6A CC with 2-2AA DE8-50 to DE8-60	0.54
72	Strawboard	Klearwater	Replace 2-4 CU with 2-2AA DE26-169 to DE27-128	1.12
73	Strawboard	Klearwater	Replace 2-4 AS with 2-2AA DE27-110 to DE28-22	1.04
74	McGalliard	Morningside	Replace 2-4 CU with 2-2AA DE57A1-68 to DE57A1-42	0.54

75	Jay	Redkey	Replace 2-4 CU with 2-2AA JA82-44 to JA82-86,	0.82
76	Jay	Redkey	Replace 2-4 CU with 2-2AAJA82-69 to JA83-18	0.56
77	Jay	Redkey	Replace 2-4 CU with 2-2AA JA83-18 to JA83-50	1.00
78	Elwood	Leisure	Replace 2-6A CC with 2-2AA MA10-286 to TI30-40	1.05
79	Elwood	Leisure	Replace 2-6A CC and 4AS with 2-2AA TI30-40 to TI30-99	1.01
80	Upland	South	GR0077000250 to GR0088000103, 6A CC to 2AA	1.36
81	Linwood	Linwood	Rebuild as single phase MA0062000365 to MA0054D20085, 4CU to 2AA	0.22
82	Portland	Commercial	JA0061000075 to JA0061C40013, 4AS to 2AA	0.31
83	Montpelier	Roll	Rebuild BL3-119 to WE87-154 4AS to 2AA	1.98
84	Montpelier	Roll	Rebuild BL2-232 to BL2-166, 4AS to 2AA	0.93
85	Montpelier	Roll	Rebuild BL1-50 to WE84-87, 4AS to 2AA	1.13
86	Elmridge	Hines Road	Rebuild 6A CC & 4AS with 2AA DE0075B20003 - DE0074000091	0.74
			Total	59.7
			Estimated Labor Cost	$ 6,561,845
			Estimated Material Cost	$ 980,506
			Estimated Total Capital	$ 7,542,350

Three Phase Line Rebuild 2023				
Map Reference Number	**Station**	**Circuit**	**Description**	**Miles**
1	Conant	No 3	Reconductor 4 AS and 4 CU with 4-#2AA from EL0213000052 to EL0193000054	0.67
2	Northland	No 5	Reconductor mixed 4 AS and 2 AA with 4-#2AA from EL0173000030 to EL0175000112.	1.50
3	Gravel Pit	Slate	Reconductor mixed 4 AS, 4 CU and 2 AA with 556 AL from JO0387000169 to JO0410000145	0.77
4	Gravel Pit	Slate	Reconductor mixed 4 AS, 4 CU and 2 AA with 556 AL from JO0387000169 to JO0410000145	0.73
5	Countryside	Homestead	Reconductor 4 AS with 556 AL from EL0274000034 to EL0295000082.	0.51
6	Conant	No 3	Reconductor 4 CU with 4-#2AA from EL0212000026 to EL0212000025	0.68
7	Vintage	Lapaz	Reconductor 4 AS with 4-#2AA from MR0131000105 to MR0132000042	0.80
8	Darden Road	Douglas	Reconductor 4 AS and 4 CU with 556 AL fromJO0212000534 to JO0212000143.	0.29
9	Lydick	Town	Reconductor 4 Cu to 4-2AA from JO0298000013 to JO0319000009	0.96
10	Marquette	Springville	Reconductor 4 AS with 4-556 AL from LP0148000017 to LP0149000100. Part 2	0.46

11	Marquette	Springville	Reconductor 4 AS with 4-556 AL from LP0148000017 to LP0149000100. Part 1	0.53
12	Whitaker	Moose	Reconductor 4 Cu to 4-2AA from EL0248000068 to EL0248000087	0.70
13	Marquette	Springville	Reconductor 4 AS with 4-#2AA from LP0208000024 to LP0208000062	0.34
14	Cleveland	Park Forest	Reconductor 4 AS to 4 - 2 AA from EL0144000015 to EL0143000029	0.03
15	Whitaker	Moose	Reconductor 4 CU with 4-#2AA from JO0314000003 to JO0314000062.	0.97
16	Silver Lake	Wirekraft	Reconductor 4 Cu with 4- 2AA from LP0237000006 to LP0258000047	0.13
17	South Bend	No 1	Reconductor #4 CU to 556 AL from JO0212000133 to JO0212000127	0.17
18	Elcona	Country Club	Reconductor 4 Cu to 2 AA from EL0234000219 to EL0234000223	0.12
19	Vintage	Lapaz	Reconductor 4 AS with 4-#2AA from MR0133000001 to MR0133000023.	0.70
20	Marquette	Springville	Reconductor 4 AS with 4-#2AA from LP0231000001 to LP0231000049	0.31
21	Dunlap	No 3	Reconductor mixed 4 AS and 2 AA with 4-#2AA from EL0276000026 to EL0297000464.	0.49
22	East Side	Adams	Reconductor 4 Cu to 4 - 2 AA from JO0284000257 to JO0284000243	0.31
23	Pine Road	South	Reconductor 4 AS with 4-#2AA from JO0156000021 to JO0132000010.	1.07
24	Marquette	Toll Rd	Reconductor 4AS with 4-#2AA from LP0228000075 to LP0228000072	0.93
25	Butler	West	Reconductor 1/0AS & 4CU with 3-556AL & 1-4/0AA from DK0263000022 to DK0200000023	0.95
26	Churubusco	Blue Lake	Reconductor 6CU, 4CU, & 2AL with #2AA from WH0166000180 to WH0166000190	0.12
27	North Kendallville	Village	Reconductor 6CU & 2AS with 4-#2AA from NO0241000829 to NO0241000881	0.45
28	Kingsland	Uniondale	Reconductor 4CU, 3-2CU, 1-5CU, & 6CU with 3-556 AL & 1-4/0 AA from WE0177000019 to WE0175000047	1.30
29	Kingsland	Uniondale	Reconductor 4CU, 3-2CU, 1-5CU, & 6CU with 3-556 AL & 1-4/0 AA from WE0177000019 to WE0175000047	0.63
30	Liberty Center	Poneto	Rebuild WE0346000109 to WE0346000020	0.15
31	Pleasant	Yoder	Reconductor 336AL & 4/0AA with 3-556AL & 1-4/0AA from AL0678000023 to AL0679000104	1.06
32	Anthony	McMillen	Rebuild from AL0477001340 - AL0506000568	0.31
33	Anthony	Wallace	Replace 556AL Spacer Cable with 556AL 3PH from AL0477001396 to AL0447001351	0.76
34	Harlan	Notestine	Rebuild AL0285000001 to AL0343000086	1.03
35	Harper	Tanglewood	Reconductor 4CU, 2CU, & 2AS with 4-#2AA from AL0483001049 to AL0483000071	0.30
36	Milan	Bull Rapids	Replace 3-336AL, 3-4/0AA, 4CU, and 6CU with 3-556AL and 1-4/0AA from AL404-183 to AL376-2	0.62
37	Berne	Swiss	Reconductor 6CU & 5CU with 2AA from AD0372000003 to AD0372000029	0.77

38	Liberty Center	Poneto	Part 1 of 2 - Reconductor 2-6CU & 2-2AS with 3-556 AL & 1-4/0 AA from WE0346000109 to WE0346000020	0.75
39	Summit	Huguenard	Reconductor 2PH 4CU & 2AS with 4-2AA from AL0297000097 to AL0297000523	0.77
40	Fairmount	West 8th	Replace 6A CC and 4 AS with 2AA GR80-14 to GR91-19	1.53
41	Randolph	Commercial	Replace 4CU with 2AA RA44D4-266 to RA44D3-192	0.25
42	Daleville	Daleville	Replace 4AS with 556AL DE91A3-131 to DE92A1-31	0.46
43	Daleville	Daleville	Replace 6CU with 2AA DE81B4-3 to DE82B2-128	0.16
44	Perch	Fairview	Replace 4CU with 2AA DE30D1-18 to DE30D1-78	0.17
45	Dean	Hackleman	Rebuild 4AS to 2AA GR91-30 to GR103-45	1.00
46	Dean	Hackleman	Rebuild 2-6A CC, 4AS and 4CU to 2AA	0.62
47	Lynn	Lynn	Replace 4CU with 2AA GR103-45 to GR103-70	0.69
48	Lynn	Lynn	Replace 4AS with 2AA RA85-155 to RA84-58	0.18
49	Lynn	Lynn	Replace 4CU with 2AA RA96D2-44 to RA96D2-50	0.47
50	Lynn	Lynn	Replace 4CU and 4AS with 2AA RA107C1-11 to RA107C1-52	2.51
51	McGalliard	Morningside	Rebuild 4CU to 2AA DE56C4-35 to DE56C4-74	0.43
52	Upland	North	Replace 4CU with 2AA GR76C1-27 to GR76C3-41	0.63
53	Upland	North	Replace 4CU with 2AA GR76C2-133 to GR76C4-53	0.13
54	Upland	North	Replace 4CU with 2AA GR76C2-194 to GR76C2-30	0.09
55	Jay	Redkey	Replace 4CU with 2AA JA81A4-32 to JA81A4-43	0.12
56	Jay	Redkey	Replace 4CU and 6CU with 2AA JA81A4-27 to JA81B3-15	0.20
57	Royerton	Riggin	Replace 4AS with 2AA DE57A1-242 to DE57A1-112	0.37
58	Royerton	Riggin	Replace 4AS with 2AA DE46-215 to DE46-239	0.08
59	Hummel Creek	South	Replace 4CU with 2AA GR17-54 - GR17-48	0.19
60	Mier	Sweetster	Replace 4CU and 4AS with 2AA GR3-28 to GR3-1	1.52
61	Mayfield	Waterworks	Rebuild 2-4CU, 1-2AA and 1-4AS to 4-2AA DE68-234 to DE 68-214	0.53
62	Van Buren	Van Buren	Replace 4 CU and 6 CU with 556 AL GR21C1-53 to GR21C1-30	0.24
			Total	36.7
			Estimated Labor Cost	$ 8,336,179
			Estimated Material Cost	$ 2,084,045
			Estimated Total Capital	$ 10,420,224

Three Phase Line Rebuild 2024				
Map Reference Number	**Station**	**Circuit**	**Description**	**Miles**
1	Quinn	Pleasant	Reconductor mixed 4 AS and 2 AA with 4-#2AA from JO0482000032 to JO0504000039.	2.03
2	Cleveland	Park Forest	Reconductor 4 AS with 4-#2AA from EL0143000095 to EL0122000056	0.49
3	Darden	Douglas	Reconductor 4 AS with 4-#2AA from JO0211000055 to JO0211000125.	0.27
4	South Side	Wildcat	Reconductor 4 Cu to 4-2 AA from JO0305000201 to JO0283000946	0.28
5	Colfax	No 1	Reconductor mixed 4 Cu & 2 AA to 4-2AA from JO0235000454 to JO0235000569	0.40
6	Elkhart Hydro	Gym	Reconductor mixed 4 AS and 2AA to 4-2AA from EL0190000120 to EL0190000112	0.18
7	Twin Branch	No 1	Reconductor mixed 4 Cu and 2 AA to 4-2 AA from JO0291000120 to JO0313000011	1.10
8	Gravel Pit	Slate	Reconductor 4 CU with 556 AL from JO0344000038 to JO0366000017.	2.88
9	Marquette	Toll Rd	Reconductor 4 AS with 4-#2AA from LP0228000076 to LP0229000042.	0.28
10	Lusher Avenue	Warrior	Reconductor 4 CU to 4-2 AA from EL0231000391 to EL0231000105	0.31
11	Concord	No 2	Reconductor 4 CU to 4-2 AA from EL0231000001 to EL0231000013	0.25
12	Jackson Road	Michigan Street	Reconductor 4 As to 2-#2AA from JO0327000951 to JO0327000929	0.15
13	Quinn	Pleasant	Reconductor 4 As to 2-#2AA from JO0507000024 to JO0483000092	2.16
14	Jackson Road	Michigan Street	Reconductor 4 Cu to 2-#2AA from JO0305000058 to JO0305000824	0.22
15	Darden Road	Douglas	Reconductor 4 Cu to 4-2AA from JO0187000530 to JO0187000339	0.51
16	Kankakee	Sample	Reconductor 4-4 CU to 4-2 AA from JO0280000149 to JO0280000158	0.20
17	Darden Road	North	Reconductor JO0115000150 to JO0115000038. Replace 4-4 AS with 4-#2AA.	0.51
18	Twin Branch	No 3	Reconductor JO0375000050 to JO0375000084. Replace 4-4 AS with 4-#2AA	0.39
19	East Side	Wilson	Reconductor JO0260000023 to JO0260000177. Replace 4-4 CU with 4-#2AA	0.30
20	Lusher Avenue	Hart	Reconductor 4 Cu to 2-#2AA from EL0232000121 to EL0232000130	0.18
21	County Line	Dekalb	Multiphase 2PH to 3PH 4-2AA from DK0403000102 to DK0382000096	0.58
22	County Line	Dekalb	Replace 4-2AA with 3-556AL & 1-4/0AA from DK0465000011 to DK0466000104	0.53
23	Hamilton	Factory	Reconductor 3-4/0AA & 1-1/0AA with 4-2AA from ST0429000063 to ST0429000071	0.09
24	Kendallville	Publix	Replace 300CU, 4/0CU, 2CU, & 3/0AA with 3-556AL & 1-4/0AA from NO241-1306 to NO241-263	0.92
25	Kendallville	Publix	Replace 0.31 miles of 4-6CU with 4-2AA from NO241-176 to NO241-177 & NO241-1594	0.31
26	St. Joe	East	Reconductor 4/0 AA and 1/00 AA with 4-#2AA from DK0411000186 to DK0411000119	0.29
27	St. Joe	East	Reconductor 4/0 AA and 1/0 AA with 4-#2AA from DK0410000209 to DK0432000060	0.54

28	St. Joe	West	Reconductor 4-4CU with 4-2AA from AL0120000005 to AL0119000018	0.27
29	St. Joe	West	Reconductor 4-4CU & 4-6ACC with 3-556AL & 1-4/0AA from DK0472000157 to DK0470000029	1.46
30	Adams	Vera Cruz	Multiphase 2PH to 3PH 3-556AL & 1-4/0AA from WE0291000111 to WE0320000079	2.00
31	Ossian	Lafever	Replace 3-2CU & 1-1/0 AS with 3-556AL & 1-4/0AA from WE151-21 to WE151-94	0.49
32	Hadley	Flaugh	Reconductor 4 AS and 4-4 CU with 4-#2AA from AL0357000011 to AL0357000010	0.13
33	Harlan	Thimler	[1] Replace 3-4/0AS & 1/0 AS with 3-556AL & 1-4/0AA from AL0175000065 to AL0176000002	1.05
34	Harlan	Thimler	[2] Replace 4/0AS & 1/0 AS with 3-556AL & 1-4/0AA from AL0176000002 to AL0122000001	1.16
35	Milan	Warrior	Reconductor 4AS and 2AS with 4-2AA from AL0372000254 to AL0372000234	0.83
36	Wayne Trace	Paulding	Rebuild from AL0508000092 - AL0508000275	0.28
37	Wayne Trace	Paulding	Replace 4CU & 4AS with 2-#2AA AL0537000680 - AL0536000308	0.54
38	Cross Street	Moonville	Replace 4AS with 556 AL, DE0051000095 to DE0051000199	0.71
39	Cross Street	Moonville	Replace 4AS with 556 AL, MA56-1 to DE51-95	1.08
40	Elwood	Leisure	Replace 4/0 CU and 4CU with 2AA, MA0025A40196 to MA0025A30034	0.38
41	Elwood	Leisure	Replace 4CU with 2AA, MA0025A40139 to MA0025A40389	0.19
42	Elwood	Leisure	Replace 4CU with 2AA, MA0026A10028 to MA0026A10072	0.18
43	Elwood	Leisure	Replace 4CU with 2AA, MA0025A30017 to MA0025A40124	0.12
44	Elwood	Leisure	Replace 4CU with 2AA, MA0025A20039 to MA0025A20081	0.14
45	Fairmount	Fowlerton	Replace 4CU with 2AA, GR0096D10044 to GR0096D10030	0.17
46	Lynn	Lynn	Replace 4CU with 2AA, RA0096000040 to RA0097000047	2.25
47	Portland	East	Rebuild 2 Ph to 3 Ph, JA63-63 to JA76-158	5.60
48	South Elwood	Country Club	Rebuild 3 Phase, replace 4AS and 4CU W/2AA MA33-40 to MA33-26	0.51
49	Daleville	Daleville	Replace 4AS with 2AA DE72-157 to DE72-238	0.30
			Total	36.2
			Estimated Labor Cost	$ 8,747,073
			Estimated Material Cost	$ 2,186,768
			Estimated Total Capital	$ 10,933,842

Circuit Ties 2023				
Map Reference Number	**Station**	**Circuit**	**Description**	**Miles**
1	Ireland Road	No 3	Reconductor to 556 AL from JO0372000020 to JO0394000002. Part 1	0.30
2	Ireland Road	No 3	Reconductor to 556 AL from JO0394000002 to JO0394000033. Part 2	1.04
3	Ireland Road	No 3	Reconductor to 556 AL from JO0394000034 to JO0417000047. Part 3	0.77
4	Ireland Road	No 3	Reconductor to 556 AL from JO0417000089 to JO0440000059 . Part 4	0.34
5	Lydick	Ardmore	Reconductor 4 CU with 556 AL from JO0231000343 to JO0207000133	0.52
6	Kankakee	Prairie	Reconductor 4 CU with 556 AL from JO0282001646 to JO0282000010	0.27
7	East Side	Ironwood	Reconductor 4/0 CU with 556 AL from JO0285000039 to JO0284001940	0.33
8	Hamilton	Factory	Rebuild 3-556 AL DK0137000080 - DK0200000023	3.10
9	Spring Street	Tower	AL0416000469 - AL0416000653	0.67
10	Spy Run	Elizabeth	Reconductor 4-2AA with 3-556AL & 1-4/0AA from AL0418000873 to AL0418000867	0.05
11	Dooville	Farrville	3-556 AL WITH A 4/0 AA NEUTRAL. REMOVE EXISTING 3 PHASE. GR0032000136	1.33
12	Pipe Creek	Cole	Rebuild 3 Phase, 4AS to 556AL, GR0100000058 to GR0101000089	1.10
13	Pipe Creek	Cole	Rebuild 3 phase to 556AL GR79-152 to GR89-120	3.00
14	Pipe Creek	Cole	Rebuild 3 Phase, 4AS to 556AL,GR0101000089 to GR0102000044	1.06
15	Dean	Hackleman	Rebuild 3 Phase, 4AS to 556AL, GR0102000044 to GR0091000134	1.01
16	Dean	Hackleman	Rebuild 3 Phase, 4AS to 556AL, GR0091000134 to GR0092000135	1.00
17	Dean	Hackleman	Rebuild 3 Phase, 4AS to 556AL, GR0091000030 to GR0091000100	0.58
18	Van Buren	Landess	Reconductor 4/0AS with 556AL GR20-248 to GR20-85	1.40
			Total	17.9
			Estimated Labor Cost	$ 3,683,890
			Estimated Material Cost	$ 1,362,535
			Estimated Total Capital	$ 5,046,424

Circuit Ties 2024				
Map Reference Number	**Station**	**Circuit**	**Description**	**Miles**
1	Kankakee	Olive	Reconductor 2/0 Cu to 556 AL from JO0303000039 to JO0304000218	1.43
2	Conant	No 1	Reconductor 3/0 & 4/0 AS to 556 AL from EL0212000754 to EL0212000325	0.53
3	Studebaker	Hawk	Reconductor 4 CU to 556 AL from JO0282000008 to JO0257000199	1.22

4	East Side	Adams	Reconductor to 556 AL from JO0260000423 to JO0284000233.	0.93
5	Conant	No 1	Reconductor 3/0 & 4/0 Cu to 556 AL from EL0212000325 to EL0212000134	0.37
6	Kankakee	Sample	Reconductor 4/0 CU to 556 AL from JO0257000182 to JO0257000215	0.60
7	Beech Road	Bittersweet	Reconductor 4/0 CU to 556 AL from JO0242000175 to JO0218000089	0.62
8	Granger	No 4	Reconductor 4/0 CU to 556 AL from JO0218000254 to JO0170000012	1.70
9	Colfax	No 1	Reconductor 4/0 CU to 556 AL from JO0235000397 to JO0211000049	1.97
10	Studebaker	Hawk	Reconductor 4/0 CU & AA from JO0257001942 to JO0282000008	1.89
11	St. Joe	East	Create a new tie with Harlan - Thimler with 556AL: from pole AL0122000001 to AL0122000073	0.50
12	St. Joe	East	Reconductor 2AA to 556AL for new tie point, from Pole DK0473000062 to AL0122000073	0.75
13	Harlan	Springfield	Rebuild 1 phase to 3 phase 556AL: pole AL0255000247 to AL0255000178	0.41
14	Harper	Minich	Rebuild 2PH to 3PH from Pole AL0570000041 to AL0542000146	0.80
15	Harper	Minich	Rebuild 2PH to 3PH from AL0542000146 to AL0542000076	0.35
16	Wayne Trace	Meyer	Reconductor 1/0 to 556AL from Pole AL0538000068 to AL0538000134	0.10
17	Cross Street	Chesterfield	Reconductor 1/0AA and 2CU to 556AL. MA80A4-18 to MA80C3-352	1.15
18	Elwood	Wilkie	Rebuild MA0024A40031 to MA002B30127 to 556	0.62
19	South Elwood	Country Club	Rebuild AL0025B30062 to MA0025B30127 to 556	0.28
20	Elwood	East	Rebuild and extend 3-phase 556 MA0026C00131 to MA0026D20009	0.74
21	South Elwood	Dundee	Rebuild and extend 3-phase 556 MA0026D20009 to MA0026D20171	0.40
22	Aladdin	Tiger	Rebuild line to 556AL from MA38A4-7 to MA38C1-8	0.67
23	Aladdin	Fairview	Replace 1/0CU and 4/0AA with 556AL MA29D2-74 to MA30B2-80	1.00
24	Montpelier	Roll	Replace 2AA and 4AS with 556AL BL10-21 to BL10-120,	0.98
			Total	20
			Estimated Labor Cost	$ 4,388,431
			Estimated Material Cost	$ 1,623,118
			Estimated Total Capital	$ 6,011,549

Voltage Conversion 2023				
Map Reference Number	**Station**	**Circuit**	**Description**	**Miles**
1	McClure	West Commercial	Convert 4KV to 12KV. GR39A4-109 to GR39B3-151	0.49
2	McClure	East Commercial	Convert from 4kV to 12kV GR38C4-92 to GR39A2-162	0.50
			Total	0.99
			Estimated Labor Cost	$ 258,848
			Estimated Material Cost	$ 95,738
			Estimated Total Capital	$ 354,586

Voltage Conversion 2024				
Map Reference Number	**Station**	**Circuit**	**Description**	**Miles**
1	Miller Avenue	North	Station to GR38C1-3	0.95
			Total	0.95
			Estimated Labor Cost	$ 262,703
			Estimated Material Cost	$ 97,164
			Estimated Total Capital	$ 359,867

Sectionalizing 2023				
Map Reference Number	**Station**	**Circuit**	**Description**	**Units**
1	Lydick	Town	Review and modify sectionalizing on circuit	1
2	Lydick	Country Club	Review and modify sectionalizing on circuit	1
3	South Bend	No 3	Review and modify sectionalizing on circuit	1
4	Northland	No 2	Review and modify sectionalizing on circuit	1
5	Northland	No 5	Review and modify sectionalizing on circuit	1
6	Beech Road	Dunn	Review and modify sectionalizing on circuit	1
7	Lydick	Ardmore	Review and modify sectionalizing on circuit	1
8	Milan	Bull Rapids	Review and modify sectionalizing on circuit	1
9	Spring Street	Tower	Review and modify sectionalizing on circuit	1
10	Spy Run	Goshen	Review and modify sectionalizing on circuit	1
11	MAYFIELD	WATERWORKS	Review and modify sectionalizing on circuit	1
12	MAYFIELD	WATERWORKS	Review and modify sectionalizing on circuit	1
13	Montpelier	East	Review and modify sectionalizing on circuit	1
14	Daleville	East	Review and modify sectionalizing on circuit	1
15	Lantern Park	East	Review and modify sectionalizing on circuit	1
16	Randolph	Jackson	Review and modify sectionalizing on circuit	1
17	McGalliard	Morningside	Review and modify sectionalizing on circuit	1
18	Upland	North	Review and modify sectionalizing on circuit	1

Total	18
Estimated Labor Cost	$ 161,677
Estimated Material Cost	$ 168,276
Estimated Total Capital	$ 329,953

Sectionalizing 2024				
Map Reference Number	**Station**	**Circuit**	**Description**	**Units**
1	East Side	Hastings	Review and modify sectionalizing on circuit	1
2	East Side	Park Jefferson	Review and modify sectionalizing on circuit	1
3	East Side	Wilson	Review and modify sectionalizing on circuit	1
4	Northland	No 6	Review and modify sectionalizing on circuit	1
5	Dunlap	No 4	Review and modify sectionalizing on circuit	1
6	West Side	No 2	Review and modify sectionalizing on circuit	1
7	West Side	No 5	Review and modify sectionalizing on circuit	1
8	West Side	No 4	Review and modify sectionalizing on circuit	1
9	Ligonier	Cavin Street	Review and modify sectionalizing on circuit	1
10	Pettit	Vernon	Review and modify sectionalizing on circuit	1
11	County Line	Dekalb	Review and modify sectionalizing on circuit	1
12	Blaine Street	Beacon	Review and modify sectionalizing on circuit	1
13	Blaine Street	Grant Street	Review and modify sectionalizing on circuit	1
14	Blaine Street	North	Review and modify sectionalizing on circuit	1
15	Blaine Street	Mock	Review and modify sectionalizing on circuit	1
16	Blaine Street	Heekin Park	Review and modify sectionalizing on circuit	1
17	Blaine Street	Luick Avenue	Review and modify sectionalizing on circuit	1
			Total	17
			Estimated Labor Cost	$ 161,079
			Estimated Material Cost	$ 167,653
			Estimated Total Capital	$ 328,732

Recloser Replacement 2023				
Map Reference Number	**Station**	**Circuit**	**Description**	**Units**
1	Drewry's	Wilber	JO0209000203 Replace 2-140 V4L	2
2	Silver Lake	Galena	LP0173000256 Replace 1-140 V4L	1
3	Silver Lake	Laporte	LP0257000050 Replace 1-140 V4L	1
4	Silver Lake	Laporte	LP0327000037 Replace 1-70 V4H	1
5	Capital Avenue	Penn	JO0243000118 - Replace 1-100 V4L	1
6	County Road 4	Garver Lake	EL0125000046 Replace 1-140 V4L	1
7	Butler	West	3 Phase V4L DK0242000058	3

8	County Line	Dekalb	3 Phase V4L DK0444000068	3
9	Tri-Lakes	Shriner	WH0123000059 Replace 1-70 V4L	3
10	Monroe	Monroe	AD0273000002 Replace 1-100 V4L	3
11	South Decatur	West	AD0212000040 Install 3PH Viper	3
12	Fulton	Bloomingdale	AL0447001474 Install new recloser	3
13	Wabash Ave	South	BL0029000066 Replace 1-100 V4L	1
14	Hartford City	Central	Replace 1-100 V4L BL0025-247	1
15	Daleville	Daleville	Replace 2-100 V4L DE0081B4-13	2
16	Strawboard	Dodge Creek	Replace 1-140 V4L DE0017C20199	1
17	Strawboard	Dodge Creek	Replace 1-140 V4L DE0017C2-7	1
18	Upland	North	Replace 1-70 V4H GR0043-155	1
19	Royerton	Riggin	Replace 2-100 V4H DE0039-309	2
20	Mayfield	Springwater	Replace 2-200 V4L DE0067A4-50	2
21	Selman Parker	Wapahani	Replace 1-100 V4H DE009-34	1
22	Selma Parker	Wapahani	Replace 1-100 V4H DE0099-17	1
			Total	38
			Estimated Labor Cost	$ 68,125
			Estimated Material Cost	$ 241,536
			Estimated Total Capital	$ 309,661

Recloser Replacement 2024				
Map Reference Number	**Station**	**Circuit**	**Description**	**Units**
1	Twin Branch	No 2	Replace 2-140 V4L JO0266000335	2
2	East Side	Park Jefferson	Replace 1-100 V4L JO0261000012	1
3	Cleveland	Memorial	Replace 1-140 V4L EL0164000282	1
4	Osolo	No 3	Replace 1-140 V4L EL0148000052	1
5	Lydick	Ardmore	Replace 1-140 V4L JO0206000027	1
6	Darden Road	Lilac	Replace 1-100 V4L JO0162000056	1
7	Darden Road	Lilac	Replace 1-100 V4L JO0162000058	1
8	Jackson Road	Roosevelt Road	Replace 1-100 V4L JO0348000079	1
9	Lydick	Town	Replace 1-200 V4L JO0228000002	1
10	Pine Road	South	Replace 1-100 V4L JO0182000106	1
11	St. Joe	West	Replace reclosers at DK0430000004	3
12	Adams	Vera Cruz	Replace reclosers at WE0282000018	3
13	Pleasant	Yoder	Replace reclosers at AL0765000021	3
14	Colony Bay	Dicke	Replace recloser at AL0529000442	1
15	Royerton	Eden Church	Replace 1-70 L DE0027000159	1
16	Marion Plant	North	Replace 2-140 V4L GR0029000317	1
17	Montpelier	Roll	Replace 1-100 V4H BL0004000056	1
18	Farmland	Wildcat	Replace 1-70 V4H RA0036000065	1

19	Linwood	Frankton	Replace 1-50 V4H MA0049000002	1
20	Linwood	Frankton	Replace 1-50 V4H MA0050000076	1
21	Gas City	East	Replace 1-140 V4L GR0063000398	1
22	Strawboard	Dodge Creek	Replace 1-140 V4L DE0017B30047	1
23	Strawboard	Dodge Creek	Replace 1-100 V4H DE0007000005	1
24	Wes Del	Dice Acres	Replace 1-140 V4L DE0045D40316	1
25	Anchor Hocking	Island	Replace 1-140 V4L RA0051000754	1
26	Montpelier	Roll	Replace 1-70 V4H BL0002000208	1
27	Royerton	Riggin	Replace 1-70 V4H DE0048000338	1
28	Jay	Mill Grove	Replace 1-70 V4H BL0034000087	1
29	Upland	South	Replace 1-100 V4L GR0076000397	1
30	Daleville	Daleville	Replace 1-100 V4L DE0082B30187	1
			Total	37
			Estimated Labor Cost	$ 71,486
			Estimated Material Cost	$ 253,449
			Estimated Total Capital	$ 324,935

Capacitor Replacement 2023				
Map Reference Number	**Station**	**Circuit**	**Description**	**Units**
1	German	Audi	JO018400206 Replace 900 KVAR SW	1
2	Lydick	Town	JO0298000085 Replace 450 KVAR SW	1
3	Jackson Road	Scottsdale	JO0328000249	1
4	Kankakee	Olive	JO0281000108 Replace 900 KVAR SW	1
5	Ireland	No 3	JO0350000004 Replace 900 KVAR SW	1
6	Kankakee	Sample	JO0256001030 Replace 600 KVAR SW	1
7	Countryside	Jimtown	EL0271000271 Replace 450 KVAR FX	1
8	Whitaker	Rail	EL0250000275 Replace 900 KVAR SW	1
9	Ireland Road	No 1	JO0373000090 Replace 450 KVAR FX	1
10	Ireland Road	No 1	JO0350000658 Replace 450 KVAR SW	1
11	Melita	Oxford	AL0476001452- Replace 900 KVAR SW	1
12	Milan	Bull Rapids	AL0375000229- Replace 450 KVAR	1
13	Milan	Warrior	AL0372000172- Replace 450 KVAR SW	1
14	Wayne Trace	Paulding	AL0507000729- Replace 900 KVAR SW	1
15	Hogan	Cammack	Replace 450 KVAR SW DE0064A-82	1
16	Selma Parker	Parker	Replace 900 KVAR SW RA0023000073	1
17	Grant	North	Replace 900 KVAR SW GR0027B4-24	1
18	Grant	North	Replace 900 KVAR SW GR0027D30112	1
19	Haymond	Riverside	Replace 900 KVAR SW DE0066A3-49	1
20	Wabash Ave	South	Replace 450 KVAR SW BL0037-127	1
21	Aladdin	Yule	Replace 450 KVAR SW MA0038-54	1
			Total	21

Estimated Labor Cost	$ 74,682
Estimated Material Cost	$ 298,727
Estimated Total Capital	$ 373,409

Capacitor Replacement 2024				
Map Reference Number	**Station**	**Circuit**	**Description**	**Units**
1	Marquette	SR39	LP0166000046 Replace 900 KVAR SW	1
2	Gravel Pit	Granite	JO0323000014 Remove 450 KVAR SW	1
3	Gravel Pit	Granite	JO0322000066 Replace 450 KVAR FX	1
4	Gravel Pit	Slate	JO0366000104 Replace 900 KVAR SW	1
5	Kankakee	Prairie	JO0282000242 Replace 450 KVAR FX	1
6	Clevleand	Park Forest	JO0291000143 Replace 450 KVAR SW	1
7	New Carlisle	Trail	JO0173000104 Replace 900 KVAR SW	1
8	Northland	No 3	EL0171000131 Replace 450 KVAR FX	1
9	Northland	No 1	EL0171000001 Replace 900 kVAr FX	1
10	Osolo	No 2	EL0169000011 Replace 450 kVAr FX	1
11	Bixler	Grand Army	NO0243000393- Replace 900 KVAR SW	1
12	Churubusco	Blue Lake	WH0166000542- Replace 450 KVAR SW	1
13	Colony Bay	Copper Hill	AL0470000236- Replace 900 KVAR SW	1
14	Arnold Hogan	River Road	DE0063D30022 Replace 450 KVAR F	1
15	Jay	Millgrove	JA0067D30041 Replace 900 KVAR F	1
16	McGalliard	Wheeling Pike	DE0056A20059 Replace 900 KVAR SW	1
17	South Elwood	Dundee	MA0026B40243 Replace 900 KVAR SW	1
18	Utica	Meadows	DE0066B30019 Replace 450 KVAR SW	1
19	Randolph	Commercial	RA0044D40190 Replace 900 KVAR SW	1
20	Cross Street	Moonville	MA0056000052 Replace 450 KVAR SW	1
21	Montpelier	Roll	BL0003000264 Replace 450 KVAR SW	1
			Total	21
			Estimated Labor Cost	$ 78,772
			Estimated Material Cost	$ 315,088
			Estimated Total Capital	$ 393,860

Porcelain Cutout & Arrester Replacement 2023			
Station	Circuit	Description	Units
Various - Muncie	Various	Replace porcelain cutouts and arresters	2950
Various - Ft. Wayne	Various	Replace porcelain cutouts and arresters	1742
Various - S. Bend	Various	Replace porcelain cutouts and arresters	4377
		Total	9,069
		Estimated Labor Cost	$ 2,367,378
		Estimated Material Cost	$ 667,722
		Estimated Total Capital	$ 3,035,100

Porcelain Cutout & Arrester Replacement 2024			
Station	Circuit	Description	Units
Various - Muncie	Various	Replace porcelain cutouts and arresters	3,296
Various - Ft. Wayne	Various	Replace porcelain cutouts and arresters	2,125
Various - S. Bend	Various	Replace porcelain cutouts and arresters	3,644
		Total	9,065
		Estimated Labor Cost	$ 2,536,157
		Estimated Material Cost	$ 715,326
		Estimated Total Capital	$ 3,251,483

Crossarm Replacement 2023			
Station	Circuit	Description	Units
Various - Muncie	Various	Replace deteriorated crossarms and insulators identified from the overhead inspection program	614
Various - Ft. Wayne	Various	Replace deteriorated crossarms and insulators identified from the overhead inspection program	745
Various - S. Bend	Various	Replace deteriorated crossarms and insulators identified from the overhead inspection program	84
		Total	1443
		Estimated Labor Cost	$ 2,409,878
		Estimated Material Cost	$ 565,280
		Estimated Total Capital	$ 2,975,158

Crossarm Replacement 2024			
Station	Circuit	Description	Units
Various - Muncie	Various	Replace open wire secondary with twisted tri-plex secondary conductor	351
Various - Ft. Wayne	Various	Replace open wire secondary with twisted tri-plex secondary conductor	306
Various - S. Bend	Various	Replace open wire secondary with twisted tri-plex secondary conductor	362
		Total	1,019
		Estimated Labor Cost	$ 1,863,384

Estimated Material Cost	$ 437,090
Estimated Total Capital	$ 2,300,474

Open Wire Secondary Replacement 2023			
Station	Circuit	Description	Miles
Various - Muncie	Various	Replace open wire secondary with twisted tri-plex secondary conductor	7.22
Various - Ft. Wayne	Various	Replace open wire secondary with twisted tri-plex secondary conductor	7.22
Various - S. Bend	Various	Replace open wire secondary with twisted tri-plex secondary conductor	7.22
		Total	22
		Estimated Labor Cost	$ 1,396,623
		Estimated Material Cost	$ 820,239
		Estimated Total Capital	$ 2,216,862

Open Wire Secondary Replacement 2024			
Station	Circuit	Description	Miles
Various - Muncie	Various	Replace open wire secondary with twisted tri-plex secondary conductor	8.55
Various - Ft. Wayne	Various	Replace open wire secondary with twisted tri-plex secondary conductor	8.55
Various - S. Bend	Various	Replace open wire secondary with twisted tri-plex secondary conductor	8.55
		Total	26
		Estimated Labor Cost	$ 1,759,985
		Estimated Material Cost	$ 1,033,642
		Estimated Total Capital	$ 2,793,627

Pole Replacement 2023			
Station	Circuit	Description	Units
Various - Muncie	Various	Replace deteriorated poles identified from the pole inspection program	427
Various - Ft. Wayne	Various	Replace deteriorated poles identified from the pole inspection program	515
Various - S. Bend	Various	Replace deteriorated poles identified from the pole inspection program	458
		Total	1,400
		Estimated Labor Cost	$ 4,982,147
		Estimated Material Cost	$ 1,093,642
		Estimated Total Capital	$ 6,075,789

Pole Replacement 2024			
Station	Circuit	Description	Units
Various - Muncie	Various	Replace deteriorated poles identified from the pole inspection program	654
Various - Ft. Wayne	Various	Replace deteriorated poles identified from the pole inspection program	424
Various - S. Bend	Various	Replace deteriorated poles identified from the pole inspection program	327
		Total	1,405
		Estimated Labor Cost	$ 5,295,352
		Estimated Material Cost	$ 1,162,394
		Estimated Total Capital	$ 6,457,746

URD Cable Replacement 2023				
Map Reference Number	Station	Circuit	Description	Miles
1	Northland	No 5	Replace cable from UGR EL0110-34 to EL0110-6	0.07
2	Swanson	No 3	UGR JO0166000077 to UGR JO0166000079	0.18
3	Darden Road	Auten	UGR JO0137000252 to JO0137000254	0.24
4	Silver Lake	Galena	UGR LP0214000041 to padmount LP0214000042	0.08
5	Ireland Road	No 3	UGR JO0350000494 to JO0350000496	0.05
6	Lydick	Ardmore	UGR JO0231000337 to JO0230000363	0.20
7	Darden Road	Auten	UGR JO0138000307 to UGR JO0138000295	0.21
8	Ireland Road	No 3	UGR JO0350000173 to JO0350000176	0.44
9	Lydick	Ardmore	UGR JO0207000489 to UGR JO0207000492	0.02
10	Jackson	Lafayette	UGR JO0303000219 to padmount JO0303009001	0.06
11	Ireland Road	No 3	UGR JO0328001001 to JO0328001002	0.49
12	Countryside	Bent Oak	UGR EL0273000181 to padmount EL0273000183	0.70
13	County Road 4	Simonton Lake	UGR EL0126000355 to UGR EL0126000522	0.96
14	Dunlap	No 3	UGR EL0297000498 to EL0297000492	0.06
15	Capital Avenue	Currant Road	JO0216000054 radial	0.15
16	Hamilton	Hamilton	Replace cable from ST389-195 TO ST389-81	0.12
17	North Kendallville	Village	Replace cable from NO0194-7 to NO0194-11	0.19
18	Colony Bay	Colony	UGR from Riser AL0500000451 to AL0501000619	0.04
19	Hacienda	Maplewood	Replace cable from AL0394-119 to AL0394-434	0.12
20	Hacienda	Maplewood	Replace cable from Riser AL394-53 to AL394-786	0.80
21	Indiana- Purdue University	Canterbury #4	Replace LF Xfmr AL0362000115 with Deadfront	0.04
22	Indiana- Purdue University	Chiller #1/IUPU #1	Replace LF Xfmr AL0362000225 with Deadfront	0.04
23	Industrial Park	Summit	Replace UGR from Riser AL359-743 to AL359=742	0.05
24	Parnell	Northcrest	Replace UGR from Riser AL361=90 to AL361=921	0.03
25	Parnell	University	Replace UGR from Riser AL391=763 to AL391-526	0.05
26	Reed	Bohde	Replace URD from AL335-920 TO AL335-921	0.86

27	Reed	Brookside	Replace UGR from AL334-689 to AL334-382	0.10
28	Robison Park	Auburn Road	Replace cable from AL332/850 to AL303/299	1.18
29	State Street	Brentwood	Replace UGR from AL422-454 to AL422-459	0.02
30	Thomas Road	Apple Glen	Replace cable from AL473-589 to AL473-592	0.04
31	Thomas Road	Parkwest	Replace UGR from AL444-156 to AL473=661	0.17
32	Trier	Walden	Replace LF Xfmr AL0423000902 with Deadfront	0.04
33	Farmland	Bears	Replace cable from RA46-24 to RA46-367	0.19
34	Randolph	Commercial	Replace cable from DA51A1-182 to DA51A1-196	0.07
35	Lantern Park	Nebo	S/Bethel & W/350W	0.02
36	Wes Del	Farmington	Replace cable from DE45B2-24 to DE45B2-27	0.05
37	Randolph	Commercial	Replace cable from DA51A1-182 DA51A1-196	0.07
38	Randolph	Commercial	Replace cable at DA51A1-182	0.01
39	McClure	East Commercial	Replace cable from GR39A4-27 to GR39A4-613	0.01
40	Anchor Hocking	Race	Replace cable from RA52B1-3 to RA52B1-48	0.04
41	Utica	Memorial	Replace cable from DE75A3-63 to DE75A3-77	0.19
42	Utica	Memorial	Replace cable at DE75A3-63	1.00
43	Wabash Ave	North	Riser cable at BL23D3-114	1.00
44	Wabash Ave	North	Replace cable from BL23D3-114 to BL23D3-146	0.65
45	Kenmore	Euclid	Replace cable from DE45B4-116 to DE45B4-119	0.06
46	Royerton	Eden Church	Replace cable from DE18-120 to DE18-121	0.17
47	Royerton	Eden Church	Replace cable at pole DE0018000120	0.01
48	Linwood	Linwood	Replace cable from MA54D1-11 to MA54D1-59	0.60
49	Wabash	North	Replace cable from BL23C4-10 to BL23D3-179	0.17
50	Kenmore	Euclid	Replace cable from DE55A4-5 to DE55A4-739	0.56
51	Kenmore	Euclid	Replace cable at DE45B4-116	0.06
52	Wabash	North	Replace cable from BL23D3-316 to BL23D3-276	0.25
53	Wabash Ave	South	Replace cable from BL30-426 to BL30-161	0.06
54	Wes Del	Farmington	Replace cable from DE45D2-11 to DE45D2-24	0.34
55	Wes Del	Farmington	Replace cable from DE44-321 to DE44-322	0.61
56	Arnold Hogan	Cammack	Replace cable from DE64A1045 to DE64A-1149	0.19
57	Royerton	Riggin	Replace cable at DE37-398	0.16
58	Anchor Hocking	Race	Replace cable from RA51D4-74 to RA51D4-78	0.09
59	Hogan	Brindle Road	Replace cable from DE74C2-78 to DE74C2-79	0.06
60	Daleville	East	Replace cable from DE85A3-128 to DE85A3-68	0.16
61	Arnold Hogan	Cammack	Replace cable from DE64A0-490 to DE64A0-1183	0.37
62	Utica	Forest Park	Replace cable from DE65D2-247 to DE65D2-163	0.73
63	Utica	Forest Park	Replace Livefront Transformer DE0065D20164	0.00
64	Winchester	Fountain Park	Replace cable from RA51B4-513 to RA51B4-357	0.07
65	Modoc	Modoc	Replace cable from RA102A3-56 to RA102A3-57	0.16
66	Jay	Redkey	Replace cable from JA7-71 to JA7-219	0.08

67	Jay	Redkey	Replace cable from JA69-177 to JA69-178	0.46
68	Mier	Sweetster	Replace cable from GR25D4-38 to GR25D4-44	0.37
69	Mier	Sweetster	Replace cable from GR25-361 to GR25-360	0.11
70	Mayfield	Waterworks	Replace cable from DE77A3-293 to DE77A3-275	0.25
71	Hummel Creek	West	Replace cable from GR16B1-7 to GR16B1-5	0.15
72	Hummel Creek	West	Replace cable from GR16B3-69 to GR16B1-5	0.07
73	Hummel Creek	West	Replace cable from GR16B3-15 to 21	0.29
74	Hummel Creek	West	Replace cable from GR16B3-24 to 27	0.06
75	Hummel Creek	West	Replace cable from GR16D2-36 to GR16-496	0.30
76	Hummel Creek	West	Replace cable from GR16-498 to GR16-496	0.10
77	McGalliard	West	Replace cable from DE55D3-76 to DE55C3-141	0.06
78	McGalliard	West	Riser cable at DE0055D30076	1.00
79	West End	Joker	Replace cable at GR39A1-562 to GR39A1-565	0.08
80	West End	Joker	Replace cable from GR39A1-548 to GR39A1-579	0.37
81	Marion Ethanol	Montpelier	Replace cable from BL0005D1-62 to BL0005D1-163	0.17
82	Cross Street	Chesterfield	Replace cable from MA72D4-67 to MA72D4-22	0.24
83	Cross Street	Chesterfield	Install cable from MA72D4-5 to MA72D4-34	0.83
			Total	21
			Estimated Labor Cost	$ 5,308,473
			Estimated Material Cost	$ 723,883
			Estimated Total Capital	$ 6,032,356

URD Cable Replacement 2024				
Map Reference Number	**Station**	**Circuit**	**Description**	**Miles**
1	East Side	Wilson	Replace cable at JO0260001194	0.02
2	East Side	Wilson	Replace cable at JO0260001140	0.09
3	Granger	No 4	Replace cable from JO0146-509 to JO0146-317	0.61
4	Granger	No 4	Replace cable from JO0146-319 to JO0170-69	0.81
5	Granger	No 1	Replace cable from JO0146-20 to JO0146-21	0.53
6	Granger	No 1	Replace cable from JO0146-593 to JO0146-266	0.34
7	Granger	No 1	Replace cable from JO0147-206 to JO0147-44	1.83
8	Jackson Road	Scottsdale	Replace cable at JO0327001531	0.07
9	Jackson Road	Roosevelt Road	Replace cable at JO0391000172	0.07
10	Jackson Road	Scottsdale	Replace cable from JO0349-621 to JO0349-656	0.21
11	Jackson Road	Scottsdale	Replace cable at JO0327000913	0.13
12	Jackson Road	Roosevelt Road	Replace cable at JO0369000168	0.03
13	Jackson Road	Roosevelt Road	Replace cable at JO0347000077	0.11
14	Jackson Road	Roosevelt Road	Replace cable at JO0391000101	0.19
15	Capital Avenue	Currant Rd	Replace cable at JO0216000372	0.25

16	Capital Avenue	Currant Rd	Replace cable at JO0216000273	0.10
17	Capital Avenue	Currant Rd	Replace cable from JO0216-230 to JO0216-231	1.30
18	Northland	No 6	Replace cable at EL0171000414	0.24
19	Northland	No 6	Replace cable at EL0171000416	0.17
20	Dunlap	No 2	Replace cable at EL0274000109	0.06
21	Dunlap	No 2	Replace cable at EL0274000110	0.23
22	Dunlap	No 2	Replace cable at EL0274000296	0.04
23	Dunlap	No 2	Replace cable at EL0274000263	0.06
24	Dunlap	No 2	Replace cable at EL0274000241	0.08
25	Dunlap	No 1	Replace cable from EL0253-931 to EL0253-929	0.13
26	East Side	Park Jefferson	Replace cable from JO0261-1233 to JO0261-1234	0.06
27	Ireland Road	No 1	Replace cable from JO0350-522 to JO0350-546	0.53
28	East Side	IUSB	Replace cable from JO0261-226 to JO0261-222	0.38
29	East Side	Adams	Replace cable from JO0260-424 to JO0260-1233	0.05
30	Northland	No. 6	Replace cable from EL0192-59 to EL0192-58	0.43
31	Albion	City	Replace cable from NO0305-244 to NO0305-177	0.04
32	Albion	City	Repl cable from NO0305-244 to NO0305-177 pt 2	0.00
33	Kendallville	Park	Replace cable from NO0265-505 to NO0265-397	1.10
34	Kendallville	Park	Replace cable from NO0265-521 to NO0265-140	0.31
35	Ligonier	Cavin Street	Replace cable from NO0176-137 to NO0176-139	0.48
36	North Kendallville	Village	Replace cable from NO0242-120 to NO0242-244	1.06
37	North Kendallville	Village	Replace cable from AL0361-679 to AL0361-791	0.46
38	Ossian	Mill	Replace cable from WE0137-22 to WE0137-21	0.85
39	Hacienda	Arlington	Replace cable from AL0366-466 to AL0366-463	1.36
40	Hillcrest	Southtown #1	Replace cable from AL0593-306 to AL0593-368	0.43
41	Illinois Road	Covington	Replace cable from AL0469-94 to AL0498-1	0.56
42	Indiana- Purdue University	Marketplace	Replace cable from AL0361-642 to AL0362-286	1.15
43	Indiana- Purdue University	Marketplace	Replace cable from AL0361-4 to AL0362-286	0.76
44	Lincoln	Maysville	Replace cable from AL0421-1152 to AL0421-1151	0.69
45	Lincoln	Maysville	Replace cable from AL0422-308 to AL0422-862	0.65
46	Lincoln	Parrott	Replace cable from AL0482-1204 to AL0482-848	0.40
47	Parnell	Coliseum	Replace cable from AL0361-865 to AL0362-396	0.68
48	Parnell	Coliseum	Replace cable from AL0361-620 to A0361-677	0.59
49	State Street	Trier	Replace cable from AL0422-438 to AL0422-812	0.10
50	Trier	Buckingham	Replace cable from AL0422-700 to AL0422-699	0.79
51	Trier	Buckingham	Replace cable from AL0393-726 to AL0393-731	0.65
52	Trier	Buckingham	Replace cable from AL0393-734 to AL0393-733	0.81
53	Reed	Parker	Replace cable from AL0334-599 to AL0334-612	1.02
54	Lincoln	Parrott	Replace cable from AL0482-1204 to AL0482-848	0.40
55	South Berne	Geneva	Replace cable from AD0426-568 to AD0426-666	1.31
56	Industrial Park	Summit	Replace cable from AL0331-517 to AL0331-441	1.55
57	Hummel Creek	West	Replace cable from GR5-110 to GR5-369	0.32

58	Hummel Creek	West	Replace cable from GR5-273 to GR5-367	0.24
59	Hummel Creek	West	Replace cable from GR4D2-3 to GR4D2-4	0.06
60	Cross Street	Chesterfield	Replace cable from MA72D4-3 to MA72D4-54	0.43
61	Cross Street	Chesterfield	Replace cable from MA72D4-34 to MA72D4-72	0.38
62	Cross Street	Chesterfield	Replace cable from MA72D4-21 to MA72D4-37	0.46
63	Elwood	Leisure	Replace cable from TI19-26 to TI19-27	0.14
64	Elwood	Leisure	Replace cable from MA2-315 to MA2-316	0.05
65	Elwood	Leisure	Replace cable from TI50-230 to TI50-231	0.10
66	Elwood	Leisure	Replace cable from TI40-172 to TI40-173	0.06
67	Elwood	Leisure	Replace cable from MA18-219 to MA18-220	0.09
68	Elwood	Leisure	Replace cable from MA18-213 to MA18-221	0.07
69	Gas City	Jonesboro	Replace cable from GR61-799 to GR60-378	0.15
70	Gas City	Jonesboro	Replace cable from GR60-399 to GR60-400	0.32
71	Gas City	Jonesboro	Replace cable from GR61-183 to GR61-851	0.05
72	Gas City	Jonesboro	Replace cable from GR61-279 to GR61-837	0.11
73	Gas City	Jonesboro	Replace cable from GR61D4-48 to GR61D4-50	0.16
74	Gas City	Jonesboro	Replace cable from GR61D4-63 to GR61D4-64	0.06
75	Gas City	Jonesboro	Replace cable from GR73A1-246 to GR74A1-274	0.03
76	Gas City	Jonesboro	Replace cable from GR72C2-9 to GR72C2-24	0.24
77	Gas City	Jonesboro	Replace cable from GR72C2-43 to GRR72C2-44	0.05
78	Gas City	Jonesboro	Replace cable from GR73-408 to GR73-409	0.07
79	Gas City	Jonesboro	Replace cable from GR73-374 to GR73-424	0.11
80	Gas City	Jonesboro	Replace cable from GR72C4-18 to GR72C4-33	0.13
81	Gas City	Jonesboro	Replace cable from GR72-358 to GR72-359	0.06
82	Gas City	Jonesboro	Replace cable from GR73-17 to GR73-418	0.06
83	Gas City	Jonesboro	Replace cable from GR73-410 to GR73-411	0.11
84	Gas City	Jonesboro	Replace cable from GR73-420 to GR73-419	0.15
85	Gas City	Jonesboro	Replace cable from GR73-415 to GR73-416	0.26
86	Gas City	Jonesboro	Replace cable from GR72-327 to GR72-360	0.06
87	Gas City	Jonesboro	Replace cable from GR61-847 to GR61-848	0.18
88	Gas City	Jonesboro	Replace cable from GR61C1-9 to GR61C1-12	0.28
89	Hogan	Brindle Road	Replace cable from DE63D4-412 to DE63D4-392	0.19
			Total	32.58
			Estimated Labor Cost	$ 8,746,767
			Estimated Material Cost	$ 1,192,741
			Estimated Total Capital	$ 9,939,508

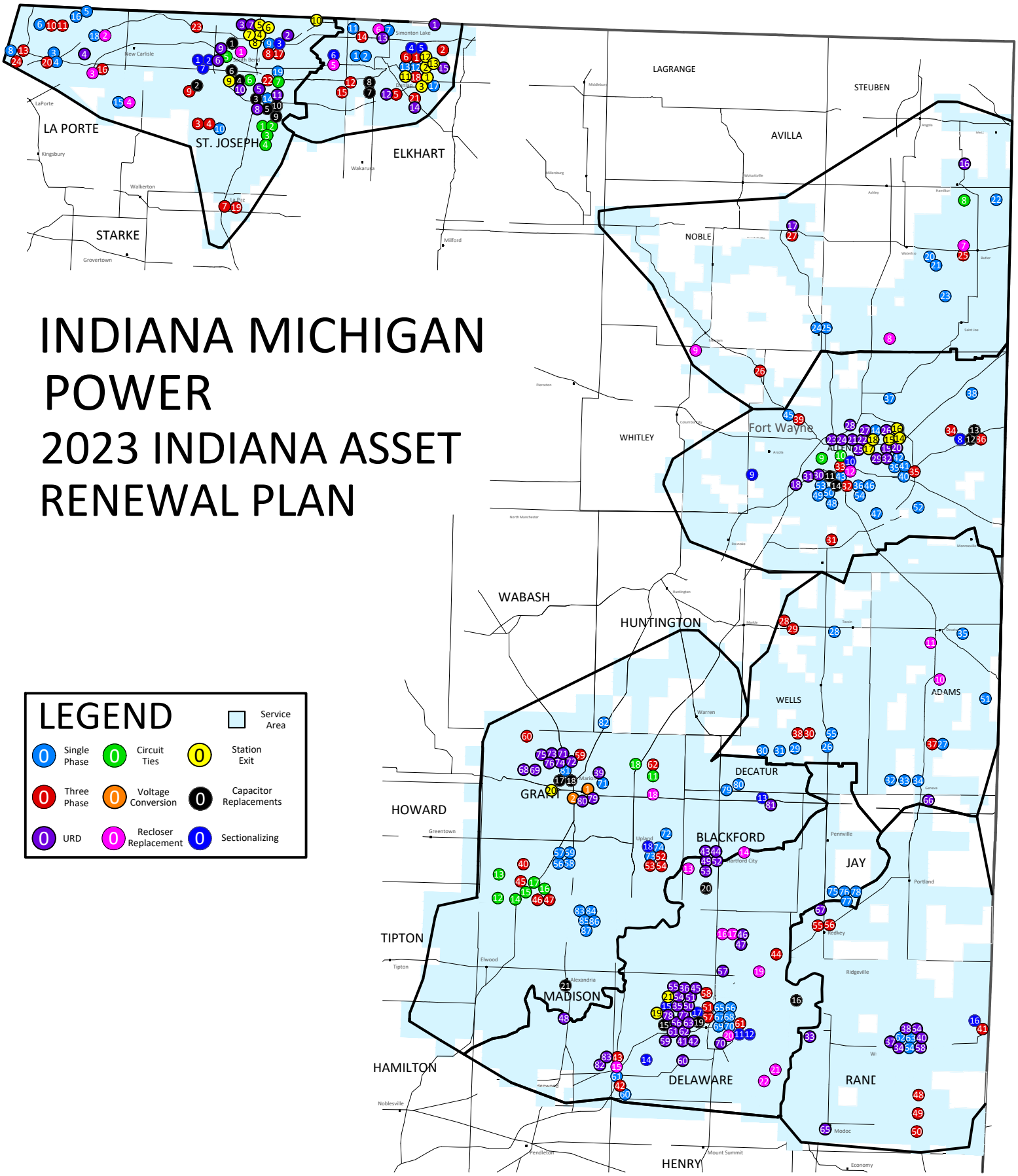
Underground Station Exit Cable Replacement 2023				
Map Reference Number	**Station**	**Circuit**	**Description**	**Feet**
1	Elcona	No 1	Replace UG exit	420
2	Elcona	No 2	Replace UG exit	420
3	Elcona	Country Club	Replace UG exit	240
4	Darden Road	East	Replace UG exit	60
5	Darden Road	Douglas	Replace UG exit	260
6	Darden Road	Lilac	Replace UG exit	160
7	Darden Road	North	Replace UG exit	140
8	Darden Road	Auten	Replace UG exit	1,300
9	Kankakee	Prairie	Replace UG exit	175
10	Granger	No 3	Replace UG exit	175
11	Conant	No 1	Replace UG exit	46
12	Greenleaf	East	Replace UG exit	271
13	Greenleaf	South	Replace UG exit	492
14	Hacienda	Goeglein	Replace UG exit	844
15	Hacienda	Hartford	Replace UG exit	353
16	Hacienda	Wheelock	Replace UG exit	881
17	Indiana- Purdue University	Canterbury #3	Replace UG exit	2,117
18	Indiana- Purdue University	Chiller #1/IUPU #1	Replace UG exit	40
19	Lantern Park	Nebo	Replace UG exit	781
20	Grant	South	Replace UG exit	832
21	Wes Del	Anthony	Replace UG exit	353.00
			Total	10,360
			Estimated Labor Cost	$ 1,238,275
			Estimated Material Cost	$ 1,098,093
			Estimated Total Capital	$ 2,336,367

Underground Station Exit Cable Replacement 2024				
Map Reference Number	**Station**	**Circuit**	**Description**	**Feet**
1	Beech Road	Bittersweet	Replace UG exit	340
2	Beech Road	Dunn	Replace UG exit	540
3	Concord	No 6	Replace UG exit	645
4	Concord	No 3	Replace UG exit	315
5	Indiana- Purdue University	Canterbury #4	Replace UG exit	2,640
			Total	4,480
			Estimated Labor Cost	$ 571,726

Estimated Material Cost	$ 507,002
Estimated Total Capital	$ 1,078,727

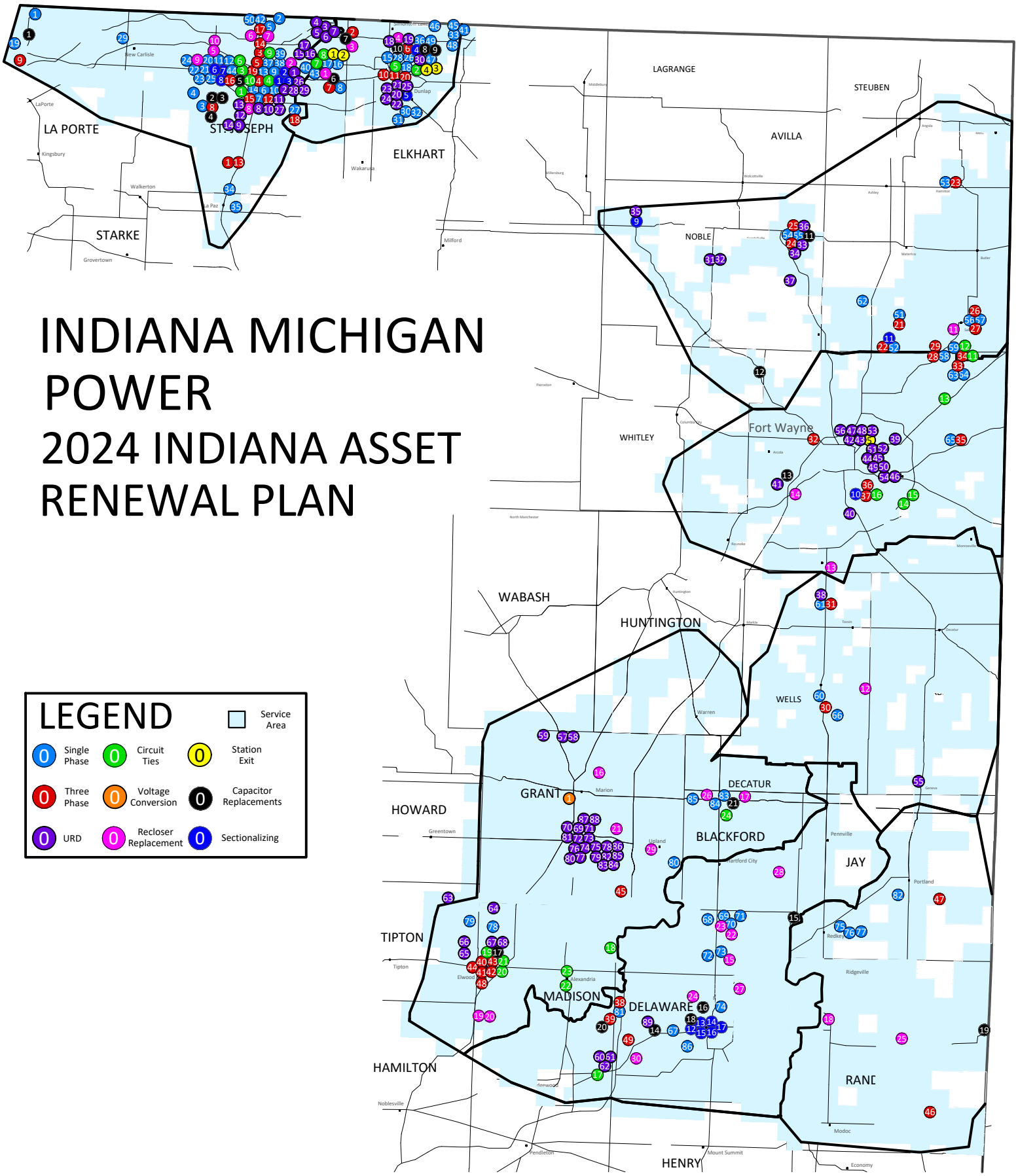
UG Network Program 2023			
Map Reference Number	**Network**	**Description**	**Estimated Capital Cost**
1	Ft. Wayne Network	Primary Equipment Installation	$ 1,400,634
1	Fort Wayne Network	Civil Construction	$ 767,723
2	Muncie Network	Primary Equipment Installation	$ 179,043
3	South Bend Network	Primary Equipment Installation	$ 499,671
3	South Bend Network	Civil Construction	$ 877,398
		Estimated Labor Cost	$ 1,634,586
		Estimated Material Cost	$ 2,089,883
		Estimated Total Capital	$ 3,724,469

UG Network Program 2024			
Map Reference Number	**Network**	**Description**	**Estimated Capital Cost**
1	Ft. Wayne Network	Primary Equipment Installation	$ 584,091
1	Fort Wayne Network	Civil Construction	$ 295,452
2	Muncie Network	Primary Equipment Installation	$ 560,071
3	South Bend Network	Primary Equipment Installation	$ 645,787
3	South Bend Network	Civil Construction	$ 295,452
		Estimated Labor Cost	$ 648,475
		Estimated Material Cost	$ 1,732,378
		Estimated Total Capital	$ 2,380,853



INDIANA MICHIGAN POWER

2023 INDIANA ASSET RENEWAL PLAN



INDIANA MICHIGAN POWER

2024 INDIANA ASSET RENEWAL PLAN

Combined Projects Management Plan

Note that estimates are Class 3 or higher estimates

Combined Projects 2023 ($000)							
Map Reference Number	**Station**	**Description**	**Through 2022**	**2023**	**2024**	**Total Plant in Service**	**Year in Service**
1	3M Station	Replace the 69/12kV 12.5MVA transformer, 6 feeder regulators, and add 69kV circuit switcher; Rebuild 0.2 miles D line OH	$2,099	$45	-	$2,144	2023
2	Beckwith Station	Install 2-12 kV Feeders, UG exits.	$30	$764	-	$794	2023
3	Blaine Street Station	Replace the 34.5/12 kV 9.375 MVA with 20 MVA and add 2-12 kV Feeders; Rebuild 1.0 Miles D line OH, Install 600' new UG Station	$6,897	-	-	$6,897	2023
4	Colfax Station	0.5 mile D line construction to complete 3-12kV UG feeders from Colfax station	$711	$1,606	-	$2,317	2023
5	Deer Creek CB	Rehab 12kV facilities; replace 1-12kV CB	$25	$252	-	$277	2023
6	Kingsland CB	Rehab 12kV facilities; replace 1-12kV CB	$44	$252	-	$296	2023
7	Virtue Station Land Purchase	Purchase site for new Virtue 69/12kV station to replace Noble station	$24	$166	-	$190	2023
8	Pleasant Murray D-Line	Relocate and reconductor 6.5 miles transmission underbuild	$440	$1,062	-	$1,502	2023
9	RV Capital Station	New 138/12 kV 25 MVA Station with 3-12 kV Feeders	$1,839	$2,478	-	$4,317	2023
10	Van Buren Station	Rehab 12kV facilities; replace 2 -12kV CB's, 2 UG exits, and bus regulators	$745	$505	-	$1,250	2023
11	Wabash Ave Station	Install 69kV circuit switcher, 2-12kV Distribution Circuit Breakers and SCADA	$845	$304	-	$1,149	2023
Total Value of Combined Projects to place in service in 2023			$13,699	$7,434	-	$21,133	

Combined Projects 2024 ($000)							
Map Reference Number	**Station**	**Description**	**Through 2022**	**2023**	**2024**	**Total Plant in Service**	**Year in Service**
1	Ameriplex Station	New 138/12 kV 25 MVA Station with 3-12 kV Feeders	$2,762	$4,296	$703	$7,761	2024
2	Ellison Rd Station	install 1-12kV CB and 1.25miles D line	$33	$126	$988	$1,147	2024
3	Kekionga Station Land Purchase	Purchase site for new 138/12kV station to relieve Mckinley station	$3	$25	$869	$897	2024
4	Randolph CB	Rehab 12kV facilities; replace 4-12kV CB; relocate 2-12kV exits; install new 12kV bus tie CB	$16	$886	$338	$1,240	2024
5	S Elwood CB	Rehab 12kV facilities; replace 2-12kV CB's	$17	$379	$192	$588	2024
Total Value of Combined Projects to place in service in 2024			$2,831	$5,712	$3,090	$11,633	

Muncie Area – 3M Station

Project Description:

- Replace the existing 69/4 kV transformer at Three M Station. The existing 69/4 kV transformer will be utilized as a system spare.
- Install a new distribution bay and retire the existing distribution bay.
- Install two 4 kV distribution circuit breakers and exits.
- Retire all existing circuit breakers.
- Install station Supervisory Control and Data Acquisition (SCADA).
- ISD =2023 (Station); 2 year project timeline.
- ISD =2023 (Distribution Line); 2 year project timeline.

Justification / Need for the Project:

Reconstruction of the Three M distribution station is due to concerns of capacity and reliability. The following are drivers for the project:

- The Visy Recycle circuit regulators are currently loaded to 104% of capacity.
- The existing 12 kV feeder breakers are at the end of life and have been identified for proactive replacement.
- Existing transformer protection scheme is obsolete and needs updating.
- No SCADA functionality of station devices.

Distribution Line Component:

Install two 4 kV distribution exits.

- Install one new underground distribution exit from Three M Station totaling 400 feet in length using 3-1000 AL + 1-4/0 Cu cable.
- Install one new overhead distribution exit totaling 250 feet using 6-795 AL + 1-556 AL conductor.

Benefits of the Project:

- Relieves reliability concerns of aged equipment and improves the ability for contingency transfers.
- Increases system capacity to allow for future load growth.
- SCADA capabilities allow enhanced monitoring and additional switching and sectionalizing abilities done remotely, reducing overall outage identification and restoration time.
- New equipment is more reliable for customers and more easily maintained.

Estimated 2023 Capital Labor	Estimated 2023 Capital Material	Estimate 2023 Capital Total
$22,000	$23,000	$45,000

Fort Wayne Area – Beckwith Station

Project Description:

- Install 2-12kV feeders at new Beckwith Station
- ISD =2023; (Station) 2 year project timeline.
- ISD =2023; (D-Line) 2 year project timeline.

Justification / Need for the Project:

Nestle Dryers Ice Cream Company is expanding their Fort Wayne facility. This expansion will add an estimated 7MVA of load to the distribution system.

- The additional load presents an overload condition to the Spy Run-Centlivre circuit.
- With the Nestle expansion it is not possible to recover Nestle with single-tier switching.

Distribution Line Component:

- Install two new underground distribution exits from Beckwith Station totaling 4000 feet in length using 3-1000 AL + 1-4/0 Cu cable in concrete encased duct bank.
- Rebuild 1000 ft of existing distribution line to 3-556 AL + 1-4/0 AA conductor.

Benefits of the Project:

- The second express feed from Beckwith station provides full recovery of Nestle with single tier switching at one location.
- Improves the operational flexibility of the Glenbrook area.

Estimated 2023 Capital Labor	Estimated 2023 Capital Material	Estimate 2023 Capital Total
$366,000	$398,000	$764,000

Muncie Area – Blaine Street Station

Project Description:

- Replace one existing station transformer at Blaine Street with a 20 MVA unit.
- Install one new distribution bay and retire one existing distribution bay.
- Install six 12 kV distribution circuit breakers and exits.
- Install a 12 kV bus tie circuit breaker.
- Integrate two additional 12 kV feeders into existing distribution system.
- Upgrade existing station Supervisory Control and Data Acquisition (SCADA).
- ISD =2023 (Station); 3 year project timeline.
- ISD =2023 (Distribution Line); 3 year project timeline.

Justification / Need for the Project:

The replacement of the Blaine Street 9.375 MVA Transformer 5 and distribution bay is due to concerns of capacity, and reliability:

- Excess distribution capacity has been reduced due to conversion of 4 kV distribution to 12 kV.
- The existing 12 kV feeder breakers are at the end of life and have been identified for proactive replacement.
- Load transfers in the Blaine Street area are limited due to the current circuit configuration.

Distribution Line Component:

Relocate one existing feeder exit and two new circuits to Blaine Street Station.

- Install three new underground distribution exits from Blaine Street Station totaling 1000 feet in length using 3-1000 AL + 1-4/0 Cu cable.
- Reconstruct 1.0 mile of existing 3-phase overhead line using 3-556 AL + 1-4/0 AA conductor.

Benefits of the Project:

- The additional capacity added at Blaine Street offsets the system capacity lost through retirement of 4 kV station assets.
- Relieves reliability concerns of aged equipment and improves the ability for contingency transfers.
- SCADA capabilities allow enhanced monitoring and additional switching and sectionalizing abilities done remotely, reducing overall outage identification and restoration time.
- New equipment is more reliable for customers and more easily maintained.

Estimated 2023 Capital Labor	Estimated 2023 Capital Material	Estimate 2023 Capital Total
$0	$0	$0

South Bend Area – Colfax Station

Project Description:

- Complete brownfield construction at Colfax station rebuild to install: 69kV line CBs, 69kV SWR's with 69/12kV transformation and MV CB protection.
- Install station Supervisory Control and Data Acquisition (SCADA).
- ISD = 2023; 1 year project timeline

Justification / Need for the Project:

Asset renewal has identified multiple rehab needs at Colfax Station. Colfax Station is very congested and is located adjacent to the Commerce Center Commercial Development.
The following are drivers for the project:

- Colfax station is a cubicle switch gear type construction, is obsolete, and spare parts are difficult to find.
- Mobile transformer can't be installed on site due to physical space limitations and complete station outage can only be taken during off-peak months (Sep-May)
- The 34.5 kV CB C and D at Colfax Station are GE FK oil-filled breakers manufactured in 1950s, has operated through 12 and 20 fault operations, exceeding the manufacturer recommendation of 10.
- The 34.5/12 kV Transformer at Colfax was manufactured in 1974 and is also showing significant signs of deterioration. It has a load tap changer (LTC) and therefore distribution voltage regulation is difficult
- This improves a reliability constrained area with limited opportunities for out of phase load transfers durning emergency situations

Distribution Component:

- 3 new underground exits, 0.5 miles new duct bank line construction

Benefits of the Project:

- Resolves the physical space limitations that restricts on site mobile transformer and drive path issues
- Provides for capacity for future distribution automation.
- The source voltage conversion helps improve area reliability and adds in-phase operational flexibility.

Estimated 2023 Capital Labor	Estimated 2023 Capital Material	Estimate 2023 Capital Total
$771,000	$834,000	$1,606,000

Muncie Districts – Circuit Breaker Replacements

Project Description:

Replace one 12 kV distribution circuit breaker at the following station
ISD = 2023; 2 year project timeline.

- Deer Creek Station: 1 circuit breakers

Justification / Need for the Project:

A number of the distribution circuit breakers in service have or will soon exceed their expected lifespan. These circuit breakers have been targeted for proactive replacement in an effort to improve reliability.

Benefits of the Project:

New circuit breakers reduce the number of misoperations and failures of obsolete breakers. Integrating circuit breaker controls into SCADA, where possible, contributes to the strategic goal of modernizing the distribution grid.

Estimated 2023 Capital Labor	Estimated 2023 Capital Material	Estimate 2023 Capital Total
$121,000	$131,000	$252,000

Fort Wayne – Circuit Breaker Replacements

Project Description:

Replace one 12 kV distribution circuit breaker at the following station
ISD = 2023; 1 year project timeline.

- Kingsland Station: 1 circuit breaker

Justification / Need for the Project:

A number of the distribution circuit breakers in service have or will soon exceed their expected lifespan. These circuit breakers have been targeted for proactive replacement in an effort to improve reliability.

Benefits of the Project:

New circuit breakers reduce the number of misoperations and failures of obsolete breakers. Integrating circuit breaker controls into SCADA, where possible, contributes to the strategic goal of modernizing the distribution grid.

Estimated 2023 Capital Labor	Estimated 2023 Capital Material	Estimate 2023 Capital Total
$121,000	$131,000	$252,000

Fort Wayne Area – Virtue Station Property Purchase

Project Description:

- Purchase approximately a three-acre site to greenfield construct a new 138/12 kV station 20MVA Station with 3 new 12kV feeders.
- ISD = 2023 for property purchase of new station site.
- ISD = 2026 (Station); 4 year project timeline

Justification / Need for the Project:

The rebuild of the Noble Station is due to concerns of capacity, reliability and expected load growth around Noble Station:

- Noble Station is space constrained, and an alternate site is required.
- The Noble Station transformer experienced an overload in 2022 of 103.17%.
- The wood poles that support the 69 kV bus are estimated to be 70 years old, which is at the end of the expected lifespan for wood poles.
- Load transfers in the Noble Station area are limited due to the current circuit configuration.
- Currently there is no SCADA at Noble Station

Benefits of the Project:

- Relieves reliability concerns of aged equipment and improves the ability for contingency transfers.
- An overload of station equipment is avoided
- SCADA capabilities allow enhanced monitoring and additional switching and sectionalizing abilities done remotely, reducing overall outage identification and restoration time.
- New equipment is more reliable for customers and more easily maintained.

Estimated 2023 Capital Labor	Estimated 2023 Capital Material	Estimate 2023 Capital Total
$44,000	$122,000	$166,000

Fort Wayne Area – Pleasant Murray D-Line

Project Description:

- 6.5 miles of underbuild re-route and conductor upgrade
- 4 miles of new separate distribution neutral
- ISD =2023; 2 year project timeline

Justification / Need for the Project:

- Work to be in conjunction with the Hillcrest-Adams 69kV rebuild project, TP2019052 of which 11.6 miles between Pleasant and Murray station is underbuilt.

Distribution Line Component:

- 6.5 miles of underbuild re-route and conductor upgrade.
- 4 miles of new, separate, distribution neutral.

Benefits of the Project:

- Replacement of aged distribution line assets with new facilities reduces the likelihood of equipment failures which is a significant cause of customer outages.
- Roadside construction of distribution line provides better access with trucks and equipment. This allows for faster response to and restoration of outages.
- Vegetation management needs are reduced when line is located roadside with the need to only trim trees on one side of the line.
- The larger thermal capacity of the new line will improve transferability between circuits and stations.

Estimated 2023 Capital Labor	Estimated 2023 Capital Material	Estimate 2023 Capital Total
$510,000	$552,000	$1,062,000

South Bend Area – RV Capital Station

Project Description:

- Construct new 138/12kV, 25MVA Station with 3 new 12kV feeders.
- Install station Supervisory Control and Data Acquisition (SCADA).
- ISD = 7/26/2023 (Station); 1 year project timeline
- ISD = 7/26/2023 (D-Line); 1 year project timeline

Justification / Need for the Project:

RV Capital distribution station is needed due to concerns of reliability and expectation for load growth on the Northland station.
The following are drivers for the project:

- Northland Transformer #2, Circuit #4 & Circuit #5 are forecasted to achieve to 112%, 111%, & 107% [28 MVA, 13MVA & 13MVA] of their respective capabilities by May 2023
- Limited field ties to neighboring capacity constrained distribution banks Greenleaf T1, Northland T1, Osolo T2 make for limited recovery options short of a mobile transformer in the event of Northland T2 failure.
- City of Elkhart approved 2040 Diversification plan is attracting new customers to the Northland service area and is forecasted to bring an additional 6.5MVA in 2023 and 1MVA in 2024 in new loads.

Distribution Component:

- 3 new feeder exits, 0.16 miles line construction
- 1 new station transformer and 4-12kV circuit breakers
- 3 new station bus voltage regulators
- 1 new 138kV Circuit Switcher

Benefits of the Project:

- Relieves loading constraints and will help provide for future load growth.
- Provides for capacity for future distribution automation and volt-var optimization additions
- The looped source addition improves area reliability and adds in-phase operational flexibility between Northland, Greenleaf and Osolo neighboring Stations.

Estimated 2023 Capital Labor	Estimated 2023 Capital Material	Estimate 2023 Capital Total
$1,190,000	$1,288,000	$2,478,000

Muncie Area – Van Buren Station

Project Description:

- Install one low side transformer breaker.
- Install one set of bus regulators.
- Rebuild 12kV distribution bay
- Install two 12 kV distribution circuit breakers and two new underground exits.
- Install station Supervisory Control and Data Acquisition (SCADA).
- ISD =2023 (Station); 2 year project timeline.
- ISD =2023 (Distribution Line); 2 year project timeline.

Justification / Need for the Project:

- Work to be in conjunction with the Van Buren 138/69kV station rebuild transmission project, TP2020062 which will replace the three winding 138/69/12kV transformer – 11MVA with a 69/12kV 20 MVA transformer.
- The installation of this equipment will eliminate the 1960's vintage deteriorated distribution equipment at Van Buren station thus reducing the risk of failure and improving asset performance.

Distribution Line Component:

- Install two new underground distribution exits from Van Buren Station totaling 1000 feet in length using 3-1000 AL + 1-4/0 Cu cable.

Benefits of the Project:

- Replacement of aged distribution station assets with new reduces the likelihood of equipment failures which is a significant cause of customer outages.
- SCADA capabilities allow enhanced monitoring and additional switching and sectionalizing abilities done remotely, reducing overall outage identification and restoration time.
- New equipment is more reliable for customers and more easily maintained.

Estimated 2023 Capital Labor	Estimated 2023 Capital Material	Estimate 2023 Capital Total
$242,000	$264,000	$505,000

Muncie Area – Wabash Ave Station Scada

Project Description:

- Replace two 12 kV distribution circuit breakers.
- Install station Supervisory Control and Data Acquisition (SCADA).
- ISD =2023 (Station); 2 year project timeline.

Justification / Need for the Project:

- 12kV Circuit breakers D & E have exceeded their recommended number of operations are recommended to be replaced.
- Currently there is no SCADA at Wabash Station.

Benefits of the Project:

- Relieves reliability concerns of aged equipment.
- SCADA capabilities allow enhanced monitoring and additional switching and sectionalizing abilities done remotely, reducing overall outage identification and restoration time.
- Prepares station for future VVO/DACR.

Estimated 2023 Capital Labor	Estimated 2023 Capital Material	Estimate 2023 Capital Total
$145,000	$158,000	$304,000

South Bend Area – Ameriplex Station

Project Description:

- Construct new 138/12kV, 25MVA Station with 3 new 12kV feeders.
- Install station Supervisory Control and Data Acquisition (SCADA).
- ISD = 1/31/2024 (Station); 2 year project timeline
- ISD = 1/31/2024 (D-Line); 2 year project timeline

Justification / Need for the Project:

Ameriplex distribution station is needed due to concerns of reliability and expectation for load growth on the Darden Road and Pine Road stations.
The following are drivers for the project:

- Darden Rd station is forecasted to reach 100% of it rated capability(23.4MVA) in 2022
- Service area is additionally capacity constrained with Pine Rd station at 93% utilized.
- Ameriplex industrial park continues to add block loads with plans for further commercial and residential builds if new highway exit from US-31 bypass is installed

Distribution Component:

- 3 new feeder exits, 5 miles line construction
- 1 new station transformer and 4-12kV circuit breakers
- 1 new 138kV Circuit Switcher

Benefits of the Project:

- Relieves loading constraints and will help provide for future load growth.
- Provides for capacity for future distribution automation and volt-var optimization additions
- The looped source addition improves area reliability and adds in-phase operational flexibility between German, Pine Rd and Darden Rd neighboring Stations.

Estimated 2024 Capital Labor	Estimated 2024 Capital Material	Estimate 2024 Capital Total
$337,000	$365,000	$703,000

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Fort Wayne Area – Ellison Road Station

Project Description:

- Install a third 12 kV feeder breaker and exit at Ellison Road Station.
- Upgrade Supervisory Control and Data Acquisition (SCADA).
- ISD = 2024 (Station); 2 year project timeline
- ISD = 2024 (D-Line); 2 year project timeline

Justification / Need for the Project:

The addition of a third distribution feeder at Ellison Road Station is due to concerns of reliability. The following are drivers for this project:

- The Ellison Road – Eagle Marsh feeder is heavily loaded feeder and serves Lutheran Hospital and the surrounding complex of healthcare facilities making this a high priority circuit.
- Due to the current circuit configuration, contingency load transfers are often not available for an outage to the Eagle Marsh circuit.

Distribution Line Component:

Install one12 kV distribution exits and diversify the customers on the Eagle Marsh feeder.

- Install one new underground distribution exit from Ellison Road Station totaling 600 feet in length using 3-1000 AL + 1-4/0 Cu cable.
- Install one new overhead distribution exit totaling 1.25 miles using 3-556 AL + 1-4/0 AL conductor.

Benefits of the Project:

- Diversification of the customer base of Ellison Road Station allows for better operational flexibility.
- Improves the ability for contingency transfers in the case of outages to critical customers.

Estimated 2024 Capital Labor	Estimated 2024 Capital Material	Estimate 2024 Capital Total
$474,000	$514,000	$988,000

Fort Wayne Area – Kekionga Station Property Purchase

Project Description:

- Purchase approximately four-acre site to greenfield construct new 138/12 kV, 25MVA station with 3 new 12kV feeders.
- ISD =2024 (Land Purchase); 2-year project timeline.
- ISD = 2026 (Station); 4-year project timeline.
- ISD = 2026 (Distribution Line); 4-year project timeline.

Justification / Need for the Project:

- Capacity addition required due to unrecoverable load at Mckinley station.
    - Transformer #4 at McKinley station serves 2592 customers or about 19.1MVA of load during peak conditions. This load is not recoverable with single tier switching.

Distribution Line Component:

- Install one new underground distribution exit from Kekionga Station totaling 3200 feet in length using 3-1000 AL + 1-4/0 AA cable.
- Install two new overhead distribution exits from Kekionga Station totaling 500ft in length using 3-556AL + 1-4/0 AA conductor.
- Reconstruct 1000 ft of existing 3-phase overhead line using 3-556 AL + 1-4/0 AA conductor.

Benefits of the Project:

- Improves the operational flexibility of the McKinley distribution area.
- McKinley Station and Kekionga will be fully recoverable with single tier switching.

Estimated 2024 Capital Labor	Estimated 2024 Capital Material	Estimate 2024 Capital Total
$128,000	$742,000	$869,000

Muncie Districts – Circuit Breaker Replacements

Project Description:

Replace seven 12 kV distribution circuit breakers at the following stations
ISD = 2024; 2 year project timeline.

- Randolph Station: 5 circuit breakers
- South Elwood Station: 2 circuit breakers

Justification / Need for the Project:

A number of the distribution circuit breakers in service have or will soon exceed their expected lifespan. These circuit breakers have been targeted for proactive replacement in an effort to improve reliability.

Benefits of the Project:

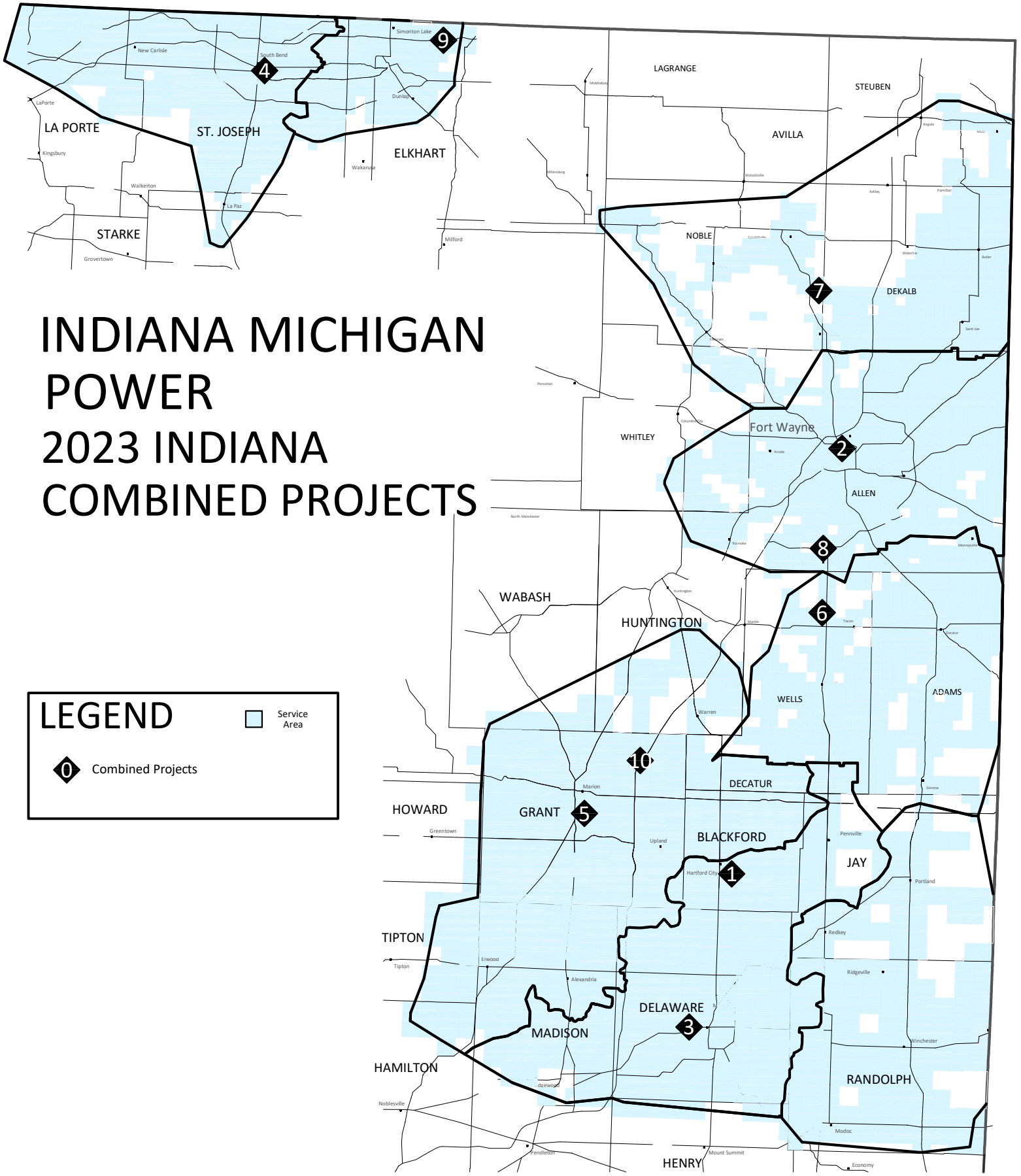
New circuit breakers reduce the number of misoperations and failures of obsolete breakers. Integrating circuit breaker controls into SCADA, where possible, contributes to the strategic goal of modernizing

Randolph:

Estimated 2024 Capital Labor	Estimated 2024 Capital Material	Estimate 2024 Capital Total
$162,000	$176,000	$338,000

South Elwood

Estimated 2024 Capital Labor	Estimated 2024 Capital Material	Estimate 2024 Capital Total
$92,000	$100,000	$192,000


INDIANA MICHIGAN POWER
2023 INDIANA COMBINED PROJECTS
LEGEND
Service Area
0 Combined Projects
LA PORTE
ST. JOSEPH
ELKHART
STARKE
LAGRANGE
STEUBEN
AVILLA
NOBLE
DEKALB
WHITLEY
Fort Wayne
ALLEN
WABASH
HUNTINGTON
WELLS
ADAMS
DECATUR
HOWARD
GRANT
BLACKFORD
JAY
TIPTON
DELAWARE
MADISON
HAMILTON
RANDOLPH
HENRY
9
4
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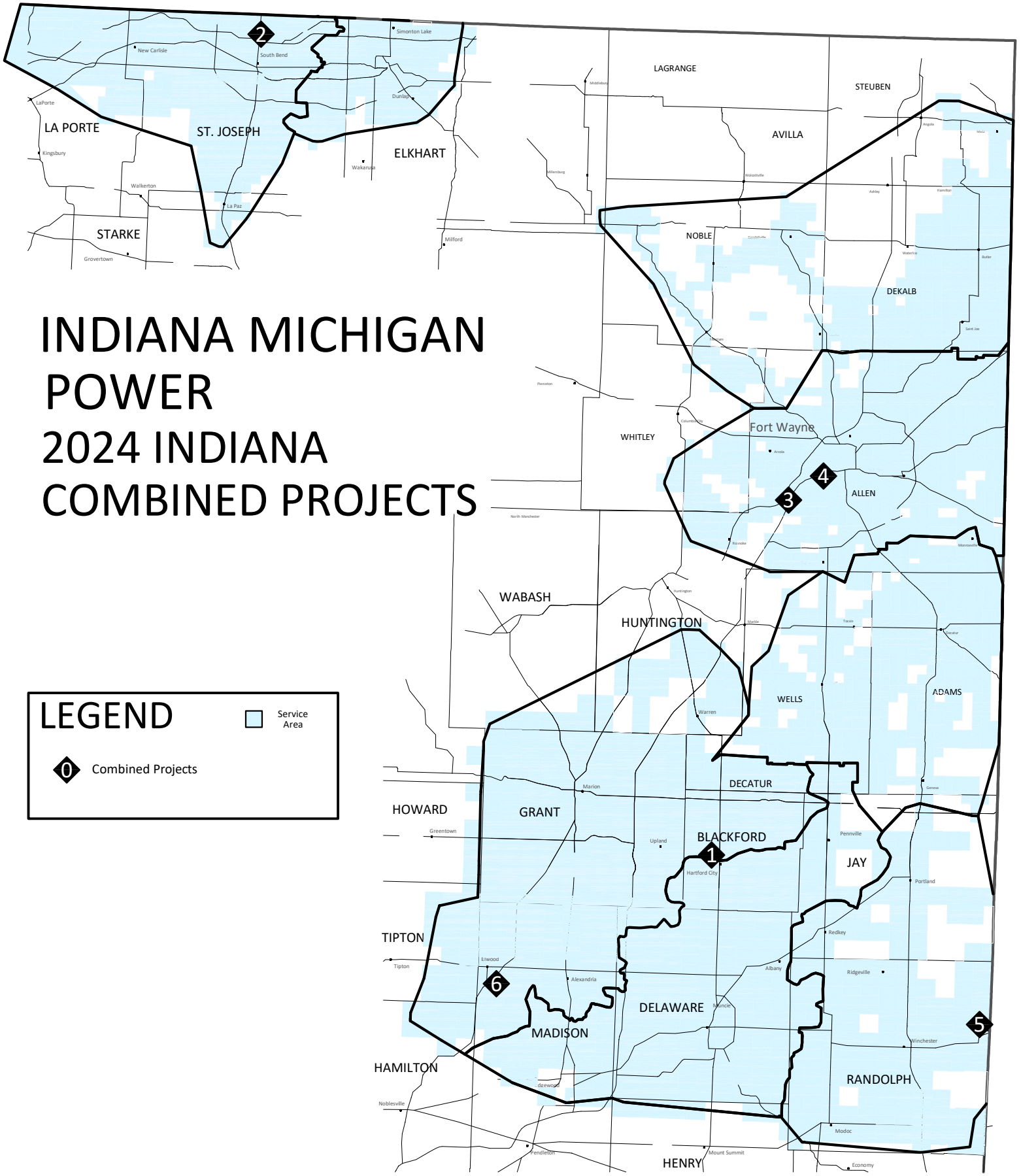
INDIANA MICHIGAN POWER
2024 INDIANA COMBINED PROJECTS
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LA PORTE
ST. JOSEPH
ELKHART
STARKE
LAGRANGE
STEUBEN
AVILLA
NOBLE
DEKALB
WHITLEY
Fort Wayne
ALLEN
WABASH
HUNTINGTON
WELLS
ADAMS
DECATUR
HOWARD
GRANT
BLACKFORD
JAY
TIPTON
DELAWARE
MADISON
HAMILTON
RANDOLPH
HENRY

Grid Modernization Management Plan

Distribution Line Sensors 2023				
Map Reference Number	Station	Circuit	Description	Units
1	Aviation (5328)	Apache	AL0619000339	3
2	Colony Bay (9319)	Medical Park	AL0528000130, AL0528000132	3
3	South Decatur (9336)	Patterson	AD0197000462	3
4	Diebold Road (5303)	Martin	AL0246000304	3
5	Ellison Road (1007)	Eagle Marsh	AL0528000165	3
6	Ferguson (9116)	Baer Field	AL0619000150	3
7	Glenbrook (9296)	NO 1	AL0389000613	3
8	Glenbrook (9296)	Fernhill	AL0390000828	3
9	Spring Street (9204)	Tower	AL0416000066 (WPTA21),AL0416000055 (WANE15)	6
10	McKinley (0559)	Phenie	AL0475001372	3
11	Parnell (9179)	Coliseum	AL0390001197	3
12	Parnell (9179)	Northcrest	AL0360000790	3
13	Spy Run (9233)	Three Rivers	AL0447000851 (Newspaper), AL0447001551 (Hospital)	6
14	Summit (9378)	Ludwig	AL0329000008	3
15	Summit (9378)	Innovation	AL0329000015	3
16	Arnold Hogan (0530)	Morrison Road	DE0064D30115	3
17	Elmridge (0984)	Sewage Plant	DE0065B20616	3
18	Mayfield (9304)	Waterworks	DE0067B40276	3
19	Blaine Street (0980)	North	DE0067D20023	3
20	Dooville (5280)	Hanfield	GR0041000465	3
21	Dooville (5280)	Farrville	GR0041000534	3
22	Dooville (5280)	Commerce	GR0041000535	3
23	Hartford City (0988)	North	BL0024A20195	3
24	Randolph (0542)	Commerical	RA0044D20263	3
25	Randolph (0542)	Jackson Pike	RA0044000232	3
26	Elwood (0985)	Commercial	MA0025B30174	3
27	Marion Plant (9230)	Hospital	GR0039A10601	3
28	Hartford City (0988)	North	BL0024A20195	3
29	Utica (9322)	Nichols	DE0065C40284	3
30	West End (9103)	Joker	GR0039A10082	3
31	North Portland (9320)	North	JA0050C30522 (Stoneridge), JA0050C40214 (Jay Hospital)	6
32	Mackey (5352)	General	EL0230001289, EL0230001247	6
33	Kankakee (0546)	Prairie	JO0282001033	3
34	Whitaker (9245)	Elk	EL0230001248, EL0209000404	6
			Total:	117
			Estimated Labor Cost:	$ 22,310
			Estimated Material Cost:	$ 200,792
			Estimated Total Cost:	$ 223,102

Distribution Line Sensors 2024			
Station	Circuit	Description	Units
NA	NA	NA	NA
		Total:	0
		Estimated Total Cost:	0

Distribution Smart Reclosers 2023				
Map Reference Number	Station	Circuit	Description	Units
1	Marion	South	GR0039A40666	1
2	Strawboard	Dodge Creek	DE0017A40012	1
3	Strawboard	Dodge Creek	DE0017A40095	1
4	Pennville	Pennville	JA0024B30147	1
5	Dooville	Hanfield	GR0041000172	1
6	Doovile	Hanfield	GR0030000089	1
7	Bluff Point	Ridgeville	JA0097000089	1
8	Bluff Point	Ridgeville	RA0006B20061	1
9	Linwood	Frankton	MA0051000022	1
10	Royerton	Riggen	DE0048000260	1
11	Aladdin	Fairview	MA0030B10024	1
12	Aladdin	Fairview	MA0030B20022	1
13	Blaine Street	North	DE0067B20017	1
14	Cross Street	moonville	MA0056000056	1
15	Daleville	East	DE0084000084	1
16	Deercreek	North	GR0050B10044	1
17	Dooville	Hanfield	GR0030000181	1
18	Hartfield	South	BL0031A20227	1
19	Hummel Creek	West	GR0016D10081	1
20	Jay	Millgrove	JA0067D30029	1
21	Mayfield	Waterworks	DE0077A30005	1
22	Montpelier	Montpelier	BL0005B30012	1
23	Pennville	Pennville	JA0046000130	1
24	Pipe Creek	Cole	GR0046D40036	1
25	Pipe Creek	Cole	GR0067000147	1
26	Pipe Creek	Cole	GR0068000082	1
27	Rock Creek	Buckeye	HU0071000074	1
28	Utica	Meadows	DE0066B10117	1
29	Wabash Ave.	Gilkey	BL0022000003	1
30	Wabash Ave.	Gilkey	BL0024B20058	1
31	Wes Del	Anthony	DE0035000281	1
32	West End	South	GR0038D10109	1

33	Colony Bay	Dicke	AL0529000442	1
34	Butler	West	DK0242000019	1
35	Berne	Swiss	AD0372000002	1
36	Adams	Linn Grove	AD0352000046	1
37	New Carlisle	#1 - 12 Kv	LP0176000499	1
38	Silver Lake	LaPorte	LP0236000216	1
39	Silver Lake	LaPorte	LP0239000120	1
40	Silver Lake	LaPorte	LP0304000068	1
41	West Side	#1 - 12 Kv	JO0232000124	1
42	East Side	#2 - 12 Kv	JO0284000913	1
43	East Side	#2 - 12 Kv	JO0329000393	1
44	Ireland Road	#1 - 12 Kv	JO0328000085	1
45	Silver Lake	Galena	LP0172000054	1
46	Dunlap	No.1	EL0319000057	1
47	Dunlap	No.1	EL0319000113	1
48	Elcona	Country Club	EL0215000029	1
49	Lusher Avenue	Warrior	EL0231000391	1
50	Osolo	No. 3	EL0126000031	1
51	Twin Branch	No.3	JO0376000018	1
52	Darden Road	lilac	JO0162000027	1
53	Darden Road	lilac	JO0162000238	1
54	East Side	No.3	JO0284000516	1
			Total:	54
			Estimated Labor Cost:	$ 410,590
			Estimated Material Cost:	$ 1,870,466
			Estimated Total Cost:	$ 2,281,056

Distribution Smart Reclosers 2024				
Map Reference Number	Station	Circuit	Description	Units
1	Haper	Minich	AL0513000145	1
2	Melita	Harmer	AL0477001445	1
3	Waynedale	Covington	AL0532000515	1
4	Wayne Trace	Paulding	AL0537000686	1
5	Grabill	Page	AL0198000031	1
6	Wallen	Cook	AL0303000505	1
7	Decatur	Root	AD0183000184	1
8	Tri Lakes	Shriner	WH0142000030	1
9	Kendallville	Park	NO0265000107	1
10	SpyRun	Delware	AL0420000806	1
11	Jackson Road	Roosevelt Road 12 Kv	JO0370000021	1
12	Lydick	Country Club 12 Kv	JO0254000329	1
13	Lydick	Ardmore 12 Kv	JO0231000007	1
14	Beech Road	Bittersweet 12 Kv	JO0194000016	1
15	Beech Road	Bittersweet 12 Kv	JO0218000100	1
16	Osolo	No.4	EL0146000114	1
17	Beachwood	Bittersweet	JO0219000017	1
18	Gravel Pit	#2 - 12 Kv	JO0387000025	1
19	PINE ROAD	South 12 Kv	JO0207000134	1
20	Beachwood	Bittersweet	JO0219000017	1
21	Blaine Street	Mock	DE0077A40082	1
22	Jay	Redkey	JA0069000219	1
23	Grant	South	GR0047000038	1
24	Van Buren	Landess	GR0019000473	1
25	Pennville	Pennville	JA0046000130	1
26	Bluff Point	Ridgeville	JA0097000089	1
27	Bluff Point	Ridgeville	RE0006B20061	1
28	Royerton	Riggin	DE0048000260	1
29	Hartford City	South	BL0031A20227	1
30	Royerton	Riggin	DE0048000260	1
			Total:	30
			Estimated Labor Cost:	$ 247,084
			Estimated Material Cost:	$ 1,125,605
			Estimated Total Cost:	$ 1,372,689

Distribution Automation Circuit Reconfiguration(DACR) 2023		
Map Reference Number	Projects	Description
1	Woods Road/South to Wallen/Irene Byron	Install circuit components to facilitate DACR
2	Anthony/Bowser/Mcmillen to Hillcrest/Venture	Install circuit components to facilitate DACR
3	Mckinley/Connett to Waynedale/Lakewood	Install circuit components to facilitate DACR
4	Reed/Brookside to Robinson Park/Dupont	Install circuit components to facilitate DACR
5	Deer Creek/North to South Side/Commercial	Install circuit components to facilitate DACR
6	Elwood/East to South Elwood/Excello	Install circuit components to facilitate DACR
7	Linwood/Linwood to Cross Street/Moonville	Install circuit components to facilitate DACR
8	Walbash Ave./South to Hartford City/South	Install circuit components to facilitate DACR
9	Waynedale/Avalon to Hillcrest/Dunbar	Install circuit components to facilitate DACR
10	Beech Road/Dunn to Cleveland/Memorial	Install circuit components to facilitate DACR
11	Jackson Road/Michigan to South Side/Eagle	Install circuit components to facilitate DACR
12	South Side/Main St. to Kankakee/Olive	Install circuit components to facilitate DACR
13	Dunlap/No 1 to Lusher Ave/Railroad	Install circuit components to facilitate DACR
14	Muessel/Brookfield/Diamond	Install circuit components to facilitate DACR
15	Colony Bay	Install Station components to facilitate DACR

16	Cross Street	Install Station components to facilitate DACR
17	Deer Creek	Install Station components to facilitate DACR
18	Illinois Road	Install Station components to facilitate DACR
19	Wayne Trace	Install Station components to facilitate DACR
20	Hacienda	Install Station components to facilitate DACR
21	Limberlost	Install Station components to facilitate DACR
22	Kankakee	Install Station components to facilitate DACR
23	Olive	Install Station components to facilitate DACR
24	South Berne	Install Station components to facilitate DACR
25	Lantern Park	Install Station components to facilitate DACR
26	Ossian	Install Station components to facilitate DACR
27	Sorenson	Install Station components to facilitate DACR
28	Royerton	Install Station components to facilitate DACR
29	Montpelier	Install Station components to facilitate DACR
30	Clipper	Install Station components to facilitate DACR
31	Jones Creek	Install Station components to facilitate DACR
32	Elwood	Install Station components to facilitate DACR
33	Elkhart Hydro	Install Station components to facilitate DACR
34	North Portland	Install Station components to facilitate DACR
35	Woods Rd	Install Station components to facilitate DACR
36	Aviation	Install Station components to facilitate DACR
37	Gravel Pit	Install Station components to facilitate DACR
38	Aladdin	Install Station components to facilitate DACR
39	Muldoon Mill	Install Station components to facilitate DACR
40	Pipe Creek	Install Station components to facilitate DACR
41	West Side	Install Station components to facilitate DACR
42	Pine Road	Install Station components to facilitate DACR
43	Milan	Install Station components to facilitate DACR
44	Utica	Install Station components to facilitate DACR
45	Lynn	Install Station components to facilitate DACR
46	St Joe	Install Station components to facilitate DACR
47	Waynedale	Install Station components to facilitate DACR
48	State Street	Install Station components to facilitate DACR
49	Lydick	Install Station components to facilitate DACR
	Estimated Labor Cost:	$ 2,096,909
	Estimated Material Cost:	$ 7,434,496
	Estimated Total Cost:	$ 9,531,405

Distribution Automation Circuit Reconfiguration 2024		
Map Reference Number	Station	Circuit
1	Wes-Del/Farmington/Dice-Acres/Anthony to Lantern Park/East	Install circuit components to facilitate DACR
2	Wes-Del/Harrison to Lantern Park/Nebo	Install circuit components to facilitate DACR
3	Montpelier/Roll to Hartford City/North	Install circuit components to facilitate DACR
4	Dean/Fowlerton to Gaston/Mattews	Install circuit components to facilitate DACR
5	Grant/North/Sweeter	Install circuit components to facilitate DACR
6	Dean/Fairmount/Argyll	Install circuit components to facilitate DACR
7	Pettit Avenue/Sears to Anthony/Bowser	Install circuit components to facilitate DACR
8	Parnell/Summerfield to Robison Park/Auburn Road	Install circuit components to facilitate DACR
9	Hacienda/Maplewood to State Street/Lahmeyer	Install circuit components to facilitate DACR
10	State Street/Trier to Trier/West	Install circuit components to facilitate DACR
11	Melita/Wayne to Mckinley/Hale	Install circuit components to facilitate DACR
12	Wayne Trace/Stinson to Hillcrest/Southtown #2	Install circuit components to facilitate DACR
13	Harlan/Thimler to Grabill/Sheller	Install circuit components to facilitate DACR
14	Ligonier/Kimmell/Gerber Street	Install circuit components to facilitate DACR
15	Concord/No 2. to Lusher Ave./Woodland	Install circuit components to facilitate DACR
16	County Road 4/Simonton Lake to Suak Trial/Eagle Lake	Install circuit components to facilitate DACR
17	Lusher Ave/Hart to Elcona/Country Club	Install circuit components to facilitate DACR
18	East side/Ironwood to Ireland Road/No. 4	Install circuit components to facilitate DACR
19	South Side/Wildcat to Studbaker/Lark	Install circuit components to facilitate DACR
20	Darden Road/Douglas to German/Hamburg	Install circuit components to facilitate DACR
21	Silver Lake/Rolling Prarie to Marquette/Springville	Install circuit components to facilitate DACR
22	Twin Branch/No.1 to Whitaker/Dragway	Install circuit components to facilitate DACR
23	Aviation	Install Station components to facilitate DACR
24	Clipper	Install Station components to facilitate DACR
25	Hacienda	Install Station components to facilitate DACR
26	Limberlost	Install Station components to facilitate DACR
27	Milan	Install Station components to facilitate DACR
28	Muldoon Mil	Install Station components to facilitate DACR
29	Ossian	Install Station components to facilitate DACR
30	South Berne	Install Station components to facilitate DACR
31	St Joe	Install Station components to facilitate DACR
32	Sorenson	Install Station components to facilitate DACR
33	State Street	Install Station components to facilitate DACR
34	Woods Road	Install Station components to facilitate DACR
35	Cross Street	Install Station components to facilitate DACR
36	Aladdin	Install Station components to facilitate DACR
37	Elwood	Install Station components to facilitate DACR
38	Jones Creek	Install Station components to facilitate DACR
39	Lantern	Install Station components to facilitate DACR
40	Lynn	Install Station components to facilitate DACR
41	Montpelier	Install Station components to facilitate DACR
42	North Portland	Install Station components to facilitate DACR
43	Pipe Creek	Install Station components to facilitate DACR

44	Royerton	Install Station components to facilitate DACR
45	Utica	Install Station components to facilitate DACR
46	Kankakee	Install Station components to facilitate DACR
47	Olive	Install Station components to facilitate DACR
48	Pine Road	Install Station components to facilitate DACR
49	West Side	Install Station components to facilitate DACR
	Estimated Labor Cost:	$ 2,497,155
	Estimated Material Cost:	$ 8,853,548
	Estimated Total Cost:	$ 11,350,703

Distribution Smart Cicuit Ties 2023				
Map Reference Number	Station	Circuit	Description	Miles
1	Muldoon Mill	Hoagland	AD0748000064 - AD0138000005	3.3
2	Adams	Linn Grove	AD0352000091 - WE0372000001	1.7
3	Adams	Linn Grove	WE0372000017 - WE0367000051	4.3
4	Lydick/Gravel Pit	Country Club/Marble	Reconductor with 556 AL from JO0254000213 to JO0299000165 And from JO0343000031 to JO0299000165 and JO0344000015 to JO0343000009	6.21
5	Modoc	Modoc	Rebuild Small Wire 3 Phase to 556AL	8.22
			Total:	23.73
			Estimated Labor Cost:	$ 3,772,748
			Estimated Material Cost:	$ 3,213,822
			Estimated Total Cost:	$ 6,986,570

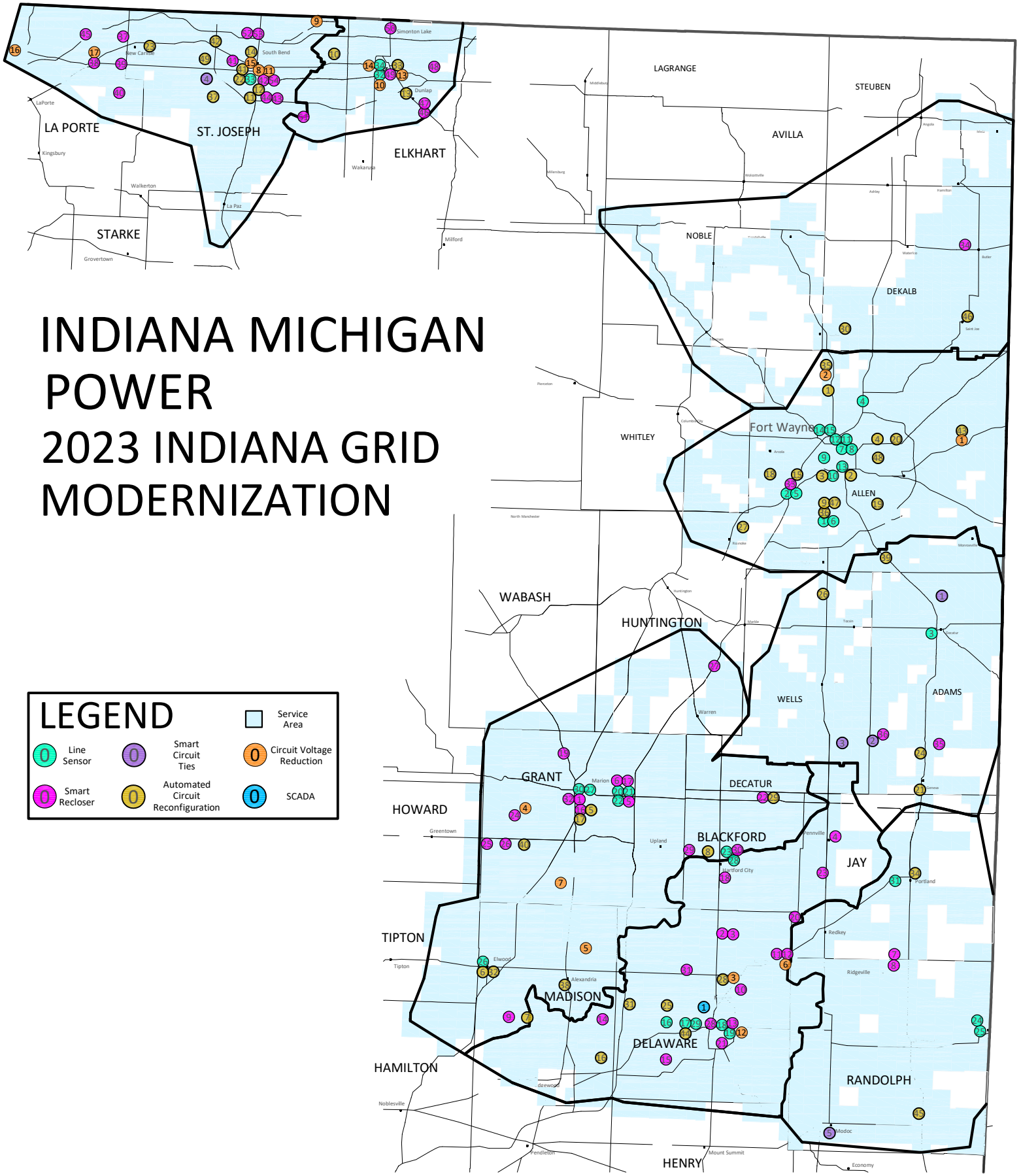
Distribution Smart Cicuit Ties 2024				
Map Reference Number	Station	Circuit	Description	Miles
1	Decatur	Root	Reconductor to 556AL from AD0152000036 to AD0138000005	2.0
2	Decatur	Root	Reconductor to 556AL from AD0168000032 to AD0104000164	5.0
3	Wabash. Ave	South	BL0037000105 to BL0038000175 reconductor 2AS,1/0 to 556 AL	1.0
4	Wabash Ave. Strawboard	South/Dodge Creek	Rebuild with 556AL from BL37-45 to DE6-95	3.0
5	Dooville	Farrville	GR0032000336 to GR0021000115 reconductor 1/0 to 556 AL	2.5
6	Kenmore	Briar Road	DE0065C40013 to DE0066B10976 reconductor 1/0 to 556 AL	0.75
7	Linwood	Frankton	MA0042000187 to MA0042000211 reconductor 4cu to 556 AL	1.1
8	Beech Road/Cleveland	Bittersweet/ Discovery	Reconductor multiphase 4 AS & 2 AA with 556 AL from JO0219000017 to JO0196000263	2
9	Marquette/ Marquette	MC/ SR39	Reconductor 4 Cu to 556 AL From LP0165000001 to LP0145000064	1.77
			Total:	19.12
			Estimated Labor Cost:	$ 2,946,718
			Estimated Material Cost:	$ 2,510,167
			Estimated Total Cost:	$ 5,456,885

Distribution Circuit Voltage Reduction (CVR) 2023			
Map Reference Number	Station	Circuit	Description
1	Milan	Bull Rapids/Warrior	install circuit components of CVR Scheme
2	Woods Road	North/South	install circuit components of CVR Scheme
3	Royeton	Eden Chruch/Riggin	install circuit components of CVR Scheme
4	Mississinewa	Raceway/River	install circuit components of CVR Scheme
5	South Summitville	Goblins/Cleveland	install circuit components of CVR Scheme
6	Perch	Fairview/Albany	install circuit components of CVR Scheme
7	Dean	Argyll/Hackleman/Fowlerton/Fairmount	install circuit components of CVR Scheme
8	Colfax	School/River/Race	install circuit components of CVR Scheme
9	Granger	No.1/No.2/No.3/No.4/No.5/No.6	install circuit components of CVR Scheme
10	Concord	No.1/No.2/No.3/No.4/No.5/No.6	install circuit components of CVR Scheme
11	Studebaker	Ignition/Lark/Roadster/Hawk	install circuit components of CVR Scheme
12	Mayfield	Selma/Waterworks/Springwater	install station component of CVR scheme
13	Lusher Avenue	Hart/Wolf Ave/Warrior/Railroad/Town/Woodland	install station component of CVR scheme
14	Mackey	General/Cap/Music/Miles/Charger/Music	install station component of CVR scheme
15	Colfax	School/River/Race	install station component of CVR scheme
16	Marquette	MC/Springville/SR39/Toll Rd	install station component of CVR scheme
17	Silver Lake	Cougar/Galena/Laporte/Rolling Prairie	install station component of CVR scheme
	Estimated Labor Cost:	$ 1,470,367	
	Estimated Material Cost:	$ 5,881,468	
	Estimated Total Cost:	$ 7,351,835	

	Distribution Circuit Voltage Reduction (CVR) 2024		
Map Reference Number	Station	Circuit	Description
1	Mcgalliard	Wheeling pike/Morningside/Mall/Chateau/West	install circuit components of CVR Scheme
2	Lantern Park	East/Nebo/Petty Rd	install circuit components of CVR Scheme
3	South Elwood	Country Club/Dundee/Excello	install circuit components of CVR Scheme
4	Kenmore	Euclid/Gilbert/Hospital/Jackson/Westwood/Briar	install circuit components of CVR Scheme
5	Twenty - First Street	Hackley/Walnut/Cowan/Arcadia	install circuit components of CVR Scheme
6	Anchor Hocking	Island/Race	install circuit components of CVR Scheme
7	Winchester	Saratoga/Fountain Park/Overmyer	install circuit components of CVR Scheme
8	St. Joe	East/West/Newville	install circuit components of CVR Scheme
9	Ossian	Baker/Lafever/Mill	install circuit components of CVR Scheme

10	Bixler	Allen Chapel/Grand Army/Marion/Industrial	install circuit components of CVR Scheme
11	Thomas Road	Apple Glen/Park West/Beineke	install circuit components of CVR Scheme
12	Melita	Fairfield/Wayne/Oakdale/Oxford/Harmar	install circuit components of CVR Scheme
13	German	Berlin/Hamburg/Audi/Bmw/Porsche/Munich	install circuit components of CVR Scheme
14	Countryside	Homestead/Bent Oak/Jimtown	install circuit components of CVR Scheme
15	Silver Lake	Cougar/Galena/Laporte/Rolling Praire	install circuit components of CVR Scheme
16	Marquette	MC/Springville/SR39/Toll Rd	install circuit components of CVR Scheme
17	Berne	Swiss/Harrison/Parr	install circuit components of CVR Scheme
18	Decatur	Krick/Root/Union	install circuit components of CVR Scheme
19	Hillcrest	Southtown #1/Southtown #2/Dunbar/Ventura/Warfield	install circuit components of CVR Scheme
20	Monroe	Monroe	install circuit components of CVR Scheme
21	Robison Park	Concordia/Mayhew/Dupont/Plaza/Auburn Road/Mallard	install circuit components of CVR Scheme
22	Haymond	Jefferson/Riverside/Whitely	install circuit components of CVR Scheme
23	Cleveland	Park Forest/Memorial/Discovery	install circuit components of CVR Scheme
24	County Road 4	Simonton Lake/Garver Lake/Airport	install circuit components of CVR Scheme
25	Dunlap	No.1/ No.2/ No.3/No.4/Oaks/River Manor	install circuit components of CVR Scheme
26	Muessel	Portage/Diamond/Brookfield/Wilber	install circuit components of CVR Scheme
27	Studebaker	Ignition/Lark/Roadster/Hawk	install circuit components of CVR Scheme
28	Ireland Road	No.1/No.2/No.3	install circuit components of CVR Scheme
		Estimated Labor Cost:	$ 2,854,048
		Estimated Material Cost:	$ 11,416,191
		Estimated Total Cost:	$ 14,270,239

Distribution SCADA			
Station	Description	2023	2024
McGalliard Road	Install Station SCADA	$ 415,645	$ 434,971
Total:			1
Estimated Total Cost:			$ 850,616


INDIANA MICHIGAN POWER
2023 INDIANA GRID MODERNIZATION
LEGEND
Line Sensor
Smart Circuit Ties
Circuit Voltage Reduction
Service Area
Smart Recloser
Automated Circuit Reconfiguration
SCADA
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ELKHART
STARKE
LAGRANGE
STEUBEN
AVILLA
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WHITLEY
Fort Wayne
ALLEN
WABASH
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WELLS
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MADISON
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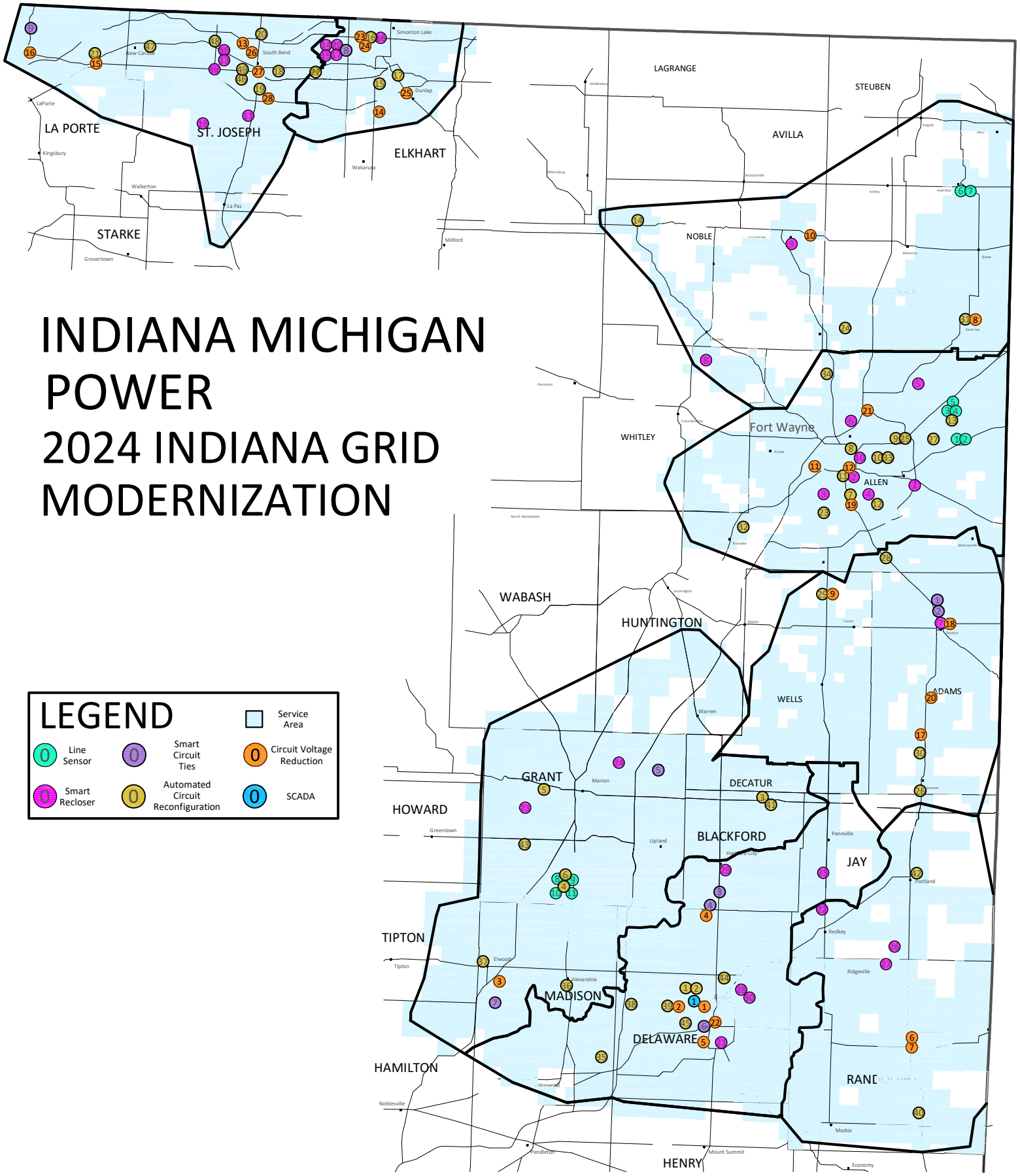
HAMILTON
RANDOLPH
HENRY


INDIANA MICHIGAN POWER
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DELAWARE
HAMILTON
HENRY
RANDOLPH

IIJA Grant Applications of Projects

Topic 1 - Grid Resilience Grants

Map Reference Number	DACR			
	Station 1	**Circuit 1**	**Station 2**	**Circuit 2**
1	Pettit Avenue	Belmont	Mckinley	Engle
2	Lincoln	Parrott	Harper	Minich
3	Lincoln	Maysville	State street	Brentwood
4	Kenmore	Briar Road	Utica	Meadows
5	Daleville	East	Fuson	Madison Street
6	South side	North	Marion Plant	Hospital
7	Quinn	Lakeville	Jackson Road	Roosevelt Road
8	Jackson Road	South Main	Ireland Road	No. 3
9	West Side	No. 2	Lydick	Country Club
10	Countryside	Homestead	Concord	No. 5

Map Reference Number	Undergrounding of Overhead Lines			
	Station	**Circuit**	**Pole Number**	**Miles**
1	Hillcrest	Dunbar	AL0562000490	0.12
2	Hillcrest	Dunbar	AL0562000463	0.17
3	Jackson Road	Roosevelt	JO0368000008	1.24
4	West End	North	GR0027D30034	0.3
5	Kankakee	Olive	JO0281000128	0.58
6	Wayne Trace	Paulding	AL0537000654	0.21
7	Wayne Trace	Paulding	AL0536000012	0.11

Topic 2 - Smart Grid Grants

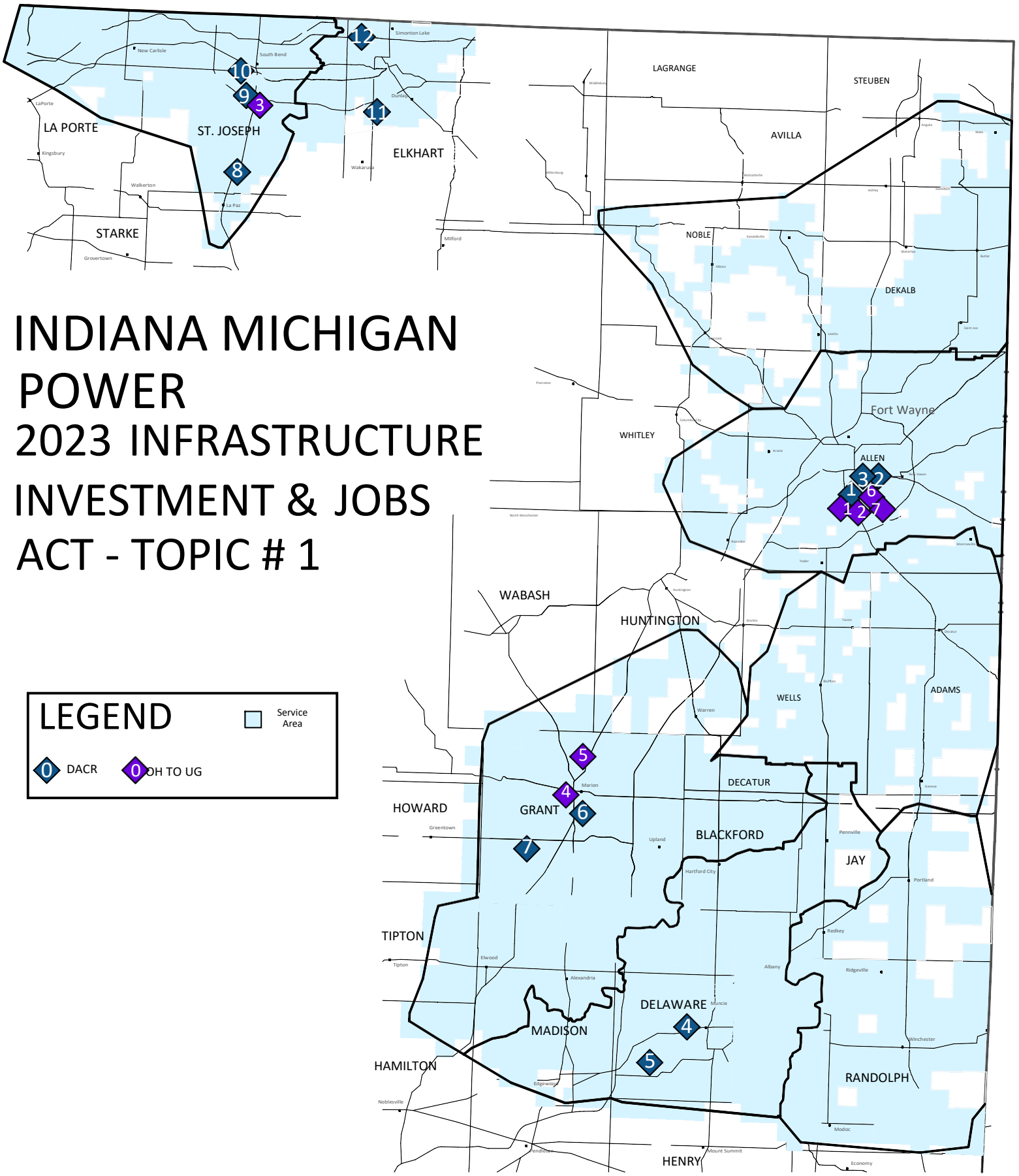
Map Reference Number	DACR			
	Station 1	**Circuit 1**	**Station 2**	**Circuit 2**
1	County Line	Dekalb	St. Joe	West
2	Twenty-First Street	Cowan	Blaine Street	Mock
3	Hummel Creek	West	West End	North
4	West Side	No. 5	Kankakee	Sample
5	Kankakee	Olive	Gravel Pit	Granite

Topic 3 - Grid Innovation Program

Map Reference Number	DACR			
	District	**Station 1**	**Circuit 1**	**Station 2**
1	Fulton	Bloomingdale	Spy Run	Rumsey
2	Anthony	Wallace	Melita	Oxford
3	Harlan	Notestine	Milan	Bull Rapids
4	Woods road	North	Clipper	Garrett
5	Glenbrook	Ley Road	Industrial	Summit
6	Utica	Ross	Twenty-First Street	Walnut
7	Upland	South	Gaston	Mathews
8	Ireland Road	No. 1	Jackson Road	South Main
9	Jackson Road	South Main	Jackson Road	Roosevelt Road

Map Reference Number	Reliability NWAs			
	Station	**Circuit**	**Pole Number**	**Customer Count**
1	South Side	Wildcat	JO0305001523	159
2	Lusher	Warrior	EL0230000309	58
3	Blain Street	Grant Street	DE0066C40089	39
4	Mckinley	Hale	AL0504000304	73
5	Muessel	Brookfield	JO0233001402	36
6	Muessel	Brookfield	JO0233000476	76
7	Colfax	1	JO0236000451	48
8	Anthony	Wallace	AL0477002148	51
9	Anthony	Wallace	AL0477001174	68
10	Anthony	Bowser	AL0477001542	58
11	South Bend	2	JO0237000132	87

Map Reference Number	Renewable Coupled NWAs			
	Station	**Circuit**	**Pole Number**	**Customer Count**
1	Olive	Solar	JO0174000120	12
2	Capital Avenue	Currant	JO0241000497	1,246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2023 INFRASTRUCTURE INVESTMENT & JOBS ACT - TOPIC # 1
LEGEND
Service Area
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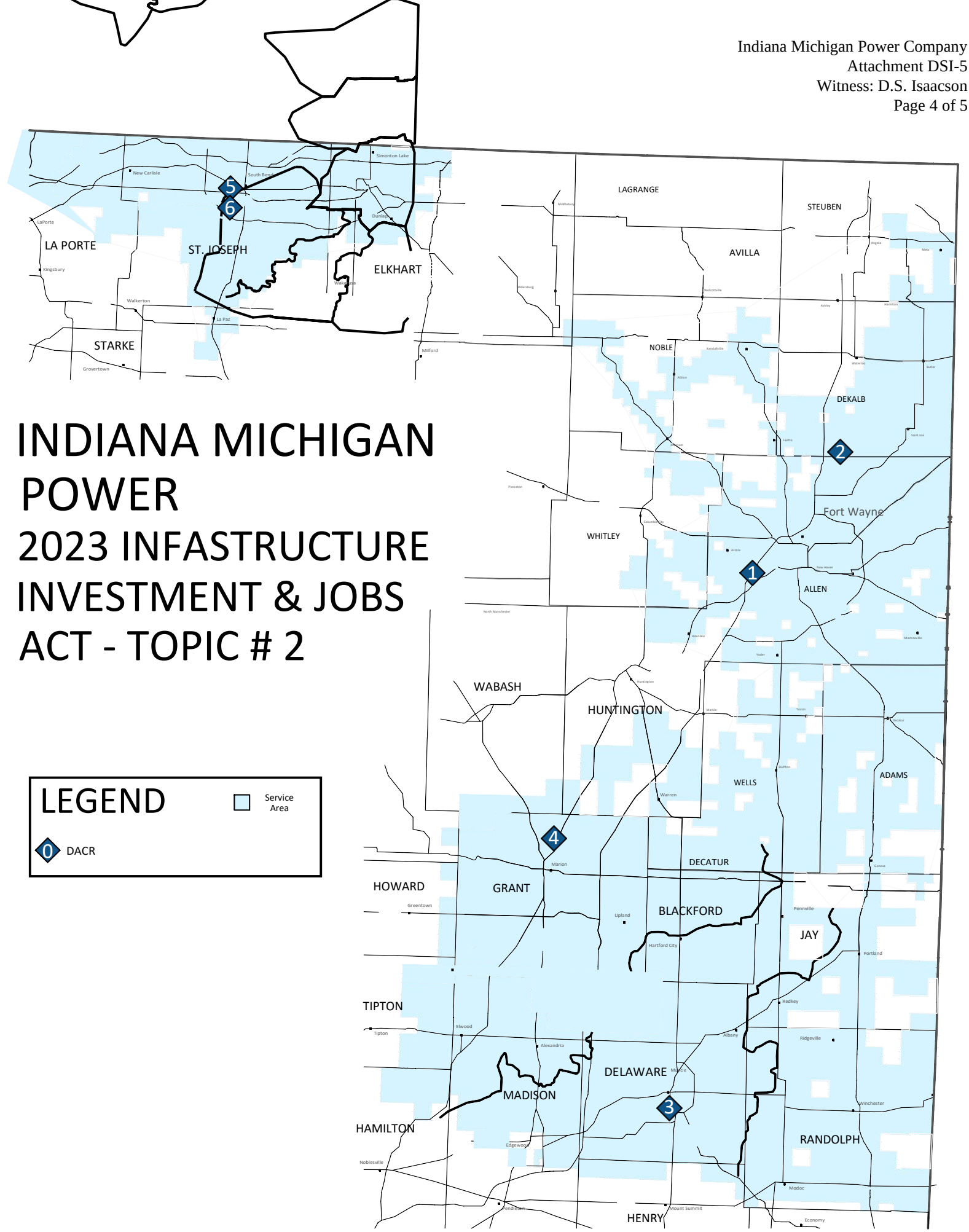
ELKHART
STARKE
LAGRANGE
STEUBEN
AVILLA
NOBLE
DEKALB
Fort Wayne
WHITLEY
ALLEN
WABASH
HUNTINGTON
WELLS
ADAMS
DECATUR
HOWARD
GRANT
BLACKFORD
JAY
TIPTON
DELAWARE
MADISON
HAMILTON
RANDOLPH
HENRY


INDIANA MICHIGAN POWER
2023 INFASTRUCTURE INVESTMENT & JOBS ACT - TOPIC # 2
LEGEND
Service Area
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ST. JOSEPH
ELKHART
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LAGRANGE
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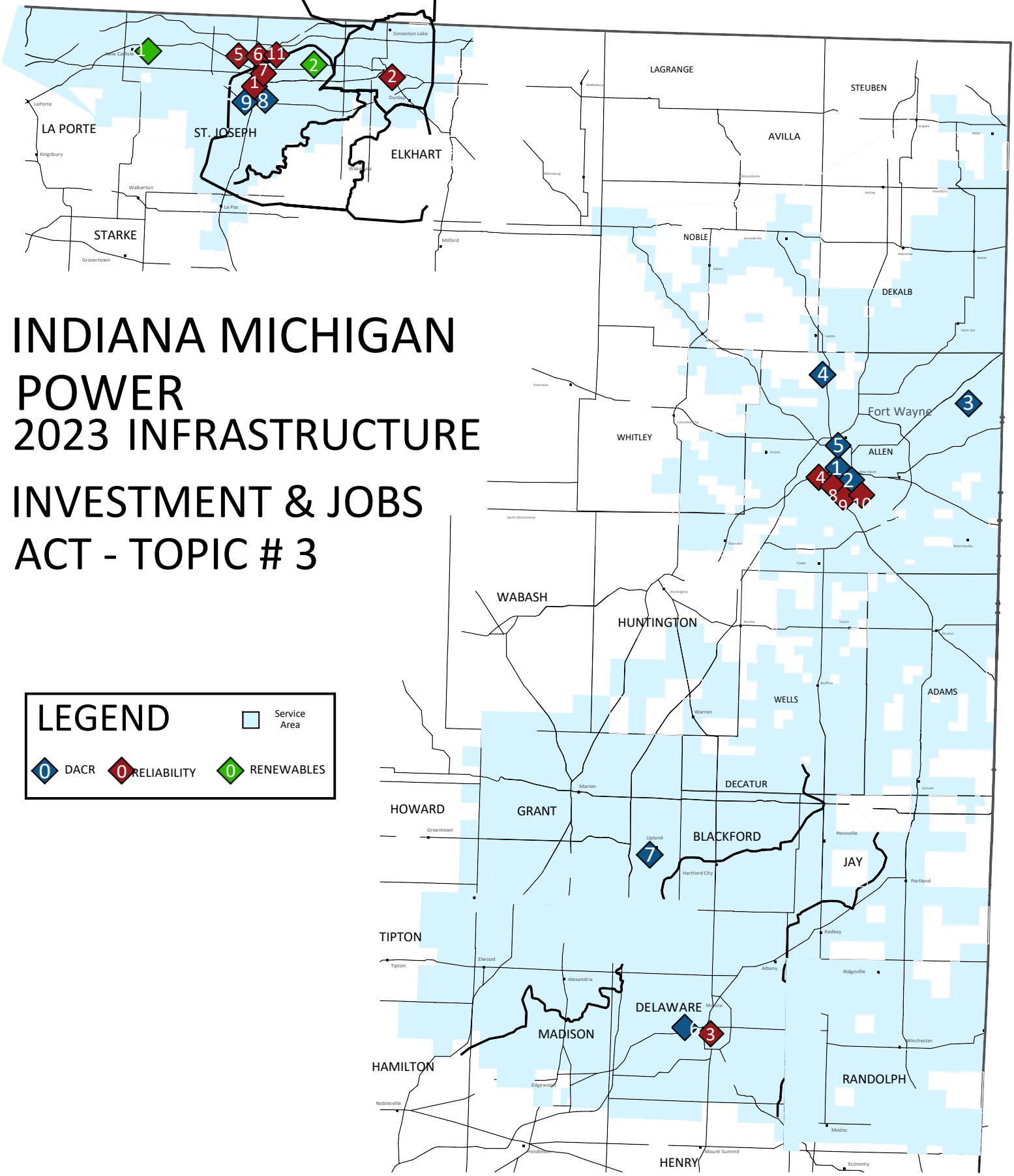

INDIANA MICHIGAN POWER
2023 INFRASTRUCTURE INVESTMENT & JOBS ACT - TOPIC # 3

LEGEND

Service Area

0 DACR

0 RELIABILITY

0 RENEWABLES