

FILED
July 1, 2021
INDIANA UTILITY
REGULATORY COMMISSION

Cause No. 45576

INDIANA MICHIGAN POWER COMPANY

PRE-FILED VERIFIED DIRECT TESTIMONY

OF

JON WALTER

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**DIRECT TESTIMONY OF JON WALTER
ON BEHALF OF
INDIANA MICHIGAN POWER COMPANY**

I. Introduction of Witness

1 **Q1. Please state your name and business address.**

2 My name is Jon C. Walter. My business address is Indiana Michigan Power
3 Center, P.O. Box 60, Fort Wayne, Indiana 46801.

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

5 I am employed by Indiana Michigan Power Company (I&M or Company) as
6 Consumer and Energy Efficiency (EE) Programs Manager.

7 **Q3. What are your responsibilities as Consumer and EE Programs Manager?**

8 I am responsible for consumer and demand side management programs,
9 planning, design, and justification. I also serve as the regulatory subject matter
10 expert for regulatory filings in these areas, covering both I&M jurisdictions of
11 Indiana and Michigan.

12 **Q4. Briefly describe your educational background and professional
13 experience.**

14 I am a 1989 graduate of Purdue University, with a Bachelor of Science degree in
15 Electrical Technology, and a 1996 graduate of Indiana University, with a
16 Masters of Business Administration degree.

17 I have worked for I&M and AEP for 32 years and have held several different
18 roles of increasing responsibility. I began my career as a Station Relay Engineer
19 in South Bend, Indiana, and have held the following positions: Distribution

1 Engineering Supervisor, Key Accounts Engineer, National Accounts Engineer,
2 Customer Design Supervisor, Supervisor Distribution Systems, Circuit
3 Performance Improvement Manager, Distribution Reliability & Engineering
4 Manager, Manager of Distribution Dispatch, and Regulatory Support Manager. I
5 assumed my current position in December 2016.

6 **Q5. Have you previously testified before any regulatory commissions?**

7 Yes. I have filed testimony before the Indiana Utility Regulatory Commission
8 (IURC or Commission) in I&M's Demand Side Management (DSM) Plan filings
9 and DSM/EE Rider Reconciliation filings. I have filed testimony before the
10 Michigan Public Service Commission in I&M's Energy Waste Reduction (EWR)
11 Plan filings and annual EWR Reconciliations.

II. Purpose of Testimony

12 **Q6. What is the purpose of your testimony?**

13 My testimony supports the Company's proposed Enhanced Conservation
14 Voltage Reduction (Enhanced CVR) program and the following proposed
15 advanced metering infrastructure (AMI)-enabled customer programs:

- 16 • Residential AMI HVAC Direct Load Control (DLC) Program;
- 17 • Residential AMI Electric Water Heater DLC Program;
- 18 • Residential Customer Engagement Demand Response (DR) Program;
- 19 • Small Business AMI DLC Program;
- 20 • Critical Peak Pricing Program;
- 21 • Residential AMI Customer Portal;
- 22 • Commercial and Industrial (C&I) AMI Customer Portal; and

- 1 • Residential Flex Pay Program.

2 My testimony also supports I&M's investment in the Crossroads EV Corridor
3 Project. Crossroads EV Corridor is a joint Indiana electric utility project to
4 deploy Direct Current Fast Charging (DCFC) electric vehicle (EV) public-use
5 charging equipment at select locations within I&M's service territory.

6 **Q7. Are you sponsoring any attachments?**

7 Yes, I am sponsoring the following attachments:

- 8 • Attachment JCW-1 Residential Engagement Demand Response;
9
10 • Attachment JCW-2 Residential AMI HVAC AC Direct Load Control;
11 • Attachment JCW-3 Residential AMI Electric Water Heat Direct Load
12 Control;
13 • Attachment JCW-4 Small Business AMI Direct Load Control;
14 • Attachment JCW-5 Critical Peak Pricing Program;
15 • Attachment JCW-6 Crossroads EV Corridor Application;
16 • Attachment JCW-7 I&M Site Detail in Support of Crossroads EV Corridor
17 Application;
18 • Attachment JCW-8 IDEM Grant Press Release;
19 • Confidential Attachment JCW-9 Crossroads EV Corridor Project.

20 **Q8. Are you sponsoring any workpapers?**

21 Yes, I am sponsoring the following workpapers:

- 22 • WP-JCW-1 Support for AMI Programs, and
23 • Confidential WP-JCW-2 Support for the Crossroads EV Corridor
24 Project.

1 **Q9. Were the attachments and workpapers that you sponsor assembled or**
2 **prepared by you or under your direction?**

3 Yes.

4 **Q10. Please summarize your testimony.**

5 The Company's proposed Enhanced CVR and AMI-enabled customer programs
6 align with and support I&M's proposed AMI deployment. The proposed
7 programs are reasonable, cost effective, and provide significant benefits to both
8 customers and the Company.

9 The Company's proposed Crossroads EV Corridor Project supports the State of
10 Indiana's goal, through the Indiana Department of Environmental Management's
11 (IDEM) Indiana Statewide Charging Network Program, to construct and deploy a
12 statewide DCFC EV charging network. The project is reasonable and
13 appropriate because it supports IDEM's goals for the State of Indiana, promotes
14 EV adoption by addressing EV driving range anxiety, and benefits Indiana
15 through development of emissions-free EV use.

III. AMI Program Objectives

16 **Q11. Do the AMI-enabled customer programs I&M proposes support the overall**
17 **objectives of its proposed AMI Project?**

18 Yes. The proposed set of AMI-enabled customer programs aligns with the
19 overall objectives of the AMI Project. Among other things, the AMI-enabled
20 customer programs will facilitate the development of DSM peak demand
21 reduction resources.

1 **Q12. Please explain how the Company's deployment of AMI technology will**
2 **facilitate the development of DSM peak demand reduction resources.**

3 Customer connectivity, engagement, end-use resource definition, and
4 availability are key elements to the development of demand response
5 resources. The proposed AMI-enabled customer programs seek to broaden the
6 reach and accessibility of DSM and demand response benefits for customers
7 and by extension, I&M, by leveraging improvements in AMI system
8 technological capabilities that have occurred over the past several years,
9 including AMI communications network capability and back-office support
10 system enhancements. These improvements lay the foundation for the benefits
11 created by the proposed AMI-enabled customer programs.

12 **Q13. Please discuss why these AMI-enabled customer programs will be**
13 **implemented in conjunction with and will rely on AMI technology.**

14 AMI infrastructure can be used to allow I&M's systems to communicate
15 bilaterally and directly with customer end-use loads. This allows I&M to control
16 load switches and to address barriers that inhibit the ongoing development of
17 efficient I&M DSM resources. Three of the four programs (residential HVAC,
18 residential electric water heater, and small business DLC programs) will engage
19 certain segments of customers directly through AMI technology by utilizing AMI
20 infrastructure to manage the demand resources on behalf of enrolled customers.
21 The fourth program (residential customer engagement DR) will engage
22 customers in load management events through customer self-action.

1 **Q14. Does the AMI enhanced customer program portfolio support the overall**
2 **AMI Cost Benefit Analysis (CBA)?**

3 Yes. The proposed program portfolio provides net positive benefits that in the
4 aggregate support the cost-effectiveness of the overall AMI CBA presented by
5 Company witness Bech.

6 **Q15. How will the Company manage the effectiveness of the proposed**
7 **programs?**

8 The Company plans to measure the effectiveness of the proposed programs by
9 measuring customer participating levels and program cost. The Company will
10 also establish and track program participation requirements for each AMI-driven
11 customer program to ensure each program only claims the level of coincident
12 peak demand reduction for which it is responsible.

13 Finally, I&M will work in concert with a third-party evaluation, measurement, and
14 verification (EM&V) vendor to verify demand response reductions. The third
15 party EM&V vendor will independently verify each program's demand response
16 reductions across all programs that have peak coincident demand reduction
17 benefits claimed. For many programs, I&M is planning with its EM&V vendor to
18 concurrently determine the amount of demand reduced soon after DR events
19 are called and completed using AMI meter usage data feeds to the vendor.
20 Readily available AMI usage data granularity make this type of concurrent
21 verification possible. The EM&V vendor will be expected to provide final annual
22 results for each program as well as a true-up to the level of statistical confidence
23 and precision required for such reporting.

24 **Q16. How does the Company plan to account for the proposed programs?**

25 I&M will determine and implement participation requirements for all AMI-enabled
26 customer programs to help ensure that the same peak coincident demand

1 reduction benefit is not claimed by more than one program for any given
2 program year. For example, a customer may not participate at the same
3 premise (*i.e.* dwelling) in both the HEM thermostat demand response program
4 and the AMI HVAC DLC Program at the same time, as both programs control
5 the same end use DR device operation (the central air conditioner compressor
6 run time). Similarly, a Residential Customer Engagement Program participant
7 cannot participate at the same time in the Residential AMI HVAC Program and
8 the Residential AMI Electric Water Heater Program because I&M cannot
9 determine on which end use device the customer is choosing to reduce their
10 peak usage during the time of demand response events.

11 **Q17. Please discuss the tariff changes required for the Company to implement**
12 **the set of AMI-enabled customer programs proposed as part of this filing.**

13 I&M proposes to include the three residential programs under the HEM tariff.
14 Two residential programs are direct load control based, where the Company will
15 manage the end-use devices on behalf of customers, and the third is demand
16 response based because customer action is required. I&M has proposed
17 revisions to the existing HEM tariff to incorporate these programs under the
18 terms of that tariff.

19 The Small Business AMI DLC Program falls under the WEM tariff. I&M has
20 proposed revisions to incorporate this program into the existing WEM tariff.

21 The Critical Peak Pricing Programs require new tariffs, Residential Service
22 Critical Peak Pricing (RS-CPP) and General Service Critical Peak Pricing (GS-
23 CPP), for I&M to implement the pricing methodologies offered through this
24 program.

25 Last, the Flex Pay Program requires changes to the Company's Terms and
26 Conditions of service because it provides different payment options to
27 customers that volunteer for this program.

1 The Company's tariffs are supported by Company witness Cooper. Company
2 witness Lucas and Seger-Lawson also support the Flex Pay program.

IV. Enhanced CVR Program

3 **Q18. What is CVR?**

4 CVR is a program implemented by the Company to manage voltage levels on
5 the distribution system, which results in lower power consumption. Under CVR,
6 distribution circuit voltage levels are managed at a lower, but still acceptable,
7 range. This operation at a lower voltage range causes energy and demand
8 consumption to reduce from customer loads and distribution system losses. A
9 majority of the reduction is concentrated on customer loads. Overall, CVR
10 benefits customers through conservation and benefits the Company through
11 lower system losses and optimized system operation.

12 **Q19. Please describe the Company's Enhanced CVR program proposal.**

13 The Company proposes to apply Enhanced CVR operation to the existing set of
14 distribution circuits that employ CVR today and to new, additional circuits that do
15 not currently operate with CVR. Enhanced CVR pairs AMI technology with
16 traditional CVR equipment to improve the energy and demand savings
17 performance of CVR.

18 The Enhanced CVR Program will operate using AMI meter voltage readings
19 located at the physical and electrical point of service delivery to customers, to
20 confirm that minimum required voltage levels are adhered to. Such voltage
21 readings will enable the Enhanced CVR Program to use near real-time data,
22 which will enable the program to use a lower minimum voltage set point for CVR
23 operation. It will also enable the technology to react more quickly and accurately
24 to dynamic voltage and electrical loss conditions at the delivery point. The

1 Enhanced CVR Program will deliver an estimated 1% improvement in energy
2 and demand savings on new installations and estimates a 0.3% improvement in
3 energy and demand savings for existing installations.

4 **Q20. Please describe the benefits that result from pairing CVR with AMI**
5 **technology.**

6 Pairing the CVR equipment and system management software with AMI
7 technology through the Enhanced CVR Program maximizes the energy
8 efficiency and demand reduction benefits available with CVR technology.
9 Enhanced CVR uses AMI meter voltage readings to further optimize distribution
10 circuit voltage levels which correspondingly improves energy and demand
11 savings performance. The use of AMI meter voltage readings in CVR voltage
12 level management identifies when distribution circuit voltage levels can be
13 further reduced, with improved validation of true end of line voltage level
14 conditions, while still maintaining required minimum service voltage levels to
15 customers.

16 When voltage levels can be further reduced and still remain compliant, energy
17 and demand savings performance incrementally improves. This level of
18 incremental improvement is possible because CVR voltage levels can be further
19 reduced, in optimal fashion and with better validation, which causes end use
20 loads (such as electric motors) to operate more efficiently within their
21 nameplate, or design, voltage levels.

22 **Q21. Please discuss the specific benefits from the application of Enhanced CVR**
23 **to the 65 existing circuits in which CVR has already been deployed.**

24 In the CBA, I&M used an average incremental energy savings improvement of
25 72,117 kWh per year on existing CVR circuits, for a 0.3% improvement over
26 prior results. The Company used a 0.3% incremental improvement in energy

1 savings, as compared to a 1% incremental improvement for new circuits
2 because EM&V data on existing installations shows that I&M has historically
3 achieved a .7 CVR factor (average 2.18% energy savings from a 2.88% average
4 voltage reduction) on the 65 circuits in which CVR has been deployed. This data
5 is limited for several circuits, however, and does not yet provide a complete
6 picture for how many of the circuits will perform under full year operation.

7 As a precaution to not overstate benefits if these circuits do not perform
8 according to the average expected performance across all circuits, I&M used the
9 0.3% incremental improvement rate. Over half of the existing circuits were
10 recently installed and have limited operational data to validate performance
11 according to the average expected performance. While the Company has
12 estimated conservatively for existing 65 circuit performance, actual operation
13 over a more sustained period will validate how well they perform relative to the
14 average expected performance.

15 **Q22. Please discuss the specific benefits from Enhanced CVR applied to new**
16 **installations.**

17 For new installations, I&M estimates an average Enhanced CVR incremental
18 energy savings improvement of 628,367 kWh per year, this estimate is included
19 in the CBA. This is based on estimates that 3% energy savings can be achieved
20 if the voltage is reduced by 4% through the reliance on more timely AMI voltage
21 reading data at the true end of line. This represents, on average, a 50% (i.e. 3%
22 / 2% = 150%) improvement in energy and demand savings.

23 **Q23. Were the estimated demand and energy savings improvements included in**
24 **the cost benefit analysis (CBA) conducted by Accenture and presented by**
25 **Company witness Bech?**

26 Yes.

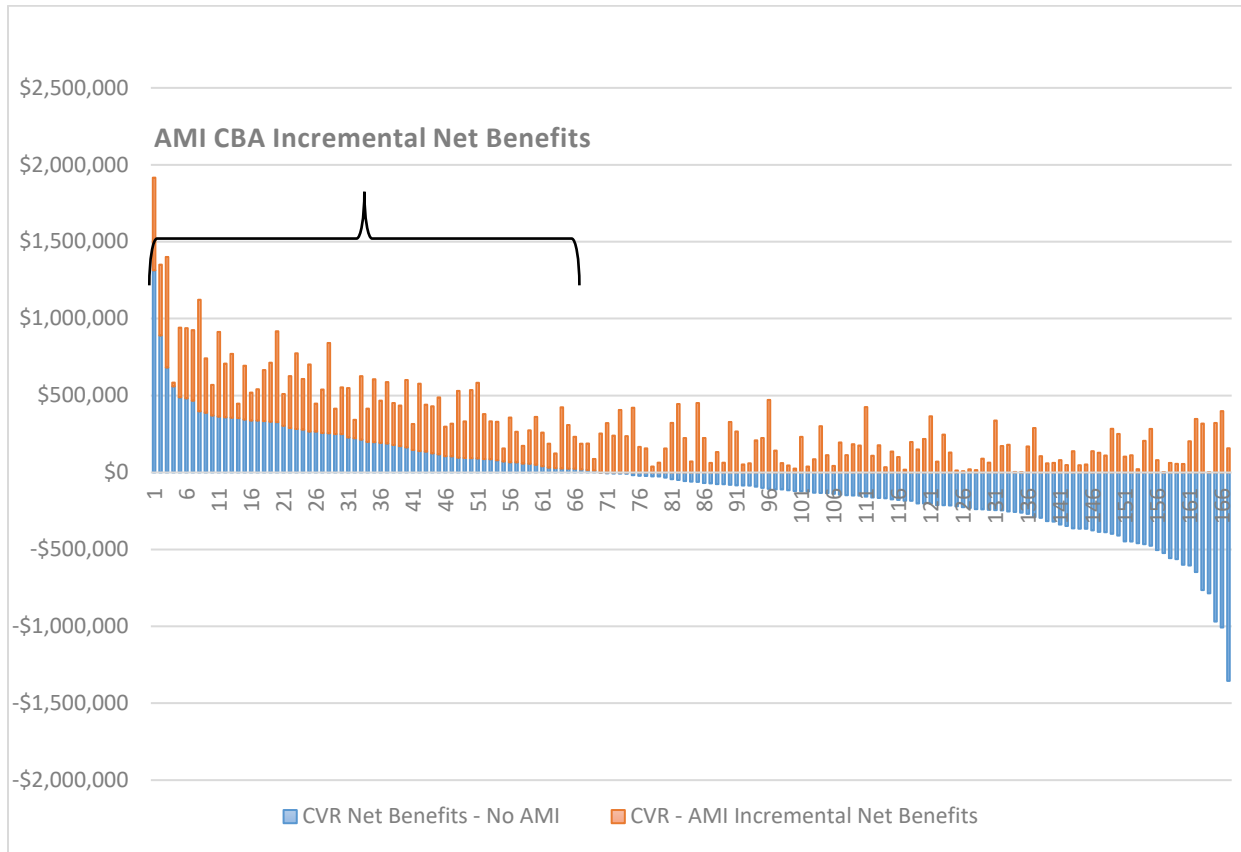
1 **Q24. Please describe how the Company selected new circuits to include in the**
2 **AMI CBA under Enhanced CVR.**

3 The Company performed cost effective analysis for the distribution substation
4 busses (i.e. the electrical point of common connection for a set of distribution
5 circuits, typically a set of 3 circuits) that do not currently have CVR deployed.
6 The analysis estimated cost effectiveness under the current and Enhanced CVR
7 operational and performance parameters.

8 Only the substation busses that were already cost effective, with net benefits
9 greater than zero, under the current operational and performance parameters
10 were included in the AMI CBA benefit analysis presented by Company witness
11 Bech. This was done for alignment purposes so that the CBA reflects the
12 incremental benefits and costs that are directly attributable to the *incremental*
13 cost effectiveness improvement stemming from Enhanced CVR.

14 *Figure JCW-1* demonstrates which substation busses were included in the AMI
15 cost benefit analysis through a Net Present Value (NPV) ranking of all
16 substation busses.

Figure JCW-1. Enhanced CVR Net Benefits (Indiana)



1 *Figure JCW-1 shows the incremental net benefits for the 70 substation busses*
2 *(223 distribution circuits) that were already cost effective (i.e. net benefits*
3 *greater than zero) and included in the AMI cost benefit analysis.*

4 **Q25. Are the capital costs for Enhanced CVR included in the capital forecast**
5 **period?**

6 Yes. Company witness Issacson supports all CVR costs that are forecasted for
7 the capital forecast period as part of the Company's Grid Modernization
8 Program.

1 **Q26. Please discuss the incremental costs of Enhanced CVR contained in the**
 2 **AMI CBA.**

3 Enhanced CVR incremental costs are comprised of:

- 4 • Vendor software costs to add AMI voltage reading data management into
 5 the CVR operating environment;
- 6 • Internal Company software costs to bring the AMI meter voltage reading
 7 data from the AMI data warehouse into the vendor CVR software
 8 operating environment; and
- 9 • Internal CVR analyst support costs.

10 Vendor software costs allow for the AMI voltage reading functionality (i.e., AMI
 11 module) to be added to the software license costs while internal Company
 12 software costs allow for automation of the integration of AMI voltage reading
 13 data into the vendor software. Analyst support costs provide for the ongoing
 14 ability to ensure Enhanced CVR operates in optimal fashion at or near the
 15 targeted voltage reduction targets. *Figure JCW-2* shows the Enhanced CVR
 16 capital and O&M costs for 2021 and 2022.

Figure JCW-2. CBA Incremental Enhanced CVR Capital and O&M Costs (Indiana)

	2021 Capital	2021 O&M	2022 Capital	2022 O&M
Vendor Software – New Installations	\$122,570	\$0	\$0	\$0
Vendor Software - Existing Installations	\$544,000	0	\$0	0
Internal IT	\$ 250,000	\$0	\$0	\$0
CVR Analyst	\$0	\$15,553	\$0	\$43,424*

*Included in Adjustment O&M-11 supported by Company witness Lucas.

1 **Q27. Does the Company propose to report the energy and demand savings**
2 **from the Enhanced CVR to the Commission?**

3 Yes. The Company currently includes CVR energy and demand savings as part
4 of the Company's DSM Plan reporting to the Commission. The Company plans
5 to include the Enhanced CVR energy and demand savings as part of this
6 ongoing DSM Plan reporting to the Commission.

7 **Q28. How does the Company propose to recover the cost of the Enhanced**
8 **CVR?**

9 I&M proposes to recover capital costs associated with Enhanced CVR in rate
10 base and depreciation expense, consistent with how other distribution system
11 capital investment is recovered. Thus, the Company does not propose to
12 recover the Enhanced CVR capital investment through the DSM/EE Rider. This
13 approach recognizes that Enhanced CVR is a key component of the Company's
14 Grid Modernization Plan. Although the Enhanced CVR as proposed in this case
15 will operate fundamentally as a customer end use energy and demand
16 optimization program, as the Company's distribution system evolves, Enhanced
17 CVR will support the coordinated operation of other distribution system assets.
18 As such, Enhanced CVR planning and design should be coordinated with the
19 ongoing integration of AMI functionality as well as with the Company ongoing
20 design and operation of its distribution system assets. Because the Company
21 currently recovers CVR program costs through the DSM/EE rider, the Company
22 will seek to recover existing and new Enhanced CVR incremental O&M and
23 EM&V through the DSM/EE Rider.

1 **Q29. Why is the Company proposing to continue to recover incremental O&M**
2 **costs and EM&V costs through the DSM/EE Rider?**

3 Unlike the capital investment, Enhanced CVR incremental O&M and EM&V
4 costs are uniquely tied to how the Company operates the program to derive its
5 continuous energy and demand savings benefits. Continuous operation requires
6 ongoing oversight to monitor Enhanced CVR performance and immediate
7 response to system outages. When Enhanced CVR trips offline due to
8 communication issues or equipment malfunction, the energy and demand
9 savings benefits are not being captured. Prompt issue resolution and response
10 is required to restore the benefit streams. Cost recovery of such costs through
11 the DSM/EE Rider allows the Company to respond appropriately and continue
12 to provide the customer benefits created by this program.

V. AMI-Enabled Customer Programs

13 **Q30. Are the costs of the proposed AMI-enabled customer programs included in**
14 **the forecasted Test Year?**

15 Yes. The Test Year capital costs and O&M expenses associated with each of
16 the programs discussed below are included in the Company's forecast revenue
17 requirement presented by Company witness Duncan.

18 **Q31. Is the Company proposing to include the AMI-enabled customer programs**
19 **in its DSM Plan at this time?**

20 No. The Commission approved I&M's current DSM Plan, which runs through the
21 end of 2022, in Cause No. 45285 on February 3, 2021. I&M is not seeking to
22 modify that plan in this proceeding. I&M does, however, reserve the right to
23 pursue inclusion of the AMI-enabled customer programs in a future DSM Plan
24 filing.

1 **Q32. Is I&M seeking in this proceeding to recover any lost revenue or incentives**
2 **associated with the AMI-enabled customer programs?**

3 No. I&M is not seeking lost revenue or incentives for the AMI-enabled customer
4 programs through the end of its current DSM Plan. The Company reserves the
5 right to request approval to recover lost revenue and incentives associated with
6 any AMI-enabled customer programs that it includes in future DSM Plan
7 proposals.

Residential AMI HVAC Direct Load Control Program

8 **Q33. Please discuss the Residential AMI HVAC Direct Load Control Program.**

9 Attachment JCW-2 provides the program design information for this program.
10 This program is an air conditioner direct load control program that relies on the
11 use of AMI infrastructure to communicate directly with air conditioner load
12 control switches. It is only available to Income Qualified (IQ) customers and rural
13 customers who do not have, or cannot access, broadband internet service. The
14 intent of this program is to address barriers to participation for these specific
15 customer segments using AMI technology and infrastructure to bilaterally
16 communicate with and control the direct load control switches.

17 Because air conditioner direct load control technology has been time tested and
18 verified, this program is expected to deliver the highest per-participant peak
19 demand savings of the three proposed residential programs. Participating
20 customers will receive peak period bill credits for event and load control
21 participation, where customers will be paid a set dollar amount for each event in
22 which they participate.

1 **Q34. Please discuss why I&M considers this application of Residential AMI**
2 **HVAC Direct Load Control Program technology to be incremental due to**
3 **the availability of AMI.**

4 The quantified demand response benefits that accrue from this type of program
5 are well documented and based on the amount of demand reduction possible
6 from air conditioner switch direct load control. The benefits from the Company's
7 proposed program, in particular, are possible because of the opportunity to use
8 AMI infrastructure to reach certain customers that may not have sufficient
9 access today to such programs.

10 I&M's service territory consists of rural and urban geographies. It is a noted
11 concern that rural broadband internet service availability needs investment to
12 make it more accessible but the timeline and investment for such in I&M's
13 service territory is not clear. With AMI deployed in I&M's service territory, there
14 is opportunity to incrementally use AMI infrastructure to broaden DSM reach into
15 these areas.

16 Further, I&M's own experience from the HEM connected thermostat DSM
17 program, the Residential Peak Reduction (RPR) Program (a.k.a. AC switch DLC
18 program), is that certain customers could not transition into the HEM thermostat
19 program from the RPR program because they either did not have broadband
20 internet, could not afford it, or did not understand connected thermostat
21 technology.

22 It is due to the deployment of AMI infrastructure that I&M customers in these
23 situations can now be reached with DSM programs more cost effectively than
24 was available under the RPR program. It is for these reasons, and the
25 opportunity to more broadly serve I&M's customers with DSM programs, the
26 Company has proposed this program.

1 **Q35. Please describe the demand response benefits that result from the**
2 **Residential AMI HVAC Direct Load Control Program.**

3 The quantified incremental benefits for this program are assumed to be the
4 average aggregate demand response reductions aligned with the I&M/PJM
5 system top five coincident peak (*i.e.* top 5 CP) hour demand reductions that I&M
6 had historically achieved from AC cycling. Based on I&M RPR Program actual
7 achievements and the average size and efficiency level of air conditioner units
8 found in I&M service territory, I&M estimated a per unit coincident peak demand
9 reduction of 0.834 kW per participant. This amount of per unit demand reduction
10 is consistent with what was learned and realized in the predecessor RPR
11 Program but with an estimate of improved results due to the level of data
12 granularity available from AMI metering to better know and predict air
13 conditioner operation during events and improved data collection from the two
14 way communicating AMI system. To determine the monetized benefit stream,
15 I&M applied the annualized avoided capacity cost from the Company's
16 fundamentals forecast as the proxy estimate for the marginal market cost for
17 capacity on the PJM market at the point in time in which the load reduction
18 occurs. This benefit is included in the AMI CBA presented by Company witness
19 Bech.

20 The AMI CBA also applied a system level estimate of \$20 per kW year for
21 distribution avoided cost to augment the program benefit stream for any location
22 specific distribution cost deferral that may occur due to the demand reduction
23 from this program operation. Company witness Bech supports both the rationale
24 and level of distribution avoided cost applied in the AMI CBA.

25 Last, the benefits for this program reflect the expected participation. Expected
26 program participation was determined using I&M customer data and estimates
27 for IQ and rural customers that have central air conditioning using an assumed
28 ten percent (10%) enrollment rate for the first year and a twenty percent (20%)
29 cumulative enrollment rate for the second year of the program.

1 **Q36. Please discuss the Test Year costs required to implement the Residential**
 2 **AMI HVAC Direct Load Control Program.**

3 Overall, the Test Year costs of this program are comparable to the costs of the
 4 predecessor RPR Program, but without the annual ongoing cost to reserve and
 5 use the radio frequency (RF) communication systems from commercial radio
 6 system operators or the vendor support and software costs to manage the RF
 7 communication system interface.

8 The Test Year costs of this program, which are also included in the AMI CBA
 9 are shown in *Figure JCW-3*:

Figure JCW-3. Residential AMI HVAC DLC (CBA Assumptions) (Indiana)

	2021		2022	
	Capital	O&M	Capital	O&M
Equipment	\$0	\$0	\$0	\$1,091,584
Customer Acquisition	\$0	\$0	\$0	\$4,597
Program Management	\$0	\$0	\$0	\$45,129
Customer Incentive	\$0	\$0	\$0	\$35,422
Internal & Vendor IT	\$0	\$0	\$0	\$103,700
EM&V	\$0	\$0	\$0	\$12,116
Total	\$0	\$0	\$0	\$1,292,549

10 **Q37. Before discussing the other DLC customer programs, please explain how**
 11 **I&M will manage the DLC events across all of the proposed DLC programs.**

12 For all AMI DLC programs, the Company plans to use an AMI software already
 13 provided by the AMI system vendor as part of the overall AMI system package
 14 to enable DR event communication to the respective DLC equipment and
 15 switches.

16 During DLC program implementation, the Company will evaluate the
 17 performance and functionality of this basic system and assess the need for an
 18 overall coordinated system that combines DLC event calling and management

1 across all DLC equipment and switches into one common software platform and
2 portal. The level of benefit realization, from a both scale and depth of per unit
3 demand savings, from each DLC program will be used to guide and inform the
4 appropriateness and need for such a common platform and portal.

Residential AMI Electric Water Heater Direct Load Control Program

5 **Q38. Please discuss the proposed Residential AMI Electric Water Heater Direct**
6 **Load Control Program.**

7 Attachment JCW-3 provides the program design information for this program.
8 The intended customer segment for this program is multi-family IQ tenant
9 customers that have an electric resistance element hot water heater but do not
10 have the capability or means to offer water heater load control during the time of
11 I&M/PJM system coincident peak demand. The program will deploy bilateral-
12 communicating hot water heater direct load control switches in multi-family
13 housing units using AMI infrastructure for control and communication up to the
14 AMI meter. I&M will partner with a vendor to deploy both the hot water heater
15 switches, the communication system from the AMI meter to each of the multi-
16 family unit water heaters, and the peak period control design. Relying on the
17 vendor's control design and experience, I&M expects to test different forms of
18 peak period control in order to determine the optimal benefit potential and
19 customer risk for the lack of hot water availability. Participating customers will
20 receive peak period bill credits for event and load control participation, where
21 customers will receive a bill credit for a set dollar amount for each event in which
22 they participated.

23 **Q39. Please discuss the benefits that result from Residential AMI Electric Water**
24 **Heater Direct Load Control program.**

25 The quantified benefits considered in the AMI CBA for this program are
26 assumed to be the average aggregate demand response reductions during the

1 top five CP demand reductions per year, using vendor estimates for the amount
2 of per participant water heater demand reductions. Using information and data
3 from vendor experience, I&M estimated a per unit coincident peak demand
4 reduction of 0.5 kW per participant. This amount of per unit demand reduction is
5 an average assumed value that is dependent upon the degree of water heater
6 management during demand response events (i.e. degree of invasiveness of
7 water heater control).

8 To determine the monetized benefit stream, I&M applied the annualized avoided
9 capacity cost from the Company's fundamentals forecast as the proxy estimate
10 for the marginal market cost for capacity on the PJM market at the point in time
11 in which the load reduction occurs.

12 I&M also applied a system level estimate of \$20 per kW year for distribution
13 avoided cost to augment the program benefit stream for any location specific
14 distribution cost deferral that may occur due to the demand reduction from this
15 program operation. Company witness Bech supports both the rationale and level
16 of distribution avoided cost applied in the AMI CBA.

17 Last, I&M estimated the level of benefits for this program at an estimated scale
18 of expected participants. This number of program participants was determined
19 using I&M customer data and estimates for the number of IQ customers that
20 have electric resistance water heaters using an assumed 5% enrollment rate for
21 the first year and a 10% cumulative enrollment rate for the second year of the
22 program.

23 **Q40. Please discuss the Test Year costs required to implement the Residential**
24 **AMI Electric Water Heater Direct Load Control program.**

25 Overall, the Test Year costs for this program mirror the costs discussed in the
26 AMI HVAC DLC Program, but are based on vendor costs to provide the DLC
27 services for this program. I&M will call the demand response events and provide

1 the AMI communication channels via AMI infrastructure, and the program
 2 vendor will implement all other aspects of the program. This is appropriate
 3 because I&M does not have direct experience in electric water heater DLC and
 4 will use this program to learn and understand the potential for cost effective
 5 electric water heat DLC, focused on an IQ multi-family setting where there is
 6 greater likelihood of concentrated electric water heat installations.

7 The Test Year costs of this program, which are also included in the AMI CBA
 8 are shown in *Figure JCW-4*:

Figure JCW-4. Residential AMI IQ Water Heater DLC (CBA Assumptions) (Indiana)

	2021		2022	
	Capital	O&M	Capital	O&M
Equipment	\$0	\$0	\$0	\$478,055
Customer Acquisition	\$0	\$0	\$0	\$1,464
Program Management	\$0	\$0	\$0	\$42,003
Customer Incentive	\$0	\$0	\$0	\$2,130
Internal & Vendor IT	\$0	\$0	\$0	\$4,346
EM&V	\$0	\$0	\$0	\$11,595
Total	\$0	\$0	\$0	\$539,593

Residential Customer Engagement Demand Response Program

9 **Q41. Please describe the Residential Customer Engagement Demand Response**
 10 **Program.**

11 Attachment JCW-1 provides all of the program design detail, cost, and targeted
 12 customer segments for this program. This program relies on large-scale
 13 customer self-action to reduce usage during peak periods when events are
 14 communicated by I&M to each enrolled customer via text message or email.
 15 Customers must reduce their usage on their own when notified by I&M of a peak
 16 period event, so this program is effectively a behavior-driven demand response

1 program. I&M will pay enrolled participants a demand response bill credit
2 according to their level of usage reduction per demand response event called by
3 the Company. In the event a precise customer usage reduction cannot be
4 determined, or if usage actually increased during the demand response event
5 window, I&M will not pay a demand response bill credit to the participant.

6 While the per participant peak period demand savings for this program is the
7 lowest amongst the four proposed programs, it offers the potential for the largest
8 scale of customer engagement. Since this program does not need end-use load
9 control devices, AMI metrology data can be used to provide customers with
10 timely and meaningful usage data and then to statistically confirm the amount of
11 load reduction during peak periods.

12 **Q42. Why does I&M expect that this type of program offers the potential for the**
13 **largest scale of demand response participation?**

14 Generally, I&M became aware of this type of demand response program while
15 attending industry conferences, from reviewing general industry news articles,
16 from discussions with industry implementation vendors, and from studying other
17 similar utility programs in the U.S. A review of annual EM&V reports for a similar
18 program (i.e. the Commonwealth Edison Peak Time Rebates Program (PTR))
19 reflected substantial customer interest and participation over the course of four
20 program years, demonstrating that this type of program offers ease of
21 participation for customers at their individual interest level without a utility
22 controlled event.

23 **Q43. Will I&M only provide to participating customers information about the**
24 **timing of demand response events?**

25 No. Customers will have access to their AMI usage data via the AMI data portal
26 to determine their usage levels. I&M will also offer these customers specific tips

1 and advice throughout the summer cooling season to help customers
2 understand what actions they can take to reduce usage on their own. After DR
3 events have been called and completed, I&M will follow up with enrolled
4 customers to provide each specific information for how much usage was
5 reduced from each DR event and how much corresponding bill credit was
6 earned. Overall, I&M plans to enable customers to use AMI data and information
7 to aid their participation in this program.

8 **Q44. Please discuss the benefits that result from Residential Customer**
9 **Engagement Demand Response Program operation.**

10 The quantified incremental benefits considered in the AMI CBA for this program
11 are the average aggregate demand response reductions aligned with the
12 I&M/PJM system top five CP hours per year that can be achieved using an
13 estimate of demand reduction for each participant. Using information and data
14 from Commonwealth Edison's PTR program EM&V experience, I&M estimated a
15 per unit coincident peak demand reduction of 0.15 kW per participant. This
16 amount of per unit demand reduction is dependent upon the amount of peak
17 hour usage reduction that will be determined by I&M's third party EM&V vendor
18 who will perform the concurrent usage reduction analysis for the program.

19 To determine the monetized benefit stream, I&M applied the annualized avoided
20 capacity cost from the Company's fundamentals forecast as the proxy estimate
21 for the marginal market cost for capacity on the PJM market at the point in time
22 in which the load reduction occurs.

23 I&M also applied a system level estimate of \$20 per kW year for distribution
24 avoided cost to augment the program benefit stream for any location specific
25 distribution cost deferral that may occur due to the demand reduction from this
26 program operation. Company witness Bech supports both the rationale and level
27 of distribution avoided cost applied in the AMI CBA.

1 Last, I&M estimated the level of benefits for this program at an estimated scale
 2 of expected participation. Program participation was estimated by Accenture
 3 using I&M customer data in comparison to the scale realized in the
 4 Commonwealth Edison PTR program but adapting it to I&M residential customer
 5 counts.

6 **Q45. Please discuss the Test Year costs required to implement the Residential**
 7 **Customer Engagement Demand Response Program.**

8 The Test Year costs of this program, which are also included in the AMI CBA,
 9 are shown in *Figure JCW-5* below:

Figure JCW-5. Residential AMI Customer Engagement DR (CBA Assumptions) (Indiana)

	2021		2022	
	Capital	O&M	Capital	O&M
Equipment	\$0	\$0	\$0	\$0
Customer Acquisition	\$0	\$0	\$0	\$53,300
Program Management	\$0	\$0	\$0	\$96,363
Customer Incentive	\$0	\$0	\$0	\$28,480
Internal & Vendor IT	\$0	\$0	\$0	\$0
EM&V	\$0	\$0	\$0	\$20,218
Total	\$0	\$0	\$0	\$198,361

Small Business AMI Direct Load Control Program

10 **Q46. Please describe the Small Business AMI Direct Load Control Program.**

11 Attachment JCW-4 provides all of the program design detail, cost, and targeted
 12 customer segments. The Small Business AMI Direct Load Control Program
 13 leverages the Company's prior experience with the Work Energy Management
 14 (WEM) Program. This program will facilitate small business customer peak load
 15 reduction using AMI usage data granularity to verify the amount of actual load
 16 reduction. Under the predecessor WEM Program I&M installed and owned load
 17 management system and demand response control measures. Under the new

1 program, small business customers will be provided an energy management
2 system (EMS) "lite" through a program vendor and will then own the EMS and
3 the associated demand response control measures (e.g., connected HVAC
4 thermostats) that will provide load control capability. I&M has identified a vendor
5 who will provide their EMS to customers when customers install the vendor's
6 wireless control measures that use a proprietary wireless communication
7 system. I&M is currently piloting this vendor's EMS and energy management
8 measures in the Company's Michigan service territory to better understand the
9 customer experience and energy savings that can be achieved from small
10 business customer engagement in energy management activities.

11 For this program, participating small business customers will maintain the EMS
12 and load control measures and will be responsible to provide internet
13 connectivity for the load management objectives of this program. The vendor will
14 arrange for and facilitate peak period load control from I&M to participating
15 customers but participating customers must provide I&M electronic access to
16 the customer's EMS. Participating small business customers will receive a bill
17 credit for each peak period load control event the customer participates in.

18 **Q47. Please discuss the benefits that result from the Small Business AMI Direct**
19 **Load Control Program operation.**

20 The quantified incremental benefits considered in the AMI CBA for this program
21 are the estimated demand response I&M/PJM system coincident peak demand
22 reductions that can be achieved using the average amount of demand reduced
23 for the top five CP hours annually for each participant. Because I&M has not
24 operated a commercial demand response program before, I&M developed an
25 initial estimate of demand reduction based on an assumed typical size air
26 conditioner for small commercial customers at 1.75 kW per unit. This amount of
27 per unit demand reduction is an average assumed value that is dependent upon
28 the amount of peak hour energy use reduction that will be determined by I&M's

1 third party EM&V vendor who will perform the coincident peak hours demand
2 usage reduction analysis for the program.

3 To determine the monetized benefit stream, I&M applied the annualized avoided
4 capacity cost from the Company's fundamentals forecast as the proxy estimate
5 for the marginal market cost for capacity on the PJM market at the point in time
6 in which the load reduction occurs.

7 I&M also applied a system level estimate of \$20 per kW year for distribution
8 avoided cost to augment the program benefit stream for any location specific
9 distribution cost deferral that may occur due to the demand reduction from this
10 program operation. Company witness Bech supports both the rationale and level
11 of distribution avoided cost applied in the AMI CBA.

12 Last, I&M estimated the level of benefits for this program based on expected
13 participation. This number of program participants was estimated by I&M and
14 Accenture using I&M customer data based on the number of business
15 customers with monthly demands less than 75 kW.

16 **Q48. Please discuss the Test Year costs required to implement the Small**
17 **Business AMI Direct Load Control Program.**

18 The Test Year costs of this program, which are also included in the AMI CBA,
19 are shown in *Figure JCW-6*:

Figure JCW-6. Commercial AMI Small Business DLC (CBA Assumptions) (Indiana)

	2021		2022	
	Capital	O&M	Capital	O&M
Equipment	\$0	\$0	\$0	\$119,888
Customer Acquisition	\$0	\$0	\$0	\$808
Program Management	\$0	\$0	\$0	\$41,348
Customer Incentive	\$0	\$0	\$0	\$6,230
Internal & Vendor IT	\$0	\$0	\$0	\$18,223
EM&V	\$0	\$0	\$0	\$11,486
Total	\$0	\$0	\$0	\$197,982

Critical Peak Pricing

1 **Q49. Please describe the Critical Peak Pricing Program.**

2 Attachment JCW-5 provides the program design details for this program. The
3 Critical Peak Pricing (CPP) Program is designed to motivate, through price
4 response, residential and general service customers to either manage the timing
5 of, or to conserve, usage during I&M and PJM peak and critical peak hour
6 periods. Different from DLC and DR, participating customers take self-action to
7 manage their usage based on seasonal periods and specific tiers of peak
8 electricity pricing. CPP is an evolution of the existing time of use tariffs currently
9 offered by I&M where the traditional on peak period has pricing tiers assigned
10 based on cost and the traditional off peak period is not as broadly defined.

11 **Q50. Please discuss the CPP benefits.**

12 CPP benefits participating customers through the opportunity to customize and
13 better manage energy use against high cost periods to the extent they can shift
14 usage to lower cost periods. CPP benefits non-participating customers because
15 the need for higher cost supply resources is lessened through reductions to
16 system-wide demand during high cost periods.

17 With an AMI system, education and tools that make usage data more timely and
18 detailed, customers benefit through increased knowledge and informed ability to
19 control their cost of electricity and what appliances they use to shift the timing of
20 their use or which ones they can conserve with.

21 CPP offers customer engagement as a resource option, but access, familiarity,
22 and acceptance are important to develop these type of resource options.

23 CPP is a DSM driven capacity reduction option for I&M customers that helps the
24 Company manage peak load by encouraging customers to either shift the timing
25 of their usage or conserving during times when increased capacity is needed.

1 Further, the deployment of AMI offers customers and the Company expanded
2 capability to manage those efforts.

3 The availability of more timely and more granular AMI based usage data and
4 information affords the prospect to better manage energy supply need and the
5 energy delivery system for the Company, while at the same time providing
6 customers with more information and the opportunity to have more control over
7 their cost of electricity. When considering the importance of planning for I&M's
8 future supply need, early and ongoing development is beneficial for both I&M
9 customers and the Company to ensure the resources are ready, available, and
10 dependable at the time when they are needed.

11 **Q51. Please discuss the customer engagement assumptions used by the**
12 **Company for Critical Peak Pricing operation.**

13 The AMI CBA contemplates relying on an "opt out" customer engagement
14 approach for CPP. Company witness Bech discusses this approach and how it
15 is based on other utility program learnings. Consistent with the need to build
16 customer familiarity and acceptance over time, the Company assumed a ramp
17 up in enrollments. This means that the Company assumed a near term opt-in
18 participation ramp up rate at 3% per year until 2028. Then, effective 2028, opt-
19 out levelizes at a 65% ongoing participation rate.

20 **Q52. Please discuss the CPP demand and energy load reduction assumptions**
21 **used in the AMI CBA.**

22 Using Accenture's estimates provided by Company witness Bech, the AMI CBA
23 case uses an estimated 0.15 kW in demand reduction per residential participant
24 during peak periods and an estimated 40 kWh in energy savings per year.
25 Because CPP is peak period focused and inherently encourages load shifting to

1 non-peak periods, peak demand savings produce about 75% of the overall
2 benefit stream.

3 **Q53. Please discuss the incremental benefits that result from Critical Peak**
4 **Pricing operation.**

5 The quantified incremental benefits considered in the AMI CBA for this program
6 are the estimated CPP I&M/PJM system coincident peak demand reductions
7 that can be achieved using the average amount of demand reduced for the top
8 five (i.e. 5 CP) coincident peak hours annually for each participant. Because
9 I&M has not operated a CPP program before, I&M relied on estimates of
10 demand reduction from Accenture. The estimated per unit demand reduction is
11 an average assumed value. The actual amount of peak hour use reduction will
12 be determined by I&M's third party EM&V vendor who will perform the
13 coincident peak hours demand usage reduction analysis for the program.

14 To determine the monetized benefit stream, the AMI CBA applied the
15 annualized avoided capacity cost from the Company's fundamentals forecast as
16 the proxy estimate for the marginal market cost for capacity on the PJM market
17 at the point in time in which the load reduction occurs.

18 The CBA also applies a system level estimate of \$20 per kW year for distribution
19 avoided cost to augment the program benefit stream for any location specific
20 distribution cost deferral that may occur due to the demand reduction from this
21 program operation. Company witness Bech supports both the rationale and level
22 of distribution avoided cost applied in the AMI CBA.

23 Further, as discussed above, the AMI CBA estimates an avoided value of peak
24 period load shift that would occur to off peak periods as a result of CPP. This
25 amount of energy was valued at the difference between marginal market energy
26 cost for on peak periods and off peak periods to derive this avoided cost benefit
27 stream.

1 Last, the AMI CBA estimates the level of benefits for this program at an
 2 estimated scale of expected participants. This number of program participants
 3 was determined by I&M and Accenture using I&M customer data based on the
 4 number of residential customers and comparable program participation
 5 estimates from other utility programs studied by Accenture. CPP participation
 6 estimates were also compared to other AMI DSM programs to ensure estimates
 7 aligned with the single program participation requirement for any given program
 8 year.

9 **Q54. Please discuss the incremental costs required to implement the Critical**
 10 **Peak Pricing Program.**

11 The Test Year incremental costs of this program, which are also included in the
 12 AMI CBA, are as shown in *Figure JCW-7* below:

Figure JCW-7. Critical Peak Pricing (CBA Assumptions) (Indiana)

	2021		2022	
	Capital	O&M	Capital	O&M
Equipment	\$0	\$0	\$0	\$0
Customer Acquisition	\$0	\$0	\$0	\$21,320
Program Management	\$0	\$0	\$0	\$61,820
Customer Incentive	\$0	\$0	\$0	\$0
Internal & Vendor IT	\$0	\$0	\$0	\$0
EM&V	\$0	\$0	\$0	\$14,898
Total	\$0	\$0	\$0	\$98,038

Residential AMI Customer Portal

13 **Q55. Please describe the Residential AMI Customer Portal Program.**

14 The Residential AMI Customer Portal Program provides an online platform that
 15 enables residential customers with an AMI meter installed to access not only
 16 their usage data and information in a more timely and detailed manner but
 17 additional tools to help them better manage their usage. This online platform is

1 provided through Oracle and contains several traditional engagement tools that
2 are enhanced with AMI data and information. Such tools and information include
3 electronic Weekly AMI Reports (WAMI), high bill alerts (HBA), energy use and
4 cost calculators, and refined usage disaggregation prediction for the end use
5 appliances that are consuming energy. These tools enable customers to gain
6 more control over their usage and better prepares them for action regarding
7 their usage profile and patterns.

8 **Q56. Please discuss how residential customers might use AMI Portal data and**
9 **information as opposed to the monthly usage data they currently have**
10 **access to.**

11 AMI Portal usage data will be more timely and informative regarding daily
12 energy use and variation. While not instantaneous, AMI data in the portal will be
13 updated on a daily basis to show prior day usage. Through this, customers can
14 make decisions, for example, on what their prior day usage was over the course
15 of the day to know what their usage was during a peak period or during a CPP
16 peak period pricing tier. Based on that information, customers can decide what
17 actions to take to manage their usage, whether those actions are behavioral in
18 nature or through some type of schedule control on HVAC run time, electric
19 dryer usage, or electric range usage.

20 Overall, customers will have better information on a more timely basis so they
21 can manage their usage according to the AMI-enabled customer program in
22 which they participate. Depending upon the program a customer participates in,
23 customer action and response can vary based on their interest level and
24 preference.

1 **Q57. Please discuss the incremental benefits that result from Residential AMI**
2 **Customer Portal operation.**

3 Generally, the Company estimates that engaged customers will become more
4 engaged and will respond with behavioral change due to their increased
5 awareness from the enhanced data, tools, and information provided by AMI.

6 This behavioral change from electronic WAMIs, informed by Accenture's study
7 of other utility AMI engagements and I&M history of behavioral change energy
8 conservation programs, was estimated to result in energy and demand
9 conservation of 1.7% per year, ongoing for the AMI CBA period, per engaged
10 customer. Additionally, based on similar information and experience, the
11 Company estimated other incremental conservation to occur from HBAs at a
12 rate of 0.3% per year, ongoing in the same manner as estimated for the WAMIs.

13 The level of behavioral conservation is consistent with the Company's
14 experience for this type of ongoing customer engagement activity and has
15 considered the quantified benefit streams in comparable fashion. AMI will
16 enable customers to have the level of data and enhanced tools necessary to
17 make informed decisions and take action on their usage. Accordingly, the
18 Company's benefit valuation assumes AMI data, and its associated tools, will
19 supplant the traditional behavior conservation programs offered by the Company
20 previously and will define a new paradigm for such engagement where highly
21 engaged customers are the new norm, whether through self-action or
22 technology and automation.

23 To determine the monetized energy savings benefit stream, the total expected
24 annual energy savings from all engaged customers was valued at the difference
25 between marginal market energy cost for on peak periods and off peak periods
26 over the forecast period of the AMI CBA.

27 To determine the monetized capacity reduction benefit stream, the AMI CBA
28 applied the annualized avoided capacity cost from the Company's fundamentals

1 forecast as the proxy estimate for the marginal market cost for capacity on the
 2 PJM market at the point in time in which the load reduction occurs over the
 3 forecast period of the AMI CBA.

4 The CBA also applies a system level estimate of \$20 per kW year for distribution
 5 avoided cost to augment the program benefit stream for any location specific
 6 distribution cost deferral that may occur due to the demand reduction from this
 7 program operation. Company witness Bech supports both the rationale and level
 8 of distribution avoided cost applied in the AMI CBA.

9 **Q58. Please discuss the Test Year costs required to implement the Residential**
 10 **AMI Customer Portal Program.**

11 The Test Year costs attributed to the Residential AMI Portal are the vendor (i.e.
 12 Oracle) costs to provide the specific enhanced data, reports, and tools to
 13 customers, and the cost to administratively support their effectuation. The
 14 Company also include EM&V cost to evaluate the energy and demand
 15 conservation that occurs as well. All of these costs were assumed to occur,
 16 ongoing, over the life of the AMI CBA analysis period. *Figure JCW-8* shows the
 17 Residential AMI Customer Portal Program costs as contained the Test Year and
 18 AMI CBA.

Figure JCW-8. Residential AMI Customer Portal (CBA Assumptions) (Indiana)

	2021		2022	
	Capital	O&M	Capital	O&M
Equipment	\$0	\$0	\$0	\$0
Customer Acquisition	\$1,337,093	\$323,604	\$986,136	\$305,773
Program Management	\$0	\$92,625	\$0	\$95,404
Customer Incentive	\$0	\$0	\$0	\$0
Internal & Vendor IT	\$1,993,588	\$295,491	\$1,692,114	\$329,014
EM&V	\$0	\$40,212	\$0	\$41,405
Total	\$3,330,681	\$751,932	\$2,678,250	\$771,596

C&I AMI Customer Portal

1 **Q59. Please describe the C&I AMI Customer Portal Program.**

2 Similar to the Residential AMI Customer Portal, the Commercial AMI Customer
3 Portal Program provides an online platform that enables commercial customers
4 with an AMI meter installed to access not only their usage data and information
5 in a more timely and detailed manner but additional tools to help them better
6 manage their usage. This online platform is provided through First Fuel and
7 contains several traditional engagement tools called widgets that are enhanced
8 with AMI usage data, information, and analytics driven insights. Combined, this
9 information is expected to drive customer engagement in their business usage,
10 cause conservation to occur and build customer understanding for their options
11 in how they consume energy.

12 Further, the Company's internal business customer support and account
13 management staff will have access to new tools that will augment their ability to
14 interact with customers, including access to how customers are engaging with
15 and using the portal through Google Analytics, as an example. These tools are
16 expected to streamline interactions and improve understanding of individual
17 customer usage profiles to help account managers identify and present
18 opportunities for customers to better manage their usage.

19 **Q60. Please discuss the benefits that result from C&I AMI Customer Portal**
20 **operation.**

21 Generally, the Company estimates that customers will become more engaged
22 and will respond with behavioral change due to their increased awareness from
23 the enhanced data, tools, and information provided by AMI and
24 recommendations made through account managers. The AMI CBA

1 contemplates that engaged business customers will save about 1% of their
2 annual usage from behavioral conservation efforts, or 390 kWh per year, with a
3 corresponding peak demand reduction of .05 kW per customer.

4 To determine the monetized energy savings benefit stream, the total expected
5 annual energy savings from all engaged customers was valued at the difference
6 between marginal market energy cost for on peak periods and off peak periods
7 over the forecast period of the AMI CBA.

8 To determine the monetized capacity reduction benefit stream, the AMI CBA
9 applied the annualized avoided capacity cost from the Company's fundamentals
10 forecast as the proxy estimate for the marginal market cost for capacity on the
11 PJM market at the point in time in which the load reduction occurs over the
12 forecast period of the AMI CBA.

13 The CBA also applies a system level estimate of \$20 per kW year for distribution
14 avoided cost to augment the program benefit stream for any location specific
15 distribution cost deferral that may occur due to the demand reduction from this
16 program operation. Company witness Bech supports both the rationale and level
17 of distribution avoided cost applied in the AMI CBA.

18 **Q61. Please discuss the Test Year costs required to implement the C&I AMI**
19 **Customer Portal Program.**

20 The Test Year costs attributed to the Commercial AMI Portal are the vendor (i.e.
21 First Fuel) costs to provide the specific enhanced data and tools to customers,
22 and the cost to administratively support their use by customers. EM&V costs to
23 evaluate the energy and demand conservation that occurs are included as well.

1 All of these costs were assumed to occur, ongoing, over the life of the analysis
 2 period in the AMI CBA. *Figure JCW-9* shows the Commercial AMI Customer
 3 Portal Program costs as contained the Test Year and AMI CBA.

Figure JCW-9. Commercial AMI Customer Portal (CBA Assumptions) (Indiana)

	2021		2022	
	Capital	O&M	Capital	O&M
Equipment	\$0	\$0	\$0	\$0
Customer Acquisition	\$176,495	\$42,715	\$130,169	\$40,362
Program Management	\$0	\$97,850	\$0	\$97,850
Customer Incentive	\$0	\$0	\$0	\$0
Internal & Vendor IT	\$0	\$475,300	\$0	\$60,606
EM&V	\$0	\$41,243	\$0	\$42,466
Total	\$176,495	\$657,109	\$130,169	\$241,284

Flex Pay Program

4 **Q62. Please describe the Flex Pay Program.**

5 Company witness Lucas explains the Flex Pay Program in more detail and
 6 describes how customers are empowered to manage energy consumption
 7 against budget, payment ability and timing. Energy conservation is expected to
 8 naturally occur because customers are more aware of their usage and are
 9 therefore pre-dispositioned to manage their consumption against individually set
 10 parameters. The flexibility of this program uniquely positions and motivates
 11 customers to manage consumption at a granular level, sometimes on a daily
 12 basis.

13 **Q63. Please discuss the benefits that result from Flex Pay Program operation.**

14 The AMI CBA case includes an estimate of annual energy savings resulting
 15 from the customer driven conservation efforts I describe above. The Company
 16 projects that about 2.5% of customers will enroll and annually use Flex Pay and

1 forecasts an individual annual energy savings of 10%. At 10%, the estimated
 2 total annual energy savings used in the CBA is about 10 MWh per year in total.

3 To determine the monetized energy savings benefit stream, the total expected
 4 annual energy savings from all engaged customers was valued at the difference
 5 between marginal market energy cost for on peak periods and off peak periods
 6 over the forecast period of the AMI CBA.

7 **Q64. Please discuss the Test Year costs required to implement the Flex Pay**
 8 **Program.**

9 The Test Year costs for the Flex Pay Program, which are also included in the
 10 AMI CBA include:

- 11 • An initial, one time upfront capital expenditure to adjust IT bill payment
 12 systems to enable Flex Pay capability;
- 13 • An allocation of support staff program start up and customer enrollment
 14 costs;
- 15 • Annual EM&V costs to verify the energy savings benefits; and,
- 16 • Ongoing support costs to insure appropriate ongoing operation of the
 17 program.

18 *Figure JCW-10 shows these costs for 2022 and 2023.*

Figure JCW-10. Flex Pay (CBA Assumptions) (Indiana)

	2021		2022	
	Capital	O&M	Capital	O&M
Equipment	\$0	\$0	\$0	\$0
Customer Acquisition	\$34,284	\$8,297	\$25,285	\$7,840
Program Management	\$0	\$2,375	\$0	\$2,446
Customer Incentive	\$0	\$0	\$0	\$0
Internal & Vendor IT	\$0	\$0	\$509,201	\$0
EM&V	\$0	\$1,031	\$0	\$1,061
Total	\$34,284	\$11,703	\$534,486	\$11,347

VI. Crossroads EV Corridor Project

1 **Q65. Please discuss the Company's request regarding the Crossroads EV**
2 **Corridor Project.**

3 I&M is proposing to recover capital costs net of grant funding received from
4 Indiana Department of Environmental Management (IDEM) for corridor fast
5 charging equipment deployments as part of its participation with other Indiana
6 electric utilities within the IDEM Indiana Statewide Charging Network Program.¹

7 The Company plans to propose pricing for corridor fast charging utilization at a
8 future date through a 30-day filing. This will allow greater certainty in
9 deployment details and market comparisons closer to anticipated deployment
10 dates.

11 **Q66. What is the Indiana Statewide Charging Network Program?**

12 In 2020, IDEM issued a request for proposal (RFP) for its Indiana Statewide
13 Charging Network Program, requesting proposals for "Full Statewide or Partial
14 Direct-Current Charger and/or Level 2." The RFP stated that approximately
15 \$6.15 million in grant funding would be awarded through a competitive
16 solicitation for cooperative agreements, separately for both direct-current fast
17 charger (DCFC) and Level 2 charging equipment installations. IDEM allocated
18 \$5.35 million for DCFC charging equipment installation and \$615 thousand for
19 Level 2 equipment installation.

20 **Q67. What are the stated goals and objectives of the IDEM Indiana Statewide**
21 **Charging Network Program?**

22 In its RFP, IDEM stated that its goals and objectives are:

¹ <https://www.in.gov/idem/airquality/2712.htm>.

- 1 • To develop a statewide EV charging network that provides EV charging
2 locations to the greatest number of consumers;
- 3 • To create a diverse statewide network that meets the needs of Indiana
4 consumers using both DCFC and Level 2 charging equipment;
- 5 • To implement a program that is reliable through multiple charging stations
6 at each location;
- 7 • To maximize the available funds of \$6.15 million and achieve the greatest
8 value for Indiana's investment; and
- 9 • To maximize leveraging of public- and private-sourced funds where
10 possible to obtain the greatest number of charging locations possible.

11 **Q68. Please discuss I&M's involvement in the IDEM RFP for corridor fast**
12 **charging.**

13 As part of a joint Indiana utility proposal in response to the IDEM RFP for DCFC
14 equipment, called Crossroads EV Corridor, I&M proposed to install twelve
15 corridor fast charging sites within its service territory. See Attachments JCW-6
16 and JCW-7. These twelve I&M sites are part of 61 total locations proposed for a
17 corridor fast charging network for the state of Indiana. Consistent with IDEM's
18 stated program goal to maximize leveraging of public- and private-sourced funds
19 to obtain the greatest number of charging locations possible for the state, I&M
20 proposed to fund the costs associated with installing, interconnecting, operating,
21 and maintaining the twelve corridor fast charging sites in excess of the costs
22 covered by VW mitigation grant funding.

23 **Q69. What action did IDEM take following its review of RFP responses?**

24 IDEM awarded the entire \$5.35 million of DCFC grant funding to the joint
25 utilities' Crossroads EV Corridor proposal on May 20, 2021. See Attachment

1 JCW-8. Accordingly, I&M's proposal to install the twelve corridor fast charging
2 sites was evaluated by IDEM and found to be in accordance with IDEM's
3 requirements and timeline for grant funds reimbursement.

4 **Q70. What is the status of I&M's portion of the Crossroads EV Corridor Project?**

5 At this time, I&M is developing DCFC site implementation plans based on
6 IDEM's RFP timeline for funding availability and currently expects that
7 commissioning for each of the twelve sites will occur at distinct times throughout
8 the grant funding availability period according to how each site becomes known
9 and available. Confidential Attachment JCW-9 provides the Company's
10 estimated timeline and deployment cost, total and net of grant funding, for each
11 of the twelve locations. Since the IDEM RFP specified which costs were eligible
12 for grant funding offset, I&M will ensure grant funds received from IDEM after
13 installation and commissioning of each site are only applied to the eligible costs.
14 I&M will use grant funds to offset the direct equipment cost of the DCFC
15 charging stations.

16 **Q71. Please discuss Crossroads EV Corridor Project costs forecasted for cost**
17 **recovery in this filing.**

18 The Test Year forecast has \$3.25 million in capital cost in 2021, which was the
19 total project cost as of November 2020 when the forecast was developed. I&M
20 expected to have thirteen DCFC corridor sites at a cost of \$250,000 per site (i.e.
21 thirteen times \$250,000 equals \$3,250,000).

22 Subsequent to the forecast being prepared and after further developments in
23 conversations with IDEM, the number of DCFC sites identified for I&M service
24 territory narrowed to twelve sites. Based on the reduced number of sites,
25 additional site information, and DCFC equipment detail, I&M submitted to IDEM
26 a revised budgetary, or Class 3, total cost estimate of \$3,586,900. IDEM

1 subsequently approved this budget amount, \$3,586,900, in its unanimous
2 decision to authorize the Crossroads EV Corridor proposal from the joint utility
3 group.

4 **Q72. What amount of grant reimbursement does I&M expect to receive from**
5 **IDEM?**

6 I&M expects to receive approximately \$1.08 million in grant funding, which is
7 based on an estimated \$90,000 per corridor fast charging site for twelve sites.
8 IDEM grant funding will be issued once each corridor fast charging site is
9 demonstrated to be installed, operating, and available for public use through the
10 process identified by IDEM in its RFP.

11 **Q73. How will the Company realize its net asset investment in the Crossroads**
12 **EV Corridor Project?**

13 The Company proposes that the full capital cost of each of the twelve sites, net
14 of grant funding, will be accounted for as Electric Plant In-Service (EPIS)
15 according to each site's respective in-service schedule. In this approach, each
16 site location will have a unique project number assigned and each project
17 number will then have various associated work orders developed to effectuate
18 the site deployment work. Once grant funding is received from IDEM, I&M will
19 apply site grant funding to the specific work order that contains the allowable
20 cost elements as an offset, or cost reduction, to the work order. From this, the
21 final EPIS balance for each site will reflect the total work order cost, net of grant
22 funding as applicable.

23 Confidential Attachment JCW-9 provides the estimated timeline for each site's
24 commissioning and subsequent grant funding reimbursement from IDEM. Since
25 this timeline differs from the timing of Test Year forecast costs, the Company will
26 use the process described above to reflect those sites actual cost accounted for

1 as EPIS during the forecast 2021 and 2022 test year periods. The Phase-In
2 Rate Adjustment mechanism will ensure that rates reflect only projects that are
3 in service at end of the Test Year.

4 **Q74. How will I&M customers benefit from I&M's participation in the Crossroads**
5 **EV Corridor Project?**

6 I&M customers will experience the benefits espoused as part of IDEM's RFP
7 from the buildout and availability of EVs and DCFC charging sites across
8 Indiana. As participants, I&M customers that already own, or use, EVs will
9 benefit from the increased number of charging locations throughout the state as
10 they travel through their local region of the state or across the state. All I&M
11 customers, including non-participants, will realize the greater benefits of
12 increased EV adoption through reduced tailpipe emissions, which is one of the
13 benefits IDEM intends to capitalize on through its RFP for EV charging
14 infrastructure – reduced range anxiety promotes EV adoption, increases EV
15 use, and thereby reduces emissions from the proliferation of internal combustion
16 engine vehicles.

17 **Q75. Is it reasonable for I&M to participate in the Crossroads EV Corridor**
18 **Project?**

19 Yes. It is reasonable because the Crossroads EV Corridor Project improves
20 access to DCFC charging throughout I&M service territory as well as the state.
21 Participating I&M customers will have improved access to DCFC charging as
22 they travel within the state and non-participants will experience the greater-good
23 benefits consistent with IDEM's rationale for what EV charging infrastructure
24 buildout provides – reduced tailpipe emissions.

25 Further, the use of grant funding to offset the cost of DCFC infrastructure
26 reduces the cost of the overall network and lays a foundation for ongoing

1 benefits. As IDEM's grant funding attests, it is necessary to seed the adoption of
2 EVs and EV charging infrastructure and lay the foundation that enables EV
3 infrastructure usage to growth.

4 **Q76. Does the Company have a forecast for DCFC site charging usage for the**
5 **next ten years?**

6 Yes. Confidential Attachment JCW-9 provides the Company's estimate for
7 DCFC charging equipment usage over the next ten years across all twelve site
8 locations.

9 **Q77. Has the Company developed a revenue forecast for the twelve DCFC**
10 **sites?**

11 Yes. Confidential Attachment JCW-9 contains a revenue forecast based upon a
12 proposed market rate based price for EV DCFC fast charging. The Company
13 proposes the Commission determine how to treat the revenue for ratemaking
14 purposes in a future proceeding.

15 **Q78. In this case, is the Company requesting cost recovery for incremental**
16 **operation and maintenance costs for the twelve DCFC EV sites?**

17 No. The Test Year forecast does not include a forecast of incremental operation
18 and maintenance costs. In order to comply with IDEM grant funding
19 requirements, DCFC equipment capital costs includes the upfront purchase of
20 equipment warranty and third party provider equipment and technology services
21 for the first five years, which are eligible for grant funding offset under the IDEM
22 RFP. Confidential Attachment JCW-9 provides the Company's estimated annual
23 O&M costs for the ten-year life of the EV charging equipment.

1 **Q79. Has the Company developed a depreciation life for the DCFC equipment?**

2 Yes, the Company expects to assign a ten-year depreciation life for these
3 assets.

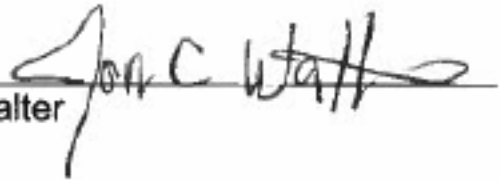
4 **Q80. Does this conclude your pre-filed verified direct testimony?**

5 Yes.

VERIFICATION

I, Jon C. Walter, Consumer & EE Programs Manager, affirm under penalties of perjury that the foregoing representations are true and correct to the best of my knowledge, information, and belief.

Date: 06/30/2021

Jon C. Walter 

Residential Customer Engagement Demand Response Program - Indiana

Objective:	<p>Offer residential customers a self-action demand response program in the I&M Indiana service territory.</p> <p>Offer a technology solution through the coupling of Automated Metering Infrastructure (AMI) technology and its associated hourly metering data and information to engage customers to take more informed self-action to reduce consumption during demand response events called by the Company.</p> <p>Capture demand response savings from residential customer engagement made possible through timely and detailed end use energy consumption from AMI technology.</p>
Target Market:	<p>I&M Indiana residential customers that are identified and qualified as meeting the following requirements:</p> <ul style="list-style-type: none">• An AMI meter and telecommunication system installed by I&M sufficient to support the technology needs of this program;• An active I&M AMI data portal account, or otherwise engaged through one of the AMI residential usage information offerings (e.g. Weekly AMI Report, or WAMI);• Primary residence is located within I&M service territory;<ul style="list-style-type: none">○ Single family residence that is not electrically served and metered as part of a master metering arrangement;○ Multi-family residence that is not electrically served and metered as part of a master metering arrangement. <p>And, any of the following:</p> <ul style="list-style-type: none">• Subscription to broadband internet services with a valid email address capable of receiving email demand response event notification;• Smart cell phone with a valid email address capable of receiving email demand response event notification;• Smart cell phone with an I&M app capable of receiving text and/or push demand response event notification;
Program Duration:	<p>This program will be offered to the specified customer segments as part of I&M's deployment and use of AMI metering and infrastructure.</p>

Program Description:	<p>This program will rely on AMI system connectivity and customer specific, granular usage data and information to:</p> <ol style="list-style-type: none"> 1. Differently engage specific residential customers; 2. Provide residential customers with a self-action demand response offering that requires customer involvement and action; 3. Offer a financial incentive for residential customers to engage in their use of and reliance on AMI usage data and information aimed at self-action to reduce during I&M peak use periods; <p>This program requires no customer or Company ownership of DLC equipment but can augment I&M's demand response capabilities.</p> <p>Certain segments of residential customers do not want, or cannot have, DLC equipment installed at their home and are inclined to self-engage with their granular AMI usage data and information.</p> <p>Through this program, I&M will offer residential customers an option to manage their own usage during peak periods on the I&M system and will pay an incentive to customers based on how much end use load they reduce during demand response events called by I&M.</p> <p>I&M will send demand response messages to enrolled customers during times of:</p> <ul style="list-style-type: none"> • Predicted utility system peak load conditions (non-system emergency or demand side management (DSM) events); • Predicted high loading on distribution circuits and/or substation distribution equipment (non-system emergency or DSM events); • Predicted correlating high outdoor temperatures (non-system emergency or DSM events); • Utility supply system emergency conditions (PJM emergency events). <p>DSM (i.e. peak reduction, non-emergency) events will be called at the discretion of I&M, with up to 15 events per year. Emergency events will be at the discretion of PJM as defined in PJM Manual 13 – Emergency Operations, with up to 10 events per PJM planning year.</p>
Incentive Strategy:	<p>A qualified residential customer will receive a bill credit of \$1.00 per kWh of load reduced per event called and participated in during the summer months of May, June, July, August and September, for each event called.</p> <p>If the customer does not reduce load as determined by the Company based on their</p>

	hourly event usage measured at the AMI electric meter for the premise enrolled in this program, that customer will be considered as opt out of the load control event and therefore will not be paid a demand response event bill credit.
Eligible Measures:	Residential customers, served by I&M through a residential tariff, that meet program eligibility requirements set forth above.
Implementation Strategy:	<p>Key elements of the implementation strategy include:</p> <ul style="list-style-type: none"> • Customer outreach, enrollment, and bill credit provisioning. I&M will provide for, support, and perform all customer outreach and enrollment activities. I&M will provision demand response bill credits through its internal billing and customer administration IT systems. • Program Administration. I&M will administer, manage, and house all program-related data through its internal billing, database and customer administration IT systems. • Customer Service. I&M and the program implementation contractor will store and track interactions with the customers, provide trained customer service staff for assisting customers with questions about the program, and provide service-related calls/issues resolution. I&M and its business partner will provide staff sufficient to handle customer’s inquiries, screen customers for eligibility, and explain program rules and benefits in a prompt and courteous manner. <p>I&M will determine when a DSM event is to take place, and will electronically call the event and will then provide notification through appropriate channels to the program enrolled customers of the demand response event.</p>
Marketing Strategy:	I&M will develop a marketing and communications package to successfully communicate and promote the program to qualified customers. As appropriate, I&M will develop, define, and create a segmentation plan that identifies customers targeted for program participation. I&M will provide for the development of marketing materials, the identification of channels and key relationships, and the leveraging of business partners to facilitate timely program enrollment. Targeted marketing to customers located on heavily-load distribution circuits, to possibly defer additional supply side infrastructure investments, may be employed as well.
Evaluation, Measurement & Verification:	An independent third party program evaluation contractor will perform an impact evaluation. The impact evaluation will determine the actual demand and energy reductions achieved, determine individual participant demand response event performance, and will perform a cost/benefit analyses of the program.

The program evaluation objectives are expected to include:

- Determination of the program impacts, including achieved demand reduction (kW), and net energy impacts.
- Assessment of the program's cost-effectiveness based on various economic tests.

I&M may supplement the evaluation efforts with customer surveys and additional load analyses.

Residential AMI HVAC Direct Load Control Program – Indiana

Objective:	<p>Offer a customer segment-specific IQ, rural, and senior citizen residential customer direct load control (DLC) demand response program in the I&M Indiana service territory.</p> <p>Utilize a technology solution that couples of Automated Metering Infrastructure (AMI) technology and its associated telecommunications channels to two way communicating load control switches located at customer central air conditioning or heat pump units.</p> <p>Capture DLC demand reduction benefits from specific customer segments that face barriers to enrollment in other DLC demand response programs that require broadband internet connectivity and smart, connected in-home control devices.</p>
Target Market:	<p>The target market is comprised of I&M Indiana residential customers with at least one existing and operational central air conditioning and/or heat pump units located at the same primary residence that are identified and qualified as meeting at least one or any combination of the following customer segments:</p> <ul style="list-style-type: none"> • An AMI meter and telecommunication system installed by I&M sufficient to support the technology needs of this program; • Limited availability, or no access to broadband internet services; <ul style="list-style-type: none"> ○ For the purpose of this program, cellular hot spot connectivity is limited availability; ○ Income Qualified according to I&M’s IQ qualification criteria of having household income equal to or less than 200% of federal poverty level; ○ Senior citizen, fixed income; ○ Primary residence is designated rural by I&M.
Program Duration:	<p>This program will be offered to the specified customer segments as part of I&M’s deployment and use of AMI metering and infrastructure.</p>
Program Description:	<p>This program will rely on and utilize AMI system connectivity to:</p> <ol style="list-style-type: none"> 1. Differently engage specific residential customer segments, 2. Provides specific customer segments with a DLC offering that requires little to no customer involvement, 3. Requires no customer ownership of DLC equipment, and 4. Augment I&M’s demand response capabilities.

	<p>Certain segments of customers do not have access to broadband internet and are therefore not eligible to participate in I&M’s Home Energy Management (HEM) smart thermostat DLC demand response program.</p> <p>In this program, a two-way communicating load control switch (LCS) will be installed on the outside of the customer’s home in the electrical circuit that powers the central air conditioning unit. The LCS will have sufficient capability to interrupt power flow to the air conditioner at times when the air conditioner is in operation. The LCS will communicate via either a Zigbee wireless communication protocol to I&M’s AMI meter, which would be capable of communicating via the same wireless protocol, or to the I&M AMI network via a Network Interface Card (NIC) installed in the LCS.</p> <p>I&M will send DLC signals via the AMI communication infrastructure to the LCS located at the customer’s central air conditioner(s) or central air source heat pumps(s) (HVAC units). Upon receipt of the specific signal, the LSC will act appropriately to cycle, according to the program’s intended cycling strategy, the HVAC units during times of:</p> <ul style="list-style-type: none"> • Predicted utility system peak load conditions (non-system emergency or Demand Side Management (DSM) events); • Predicted high loading on distribution circuits and/or substation distribution equipment (non-system emergency or DSM events); • Predicted correlating high outdoor temperatures (non-system emergency or DSM events); • Utility supply system emergency conditions (PJM emergency events). <p>DSM (i.e. peak reduction, non-emergency) events will be called at the discretion of I&M, with up to 15 events per year. Emergency events will be at the discretion of PJM as defined in PJM Manual 13 – Emergency Operations, with up to 10 events per PJM planning year.</p>
<p>Incentive Strategy:</p>	<p>A qualified residential customer with a working central air conditioner or heat pump will receive a bill credit of \$1.95 per event called and participated in during the summer months of May, June, July, August and September for each air-conditioning/heat pump unit participating in the called events. In the case where a customer has two or more HVAC units participating in an event, the customer will receive a bill credit, as described above, for each HVAC unit completing the participation in the event.</p> <p>The customer may opt out of load control event by contacting the third party program implementation contractor. A two-year minimum enrollment period is required.</p>
<p>Eligible Measures:</p>	<p>Residential customers, served by I&M through a residential tariff, that meet eligibility requirements set forth above, and having at least one existing HVAC unit are eligible to participate. I&M will install and own all program equipment, including the LCS units.</p>

Implementation Strategy:	<p>Key elements of the implementation strategy include:</p> <ul style="list-style-type: none"> • Customer outreach, enrollment, and bill credit provisioning. I&M will provide for, support, and perform all customer outreach and enrollment activities. I&M will provision demand response bill credits through its internal billing and customer administration IT systems. • Contract with and oversee third party Program LCS installation business partner. I&M’s program implementation contractor will install load control devices at the customer’s home. To the extent reasonable, this contractor will hire qualified Indiana-based installers / technicians. • Contract with and oversee third party business partner for a DLC demand response software platform capable of AMI network interface. I&M will contract with a third party business partner that will provide a DLC demand response software platform capable of LCS communication and interface through I&M’s AMI system. • Administration. I&M will administer, manage, and house all program-related data through its internal billing, database and customer administration IT systems. • Customer Service. I&M and the program implementation contractor will store and track interactions with the customers, provide trained customer service staff for assisting customers with questions about the program, and provide service-related calls/issues resolution. I&M and its business partner will provide staff sufficient to handle customer’s inquiries, screen customers for eligibility, and explain program rules and benefits in a prompt and courteous manner. <p>I&M will determine when a Demand Side Management (DSM) event is to take place, and will electronically call the event through the demand response software platform which will then initialize the event through the AMI system to the LCS known to be participating in the event.</p> <p>I&M plans to initially utilize an adaptive control/cycling strategy of the HVAC units. However, other cycling strategies may be employed and evaluated to determine the strategy that optimizes load impact without significantly affecting customer comfort.</p>
Marketing Strategy:	<p>I&M will develop a marketing and communications package to successfully communicate and promote the program to qualified customers. I&M will develop, define, and create a segmentation plan that identifies customers targeted for participation. I&M will provide for the development of marketing materials, the</p>

	<p>identification of channels and key relationships, and the leveraging of business partners to facilitate timely enrollment. Targeted marketing to customers located on heavily-load distribution circuits, to possibly defer additional supply side infrastructure investments, may be employed as well.</p> <p>Leads generated from these efforts will be provided to the third party installation business partner to determine program eligibility, set appointments (if necessary), secure a signed program agreement from the customer, ensure the equipment can receive the load control signal, provide any additional customer education, and other program implementation requirements. The business partner will also provide a toll-free telephone number where customers can call to receive additional program details, enroll in the program, and ask other program related questions.</p>
Evaluation, Measurement & Verification:	<p>An independent third party program evaluation contractor will perform an impact evaluation for all DLC events called and will report annual system coincident peak demand reductions. The impact evaluation will determine the actual demand and energy reductions achieved and a cost/benefit analyses of the program.</p> <p>The program evaluation objectives are expected to include:</p> <ul style="list-style-type: none">• Determination of the program impacts, including achieved demand reduction (kW), and net energy impacts.• Assessment of the program's cost-effectiveness based on various economic tests. <p>I&M may supplement the evaluation efforts with customer surveys and additional load analyses.</p>

Residential AMI Electric Water Heat Direct Load Control Program – Indiana

Objective:	<p>Offer a customer segment-specific residential Income Qualified (IQ), multi-family tenant, electric water heater direct load control (DLC) program in the I&M Indiana service territory.</p> <p>Utilize a technology solution that couples Automated Metering Infrastructure (AMI) technology and its associated telecommunications channels to Wi-Fi connected, smart electric resistance water heater control switches.</p> <p>Capture DLC demand reduction benefits from a specific IQ customer segment that faces barriers to enrollment in other DLC and demand response programs that require broadband internet connectivity and smart, connected in-home control devices such as thermostats.</p>
Target Market:	<p>The target market is comprised of I&M Indiana IQ, multifamily tenant, residential customers with an existing and operational electric resistance element hot water heater. The water heater must be located at the same primary residence and be dedicated to a single dwelling that is individually electric metered and located within a IQ multifamily complex. Eligible participants are those that are identified and qualified as meeting at least one or any combination of the following customer segments:</p> <ul style="list-style-type: none"> • An AMI meter and telecommunication system installed by I&M sufficient to support the technology needs of this program; • Limited availability, or no access to broadband internet services; <ul style="list-style-type: none"> ○ For the purpose of this program, cellular hot spot connectivity is limited availability; ○ Income Qualified according to I&M’s IQ qualification criteria of having household income equal to or less than 200% of federal poverty level; ○ Senior citizen, fixed income; ○ Primary residence is designated rural by I&M.
Program Duration:	<p>This program will be offered to the specified customer segment as part of I&M’s deployment and use of AMI metering and infrastructure.</p>
Program Description:	<p>This program will rely on and utilize AMI system connectivity to:</p> <ol style="list-style-type: none"> 1. Differently engage specific residential customer segments, 2. Provides those customers with a DLC demand response offering that requires little to no customer involvement,

3. Requires no customer ownership of DLC equipment, and
4. Augment I&M's demand response capabilities.

Certain segments of customers do not have access to broadband internet and are therefore not eligible to participate in I&M's Home Energy Management (HEM) smart thermostat DLC demand response program.

In this program, a two-way communicating load control switch (LCS) will be installed at, near, or on the electric hot water heater in the electrical circuit that powers the electric hot water heater unit. The LCS will have sufficient capability to interrupt power flow to the electric hot water heater at times when the water heater is in operation and will also have the communication capability via a Zigbee wireless communication protocol to communicate to I&M's AMI meter, capable of communicating via the same wireless protocol, or to the I&M AMI network via a Network Interface Card (NIC) installed in the LCS.

I&M will send DLC signals via the AMI communication infrastructure to the LCS located at the customer's electric hot water heater(s). Upon receipt of the specific signal, the LSC will act appropriately to cycle, according to the program's intended cycling strategy, the HVAC units during times of:

- Predicted utility system peak load conditions (non-system emergency or load management events);
- Predicted high loading on distribution circuits and/or substation distribution equipment (non-system emergency or Demand Side Management (DSM) events);
- Predicted correlating high outdoor temperatures (non-system emergency or DSM events);
- Utility supply system emergency conditions (PJM emergency events).

DSM (i.e. peak reduction, non-emergency) events will be called at the discretion of I&M, with up to 15 events per year. Emergency events will be at the discretion of PJM as defined in PJM Manual 13 – Emergency Operations, with up to 10 events per PJM planning year.

Incentive Strategy:

A qualified residential customer with a working electric resistance element hot water heater will receive a bill credit per event called and participated in during the summer months of May, June, July, August and September for each electric hot water heater unit participating in the called events according to the schedule below (Annual Payments are expected maximum annual amounts based on the maximum number of events that can be called):

Form 3 Customer Incentive-Per Event	\$0.80
Form 3 Customer Incentive--Annual Payment	\$12.00
Form 2 Customer Incentive-Per Event	\$1.00
Form 2 Customer Incentive--Annual Payment	\$15.00
Form 1 Customer Incentive-Per Event	\$1.10
Form 1 Customer Incentive--Annual Payment	\$16.50

The customer may opt out of load control event by contacting the third party program implementation contractor. A two-year minimum enrollment period is required.

Eligible Measures:

Residential customers, served by I&M through a residential tariff, that meet eligibility requirements set forth above, and having at least one existing electric hot water heater unit are eligible to participate. I&M will contract with a business partner who will install program equipment, including the LCS units, that is supplied by the business partner.

Implementation Strategy:

Key elements of the implementation strategy include:

- **Customer outreach, enrollment, and bill credit provisioning.** I&M will provide for, support, and perform all customer outreach and enrollment activities. I&M will provision demand response bill credits through its internal billing and customer administration IT systems.
- **Contract with and oversee third party Program business partner.** I&M's program implementation contractor, will install load control devices at the customer's apartment/dwelling unit. This business partner will provide a DLC demand response software platform capable of LCS communication and interface through I&M's AMI system.
- **Program Administration.** I&M will administer, manage, and house all program-related data through its internal billing, database and customer administration IT systems.
- **Customer Service.** I&M and the program implementation contractor will store and track interactions with the customers, provide trained customer service staff for assisting customers with questions about the program, and provide service-related calls/issues resolution. I&M and its business partner will provide staff sufficient to handle customer's inquiries, screen customers for eligibility, and explain program rules and benefits in a prompt and courteous manner.

I&M will determine when a DSM event is to take place, and will electronically call the event

	<p>through the business partner hosted system demand response software platform which will then initialize the event through the AMI system to the LCS known to be participating in the event.</p> <p>I&M plans to initially utilize a varied control strategy ranging from non-invasive, minimally invasive, and invasive (Form 3, Form 2, and Form 1 respectively) of the electric hot water heater units. However, cycling strategies may be changed to determine the strategy that optimizes load impact without significantly affecting customer experience.</p>
<p>Marketing Strategy:</p>	<p>I&M will develop a marketing and communications package to successfully communicate and promote the program to qualified customers. I&M will develop, define, and create a segmentation plan that identifies customers targeted for participation. I&M will provide for the development of marketing materials, the identification of channels and key relationships, and the leveraging of business partners to facilitate timely enrollment. Targeted marketing to customers located on heavily-load distribution circuits, to possibly defer additional supply side infrastructure investments, may be employed as well.</p> <p>Leads generated from these efforts will be provided to the third party installation business partner to determine program eligibility, set appointments (if necessary), secure a signed program agreement from the customer, ensure the equipment can receive the load control signal, provide any additional customer education, and other program implementation requirements.</p> <p>The business partner will also provide a toll-free telephone number where customers can call to receive additional program details, enroll in the program, and ask other program related questions.</p>
<p>Evaluation, Measurement & Verification:</p>	<p>An independent third party program evaluation contractor will perform an impact evaluation for all DLC events called and will report annual system coincident peak demand reductions. The impact evaluation will determine the actual demand and energy reductions achieved and a cost/benefit analyses of the program.</p> <p>The program evaluation objectives are expected to include:</p> <ul style="list-style-type: none"> • Determination of the program impacts, including achieved demand reduction (kW), and net energy impacts. • Assessment of the program’s cost-effectiveness based on various economic tests. <p>I&M may supplement the evaluation efforts with customer surveys and additional load analyses.</p>

Small Business AMI Direct Load Control Program – Indiana

Objective:	<p>Offer a small business customer direct load control (DLC) program in the I&M Indiana service territory.</p> <p>Utilize Automated Metering Infrastructure (AMI) technology and its availability for hourly end-use consumption data to better identify, with certain precision, smaller demand load reductions resulting from small business customer DLC load reduction events.</p> <p>Improve small business customer segment demand reduction identification through the use of AMI interval meter data, where aggregate monthly meter reading data and information yields limited confirmation ability and load reduction precision for DLC demand response usage reductions.</p>
Target Market:	<p>I&M Indiana small business customers with at least one existing and operational central air conditioning and/or heat pump units located at the same commercial business property that are identified and qualified as meeting the following:</p> <ul style="list-style-type: none">• A maximum of 40 kW in monthly peak demand usage as measured by the Company’s electric meter;• An AMI meter and telecommunication system installed by I&M sufficient to support the technology needs of this program;• At least one HVAC equipment measure available for demand response control through wireless, remote capability including:<ul style="list-style-type: none">○ Compliant Wi-Fi connected thermostats in which the Customer allows the Company to vary the air conditioner compressor motor or heat pump compressor motor run time for demand response events;○ Complaint Wi-Fi connected variable control air flow motors with carbon dioxide (CO₂) or occupancy sensors in which the Customer allows the Company to vary for demand response events;• Customer-owned broadband internet services;• Customer-owned, Program compliant remote control energy management system (EMS) and/or remote, electronic means of access to program controlled DR measures such as through a Program compliant thermostat manufacturer API arrangement.<ul style="list-style-type: none">○ Customer-owned Company business partner EMS DR measure and equipment system preferred• Commercial business hours of operation identified as overlapping with typical Company and PJM summer cooling season peak periods (e.g. weekday, noon to 8 pm) where high probability exists for HVAC system typical operation.

Program Duration:	This program will be offered to the specified customer segment as part of I&M’s deployment and use of AMI metering and infrastructure.
Program Description:	<p>This program will rely on and use AMI system hourly usage data and information to:</p> <ol style="list-style-type: none"> 1. Improve the viability for commercial small business demand response; 2. Improve the precision and resolution for demand response load reduction identification for small commercial HVAC DLC loads as compared to that available from non-AMI metering data and systems; 3. Engage customer-owned DLC equipment through Company preferred business partner systems; and, 4. Augment I&M’s demand response capabilities. <p>Participating small business customers must have compliant DLC DR measures and systems installed, operating, and available for demand response load events to be called according to the terms of the Company’s Work Energy Management (WEM) tariff and as set forth in the Target Market section above.</p> <p>I&M will send DLC signals via its preferred business partner systems. Participating customers must agree to and provide, ongoing for the duration of their participation in the program, Company electronic access to Program DLC DR systems and equipment. DLC systems and measures will control customer’s central air conditioner(s) or central air source heat pumps(s) (HVAC units) or variable HVAC related air flow equipment. Upon receipt of the specific signal, the EMS or DLC measures will act appropriately to cycle, according to the program’s intended cycling strategy, the HVAC units during times of:</p> <ul style="list-style-type: none"> • Predicted utility system peak load conditions (non-system emergency or Demand Side Management (DSM) events); • Predicted high loading on distribution circuits and/or substation distribution equipment (non-system emergency or DSM events); • Predicted correlating high outdoor temperatures (non-system emergency or DSM events); • Utility supply system emergency conditions (PJM emergency events). <p>DSM (i.e. peak reduction, non-emergency) events will be called at the discretion of I&M, with up to 15 events per year. Emergency events will be at the discretion of PJM as defined in PJM Manual 13 – Emergency Operations, with up to 10 events per PJM planning year.</p>

Incentive Strategy:	<p>At the Company’s sole discretion, participating, compliant small business customers may receive the Company’s preferred business partner DLC equipment and systems as a program incentive, which can include:</p> <ul style="list-style-type: none"> • A EMS cell phone app, which will provide the customer and the Company, with the means for remote access control and management for their DLC measures; and, • DR measures (including installation), as determined by the Company’s business partners, that facilitate remote control for DR events; <ul style="list-style-type: none"> ○ Wi-Fi connected thermostat connected to customer-owned and provided broadband internet connection; and/or; ○ HVAC related variable air flow control measures. <p>A qualified small business customer with a working central air conditioner or heat pump will receive a bill credit of \$2.40 per event called and participated in during the summer months of May, June, July, August and September for each air-conditioning/heat pump unit/variable air flow motor participating in the called events. In the case where a customer has two or more HVAC units, or measures, participating in an event, the customer will receive a bill credit, as described above, for each HVAC unit or measures completing the participation in the event.</p> <p>The customer may opt out of load control event by contacting the third party program implementation contractor. A two-year minimum enrollment period is required.</p>
Implementation Strategy:	<p>Key elements of the implementation strategy include:</p> <ul style="list-style-type: none"> • Customer outreach, enrollment, and bill credit provisioning. I&M will provide for, support, and perform all customer outreach and enrollment activities. I&M will provision demand response bill credits through its internal billing and customer administration IT systems. • Contract with and oversee preferred business partner, third party Program system and measures, as needed and as appropriate. I&M may contract with a preferred business partner to offer and provide for Program systems and measures made available to participating customers at the sole discretion of I&M. I&M will also coordinate, oversee, and manage the DLC DR interface requirements and needs in order to call demand response events through this vendor’s electronic systems to the customer owned, vendor provided EMS’ and DLC DR measures. • Contract with and oversee third party Program systems and measure installation business partner as needed. I&M’s program implementation contractor may install load control devices at the customer’s business location as determined by the Company. To the extent reasonable, this contractor will hire qualified Indiana-based installers / technicians. • Contract with and oversee third party business partner, as needed and as appropriate, for a DLC demand response software platform. I&M will contract with a

third party business partner that will provide a DLC demand response software platform capable of DLC DR EMS system and measure communication and interface event calling and management.

- **Program Administration.** I&M will administer, manage, and house all program-related data through its internal billing, database and customer administration IT systems.
- **Customer Service.** I&M and the program implementation contractor will store and track interactions with the customers, provide trained customer service staff for assisting customers with questions about the program, and provide service-related calls/issues resolution. I&M and its business partner will provide staff sufficient to handle customer's inquiries, screen customers for eligibility, and explain program rules and benefits in a prompt and courteous manner.

I&M will determine when a DSM event is to take place, and will electronically call the event through the demand response software platform.

I&M plans to initially utilize either (or both) a 2 or 4 degree thermostat temperature setback strategy for thermostat controlled HVAC units.

I&M plans to cycle directly any controlled variable air flow HVAC related measures (e.g. fan motors) but will coordinate with any coincidence for HVAC thermostat setback also used at each customer business premise.

Other cycling strategies may be employed and evaluated to determine the strategy that optimizes load impact without significantly affecting customer business operations.

Marketing Strategy:

I&M will develop a marketing and communications package to successfully communicate and promote the program to qualified customers. I&M will develop, define, and create a segmentation plan that identifies customers targeted for participation. I&M will provide for the development of marketing materials, the identification of channels and key relationships, and the leveraging of business partners to facilitate timely program enrollment. Targeted marketing to customers located on heavily-load distribution circuits, to possibly defer additional supply side infrastructure investments, may be employed as well.

Leads generated from these efforts will be provided to the third party installation business partner to determine program eligibility, set appointments (if necessary), secure a signed program agreement from the customer, ensure the equipment can receive the load control signal, provide any additional customer education, and other program implementation requirements.

I&M will provide a toll-free telephone number where customers can call to receive additional program details, enroll in the program, and ask other program related questions.

**Evaluation,
Measurement
& Verification:**

An independent third party program evaluation contractor will perform an impact evaluation for all DLC events called and will report annual system coincident peak demand reductions. The impact evaluation will determine the actual demand and energy reductions achieved and a cost/benefit analyses of the program.

The program evaluation objectives are expected to include:

- Determination of the program impacts, including achieved demand reduction (kW), and net energy impacts.
- Assessment of the program's cost-effectiveness based on various economic tests.

I&M may supplement the evaluation efforts with customer surveys and additional load analyses.

Critical Peak Pricing (CPP) Program – Indiana

Objective:	<p>The CPP Program is designed to motivate, through price response, residential and general service customers to either manage the timing of, or to conserve, usage during I&M and PJM peak and critical peak hour periods.</p> <p>The program offers participants seasonally tiered on peak electricity pricing and Critical Peak period pricing for demand response events to encourage customers to:</p> <ul style="list-style-type: none"> • Reduce usage during these high cost periods (e.g. manage thermostat settings to decrease air conditioner run time), • Shift usage to lower priced periods or to off peak periods set forth in the pricing structure of the CPP tariff, or • Conserve usage during high cost periods (e.g. change appliance settings to ‘off’ to eliminate appliance energy use for the peak or high cost periods).
Target Market:	<p>CPP is available to I&M Indiana certain individual residential customers, including those engaged principally agricultural pursuits, that have an advanced meter (i.e. AMI meter) installed and commercial General Service tariff customers that have an advanced meter (i.e. AMI meter) installed.</p> <p>Customers taking electric service under Rider EDG, Rider NMS, or other AMI based demand response or time of use pilots, programs, or tariffs are not eligible to participate in CPP for the same time period in which they are enrolled in any of these rate schedules.</p>
Duration:	<p>Customers electing to take service under the Critical Peak Pricing Tariff are expected to remain on this schedule for a minimum of one (1) year. If the customer terminates service under this schedule, the customer will not be eligible to receive service under this schedule for a period of one (1) year from termination date.</p>
Program Description:	<p>When considering the importance of planning for I&M’s future supply need, early and ongoing development is beneficial for both I&M customers and the Company to insure the resources are ready, available, and dependable at the time when they are needed.</p> <p>Customers enrolled in the CPP Program are subject to the pricing provisions set forth in the CPP tariff. Customers must determine their own level of engagement in the CPP pricing tiers but can use tools provided by the Company through the AMI Data Portal to educate and inform themselves on their individual usage level and timing.</p> <p>When the Company anticipates or experiences high power system loads and/or emergency system conditions, the Company may call Critical Peak events during a specified time period</p>

	<p>(e.g., 3 p.m. to 6 p.m. on a hot summer weekday). During Critical Peak Events, Critical Peak Hours pricing applies, where the price for electricity during Critical Peak event hours is substantially higher than non-Critical Peak periods (i.e. all other pricing tiers set forth in CPP).</p> <p>Since CPP electricity pricing is peak period focused and inherently encourages customers to take responsive action to reduce Critical Peak Hours usage, higher demand savings result during Critical Peak Events when compared to reductions during other CPP cost tier periods.</p>
Incentive Strategy:	<p>CPP does not offer direct cash incentives or electric bill credits to participating customers.</p> <p>Instead, CPP provides participating customers the opportunity to have more control over their cost of electricity through choice of the CPP pricing tier used to concentrate their energy use.</p>
Implementation Strategy:	<p>I&M will perform, manage, and support all customer outreach and enrollment activities.</p> <p>I&M will monitor, store and track interactions with the customers, provide trained customer service staff for assisting customers with questions about the program, and provide service-related calls/issues resolution.</p> <p>I&M will determine when a Critical Peak Event occurs and will electronically notify participating customers. Such electronic notification may take place through the use of a demand response software platform or other electronic software platform the Company uses to manage customer activities and communications.</p> <p>The Company will offer email notification and may also offer text messaging and/or other technologies approved by the Company. Any customer owned technology equipment utilized for notification shall be subject to Company review and approval.</p>
Marketing Strategy:	<p>I&M will develop a marketing and communications package to successfully communicate and promote the program to qualified customers. I&M will develop, define, and create a segmentation plan that identifies customers targeted for program participation. I&M will provide for the development of marketing materials, the identification of channels and key relationships, and the leveraging of business partners to facilitate timely pilot enrollment. Targeted marketing to customers located on heavily-load distribution circuits, to possibly defer additional supply side infrastructure investments, may be employed as well.</p> <p>I&M will provide a toll-free telephone number where customers can call to receive additional program details, enroll in the program, and ask other program related questions.</p>

Evaluation, Measurement & Verification:	<p>An independent third party program evaluation contractor will perform an impact evaluation. The impact evaluation will determine the actual demand and energy reductions achieved on a concurrent and for a full program year basis.</p> <p>I&M may supplement the evaluation efforts with customer surveys and additional load analyses.</p>
Estimated Participation & Opt-Out	<p>Initially, the CPP is offered to customers on an opt-in basis, meaning customers choose to enroll in CPP on their own volition. As CPP customer enrollments and participation evolve, along with the Company's need for Critical Peak resources, the Company anticipates switching to an opt-out enrollment approach where specific customers will be assigned to CPP which provides the Company more certainty in Critical Peak demand reductions.</p>

CROSSROADS EV CORRIDOR

APPLICATION #1

I. Summary

This Application is the first of two applications submitted by the Indiana Utility Group. This application is submitted by Duke Energy Indiana, HoosierEnergy REC, Inc., Indiana Michigan Power, Indianapolis Power & Light Company, Northern Indiana Public Service Co. (NIPSCO), Vectren, and Wabash Valley Power Alliance (“Applicants” or “Indiana Utility Group”). The Indiana Municipal Power Association is not an applicant for purposes of Application #1.

Application #1 is fully compliant with all terms of the RFP and assumes a total grant to the Applicants in the amount of \$5,535,000. The Applicants will use the grant money to construct 62 DC fast chargers positioned strategically along Indiana’s major highways to encourage the use of electric vehicles for long trips.

II. Narrative Work Plan

A. Project Title

The Project will be known as the “Crossroads EV Corridor.”

B. Title of IDEM RFP

This Application is being submitted in response to the “Indiana Statewide Electric Vehicle Charging Network” RFP.

C. Grantee Information

This application is being submitted jointly by the following entities:

Duke Energy Indiana

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Plainfield, Indiana 46168
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Phone: 812-593-1432
Fax: 317-838-2987

Email: Jordan.wallpe@duke-energy.com

HoosierEnergy REC, Inc.

2501 South Cooperative Way
P.O. Box 908
Bloomington, Indiana 47402
Contact: Chad Jenkins
Phone: 270-498-4815
Email: cjenkins@HEPN.com

Indiana Michigan Power

110 E. Wayne St.
P.O. Box 60
Ft. Wayne, Indiana 46801
Contact: Jon Walter
Phone: 260-408-3540
Fax: 260-408-3085
Email: jcwalter@aep.com

Indianapolis Power & Light Company

One Monument Circle
Indianapolis, Indiana 46204
Contact person: Fred Mills
Phone: 317-261-8964
Fax: 317-864-5470
Email: Fred.mills@aes.com

Northern Indiana Public Service Co. (NIPSCO)

801 E. 86th Avenue
Merrillville, Indiana 46410
Contact: Kevin Kirkham
Phone: 219-647-5509
Fax: 219-647-6370
Email: kakirkham@nisource.com

Vectren, a CenterPoint Energy Company

P.O. Box 209
Evansville, Indiana 47702-02019
Contact: David Owen
Phone: 713-207-6385
Email: david.owen@centerpointenergy.com

Wabash Valley Power Alliance

6702 Intech Blvd.
Indianapolis, Indiana 46278
Contact: Andrew Horstman
Phone: 317-481-2847
Fax: 317-243-6416
Email: andrewh@wvpa.com

While this Application is being submitted jointly and the Applicants intend to work together and coordinate their efforts to ensure statewide coverage (to the extent possible) and a uniform customer experience, it is anticipated that each Applicant will enter into a separate project funding agreement with IDEM and be responsible only for the charging stations in their respective territories.

D. Funding Request

Applicants request total funding in the amount of \$5,535,000 for 62 DC fast charging stations, which breaks down to a grant of \$89,274.19 per station. The table below shows the number of charging stations per Applicant with the total amount of funding requested.

Applicant	DCFC Stations	Funding Request
Duke	18	\$1,606,935
Indiana Michigan	13	\$1,160,565
NIPSCO	10	\$892,742
IPL	9	\$803,468
Vectren	7	\$624,919
WVPA	4	\$357,097
Hoosier Energy	1	\$89,274
TOTAL	62	\$5,535,000

E. Total Project Cost

The total cost of the Crossroads EV Corridor project is difficult to estimate. Upfront costs will include the costs associated with acquiring a site, installing the infrastructure necessary to power the site, purchasing the equipment (including both hardware and software), and installing the equipment. At this time, we estimate that each site will cost approximately \$200,000, making the cost of the entire project approximately \$12,400,000. Thus, the State of Indiana will be receiving \$12,400,000 in value for an investment of \$5,535,000, or \$2.24 in value for every \$1 invested. This does not include long-term maintenance, repair, and

replacement costs. The limits on funding per charging location found in Table 3 of the RFP will easily be met by the Crossroads EV Corridor project.

F. Project Schedule

The RFP indicates that Grantees should assume that funds will be available no later than 60 days after notification of an award, which is scheduled to occur on October 28, 2020. The following schedule is based on that date.

Milestone	Approximate Completion Date
Grants Awarded	October 28, 2020
Grant Agreements Executed	November 25, 2020
Sites Acquired or Agreements with Site Owners Executed	February 28, 2022
Equipment Chosen and Ordered	March 31, 2022
Equipment and Necessary Infrastructure Installed and Tested	November 31, 2022
Sites Ready for Use and Project Completed	December 31, 2022

G. Project Description

i. Project Summary

Attached as to this Application are (a) a spreadsheet listing each proposed DCFC by location and the Applicant that will be responsible for its construction, and (b) a map showing the approximate location of each charging station. All of these sites will be open to the public 24 hours per day, 7 days per week. These sites were chosen based upon a combination of factors, including:

- The limitations of each Applicant’s respective territories
- The location of current publicly-available DC fast chargers¹
- The location of the state’s population centers
- Traffic flow patterns
- Three phase power availability

At this time, it is not possible for the Applicants to commit to an exact location for each DC fast charger. However, Applicants believe that they will be able to secure locations for most of the proposed DCFCs near the locations shown on the attachments, and within one (1) mile from the applicable highway. However, it is anticipated that some locations may be more than one (1) mile from a highway. In those situations, we will work with IDEM and request an exception as discussed in Appendix A of the RFP. Upon execution of a funding agreement with

¹ We have coordinated with Electrify America and other groups to cover gaps in statewide charging station coverage and avoid duplication of sites.

IDEM, each Applicant will work to secure appropriate locations for each station. Some locations might be purchased or leased directly by the Applicant. For other locations, the Applicants may enter into agreements with third parties who will own and operate the locations. In all cases, Applicants will secure IDEM's approval of each final location and any arrangements with third parties.

Once the locations are chosen, each Applicant will prepare the site and install all necessary infrastructure including power and parking, as necessary. The Applicant will then choose appropriate DC fast charging equipment and equipment suppliers for each location. The equipment will meet all of the requirements established by the RFP. Further, the sites and equipment chosen by the Applicants will be fully expandable and upgradeable to account for anticipated growth of the EV market. The equipment will then be installed and tested. Once the equipment is shown to be safe and reliable, it will be made available to the public.

The anticipated timelines for each of these milestones are set forth in the Project Schedule above.

ii. Air Quality Benefits

Vehicles powered by internal combustion engines generate significant amounts of carbon dioxide (CO₂), carbon monoxide (CO), nitrogen oxides (NO_x), particulates (PM), and hydrocarbons (HC) that combine with NO_x to form ozone. Numerous studies have shown that the replacement of vehicles powered by internal combustion engines with electric vehicles significantly reduces air pollution caused by automobiles. This is true even if the electrical supply is generated by fossil fuels. Further, we believe that electric school buses and transit buses may use our DCFC stations and those vehicles impact multiple riders.

It is difficult to quantify reductions in air pollution as a result of EV charging infrastructure. However, the Federal Highway Administration has determined that the installation and use of electric vehicle charging stations is a cost-effective way to reduce Carbon Monoxide (CO), Nitrogen Oxides (NO_x), and Volatile Organic Compounds (VOCs).² That study estimated a lifetime emission savings of 2.7598 tons per year of NO_x per charging station.³

iii. Progress Tracking Plan

Applicants will track the progress of each DCFC station against the milestone dates set forth above.

² FHWA – Cost Effectiveness Tables Summary (July 20, 2020), available at: https://www.fhwa.dot.gov/ENVIRONMENT/air_quality/cmaq/reference/cost_effectiveness_tables/#toc37055080 (“Electric vehicle charging stations, carsharing, transit service expansions, natural gas refueling facilities, and park and ride programs show strong cost-effectiveness for reducing CO emissions – the first three project types are also especially strong for NO_x and VOCs.”)

³ Because of the lack of data, this was the average savings for all types of EV chargers, including Level 2 chargers. Therefore, it is likely that savings associated with DC fast chargers will be even greater.

iv. Evaluation of Project Success

After the equipment is made available to the public, Applicants will monitor usage and report to IDEM as required under Section 10 of the RFP. Success will be determined by (a) meeting the deadlines established in this Application and (b) post-construction usage of the charging stations. Each member utility will have a dedicated local resource responsible for tracking the success of the program and for meeting the reporting requirements in the RFP, and we will work together on a common format for reporting to IDEM. Each member of the Indiana Utility Group already has infrastructure dedicated to customer feedback, customer support, marketing, and community engagement that can be extended to the DC fast chargers to ensure success and continuous improvement of services.

v. Locations of Charging Stations

The proposed locations of the DCFC stations are shown in the attachments. It is worth noting that many of these locations were chosen because they were at the intersection of major interstate highways and important state highways, making the stations conveniently available to the largest number of Hoosier possible.

However, this proposal still leaves some gaps in statewide coverage due to the limitations in the territories of the utilities participating in Application #1. That is particularly true with regard to I-65 between Whitestown and Roselawn, I-74 west from Brownsburg to the Illinois state line, and I-70 east from Indianapolis to the Ohio state line. Application #2, which includes IMPA, would close some of those gaps.

vi. Description of the Roles of Applicants and Partners

Each Applicant will be independently responsible for site selection, equipment selection, and installation at the sites within each Applicant's territory. Partners may include equipment suppliers, installation contractors, third-party site owners or operators, and maintenance contractors.

vii. Contact Information for All Key Personnel

See Section II(C) above.

viii. Information to Address Evaluation Criteria

Section 12 contains IDEM evaluation criteria. Each is discussed below.

1. Reasonable geographic distribution of projects across the state.

As demonstrated by our selection of locations, the Crossroads EV Corridor was designed as a statewide network of 62 DCFC stations. The Indiana Utility Group used a number of factors to select these sites and one of our goals was to realize statewide coverage.

2. Collaboration among a diverse set of stakeholders to advance a broader environmental vision or goal for the area.

The Indiana Utility Group includes all of Indiana's electric utilities representing all regions of the Hoosier State. Because our project includes the entire state, it will have the broadest possible impact on improving air quality by promoting the statewide use of electric vehicles. Further, we have already been contacted by national retailers with a significant number of establishments in Indiana as possible site hosts.

3. Evidence of regional support of a project.

We have submitted letters of support from a number of organizations.

4. Evidence of a clear plan of action, milestones, and schedule for project completion.

The Indiana Utility Group has been considering this plan for over a year and we believe that our submission demonstrates a clear plan of action. We have provided milestones and a schedule for project completion in Section II(F) of this Application.

5. Evidence of commitment by the owner to maintain DCFC and/or L2 charging station equipment.

The members of the Indiana Utility Group are public utilities that are among the most financially stable and secure companies in Indiana. There is no question that we have the financial wherewithal to complete the project and maintain the equipment in the future.

6. Evidence of project implementation feasibility without significant obstacles to ensure continued use of the charging station.

The member of the Indiana Utility Group have significant in-house administrative, engineering, and technical assets in the area of electric power, as well as numerous existing relationships in the industry to create partnerships with third parties for the supply, installation, and maintenance of charging equipment. There will be no obstacles to the construction and future maintenance of the charging stations reference in this proposal.

H. Scoring Criteria

IDEM's Scoring Criteria are replicated in the table below with our comments on each.

Scoring Criteria	Comments
Cost-effectiveness of the project	<p>The Indiana Utility Group can acquire hardware at discounted rates and its members have fast accessibility to utility upgrades if needed. Even with those advantages, we estimate that the project’s overall cost will be about \$12,400,000. We are seeking an investment of \$5,535,000. That is a ratio of about \$2.24 of value per \$1 invested. This criterion refers to annual average daily traffic at the location, but our goal was a statewide network of charging stations to allow for travel across the state. Further, with 62 locations it is not practical to provide that information. INDOT collects a significant amount of traffic data that can be found at https://www.in.gov/indot/2469.htm</p>
Long-term sustainability and maintenance of the site	<p>As noted above, the members of the Indiana Utility Group are financially stable and have access to significant in-house assets and third-party relationships to ensure the long-term sustainability and maintenance of each of the sites described in our proposal. Our members have brand recognition and utility assets at or near the proposed sites. Adding DCFC stations would be an expansion of existing services. Our members are already staffed for long-term growth of the electric utility industry and are well-motivated to make this project work. Contracts with site hosts will be for a minimum of 5 years and will ensure maintenance and reliability standards. All sites will be chosen and built with “future proofing” mind, meaning that the sites will be built with future growth in mind, such as extra conduit, expandable hardware, appropriately sized transformers, and site design and traffic flow that anticipates expansion.</p>
Compliments other programs for a stated network or the application itself supports a statewide network	<p>Our proposal is a statewide network of DC fast chargers.</p>
Verified leveraging of additional resources (financial only)	<p>As noted above, our proposal assumes that our members will provide a significant percentage of the cost of the project, far exceeding the minimum amounts described in the RFP.</p>
Project Readiness	<p>We have already issued our own Requests for Information from equipment suppliers and we have received important industry information that supports our submission. The members of the Indiana Utility Group have already budgeted for this project. Many of our members have already begun to explore potential sites. In addition, we have been contacted by national retailers with locations throughout Indiana as potential site hosts. While it is not possible for us to proceed past the planning stages until an award is made, we have no doubt that we will be able to meet the schedule in the RFP.</p>

Quality of site marketing and amenities	Our proposed sites were chosen because they are at or near the intersection of a major U.S. highway and a state highway. Therefore, the locations already have retail establishments in the area. We believe that the presence of charging stations will spur further growth. Further, most of our members have existing marketing plans and budgets in place to promote electric vehicle usage in the State of Indiana.
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Location	Roadway	Electric Service Provider
Rochester	US31	DUKE
Kokomo	US31	DUKE
Franklin	I65	DUKE
Columbus	I65	DUKE
Seymour	I65	DUKE
Bedford	US50	DUKE
Bloomington	I69	DUKE
Martinsville	I69	DUKE
Huntington	I69	DUKE
Carmel	US31	DUKE
Cloverdale	I70	DUKE
Brownsburg	I74	DUKE
Shelbyville	I74	DUKE
Greensburg	I74	DUKE
Batesville	I74	DUKE
Vincennes	US150	DUKE
Carefree/Corydon	I64	DUKE
New Albany	I64	DUKE
Dale	I64	HOOSIER
South Bend	I80 / I90	IM
Mishawaka	I80 / I90	IM
Bristol	I80 / I90	IM
South Bend	US31	IM
Muncie	I69	IM
Marion/Gas City	I69	IM
Fort Wayne	I69	IM
Fort Wayne	I69	IM
Fort Wayne	I69	IM
Auburn	I69	IM
Fort Wayne	I469	IM
Fort Wayne (US 24)	I469	IM
Elkhart	US20	IM
Indianapolis (off I465)	US31	IPL
I65 NW	I465	IPL
I74 W	I465	IPL
I70 SW	I465	IPL
I69 S	I465	IPL
I 65 S	I465	IPL

I 74 SE	I465	IPL
I70 E	I465	IPL
I69 NE	I465	IPL
Hammond	I80 / I94	NIPSCO
Chesterton	I94	NIPSCO
Michigan City	I94	NIPSCO
Hammond	I90	NIPSCO
Portage - J.T. McCutcheon Travel Plaza	I80 / I90	NIPSCO
Portage - George Ade Travel Plaza	I80 / I90	NIPSCO
Angola	I80 / I90	NIPSCO
Plymouth	US31	NIPSCO
Merrillville	I65	NIPSCO
Roselawn	I65	NIPSCO
Evansville	I69	Vectren
Evansville	I69	Vectren
Oakland City	I69	Vectren
Warrenton	I69 / I64	Vectren
Evansville University Blvd - USI	SR62	Vectren
Downtown Evansville	SR62	Vectren
Hwy 41 (Evansville airport)	US57	Vectren
Peru	US31	WVPA
Covington	I74	WVPA
Whitestown	I65	WVPA
Monrovia	I70	WVPA

<u>Service Provider</u>	<u>Count</u>	<u>VW Reimbursement</u>	<u>VW Bucket</u>
Duke	18	\$1,606,935	\$5,535,000
IM	13	\$1,160,565	
NIPSCO	10	\$892,742	Reimbursement per location
IPL	9	\$803,468	\$89,274
Vectren	7	\$624,919	
WVPA	4	\$357,097	
Hoosier	1	\$89,274	
Total	62	\$5,535,000	

Crossroads EV Corridor Project Revised Proposal – Indiana Michigan Power

As part of the Crossroads EV Corridor Project, Indiana Michigan Power (I&M), proposes to own and operate all (12) DCFC sites located within I&M service territory.

General

1. I&M has direct experience in offering utility rebate programs for L2 EV charging infrastructure, both residential and business, and has a corporate agreement with CHARGEPOINT, Inc. for EV charging station infrastructure equipment supply and related services. For demonstrated, proven success in DC Fast Charging programs in the U.S., I&M will draw upon resources (& related experience in the EV and EV charging industry) from its business relationship with American Electric Power Service Corporation (AEPSC), American Electric Power sister utility operating companies, and CHARGEPOINT's resources and experience.
2. Please see the Crossroads EV Corridor Project Application for the joint proposal's revised and detailed schedule of milestones.
3. I&M will own and operate all DCFC locations proposed within its electric service territory.

Financial Clarifications

1. Indiana Michigan Power Company is a vertically integrated electric utility that operates in the State of Indiana and the State of Michigan. I&M is financially rated at A3 by Moody's and A- by Standard & Poors.
2. I&M total project cost: \$3,586,900. Please see the following pages for I&M's per- site line-item budgets.

3. I&M will have sole authority to determine, and set in real-time, charging session fees.

Technology Clarifications

1. I&M is currently planning to direct purchase DCFC station equipment, up to 5 years of operation and maintenance services, and up to 5 years of cloud based network services from CHARGEPOINT.
2. To insure site locations meet the 95% uptime requirement, I&M plans to contract with CHARGEPOINT for its support, maintenance, and warranty which specifies 98% annual station uptime performance.
3. I&M currently plans to own, operate and maintain its (12) DCFC sites for the useful life of the DCFC equipment.

I&M currently plans to purchase CHARGEPOINT's CPE250 DC Fast Charging Station that provides for the following functionality for each of I&M's (12) sites:

- (2) DCFC Charging Pedestals in a Paired Configuration
 - i. Each pedestal contains 62.5 kW maximum power availability
 - ii. Under the Paired Configuration, 125 kW of maximum power availability
 - iii. (1) EV can charge at up to 125 kW
 - iv. (2) EVs can share 125 kW charging power according to each EV's charging capability and need.
 - v. Future and legacy EV proofed capability to charge EV battery packs that range from 200 volts to 1000 volts

vi. (1) CCS1 charging cable and (1) CHAdeMO charging cable per charging pedestal.

Location Clarifications

1. See the following pages for I&M's (12) proposed site locations and site plans.
2. The following is a status list of preferred site partners for I&M's 12 sites:
 - a. I&M has obtained a Letter of Support from Meijer Stores for (6) DCFC sites.
 - b. I&M has had promising discussions with Pilot Travel Plaza for (3) DCFC sites, but those discussions have not resulted in a firm Letter of Support at this time.
 - i. I&M has identified alternate site locations and will engage in site partner discussions as needed
 - Cracker Barrel
 - Rickers/GetGo (Giant Eagle)
 - McDonald's
 - Wendy's.
 - c. I&M has had promising discussions with the operator of Indiana Toll Road for (2) DCFC sites, but those discussions have not resulted in a firm Letter of Support at this time.
 - i. I&M has identified alternate site locations and will engage in site partner discussions as needed
 - Martin's Grocery Stores
 - McDonalds
 - Wendy's

- Country Mark.

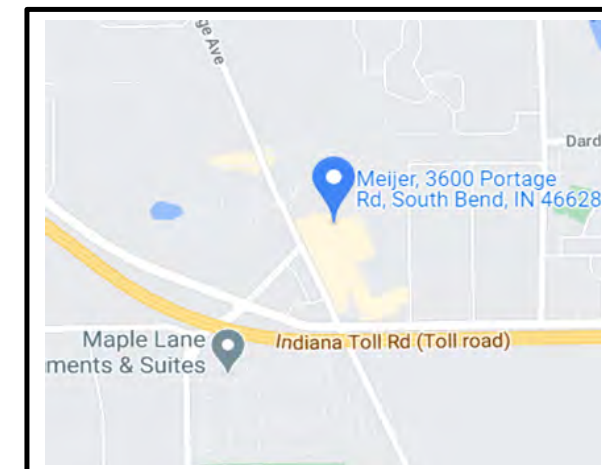
d. I&M has had promising discussions with Cracker Barrel for (1) DCFC site, but those discussions have not resulted in a firm Letter of Support at this time.

i. I&M has identified an alternate site location and will engage in site partner discussions as needed.

- Martin's Grocery Stores

- McAlisters

- McDonalds.



Site Address:	3600 Portage Rd, South Bend, IN 46628	Traffic Data AADT:	18,170 (INDOT TCDS, 2020)	Page 1/2
Site Host:	Meijer	Nearby Amenities:	Meijer, McDonald's, Burger King, Sonic Drive-In	
Site Host Mail Address:	2350 3 Mile Road, Grand Rapids, MI 49544	Distance to Major Road:	1.8-mi to Interstate 80/90, Exit 77, at Business US 31/SR 933	
Site Host Contact:	Christina Britton (616) 735-7117 (o) christina.britton@meijer.com	Distance to Nearest 100kW DCFC:	16-mi W of Proposed IM-3 & IM-12 DCFCs, Craig/Schricker Plaza (MM 90) Tesla SC site 5.3-mile E at Grape Rd and Interstate 80/90	DRAFT - 3/5/2021

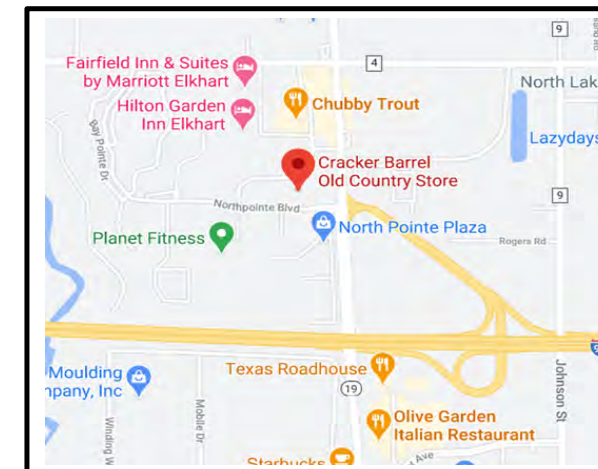
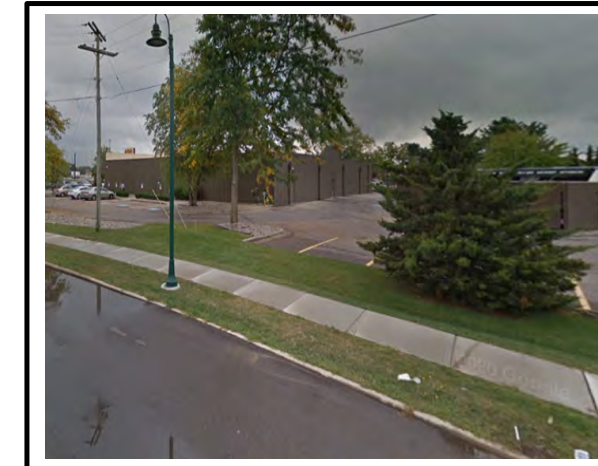
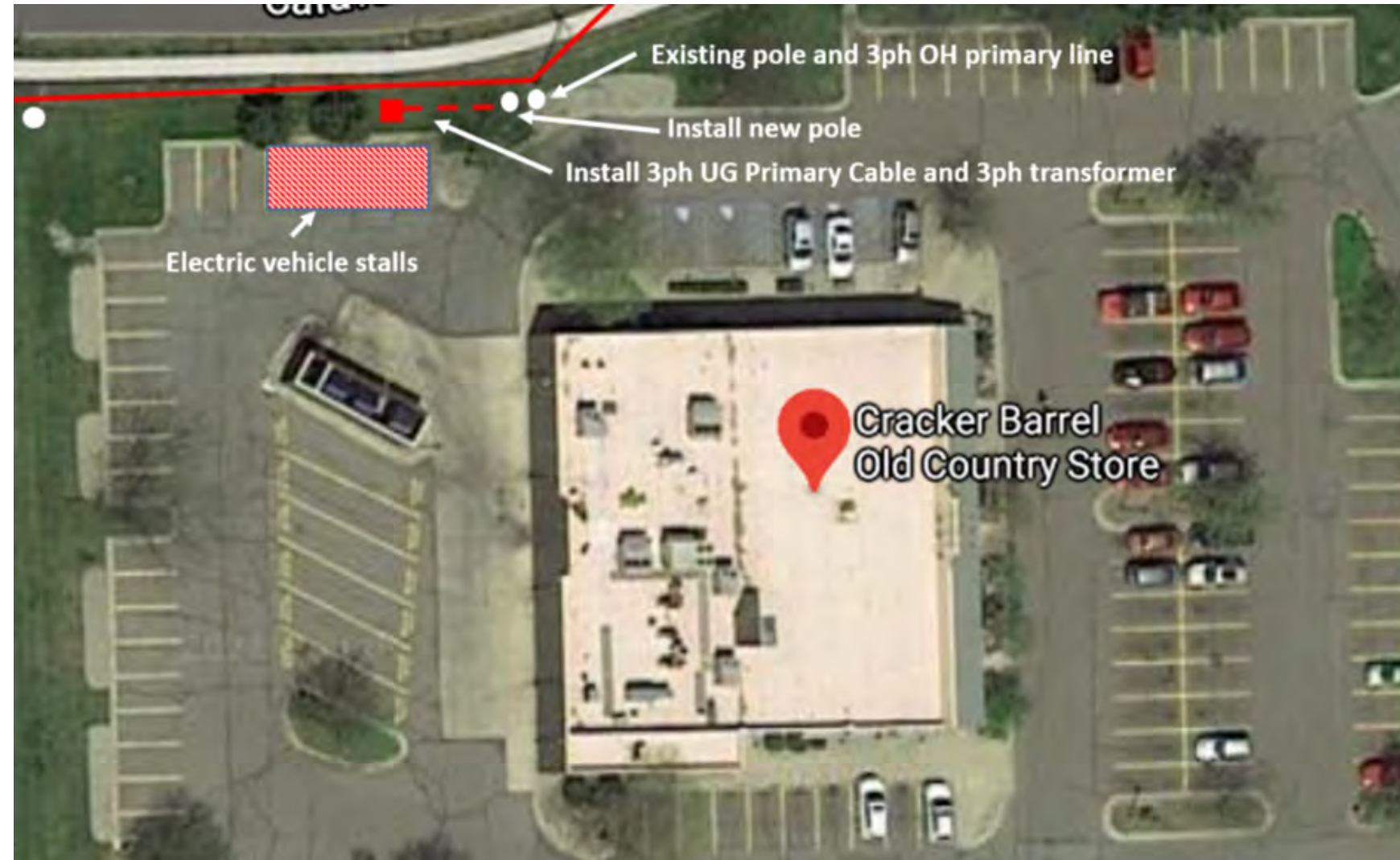
IM-1 - Meijer - Portage Road, South Bend, IN – EV Fast Charging Station



IM-1 - Meijer - Portage Road, South Bend, IN – EV Fast Charging Station

Site Address:	3600 Portage Rd, South Bend, IN 46628
Description:	Located northwest of I80/90, Exit 77 in South Bend, Indiana, this location at Meijer offers EV drivers walking access to restaurants and retail shopping in a well-lit and safe area. The proposed charging stations will be visible from Portage Rd. This will be a popular station for drivers traveling through South Bend and looking for big-box shopping and or quick food options.
Nearby Amenities:	Meijer, McDonald's, Burger King, Sonic Drive-In
Traffic Data AADT:	18,170 (INDOT TCDS, 2020)
Distance to major road:	1.8-mi to Interstate 80/90, Exit 77, at Business US 31/SR 933
Distance to nearest 100kW DCFC:	16-mi W of Proposed IM-3 & IM-12 DCFCs, Craig/Schricker Plaza (MM 90) Tesla SC site 5.3-mile E at Grape Rd and Interstate 80/90
Site Host:	Meijer
Site Host Mail Address:	2350 3 Mile Road, Grand Rapids. MI 49544
Site Host Contact:	Christina Britton (616) 735-7117 (o) christina.britton@meijer.com
Proposed Installation Details:	I&M will extend new service from a new pole near the overhead service line that runs along the west perimeter of the Meijer parking lot. A new 3-phase underground primary cable will be installed to a new, 3-phase transformer near the proposed EV stalls on the NW corner of the Meijer parking lot.
Fast Charging Hardware:	(2) CHARGEPOINT CPE 250 125 kW Chargers with 4G LTE cellular and OCPP communication capability
Tentative Budget:	Utility Service Costs: \$37,400 DCFC Equipment Installation: \$11,500 Loaded Hardware, Commissioning, Activation, & Network: \$250,000 Total: \$298,900
Ownership:	Indiana Michigan Power Owned and Operated





Site Address:	110 Northpointe Blvd., Elkhart, IN 46514	Traffic Data AADT:	17,143 (INDOT TCDS, 2020)	Page ½
Site Host:	Cracker Barrel Old Country Store	Nearby Amenities:	Cracker Barrel Old Country Store, North Pointe Plaza Shopping Mall, Subway	
Site Host Mail Address:	305 Hartmann Drive, Lebanon, Tenn. 37087	Distance to Major Road:	0.1-mi to Interstate 80/90, Exit 92, at SR 19	
Site Host Contact:	Adam Watkins (615) 443-9124 (o) adam.watkins@crackerbarrel.com	Distance to Nearest 100kW DCFC:	2-mi E of Proposed IM-3 & IM-12 DCFCs, Craig/Schricker Plaza (MM 90)	DRAFT – 3/5/2021

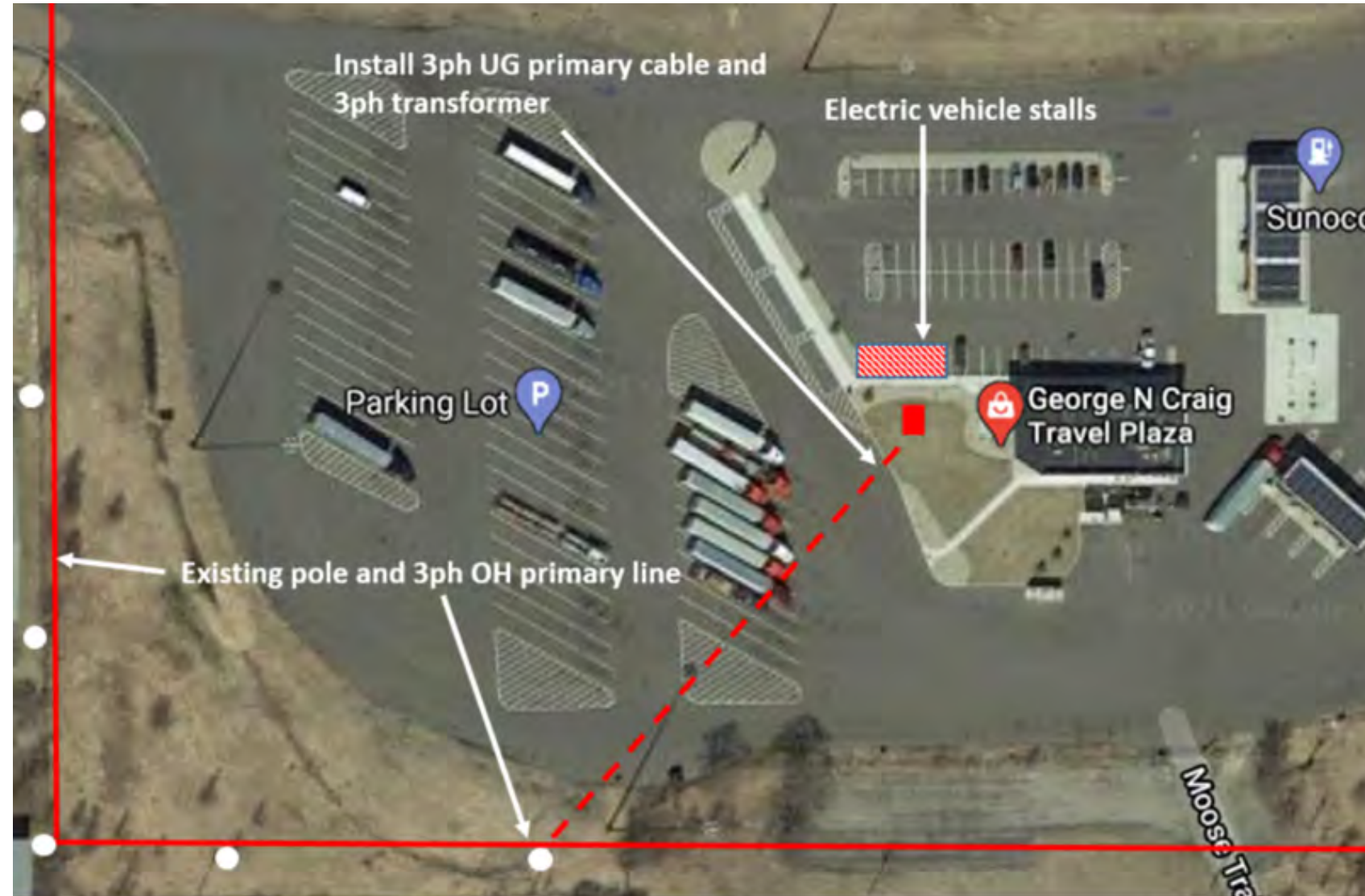
IM-2 – Cracker Barrel – Northpointe Blvd - Elkhart, IN – EV Fast Charging Station



IM-2 – Cracker Barrel – Northpointe Blvd - Elkhart, IN – EV Fast Charging Station

Site Address:	110 Northpointe Blvd, Elkhart, IN 46514
Description:	Located immediately west of the I80/90 ramp from Exit 92 at SR 19 (Cassopolis St) in Elkhart, Indiana, this location at Cracker Barrel Old Country Store offers EV drivers walking access to restaurants and retail shopping in a well-lit and safe area. This will be a popular station for drivers traveling in Elkhart and looking for shopping and food options.
Nearby Amenities:	Cracker Barrel Old Country Store, North Pointe Plaza Shopping Mall, Perkins, Steak 'n Shake, Subway
Traffic Data AADT:	17,143 (INDOT TCDS, 2020)
Distance to major road:	0.1-mi to Interstate 80/90, Exit 92, at SR 19
Distance to nearest 100kW DCFC:	2-mi E of Proposed IM-3 & IM-12 DCFCs, Craig/Schricker Plaza (MM 90)
Site Host:	Cracker Barrel Old Country Store
Site Host Mail Address:	305 Hartmann Drive, Lebanon, Tenn. 37087
Site Host Contact:	Adam Watkins (615) 443-9124 (o) adam.watkins@crackerbarrel.com
Proposed Installation Details:	I&M will extend new service from a new pole near the overhead service line that runs along the north perimeter of the Cracker Barrel parking lot. A new 3-phase underground primary cable will be installed to a new, 3-phase transformer near the proposed EV stalls on the far NW corner of the Cracker Barrel parking lot.
Fast Charging Hardware:	(2) CHARGEPOINT CPE 250 125 kW Chargers with 4G LTE cellular and OCPP communication capability
Tentative Budget:	Utility Service Costs: \$28,700 DCFC Equipment Installation: \$11,500 Loaded Hardware, Commissioning, Activation, & Network: \$250,000 Total: \$290,200
Ownership:	Indiana Michigan Power Owned and Operated





Site Address:	28054-2 CR4 West, Elkhart, IN 46514	Traffic Data AADT:	5,000-15,000 (INDOT TCDS, 2020)	Page 1/2
Site Host:	Indiana Toll Road Concession Company	Nearby Amenities:	Craig Toll Plaza, HMS Host, Sunoco	
Site Host Mail Address:	3200 Cassopolis Street, Elkhart, IN 46514	Distance to Major Road:	0.1 to Eastbound Interstate 80/90 at Mile Marker 90	
Site Host Contact:	Bill McCall (574) 675-4010 (o) bmccall@indianatollroad.org	Distance to Nearest 100kW DCFC:	2-mi W of Proposed IM-2 DCFCs at Exit 92, SR19	DRAFT – 3/5/2021

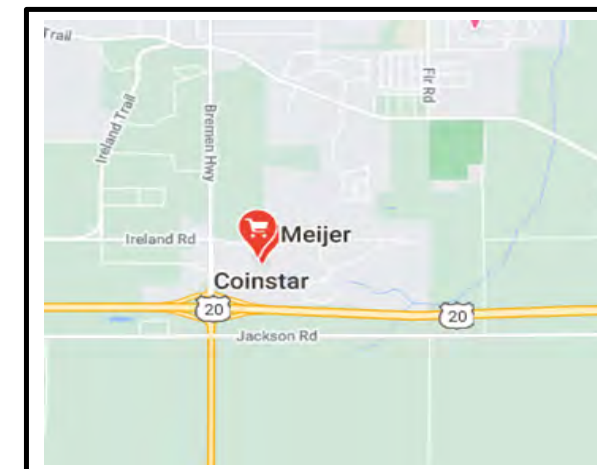
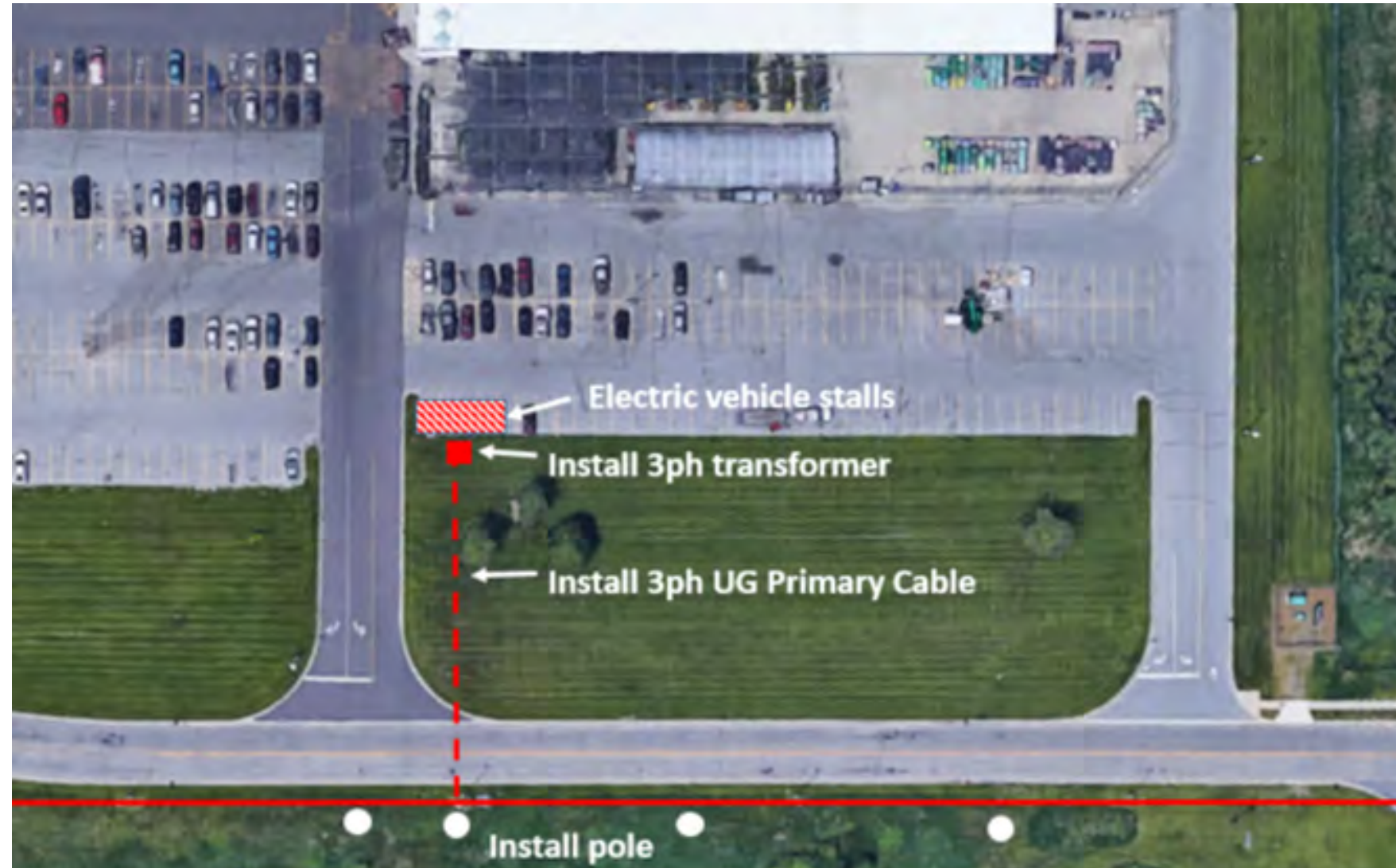
IM-3 – Indiana Toll Rd – Eastbound, Craig Travel Plaza – Elkhart, IN – EV Fast Charging Station



IM-3 – Indiana Toll Rd – Eastbound, Craig Travel Plaza – Elkhart, IN – EV Fast Charging Station

Site Address:	28054-2 CR4 West, Elkhart, IN 46514
Description:	Located immediately south of Eastbound I80/90 at the Craig Travel Plaza Elkhart, Indiana, this location offers EV drivers walking access to the rest stop and a restaurant food court in a well-lit and safe area. This will be a popular station for drivers traveling in Elkhart and looking for a quick on/off charging experience.
Nearby Amenities:	Craig Toll Plaza, HMS Host, Sunoco
Traffic Data AADT:	5,000 – 15,000 (INDOT TCDS, 2020)
Distance to major road:	0.1-mi to Interstate 80/90, Mile Marker 90, Craig Plaza
Distance to nearest 100kW DCFC:	2-mi W of Proposed IM-2 DCFCs at Exit 92, SR19
Site Host:	Indiana Toll Road Concession Company – Craig Plaza
Site Host Mail Address:	3200 Cassopolis Street, Elkhart, IN 46514
Site Host Contact:	Bill McCall (574) 675-4010 (o) bmccall@indianatollroad.org
Proposed Installation Details:	I&M will extend new service from an existing pole near the overhead service line that runs along the west perimeter of the Craig Plaza parking lot. A new 3-phase underground primary cable will be installed to a new, 3-phase transformer near the proposed EV stalls northwest of the Plaza building.
Fast Charging Hardware:	(2) CHARGEPOINT CPE 250 125 kW Chargers with 4G LTE cellular and OCPP communication capability
Tentative Budget:	Utility Service Costs: \$28,700 DCFC Equipment Installation: \$11,500 Loaded Hardware, Commissioning, Activation, & Network: \$250,000 Total: \$290,200
Ownership:	Indiana Michigan Power Owned and Operated





Site Address:	3610 S. Bremen Hwy Mishawaka, IN 46544	Traffic Data AADT:	16,786 (INDOT TCDS, 2020)	Page 1/2
Site Host:	Meijer	Nearby Amenities:	Meijer, McDonald's	
Site Host Mail Address:	2350 3 Mile Road, Grand Rapids. MI 49544	Distance to major road:	0.35-mi to US 20 and SR 331	
Site Host Contact:	Christina Britton (616) 735-7117 (o) christina.britton@meijer.com	Distance to nearest 100kW DCFC:	18-mi NW at Proposed IM-1 DCFC site at I80/90, Exit 77, South Bend 18-mi NE at Proposed IM-2 DCFC site at I80/90, Exit 92, Mishawaka Tesla SC site 9-mi NW at Grape Rd and I80/90	DRAFT – 3/5/2021

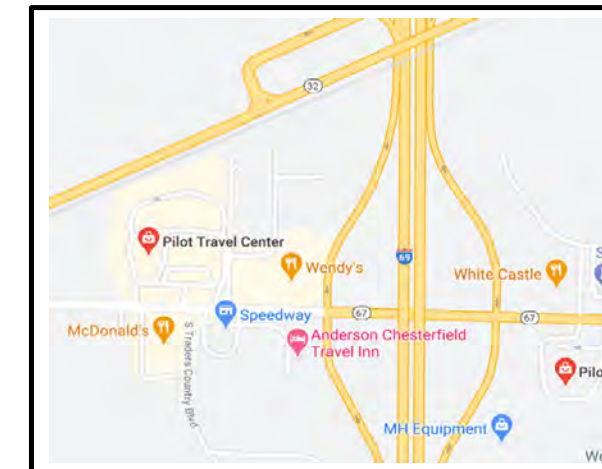
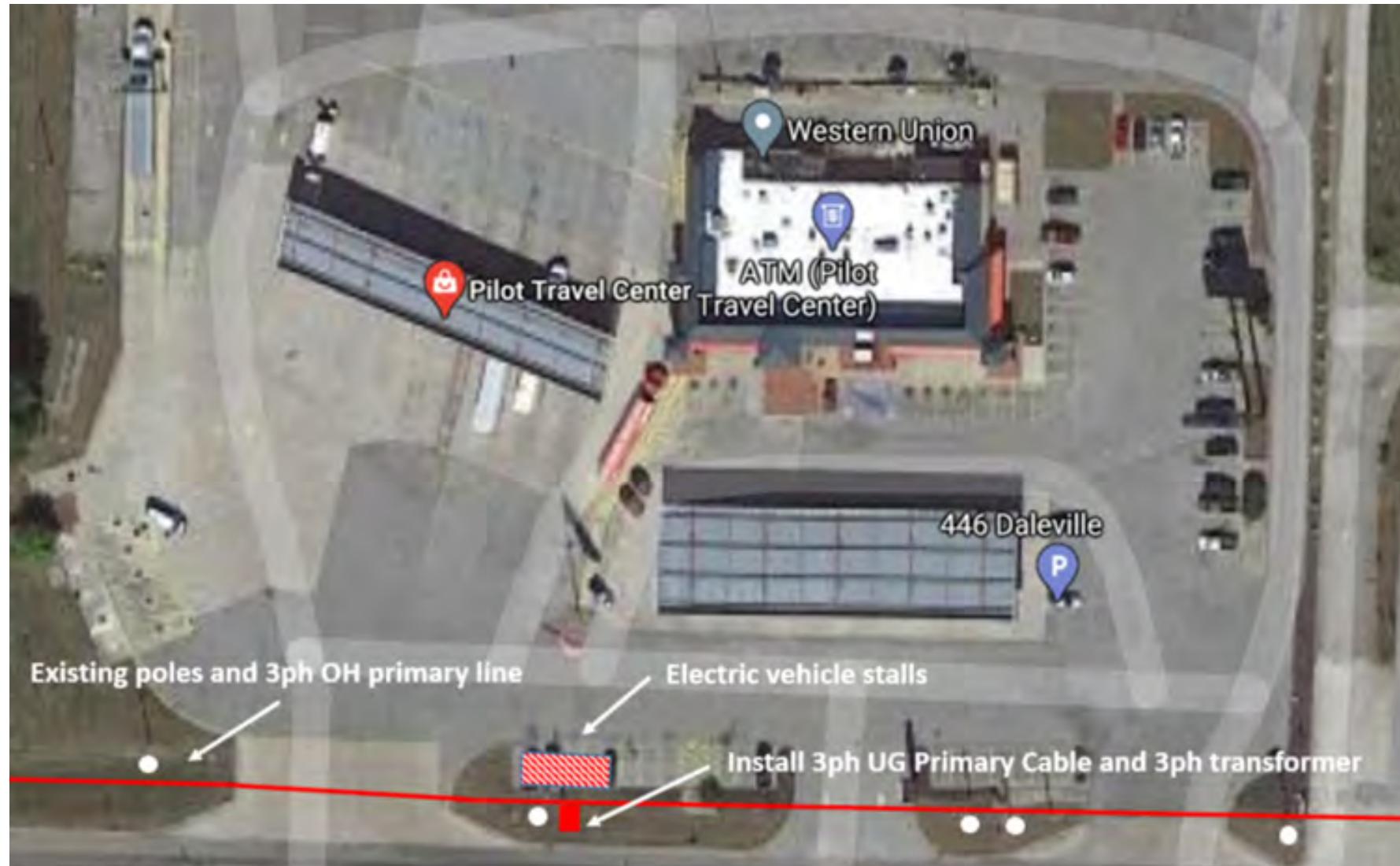
IM-4 - Meijer – Bremen Hwy, Mishawaka, IN – EV Fast Charging Station



IM-4 - Meijer – Bremen Hwy, Mishawaka, IN – EV Fast Charging Station

Site Address:	3610 S. Bremen Hwy, Mishawaka, IN 46544
Description:	Located northeast of US 20 and SR 331 (Bremen Hwy) in Elkhart, Indiana, this location at Meijer offers EV drivers walking access to restaurants and retail shopping in a well-lit and safe area. The proposed charging stations will be visible from US 20. This will be a popular station for drivers traveling through Mishawaka and looking for big-box shopping and or quick food options.
Nearby Amenities:	Meijer, McDonald's
Traffic Data AADT:	16,786 (INDOT TCDS, 2020)
Distance to major road:	0.35-mi to US 20 and SR 331
Distance to nearest 100kW DCFC:	18-mi NW at Proposed IM-1 DCFC site at I80/90, Exit 77, South Bend 18-mi NE at Proposed IM-2 DCFC site at I80/90, Exit 92, Mishawaka Tesla SC site 9-mi NW at Grape Rd and I80/90
Site Host:	Meijer
Site Host Mail Address:	2350 3 Mile Road, Grand Rapids. MI 49544
Site Host Contact:	Christina Britton (616) 735-7117 (o) christina.britton@meijer.com
Proposed Installation Details:	I&M will extend new service from a new pole near the overhead service line that runs along the south perimeter of the Meijer parking lot. A new 3-phase underground primary cable will be installed to a new, 3-phase transformer near the proposed EV stalls on the south perimeter of the Meijer parking lot.
Fast Charging Hardware:	(2) CHARGEPOINT CPE 250 125 kW Chargers with 4G LTE cellular and OCPP communication capability
Tentative Budget:	Utility Service Costs: \$25,000 DCFC Equipment Installation: \$11,500 Loaded Hardware, Commissioning, Activation, & Network: \$250,000 Total: \$286,500
Ownership:	Indiana Michigan Power Owned and Operated





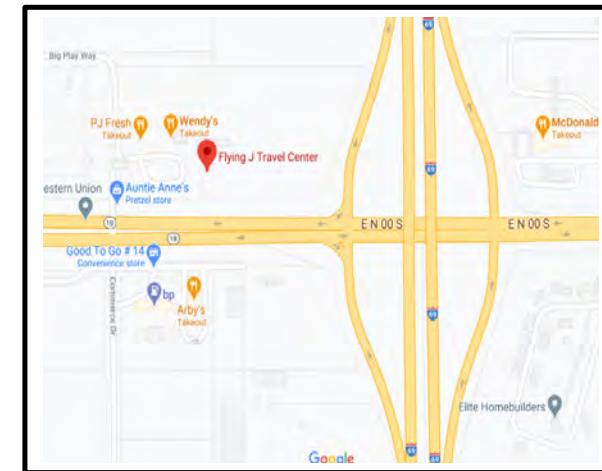
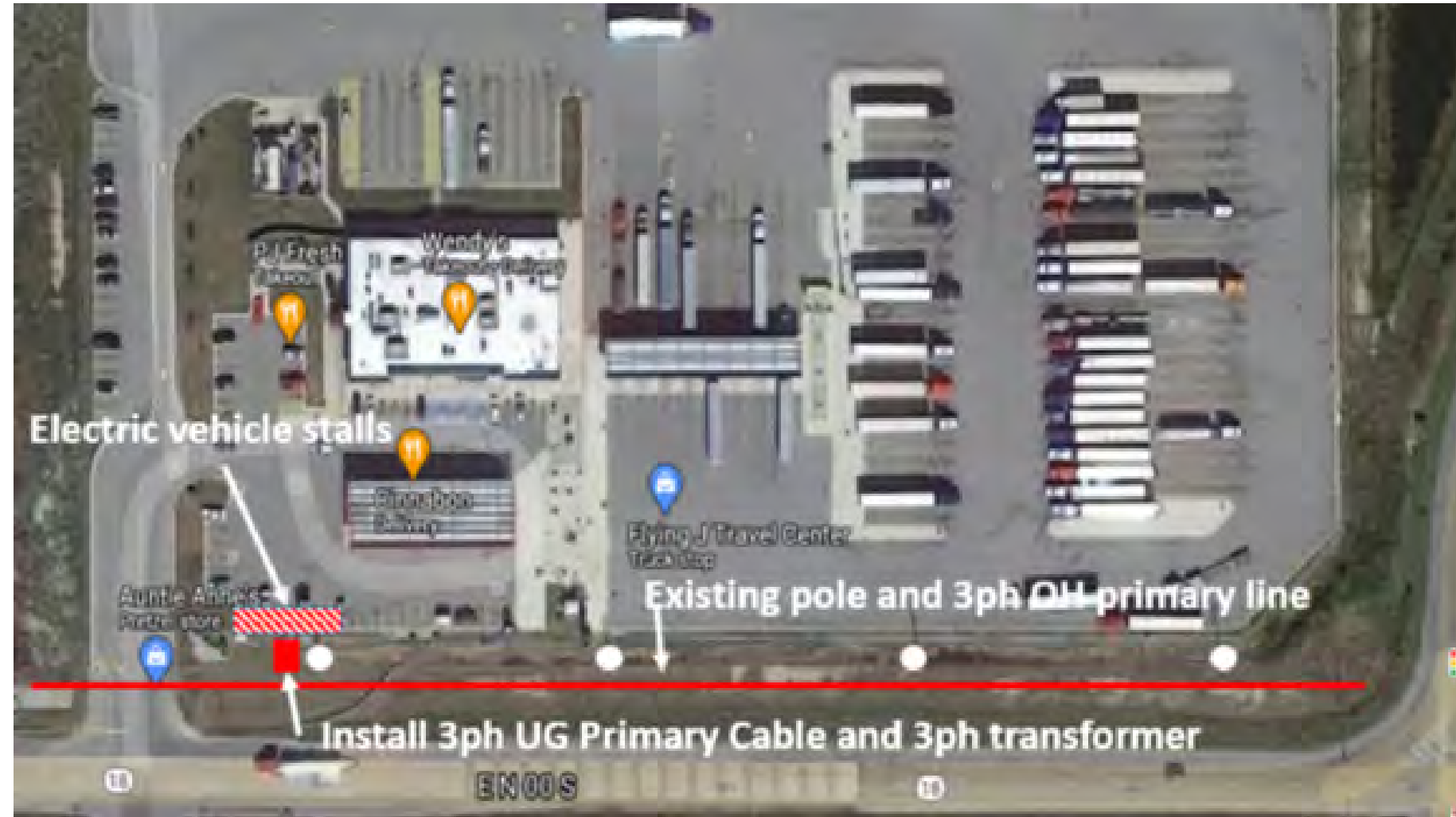
Site Address:	15876 Commerce Rd, Daleville, IN 47334	Traffic Data AADT:	18,212 (INDOT TCDS, 2020)	Page 1/2
Site Host:	Pilot Travel Center	Nearby Amenities:	Pilot Travel Center, Wendy's, McDonald's, Subway, White Castle	
Site Host Mail Address:	5508 Lonas Drive, Knoxville, TN 37909	Distance to Major Road:	0.1-mi to Interstate 69, Exit 234, at SR 67	
Site Host Contact:	Bryan Martin (865) 474-3739 (o) bryan.martin@pilottravelcenters.com	Distance to Nearest 100kW DCFC:	30-mi SW of Proposed IM-6 DCFC, at I69 and SR18 (Exit 264)	DRAFT – 3/5/2021

IM-5 – Pilot Travel Center – I69 & SR 67, Daleville, IN – EV Fast Charging Station



IM-5 – Pilot Travel Center – I69 & SR 67, Daleville, IN – EV Fast Charging Station

Site Address:	15876 Commerce Rd, Daleville, IN 47334
Description:	Located northwest of Interstate 69, Exit 234, at SR 67 in Daleville, Indiana, this location at Pilot Travel Center offers EV drivers walking access to restaurants in a well-lit and safe area. The proposed charging stations will be visible from I69. This will be a popular station for drivers traveling between Indianapolis and Ft Wayne looking for easy on-off and quick food options.
Nearby Amenities:	Pilot Travel Center, Wendy's McDonald's, Subway, White Castle
Traffic Data AADT:	18,212 (INDOT TCDS, 2020)
Distance to major road:	0.1-mi to Interstate 69, Exit 234, at SR 67
Distance to nearest 100kW DCFC:	30-mi SW of Proposed IM-6 DCFC, at I69 and SR18 (Exit 264)
Site Host:	Pilot Travel Center
Site Host Mail Address:	5508 Lonas Drive, Knoxville, TN 37909
Site Host Contact:	Bryan Martin (865) 474-3739 (o) bryan.martin@pilottravelcenters.com
Proposed Installation Details:	I&M will extend new service from an existing pole near the overhead service line that runs along the south perimeter of the Pilot parking lot. A new 3-phase underground primary cable will be installed to a new, 3-phase transformer near the proposed EV stalls on the southwest perimeter of the Pilot parking lot.
Fast Charging Hardware:	(2) CHARGEPOINT CPE 250 125 kW Chargers with 4G LTE cellular and OCPP communication capability
Tentative Budget:	Utility Service Costs: \$25,600 DCFC Equipment Installation: \$11,500 Loaded Hardware, Commissioning, Activation, & Network: \$250,000 Total: \$287,100
Ownership:	Indiana Michigan Power Owned and Operated



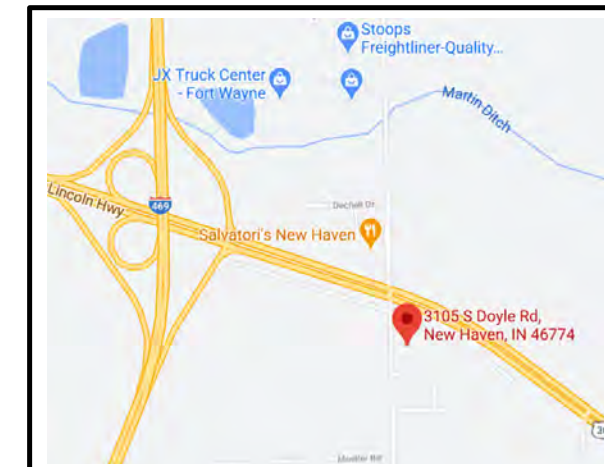
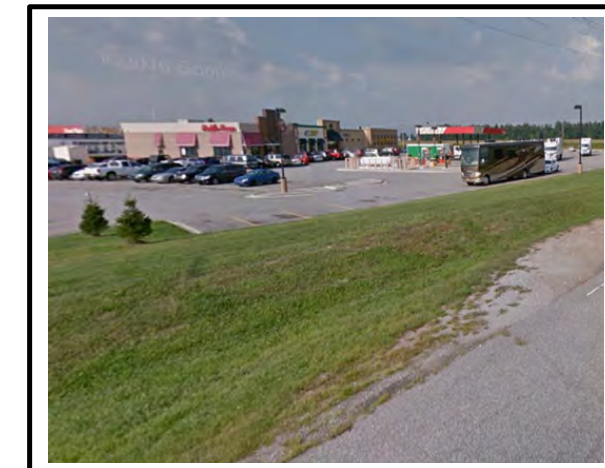
Site Address:	6252 State Rte. 18 East, Marion, IN 46952	Traffic Data AADT:	10,985 (INDOT TCDS, 2020)	Page 1/2
Site Host:	Pilot Travel Center	Nearby Amenities:	Pilot Travel Center, Wendy's, PJ Fresh, Auntie Anne's, Arby's	
Site Host Mail Address:	5508 Lonas Drive, Knoxville, TN 37909	Distance to Major Road:	0.2-mi to Interstate 69 and SR 18, Exit 264	
Site Host Contact:	Bryan Martin (865) 474-3739 (o) bryan.martin@pilottravelcenters.com	Distance to Nearest 100kW DCFC:	30-mi NE of Proposed IM-5 DCFC at I69, Exit 234	DRAFT – 3/5/2021

IM-6 – Pilot Travel Center – I69 & SR 18, Gas City, IN – EV Fast Charging Station



IM-6 – Pilot Travel Center – I69 & SR 18, Gas City, IN – EV Fast Charging Station

Site Address:	6252 State Rte. 18 East, Marion, IN 46952
Description:	Located of northwest of Interstate 69, Exit 264, at SR 28 in Gas City, Indiana, this location at Pilot Travel Center offers EV drivers walking access to restaurants in a well-lit and safe area. The proposed charging stations will be visible from I69. This will be a popular station for drivers traveling between Indianapolis and Ft Wayne looking for easy on-off and quick food options.
Nearby Amenities:	Pilot Travel Center, Wendy's, PJ Fresh, Auntie Anne's, Arby's
Traffic Data AADT:	10,985 (INDOT TCDS, 2020)
Distance to major road:	0.2-mi to Interstate 69 and SR 18, Exit 264
Distance to nearest 100kW DCFC:	30-mi NE of Proposed IM-5 DCFC at I69, Exit 234
Site Host:	Pilot Travel Center
Site Host Mail Address:	5508 Lonas Drive, Knoxville, TN 37909
Site Host Contact:	Bryan Martin (865) 474-3739 (o) bryan.martin@pilottravelcenters.com
Proposed Installation Details:	I&M will extend new service from an existing pole near the overhead service line that runs along the south perimeter of the Pilot parking lot. A new 3-phase underground primary cable will be installed to a new, 3-phase transformer near the proposed EV stalls on the southwest perimeter of the Pilot parking lot.
Fast Charging Hardware:	(2) CHARGEPOINT CPE 250 125 kW Chargers with 4G LTE cellular and OCPP communication capability
Tentative Budget:	Utility Service Costs: \$24,000 DCFC Equipment Installation: \$11,500 Loaded Hardware, Commissioning, Activation, & Network: \$250,000 Total: \$285,500
Ownership:	Indiana Michigan Power Owned and Operated



Site Address:	3105 S. Doyle Rd., New Haven, IN 46774	Traffic Data AADT:	25,824 (INDOT TCDS, 2020)	Page 1/2
Site Host:	Pilot Travel Center	Nearby Amenities:	Pilot Travel Center, Wendy's, PJ Fresh, Auntie Anne's, Arby's	
Site Host Mail Address:	5508 Lonas Drive, Knoxville, TN 37909	Distance to Major Road:	0.25-mi to Interstate 469 and US 30, Exit 19	
Site Host Contact:	Bryan Martin (865) 474-3739 (o) bryan.martin@pilottravelcenters.com	Distance to Nearest 100kW DCFC:	14-mi N of Proposed IM-10 DCFC at DuPont Rd and Diebold Rd	DRAFT – 3/5/2021

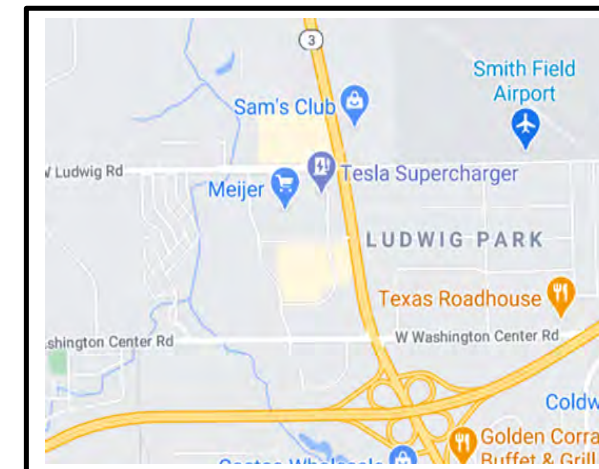
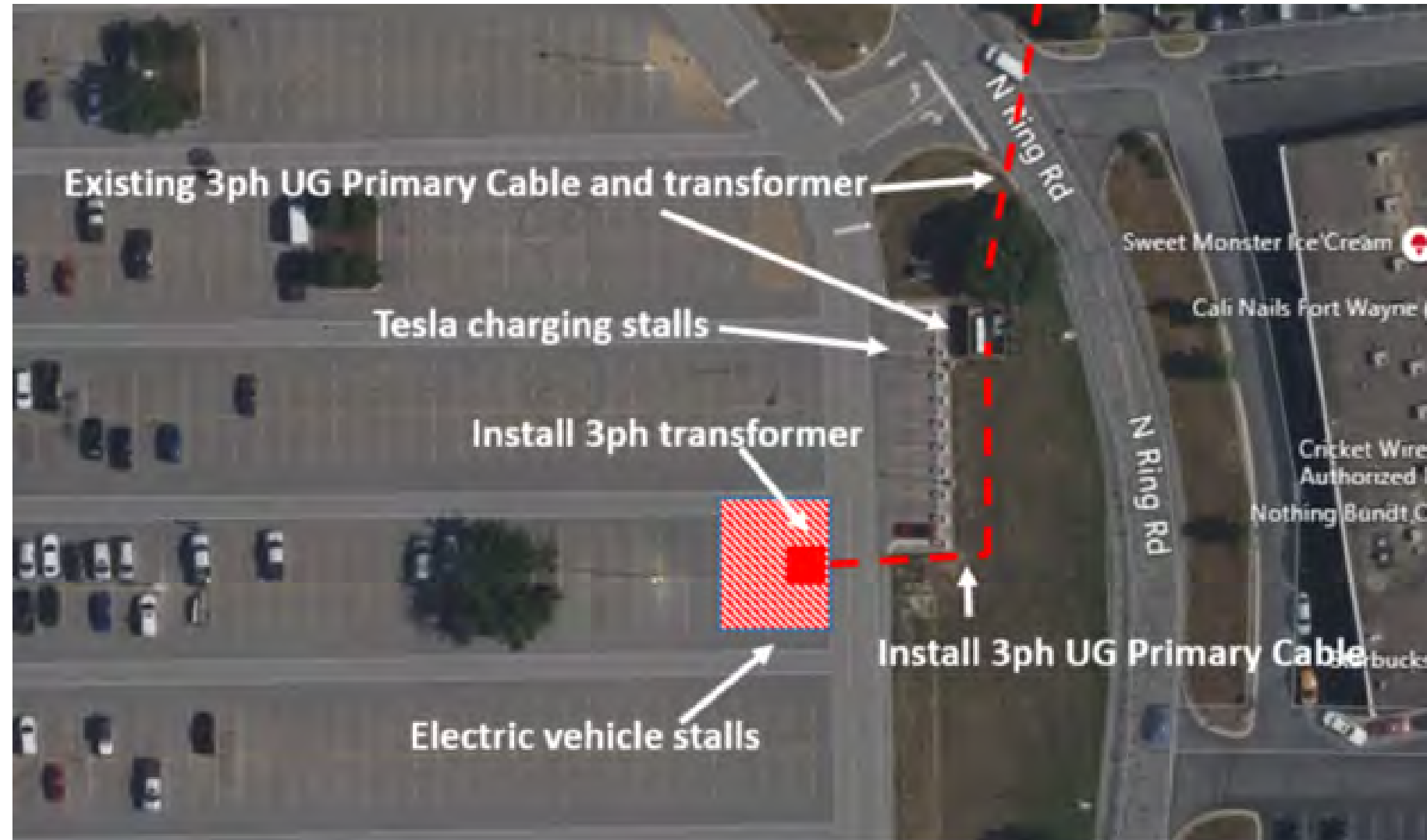
IM-7 – Pilot Travel Center – Doyle Road, New Haven, IN – EV Fast Charging Station



IM-7 – Pilot Travel Center – Doyle Road, New Haven, IN – EV Fast Charging Station

Site Address:	3105 S. Doyle Rd., New Haven, IN 46774
Description:	Located of southeast of Interstate 69, Exit 264, at SR 28 in Gas City, Indiana, this location at Pilot Travel Center offers EV drivers walking access to restaurants in a well-lit and safe area. The proposed charging stations will be visible from I69. This will be a popular station for drivers traveling between Indianapolis and Ft Wayne looking for easy on-off and quick food options.
Nearby Amenities:	Pilot Travel Center, Wendy's, PJ Fresh, Auntie Anne's, Arby's
Traffic Data AADT:	25,824 (INDOT TCDS, 2020)
Distance to major road:	0.25-mi to Interstate 469 and US 30, Exit 19
Distance to nearest 100kW DCFC:	14-mi N of Proposed IM-10 DCFC at DuPont Rd and Diebold Rd
Site Host:	Pilot Travel Center
Site Host Mail Address:	5508 Lonas Drive, Knoxville, TN 37909
Site Host Contact:	Bryan Martin (865) 474-3739 (o) bryan.martin@pilottravelcenters.com
Proposed Installation Details:	I&M will extend new service from an existing pole near the overhead service line that runs along the northeast perimeter of the Pilot parking lot. A new 3-phase underground primary cable will be installed to a new, 3-phase transformer near the proposed EV stalls on the far northwest perimeter of the Pilot parking lot.
Fast Charging Hardware:	(2) CHARGEPOINT CPE 250 125 kW Chargers with 4G LTE cellular and OCPP communication capability
Tentative Budget:	Utility Service Costs: \$24,000 DCFC Equipment Installation: \$11,500 Loaded Hardware, Commissioning, Activation, & Network: \$250,000 Total: \$285,500
Ownership:	Indiana Michigan Power Owned and Operated





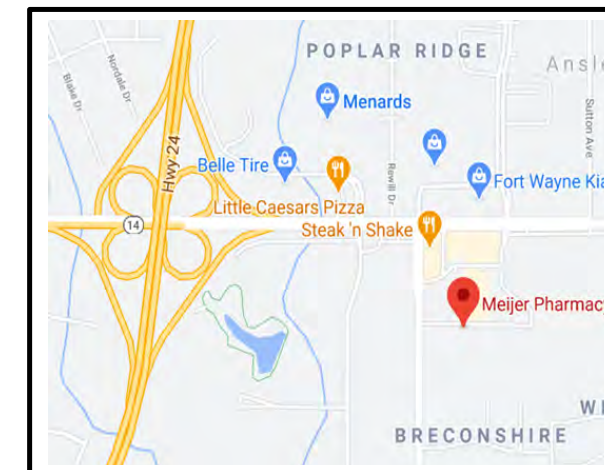
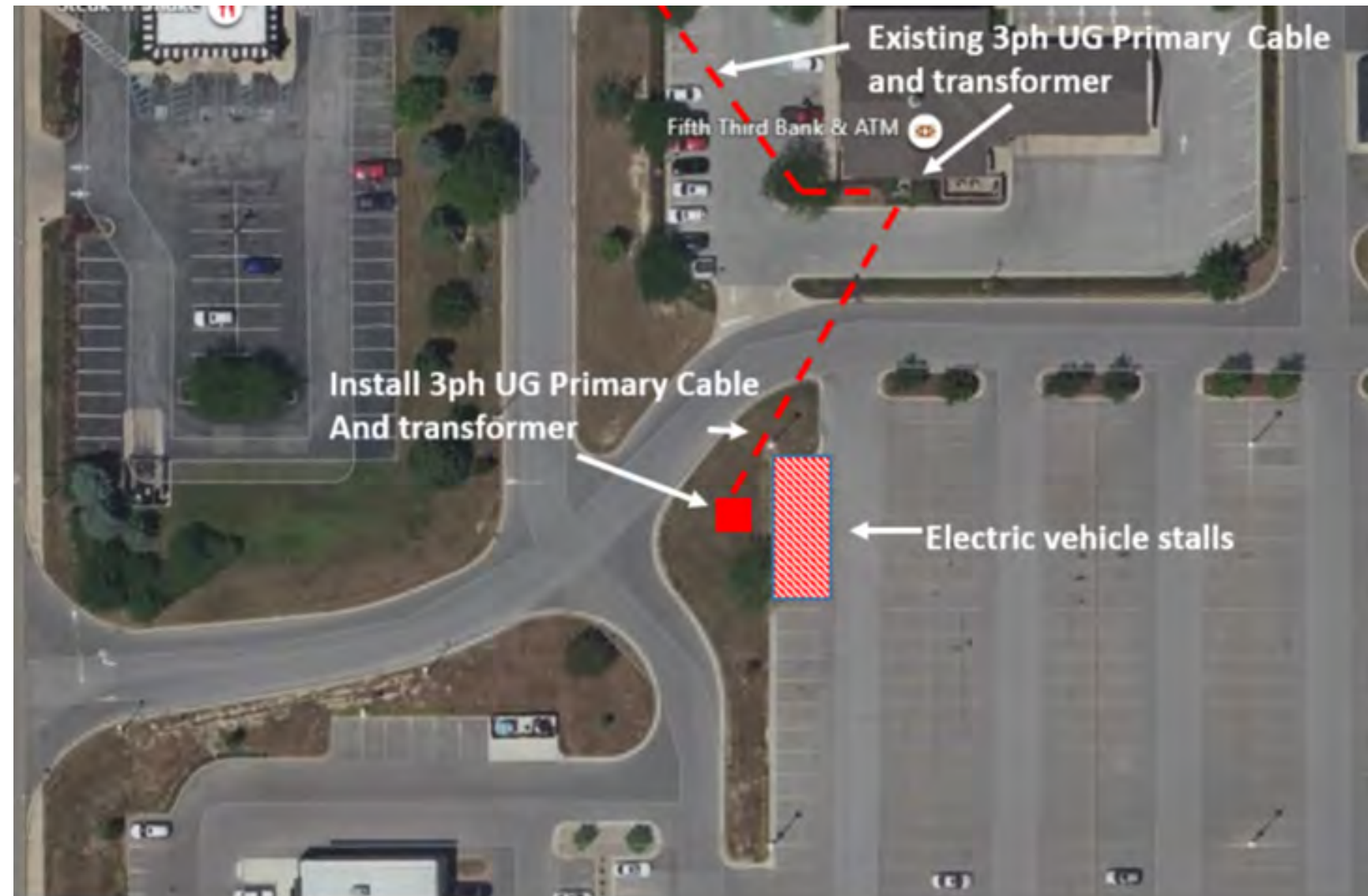
Site Address:	6309 Lima Rd., Ft Wayne, IN 46818	Traffic Data AADT:	42,080 (INDOT TCDS, 2020)	Page ½
Site Host:	Meijer	Nearby Amenities:	Meijer, Cracker Barrel Old, Buffalo Wild Wings, Starbucks, Kohl's	
Site Host Mail Address:	2350 3 Mile Road, Grand Rapids, MI 49544	Distance to major road:	0.5-mi to Interstate 69 and SR 3, Exit 311	
Site Host Contact:	Christina Britton (616) 735-7117 (o) christina.britton@meijer.com	Distance to nearest 100kW DCFC:	7.5-mi SW at Proposed IM-9 DCFC at I69/SR 14, Exit 305, Ft Wayne Tesla SCs onsite	DRAFT – 3/5/2021

IM-8 - Meijer – Lima Road, Fort Wayne, IN – EV Fast Charging Station



IM-8 - Meijer – Lima Road, Fort Wayne, IN – EV Fast Charging Station

Site Address:	6309 Lima Rd., Ft Wayne, IN 46818
Description:	Located northwest of Interstate 69 and SR 3 (Lima Rd) in Ft Wayne, Indiana, this location at Meijer offers EV drivers walking access to restaurants and retail shopping in a well-lit and safe area. The proposed charging stations will be visible from SR 3. This will be a popular station for drivers traveling through Ft Wayne looking for big-box shopping and or quick food options.
Nearby Amenities:	Meijer, Cracker Barrel Old Country Store, Buffalo Wild Wings, Starbucks, Kohl's
Traffic Data AADT:	42,080 (INDOT TCDS, 2020)
Distance to major road:	0.5-mi to Interstate 69 and SR 3, Exit 311
Distance to nearest 100kW DCFC:	7.5-mi SW at Proposed IM-9 DCFC at I69/SR 14, Exit 305, Ft Wayne Tesla SCs onsite
Site Host:	Meijer
Site Host Mail Address:	2350 3 Mile Road, Grand Rapids. MI 49544
Site Host Contact:	Christina Britton (616) 735-7117 (o) christina.britton@meijer.com
Proposed Installation Details:	I&M will extend new service from a nearby existing 3-phase underground primary cable located northeast of the Meijer property by installing a new, 3-phase underground primary cable and transformer near the proposed EV stalls on the northeast perimeter of the Meijer parking lot.
Fast Charging Hardware:	(2) CHARGEPOINT CPE 250 125 kW Chargers with 4G LTE cellular and OCPP communication capability
Tentative Budget:	Utility Service Costs: \$46,000 DCFC Equipment Installation: \$11,500 Loaded Hardware, Commissioning, Activation, & Network: \$250,000 Total: \$307,500
Ownership:	Indiana Michigan Power Owned and Operated



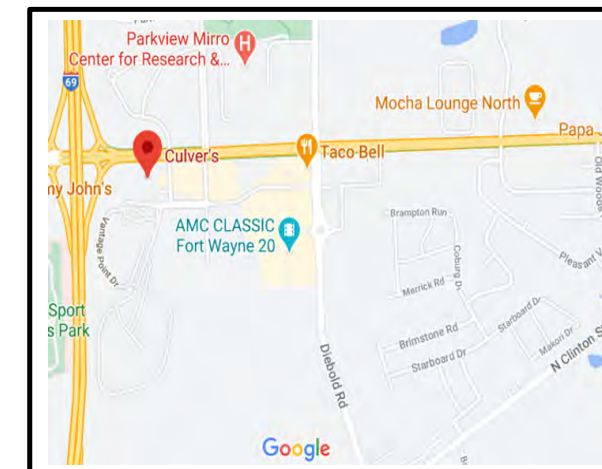
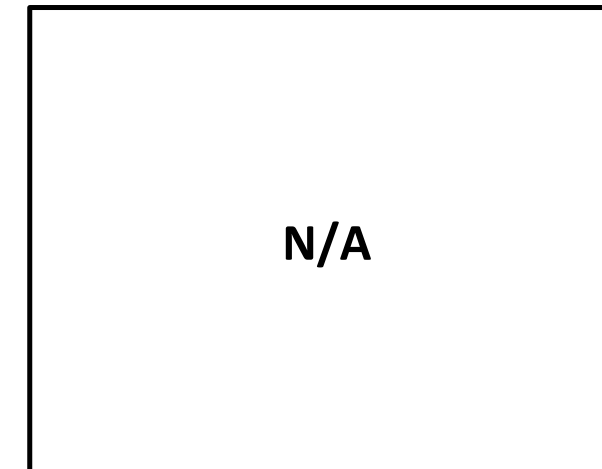
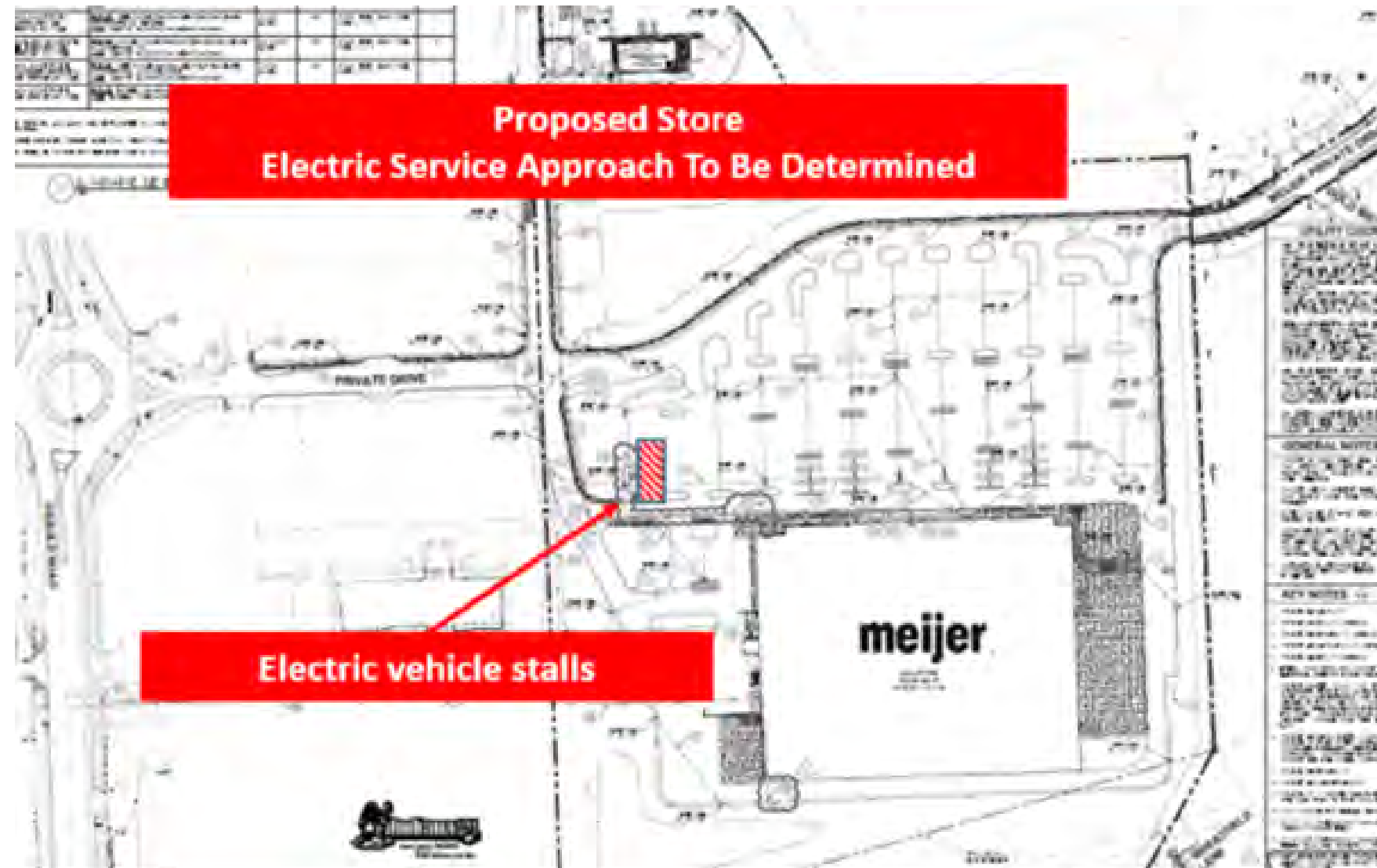
Site Address:	5909 Illinois Rd, Fort Wayne, IN 46804	Traffic Data AADT:	41,571 (INDOT TCDS, 2020)	Page 1/2
Site Host:	Meijer	Nearby Amenities:	Meijer, Auntie Anne's, Biggby Coffee, Steak 'n Shake	
Site Host Mail Address:	2350 3 Mile Road, Grand Rapids, MI 49544	Distance to major road:	0.5-mi to Interstate 69 and SR 14, Exit 305, Ft Wayne	
Site Host Contact:	Christina Britton (616) 735-7117 (o) christina.britton@meijer.com	Distance to nearest 100kW DCFC:	7.5-mi NE at Proposed IM-8 DCFC at I69/SR 3, Exit 311, Ft Wayne Tesla SCs 7.5-mi NE at Proposed IM-8 DCFC site above	DRAFT – 3/5/2021

IM-9 - Meijer – Illinois Road, Fort Wayne, IN – EV Fast Charging Station



IM-9 - Meijer – Illinois Road, Fort Wayne, IN – EV Fast Charging Station

Site Address:	5909 Illinois Rd, Fort Wayne, IN 46804
Description:	Located southeast of Interstate 69 and SR 14 (Illinois Rd) in Ft Wayne, Indiana, this location at Meijer offers EV drivers walking access to restaurants and retail shopping in a well-lit and safe area. The proposed charging stations will be visible from SR 3 and Getz Rd. This will be a popular station for drivers traveling through Ft Wayne looking for big-box shopping and or quick food options.
Nearby Amenities:	Meijer, Auntie Anne's, Biggby Coffee, Steak 'n Shake
Traffic Data AADT:	42,571 (INDOT TCDS, 2020)
Distance to major road:	0.5-mi to Interstate 69 and SR 14, Exit 305, Ft Wayne
Distance to nearest 100kW DCFC:	7.5-mi NE at Proposed IM-8 DCFC at I69/SR 3, Exit 311, Ft Wayne Tesla SCs 7.5-mi NE at Proposed IM-8 DCFC site above
Site Host:	Meijer
Site Host Mail Address:	2350 3 Mile Road, Grand Rapids. MI 49544
Site Host Contact:	Christina Britton (616) 735-7117 (o) christina.britton@meijer.com
Proposed Installation Details:	I&M will extend new service from a nearby existing 3-phase underground cable and transformer north of the Meijer property by installing a new 3-phase underground primary cable and transformer near the proposed EV stalls on the far northwest perimeter of the Meijer parking lot.
Fast Charging Hardware:	(2) CHARGEPOINT CPE 250 125 kW Chargers with 4G LTE cellular and OCPP communication capability
Tentative Budget:	Utility Service Costs: \$59,000 DCFC Equipment Installation: \$11,500 Loaded Hardware, Commissioning, Activation, & Network: \$250,000 Total: \$320,500
Ownership:	Indiana Michigan Power Owned and Operated



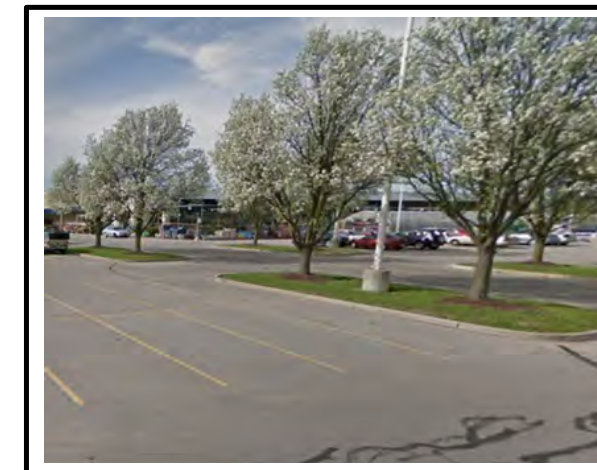
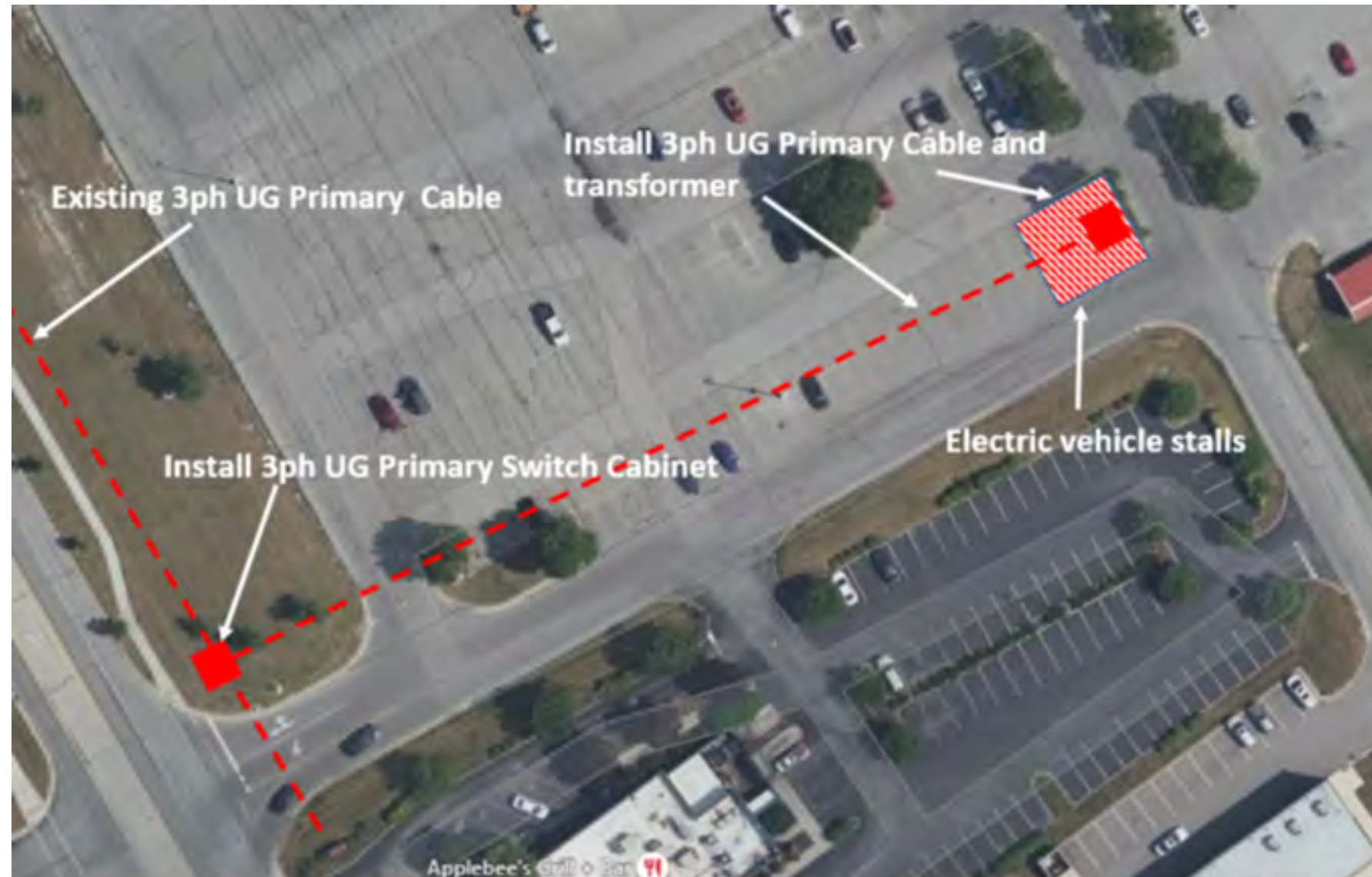
Site Address:	Proposed Store – Dupont Rd & Diebold Rd, Fort Wayne, IN 46826	Traffic Data AADT:	20,042 (INDOT TCDS, 2020)	Page 1/2
Site Host:	Meijer	Nearby Amenities:	Meijer, Culver's, Taco Bell, Burger King, Giordano's Pizza	
Site Host Mail Address:	2350 3 Mile Road, Grand Rapids, MI 49544	Distance to major road:	0.7-mi to Interstate 69 and SR 1, Exit 316	
Site Host Contact:	Christina Britton (616) 735-7117 (o) christina.britton@meijer.com	Distance to nearest 100kW DCFC:	6-mi SW at Proposed IM-8 DCFC at I69/SR 3, Exit 311, Ft Wayne Tesla SCs 6--mi SW at Proposed IM-8 DCFC site above	DRAFT – 3/5/2021

IM-10 - Meijer – Dupont Road (PROPOSED STORE), Fort Wayne, IN – EV Fast Charging Station



IM-10 - Meijer – Dupont Road (PROPOSED STORE), Fort Wayne, IN – EV Fast Charging Station

Site Address:	Proposed Store – Dupont Rd and Diebold Rd, Fort Wayne, IN 46826
Description:	Located southeast of Interstate 69 and SR 1 at Dupont Rd and Diebold Rd in Ft Wayne, Indiana, this location at Meijer will offer EV drivers walking access to restaurants and retail shopping in a well-lit and safe area. This will be a popular station for drivers traveling through Ft Wayne looking for big-box shopping and or quick food options.
Nearby Amenities:	Meijer, Culver’s, Taco Bell, Burger King, Giordano’s Pizza
Traffic Data AADT:	20,042 (INDOT TCDS, 2020)
Distance to major road:	0.7-mi to Interstate 69 and SR 1, Exit 316
Distance to nearest 100kW DCFC:	6-mi SW at Proposed IM-8 DCFC at I69/SR 3, Exit 311, Ft Wayne Tesla SCs 6--mi SW at Proposed IM-8 DCFC site above
Site Host:	Meijer
Site Host Mail Address:	2350 3 Mile Road, Grand Rapids. MI 49544
Site Host Contact:	Christina Britton (616) 735-7117 (o) christina.britton@meijer.com
Proposed Installation Details:	Meier is building a new store at this location. I&M will collaborate electrical service to the electric vehicle stalls and their placement with Meijer Stores and the site development contractor.
Fast Charging Hardware:	(2) CHARGEPOINT CPE 250 125 kW Chargers with 4G LTE cellular and OCPP communication capability
Tentative Budget:	Utility Service Costs: \$47,000 DCFC Equipment Installation: \$11,500 Loaded Hardware, Commissioning, Activation, & Network: \$250,000 Total: \$308,500
Ownership:	Indiana Michigan Power Owned and Operated



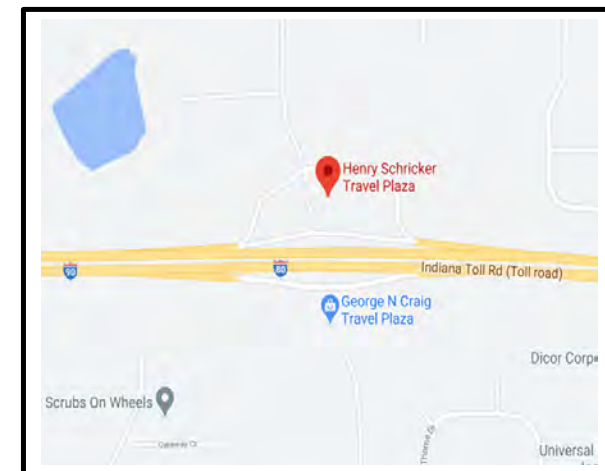
Site Address:	10301 Maysville Rd, Fort Wayne, IN 46628	Traffic Data AADT:	16,226 (INDOT TCDS, 2020)	Page 1/2
Site Host:	Meijer	Nearby Amenities:	Meijer, Cracker Barrel Old Country Store, Starbucks, Wings Etc, Steak 'n Shake	
Site Host Mail Address:	2350 3 Mile Road, Grand Rapids, MI 49544	Distance to major road:	0.2-mi to Interstate 469 at SR 37, Exit 25	
Site Host Contact:	Christina Britton (616) 735-7117 (o) christina.britton@meijer.com	Distance to nearest 100kW DCFC:	8-mi NW at Proposed IM-10 DCFC at I69/SR 1, Exit 316, Ft Wayne	DRAFT – 3/5/2021

IM-11 - Meijer – Maysville Road, Fort Wayne, IN – EV Fast Charging Station



IM-11 - Meijer – Maysville Road, Fort Wayne, IN – EV Fast Charging Station

Site Address:	10301 Maysville Rd, Fort Wayne, IN 46628
Description:	Located northwest of Interstate 469 and SR 37, Maysville Rd, in Ft Wayne, Indiana, this location at Meijer will offer EV drivers walking access to restaurants and retail shopping in a well-lit and safe area. This will be a popular station for drivers traveling through Ft Wayne looking for big-box shopping and or quick food options.
Nearby Amenities:	Meijer, Cracker Barrel Old Country Store, Starbucks, Wings Etc, Steak 'n Shake
Traffic Data AADT:	16,226 (INDOT TCDS, 2020)
Distance to major road:	0.2-mi to Interstate 469 at SR 37, Exit 25
Distance to nearest 100kW DCFC:	8-mi NW at Proposed IM-10 DCFC at I69/SR 1, Exit 316, Ft Wayne
Site Host:	Meijer
Site Host Mail Address:	2350 3 Mile Road, Grand Rapids. MI 49544
Site Host Contact:	Christina Britton (616) 735-7117 (o) christina.britton@meijer.com
Proposed Installation Details:	I&M will extend new service from a nearby existing 3-phase underground cable and transformer southwest of the Meijer property by installing a new 3-phase underground primary switch cabinet and then a second 3-phase underground primary cable to a new transformer near the proposed EV stalls southwest of the Meijer on the far southern perimeter of the Meijer parking lot.
Fast Charging Hardware:	(2) CHARGEPOINT CPE 250 125 kW Chargers with 4G LTE cellular and OCPP communication capability
Tentative Budget:	Utility Service Costs: \$70,000 DCFC Equipment Installation: \$11,500 Loaded Hardware, Commissioning, Activation, & Network: \$250,000 Total: \$331,500
Ownership:	Indiana Michigan Power Owned and Operated



Site Address:	28054-2 CR4 West, Elkhart, IN 46514	Traffic Data AADT:	5,000-15,000 (INDOT TCDS, 2020)	Page 1/2
Site Host:	Indiana Toll Road Concession Company	Nearby Amenities:	Schricker Toll Plaza, HMS Host, Sunoco	
Site Host Mail Address:	3200 Cassopolis Street, Elkhart, IN 46514	Distance to Major Road:	0.1 to Westbound Interstate 80/90 at Mile Marker 90	
Site Host Contact:	Bill McCall (574) 675-4010 (o) bmccall@indianatollroad.org	Distance to Nearest 100kW DCFC:	2-mi W of Proposed IM-2 DCFCs at Exit 92, SR19	DRAFT – 3/5/2021

IM-12 – Indiana Toll Rd – Westbound, Schricker Plaza, Elkhart, IN – EV Fast Charging Station



IM-12 – Indiana Toll Rd – Westbound, Schricker Plaza, Elkhart, IN – EV Fast Charging Station

Site Address:	28054-2 CR4 West, Elkhart, IN 46514
Description:	Located immediately north of Westbound I80/90 at the Schricker Travel Plazas Elkhart, Indiana, this location offers EV drivers walking access to the rest stop and a restaurant food court in a well-lit and safe area. This will be a popular station for drivers traveling in Elkhart and looking for a quick on/off charging experience.
Nearby Amenities:	Schricker Toll Plaza, HMS Host, Sunoco
Traffic Data AADT:	5,000 – 15,000 (INDOT TCDS, 2020)
Distance to major road:	0.1-mi to Interstate 80/90, Mile Marker 90, Schricker Plaza
Distance to nearest 100kW DCFC:	2-mi W of Proposed IM-2 DCFCs at Exit 92, SR19
Site Host:	Indiana Toll Road Concession Company – Craig Plaza
Site Host Mail Address:	3200 Cassopolis Street, Elkhart, IN 46514
Site Host Contact:	Bill McCall (574) 675-4010 (o) bmccall@indianatollroad.org
Proposed Installation Details:	I&M will extend new service from an existing pole near the overhead service line that runs along the north perimeter of the Schricker Plaza parking lot. A new 3-phase underground primary cable will be installed to a new, 3-phase transformer near the proposed EV stalls southwest of the Plaza building.
Fast Charging Hardware:	(2) CHARGEPOINT CPE 250 125 kW Chargers with 4G LTE cellular and OCPP communication capability
Tentative Budget:	Utility Service Costs: \$33,500 DCFC Equipment Installation: \$11,500 Loaded Hardware, Commissioning, Activation, & Network: \$250,000 Total: \$295,000
Ownership:	Indiana Michigan Power Owned and Operated

FOR IMMEDIATE RELEASE
May 26, 2021

VW Committee awards \$5.5 million for electric vehicle charging stations

INDIANAPOLIS - The Indiana Volkswagen Environmental Mitigation Trust Program Committee (committee) approved \$5.535 million in funding to the Indiana Utility Group to install at least 61 DC Fast electric vehicle (EV) charging stations across Indiana at its meeting on May 20, 2021.

The Indiana Utility Group is made up of eight Indiana utilities: Duke Energy Indiana; Hoosier Energy REC, Inc.; Indiana Michigan Power; AES Indiana (Indianapolis Power & Light Company); Northern Indiana Public Service Co. (NIPSCO); Vectren; Wabash Valley Power Alliance; and Crawfordsville Electric Light & Power.

While the plans are in their early stages, the committee is excited to fund DC Fast EV charging stations to help meet Indiana's future transportation needs as more auto manufacturers offer EV choices. Having a network of DC Fast charging stations that can charge some EVs in as little as 20 minutes allows Indiana consumers to more easily consider the environmental benefits of purchasing an electric vehicle. The charging stations will help Indiana continue to be a leader in meeting transportation needs of Hoosiers and visitors as they travel throughout the state.

Further details will be made available on the Indiana Volkswagen Environmental Mitigation Trust Program website at idem.IN.gov/vwtrust.

About the Committee

The Indiana Volkswagen Environmental Mitigation Trust Fund Committee (Committee) was formed under an [executive order](#) issued by Gov. Eric Holcomb on Oct. 4, 2017. The Committee will play a vital role in the disbursement of Indiana's share of funds from the Environmental Mitigation Trust created as part of Volkswagen's settlement of Clean Air Act violations regarding diesel emissions from its vehicles. Indiana will receive approximately \$41 million under the terms of the consent decree.

About IDEM

IDEM (idem.IN.gov) implements federal and state regulations regarding the environment. Through compliance assistance, incentive programs and educational outreach, the agency encourages and aids businesses and citizens to protect Hoosiers and the environment.

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Media contact:

Barry Sneed
Public Information Officer
317-232-8596
Media@idem.IN.gov

Indiana Michigan Power Company

Attachment JCW-9

Witness: J.C. Walter

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INDIANA RULES ON ACCESS TO COURT RECORDS RULE 5
(FORMERLY A.R. 9(G))