

Secretary of the Commission
Indiana Utility Regulatory Commission
PNC Center
101 West Washington Street, Suite 1500 East
Indianapolis, Indiana 46204

via Electronic Filing

December 10, 2010

Re: Experimental Service For Electric Vehicle Charging on Public Premises (Rate EVP)

Dear Secretary:

Pursuant to 170 IAC 1-6 (Rule 6), the Thirty-Day Administrative Filing Procedures and Guidelines Rule, Indianapolis Power & Light Company (IPL) submits herewith for filing an Experimental Rate for Public Charging of Electric Vehicles, which is a "New rate" as defined in 170 IAC 1-6-2(6). This tariff incorporates timely yet evolving industry information in preparation for initial electric vehicle deployment in December 2010.

IPL is the recipient of a Smart Grid Investment Grant through the US Department of Energy enacted through the American Recovery and Reinvestment Act (ARRA), a portion of which may be used to partially fund an electric vehicle pilot. IPL has also been chosen as a vendor in connection with an additional ARRA grant through the Indiana State Energy Program. Energy Systems Network (ESN), a division of the Central Indiana Corporate Partnership, will administer this state grant to procure fast-charging electric vehicle infrastructure and smart grid technologies. IPL is collaborating with Duke Energy to identify locations throughout central Indiana and the Indianapolis metropolitan area to test and demonstrate the usefulness of such equipment and assess the impact of electric transportation on utility systems. IPL is seeking cost recovery of the non-DOE funded portion of this pilot in a separate docketed proceeding.

IPL plans to offer public EV charging through an experimental rate (EVP) for a limited duration and number of locations. As the utility, IPL is well positioned to be the entity that makes public charging available in our service territory through a simple flat fee per charging session. The public charging options will be offered to alleviate range anxiety¹ and foster adoption of electric vehicles more broadly. Additionally, in partnership with Purdue University, IPL plans to conduct a transportation study to understand EV utilization, electric system impact, and ideal placement of public charging stations. IPL intends to explore all metering options, including revenue grade meters within chargers.

EVs represent an exciting possibility for increasing vehicle efficiency, decreasing tailpipe emissions, reducing our nation's dependence on foreign oil, and improving Homeland Security. This filing is IPL's first step toward meeting the challenges presented by electrifying transportation for our industry.

IPL recognizes electric vehicle charging is new territory and customer acceptance and usage patterns are completely unknown. Given the cutting edge experimental nature of this proposed new EV tariff, IPL respectfully requests that, during the term of the experimental tariff, the Commission grant IPL flexibility to modify terms of the experimental rate as necessary or

¹ Range anxiety is a hesitation to own electric vehicles due to the limited range of distance traveled on a full battery charge without the accessibility to re-charge the vehicle away from home. "Electrification Roadmap: Revolutionizing Transportation and Achieving Energy Security" by Electrification Coalition

desirable to optimize this experiment. IPL will file any such proposed modifications with the Commission. Following the completion of the EV charging demonstration program, IPL will perform process and impact evaluations, and will share these evaluations with both the IURC and the OUCC.

Background information on EVs, IPL's proposed public EV tariff, IPL's public charging calculations, and a map of proposed public charging station locations are included as Exhibits A, B, C, and D, respectively. Exhibit C, Public Charging Calculations, includes two scenarios and a cumulative cash flow summary. We considered two separate fee scenarios, calculated using different electricity rates and charging patterns. Of the two results, we recommend the \$5.00 fee because we believe it may be more appealing and acceptable to public charging customers.

IPL respectfully requests approval of this tariff under the 30-day filing procedure with activation beginning with the date of Commission approval and continuing for approximately two years.

The following documents are attached:

Exhibit A – Background Information on Electric Vehicles and Electric Utility Industry Issues

Exhibit B – IPL's proposed Experimental Service for Electric Vehicle Charging on Public Premises (Rate EVP), Original Sheet No.140

Exhibit C – Rate EVP—Public Charging Calculations

Exhibit D – Map of Proposed Public Charging Stations

In addition, this filing contains a Verified Statement by IPL concerning notification of customers regarding the proposed new experimental rate and a copy of such notification. IPL appreciates your assistance in processing this request through the Commission's 30-day filing procedures.

Upon approval of IPL's proposed Rate EVP, IPL will submit, for approval by the Electric Division, redlined and clean versions of the Tariff Table of Contents (Page No. 2).

Please contact me with any questions regarding this matter.

Sincerely,



Ken Flora
Director, Regulatory Affairs

Attachments

cc: Office of the Utility Consumer Counselor

EXHIBIT A

Background Information on Electric Vehicles and Electric Utility Industry Issues

Introduction

Electricity has long been considered the premier alternative fuel for vehicles due to its high efficiency. The internal combustion engine (ICE), which is used in almost all vehicles in operation today, has an efficiency of around 16%. That means that it only uses a small portion of the energy in the fuel it consumes. By contrast, electric motors are much more efficient at around 80%.¹ This means that electricity-powered vehicles can operate at a fuel cost much lower than that of gasoline-powered vehicles.

There are three major types of electricity-powered vehicles. Electric Vehicles (EVs) run on electricity only. They need to be plugged in to recharge once the storage battery is depleted. Hybrid Electric Vehicles (HEVs) use two sources of energy, one of which is electricity. An HEV consists of an energy conversion unit, such as an ICE or fuel cell, and an electric motor that generates power “on the go” and stores it in the battery. Plug-in Hybrid Electric Vehicles (PHEVs) combine the technology and benefits of EVs and HEVs. Like HEVs, they have two types of motors, and are capable of operating either on stored electricity or with gasoline. However, PHEVs have larger batteries which can be charged externally to provide a significant amount of driving range on electricity alone, thus operating even more efficiently.

While PHEVs have a higher upfront cost due to their batteries, they have lower operating costs. A gallon of gasoline delivers the same amount of drive energy as approximately 10 kWh of electricity making the cost of operating a PHEV on all electric mode less than \$1/gallon based on average U.S. residential rates. Using time-of-use off-peak rates, this cost could be cut to closer to \$0.50/gallon.²

American Recovery and Reinvestment Act of 2008; IPL’s Participation as a Vendor

The American Recovery and Reinvestment Act of 2008 (ARRA), among other things, provides \$2 billion in grants to support the manufacturing of advanced vehicle batteries and components. In 2009, the state of Indiana was awarded a \$68.621 million grant from the U.S. Department of Energy’s (DOE) State Energy Project (SEP) American Recovery and Reinvestment Act (ARRA) funds, to address Indiana’s energy priorities and adopt emerging renewable energy and energy efficiency technologies. Subsequently, on June 29, 2010, the state of Indiana awarded a \$1.9 million sub-grant to Energy Systems Network (ESN), a division of the Central Indiana Corporate Partnership, for the purpose of purchasing battery storage, electric vehicle charging stations, and smart-grid technologies at existing commercial and government buildings, parking facilities, and electric vehicle customer properties. ESN and IPL are currently negotiating a vendor agreement, whereby IPL would procure and install fast-charging electric vehicle supply equipment units and associated software at locations within its assigned utility service area in the Indianapolis area, for the purpose of testing and demonstrating the usefulness of such equipment and assessing the impact

¹ See, Research Reports International, “The Impact of Plug-in Hybrid Electric Vehicles on the Electric Industry,” May 2010 (3rd Ed.).

² *Id.*

of such equipment upon utility systems. In connection with this testing and demonstration project, IPL desires to implement the new experimental EVX and EVP rates described in the attached 30-day filing request.

Government Support for EVs

In addition to the ARRA funding described above, several additional government initiatives have been established to help further the advancement of EVs. The Federal Government provides a tax credit for EVs up to \$7,500 for vehicles with battery capacity greater than 4 kWh. A limit of 200,000 vehicle credits is available for each manufacturer. A 10% tax credit up to \$4,000 for the conversion of a vehicle to PHEV with a minimum battery capacity of 4 kWh is also provided by the Federal Government.³ In addition, as referenced previously, it provides \$2 billion in grants to support the manufacturing of advanced vehicle batteries and components. The DOE has undertaken the Vehicle Technologies Program to develop more energy efficient and environmentally friendly highway transportation technologies that enable America to use less petroleum⁴.

Potential Benefits of EVs

Currently, about 97% of the transportation sector relies on oil.⁵ EV technology has the potential to bring about a convergence of the electric and transportation industries by making electricity a prime power source for vehicles. The benefits of this convergence include: reduced transportation fuel costs; reduced tailpipe emissions; and increased national security as a result of reduced dependence on foreign oil.

Today, approximately two-thirds of the oil used in the U.S. goes towards powering the transportation sector and 66% of this amount is imported from other countries. In July 2008, the spot market price of oil reached \$147/barrel (bbl) and the average U.S. retail price for regular gasoline climbed above \$4 per gallon in large part due to high crude oil prices. While gasoline prices have come down significantly from these highs due to the recession, they are likely to rise again as the economy recovers.⁶ In contrast, the national average cost of electricity in the U.S. is 8.5¢/kWh (and Indiana's average cost of electricity is even lower). At this price, EVs could operate on electric power at \$0.02 - \$0.04 per mile.⁷ This gives EVs a significant operating cost advantage over gasoline-powered vehicles which operate at an average of \$0.10 - \$0.14 per mile depending on the price of gasoline.⁸

³ U.S. Department of Energy. Details at www.fueleconomy.gov

⁴ U.S. Department of Energy, Vehicle Technologies Program. Details at <http://www1.eere.energy.gov/vehiclesandfuels/>

⁵ See, Research Reports International, "The Impact of Plug-in Hybrid Electric Vehicles on the Electric Industry," May 2010 (3rd Ed.).

⁶ The Energy Information Administration projects that oil prices, in real terms, will rebound following the global recession, to \$95 per barrel in 2015 and \$133 per barrel in 2035. Growth in non-OPEC production will come primarily from high-cost conventional projects in regions with unstable fiscal or political regimes and from relatively expensive unconventional liquids projects. See, Energy Information Administration, *Annual Energy Outlook 2010*, May 2010.

⁷ See, Idaho National Laboratory, "Comparing Energy Costs per Mile for Electric and Gasoline-Fueled Vehicles." See also, U.S. Department of Energy, "Benefits of Hybrid, Plug-In Hybrid, and All-Electric Vehicles."

⁸ See, U.S. Department of Energy Transportation Energy Data Book, *Chapter 4 Light Vehicles and Characteristics*, "Summary Statistics for Cars." 2008.

The transportation sector is a large emitter of greenhouse gases (GHGs).⁹ EVs can reduce GHG emissions by using electricity that is produced with fewer GHG emissions than those given off by gasoline. By displacing most of the gasoline-fired vehicles on the road, EVs have the potential to significantly reduce the amount of GHGs emitted from the transportation sector.

Our national security is greatly impacted by our dependence on imported energy. This dependence makes our country more strategically vulnerable to major energy suppliers like Russia, Iran, and Venezuela – who all have their own political agendas. Furthermore, a dependence on imported energy limits a country’s ability to pursue national security interests. Dependence also requires the country to compete directly with other importing nations straining international relationships between these countries. National security can be enhanced by increasing the “energy security” of the nation – making our supply of energy more reliable and affordable.

The U.S. imports approximately 72% of its oil.¹⁰ This equates to approximately 15% of total world oil production.¹¹ EVs are an attractive solution for decreasing our country’s dependence on imported oil. “In fact, mandating that 30 percent of all vehicles be electric by 2050 would both reduce U.S. oil use by 2.5 million barrels a day.”¹²

Barriers to EV Development

The major barriers preventing EVs from entering commercial markets are associated with the cost, performance, and life of batteries; the lack of charging infrastructure; and the lack of market acceptance regarding EV technology. It is expected that these hurdles will eventually be overcome, but maybe not for quite some time. Batteries must be improved and mass produced before costs can be lowered; the necessary charging infrastructure must be implemented to reduce range anxiety; and greater efforts must be made among automobile manufacturers to develop attractive and appealing EVs.

One of the major issues which will determine the level of acceptance for EVs is the ability to recharge them as needed. Nationally, 78% of U.S. residents travel less than 40 miles per day¹³. In Indianapolis, the average round-trip commute is 45-50 miles¹⁴. This would indicate that an EV should allow for most trips to be made without needing to recharge except at night. The implication is that owners will generally recharge their vehicles at home. The table below describes the characteristics of the different levels of EV charging.

⁹ See, Environmental Protection Agency, *Inventory Of U.S. Greenhouse Gas Emissions And Sinks: 1990-2008*, March 2010.

¹⁰ See, Research Reports International, “The Impact of Plug-in Hybrid Electric Vehicles on the Electric Industry,” May 2010 (3rd Ed.).

¹¹ *Id.*

¹² Baker Institute for Public Policy at Rice University, *Energy Market Consequences of an Emerging U.S. Carbon Management Policy*.” September 2010. Press release available at: <http://www.media.rice.edu/media/NewsBot.asp?MODE=VIEW&ID=14798>

¹³ U.S. Department of Transportation, Bureau of Transportation Statistics. *OmniStats*. Volume 3, Issue 4, October 2003.

¹⁴ Roland Berger Strategy Consultants in collaboration with Rocky Mountain Institute and Project Get Ready. *PEV Readiness Study*, p. 15. Fall 2010.

Type	Power Level	Vehicles	Time Required for Full Charge (depends on battery size) ¹⁵
Level 1 120 VAC	1.2 – 2.0 kW 1.4 kW typical	PHEV, EV	24 kWh => 16-18 hours 16-16.5 kWh => 10-12 hours
Level 2 240 VAC	3 - 19 kW 3.3 kW or 6.6 kW typical	PHEV, EV	24 kWh => 8-10 hours 16-16.5 kWh => 4-6 hours
Level 3 480 VAC or High Voltage DC	50 kW – 200kW +	EV	Less than 30 minutes

Table 1: EV Charging Level Statistics

However, not everyone has the ability to charge at their residence. Many people live in urban areas where they must park on the street a distance from their home. Others live in apartments with large parking lots that may be far from outlets. Charging at office buildings, hotels, or parking lots may not be available. Currently there is no wide-scale charging infrastructure available for EVs. Public chargers would allow EV batteries to be charged anywhere the vehicle is parked and not in use.

Market acceptance is another barrier. Although there has been some commercial success with HEVs, the public has not yet embraced EV technology. The major issue is the high cost of EVs due to expensive batteries, but there may also be some reluctance to having a vehicle that must be plugged in to charge the battery. In fact, auto manufacturers decided to introduce HEVs before introducing EVs so that consumers could first become acquainted with the benefits of an electric vehicle that did not have to be plugged in.

Issues for Electric Utilities; Need for Special EV Rates

EVs are an important piece of the Smart Grid projects being implemented across the country by utilities. With their energy storage, two-way communications, and self-metering and diagnostics capabilities, EVs are the consummate “smart appliance.” The Smart Grid projects and EVs will be complementary in their abilities to demonstrate the full value of the other’s technology.

¹⁵ The Nissan Leaf and Think City EVs have 24 kWh batteries. The Chevy Volt PHEV has an 16 kWh battery. The Smart ForTwo EV has a 16.5 kWh battery.

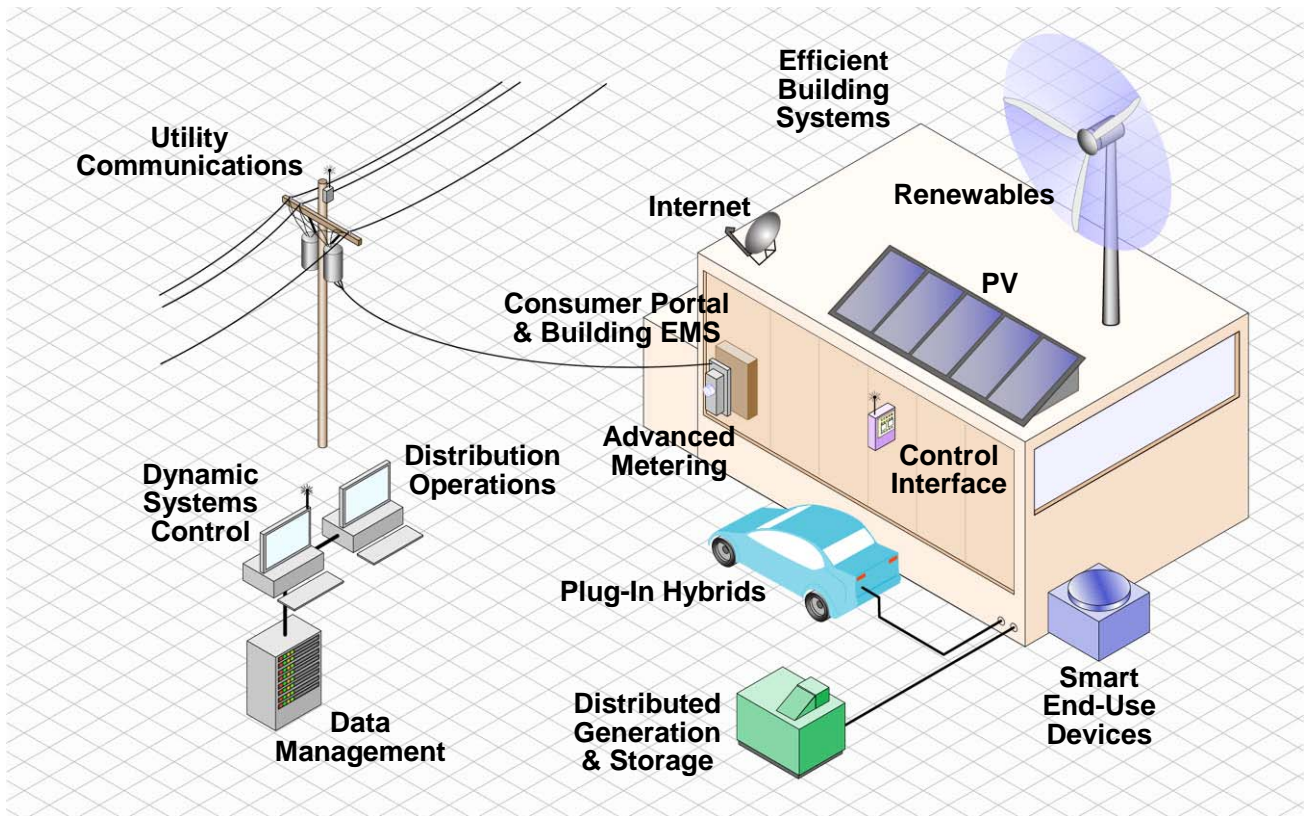


Figure 1: EVs and the Smart Grid

Given that EVs will derive their energy from electricity, it is likely that these vehicles will have a significant impact on the grid in the future. Large-scale penetration of EVs would mark a major shift in the use of electricity. Adding EVs to the grid as new load could potentially worsen the problems already faced by the grid, including constrained transmission lines, demand outstripping supply, and high peak prices. Depending on when, where, and how EVs are operated, they could introduce regional or local constraints to the existing grid. Remedying this situation could require construction of new generating and T&D capacity. The inability of capacity to keep up with demand if market penetration of EVs happens rapidly could reduce reserve margins and negatively impact system reliability at both the regional and local level.

However, EVs will not impact the grid much until they reach a substantial level of market penetration. While most in the industry are concerned about EVs having a negative impact on the grid because of increased load, they may in fact be able to strengthen the grid by acting as distributed energy resources providing peak power or ancillary services through “vehicle-to-grid” (“V2G”) technology. V2G supports two-way communications allowing utilities to interact with PHEVs and cooperate on charging or discharging batteries based on system conditions. With a significant number of EVs on the road, this could prove to be a significant new source of energy or capacity without requiring investment in new peaking plants. V2G technology is still being tested to prove its viability and to test the impacts on the battery systems.

As the market penetration of EVs increases, transportation-based emissions will shift away from tailpipes and towards power plants. Taking into account the greater efficiency of electric drives over

ICE, this by itself will reduce emissions. Unfortunately, while overall emissions will go down, power plant emissions will necessarily go up. This could be problematic for utilities faced with emissions caps. What emissions and by how much they will increase will be dependent on the generation mix of particular utilities or regions, as well as the characteristics of EV charging.

A number of studies have been performed to determine the impact of EVs on the electric industry. On a positive note, most of the studies have come to very similar conclusions regarding the impact of EVs on the industry – in particular, if EV charging is controlled by the utility, directly or indirectly through rate structures, the impact on generation and T&D system needs should be minimal. More specifically, studies performed by the National Renewable Energy Laboratory (NREL) the Pacific Northwest National Laboratory (PNNL), and the Oak Ridge National Laboratory (ORNL) support the conclusion that uncontrolled charging would increase peak demand and require new generation and transmission investments, while delayed or off-peak charging would have minimal impacts on generation and transmission needs.¹⁶

¹⁶ See, K. Parks, et.al., NREL, *Costs and Emissions Associated with Plug-In Hybrid Electric Vehicle Charging in the Xcel Energy Colorado Service Territory*, May 2007; see also, Pacific Northwest National Laboratory, *Potential Impacts of High Penetration of Plug-in Hybrid Vehicles on the U.S. Power Grid*, June 2007; see also, Stanton Hadley, ORNL, *Impact of Plug-in Hybrid Vehicles on the Electric Grid*, October 2006.

Indianapolis Power & Light Company
One Monument Circle
Indianapolis, Indiana

I.U.R.C. No.E-16

Original No. 140

RATE EVP
EXPERIMENTAL SERVICE FOR ELECTRIC VEHICLE CHARGING ON PUBLIC PREMISES

AVAILABILITY:

Available to Customers charging their electric vehicles (EVs) at certain public charging facilities located within the Company's assigned utility service area. Such public charging facilities may be located at hotels, museums, public parking facilities, etc. Participation is voluntary. Energy consumption billed under this rate shall be used exclusively for charging licensed electric vehicles.

EQUIPMENT:

The Company will own and operate the public charging equipment and will install, own and operate any necessary metering equipment subject to a lease agreement with the owners of the property on which public charging equipment is located. Customer's charging system in the electric vehicle must meet applicable standards. Further, Customers must take responsibility for (and indemnify and hold the Company harmless with respect to) the adequacy, condition and operation of the Customers' charging system in the electric vehicle.

METERING AND BILLING:

EV charging service will be billed and paid for at the point of service prior to charging by means of credit, debit, or pre-paid cards, as determined by the Company, at rates specified in this rate schedule. The charging service will be metered separately.

CHARACTER OF SERVICE:

Sixty cycle alternating current energy, ordinarily delivered and measured at 120/240 volts single phase three wire, 120/240 volts three phase four wire, or 120/208 volts three phase four wire, at the option of the Company. Service provided includes use of the charging equipment, electricity needed per session, and the convenience of charging in a public location.

RATE:

During the term of this rate, the initial service charge is a flat fee of \$5.00 per charging session. The Company may seek authority to change this rate, if approved by the Indiana Utility Regulatory Commission.

STANDARD CONTRACT RIDERS APPLICABLE:

NONE

PAYMENT:

This rate requires Customers to prepay for the voluntary service provided pursuant to this tariff by means of credit, debit, or pre-paid cards only, as determined by the Company. Payment must be made before charging service is rendered.

TERM:

The term for this public charging rate is the date of Commission approval continuing for approximately two years. Until it is terminated or superseded by a new rate, this rate will remain in effect beyond the end of the term.

RULES:

Service hereunder shall be subject to the Company's Rules and Regulations for Electric Service, and to the Rules and Standards of Service for the Electrical Public Utilities of Indiana prescribed by the Indiana Utility Regulatory Commission, as the same are now in effect, and as they may be changed from time to time hereafter.

Effective Pending

Public Charging Payment Calculation

$$\text{Pre-paid Fee} = \text{Transaction Cost} + \text{Electricity} + \frac{\text{Installation}}{\text{Total Charges, 5 yrs}} + \left(\frac{\text{Connections}}{\text{month}} * \frac{12 \text{ months}}{\text{\# charges (annual)}} \right)$$

Charge Rate Summary Options - Scenario I

	Use avg # charges over 5 yrs (thru end of 2015)	
Transaction Cost (Approx. 10%)	\$ 0.68	
Electricity	\$ 0.86	Estimate
Installation	\$ 5.17	Estimate
Connectivity	\$ 0.09	Estimate
Fee w/ Trans. Cost	\$ 6.80	
Fee w/ URT	\$ 6.90	
Fee w/ Sales Tax	\$ 7.39	
Fee (Rounded)	\$ 7.00	

Estimate
 Estimate
 Estimate

NOTES:

- 1 Estimates: Customer usage patterns (i.e. # of charges, timing of charges) are unknown and are estimated based on a gradual ramp-up of electric vehicles available
- 2 A DOE grant through the State of Indiana will fund 100% of the equipment costs
- 3 Calculation does not include software costs
- 4 Credit Card Transaction Cost is expected to be approximately 10% of the fee charged
- 5 Electricity cost assumes a weighted rate using the EV TOU peak rates for summer and non-summer
- 6 Electricity cost assumes 3 hour charge at 3.3 kW per hour
- 7 Installation and Connectivity costs assume 1 charge per port per day in 2011-2013, 2 charges per port per day in 2014-2015
- 8 Installation = \$4,000 (Est from Electric charging equip vendor) + \$50K/loc IPL, Spread over 5 yrs
- 9 Assumes 5 ports/location => 1 dual station + 3 single stations per location
- 10 Connectivity = monthly connection fee. This is assumed to be 1 connection fee per location.
 The \$20/mo fee is spread over the 5 ports in each location

Public Charging Payment Calculation

$$\text{Pre-paid Fee} = \text{Transaction Cost} + \text{Electricity} + \frac{\text{Installation}}{\text{Total Charges, 5 yrs}} + \left(\frac{\text{Connections}}{\text{month}} * \frac{12 \text{ months}}{\text{\# charges (annual)}} \right)$$

Charge Rate Summary Options - Scenario II

	Use avg # charges over 5 yrs (thru end of 2015)	
Transaction Cost (Approx. 10%)	\$ 0.49	
Electricity	\$ 0.71	Estimate
Installation	\$ 3.62	Estimate
Connectivity	\$ 0.07	Estimate
Fee w/ Trans. Cost	\$ 4.88	
Fee w/ URT	\$ 4.95	
Fee w/ Sales Tax	\$ 5.30	
Fee (Rounded)	\$ 5.00	

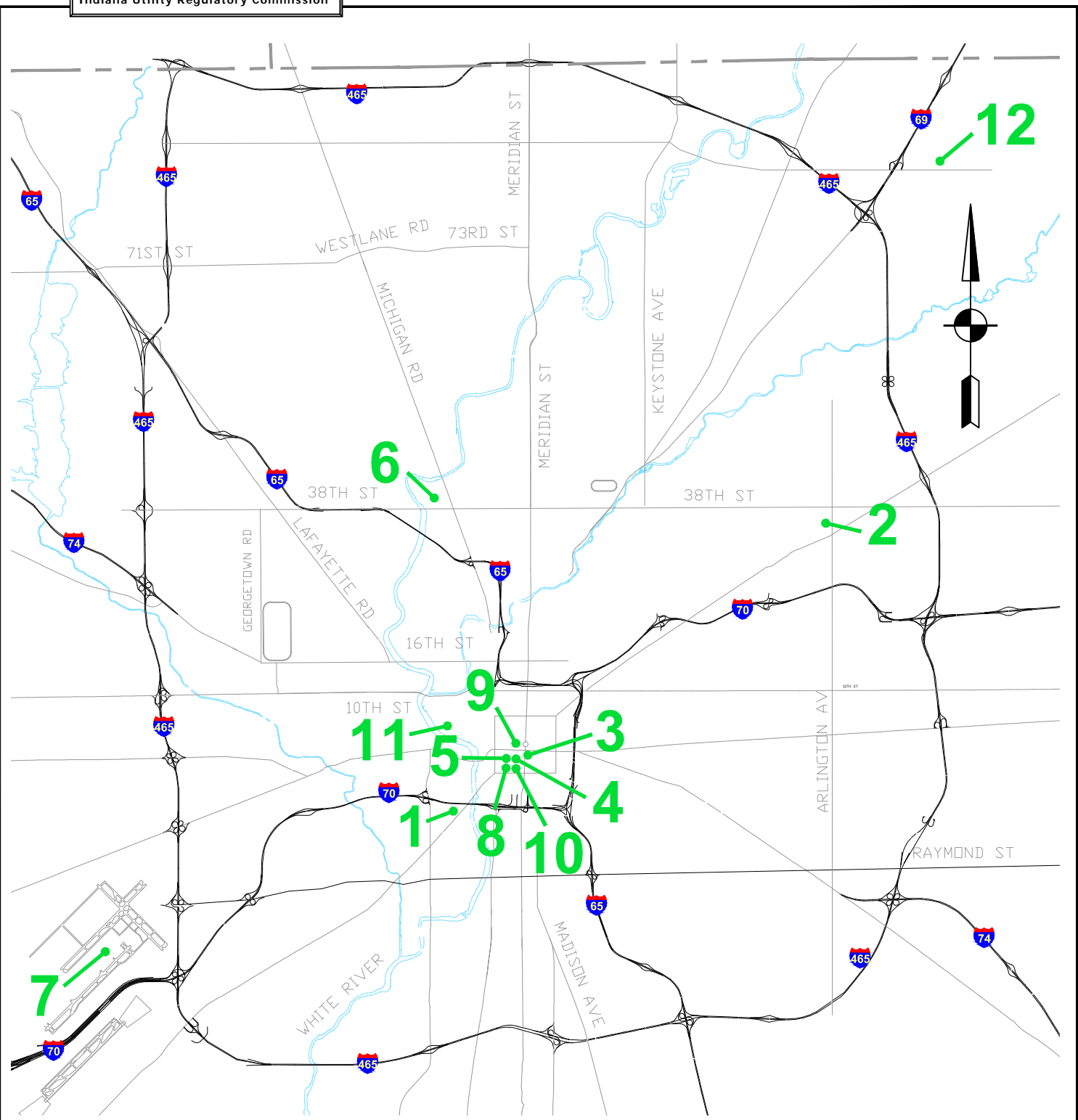
NOTES:

- 1 Estimates: Customer usage patterns (i.e. # of charges, timing of charges) are unknown and are estimated based on a gradual ramp-up of electric vehicles available
- 2 DOE grant through the State of Indiana will fund 100% of the equipment costs
- 3 Calculation does not include software costs
- 4 Credit Card Transaction Cost is expected to be approximately 10% of the fee charged
- 5 Electricity cost assumes IPL's average total retail electric rate (12 ME Sept 2010) of \$.07129/kWh
- 6 Electricity cost assumes 3 hour charge at 3.3 kW per hour
- 7 Installation and Connectivity costs assume 2 charges per port per day in 2011-2015 (i.e. 5 ports in 1 location => 10 charges/location/day)
- 8 Installation = \$4,000 (Est from Electric charging equip vendor) + \$50K/loc IPL, Spread over 5 yr:
- 9 Assumes 5 ports/location => 1 dual station + 3 single stations per location
- 10 Connectivity = monthly connection fee. This is assumed to be 1 connection fee per location.
The \$20/mo fee is spread over the 5 ports in each location

Business Case Price Variation Summary

	Scenario I Actual	Scenario I Rounded	Scenario II Actual	Scenario II Rounded
Weighted Rate	\$ 7.39	\$ 7.00	\$ 5.30	\$ 5.00
Breakeven Year	2016	2016	2016	2016
Cumulative Cash Flow				
2010	\$ (331,200.00)	\$ (331,200.00)	\$ (331,200.00)	\$ (331,200.00)
2011	\$ (281,972.68)	\$ (284,653.05)	\$ (260,117.64)	\$ (264,272.20)
2012	\$ (237,245.99)	\$ (242,363.05)	\$ (195,522.72)	\$ (203,454.16)
2013	\$ (196,609.04)	\$ (203,941.28)	\$ (136,823.75)	\$ (148,188.71)
2014	\$ (121,863.11)	\$ (133,222.94)	\$ (83,483.12)	\$ (97,969.46)
2015	\$ (53,932.82)	\$ (68,954.10)	\$ (35,012.19)	\$ (52,336.16)
2016	\$ 39,063.42	\$ 19,049.26	\$ 31,448.55	\$ 10,255.10
2017	\$ 123,587.60	\$ 99,034.46	\$ 91,849.56	\$ 67,138.39
2018	\$ 200,411.14	\$ 171,731.64	\$ 146,742.93	\$ 118,833.84
2019	\$ 270,235.21	\$ 237,804.48	\$ 196,630.49	\$ 165,814.20
2020	\$ 333,697.19	\$ 297,856.26	\$ 241,968.38	\$ 208,509.17

The business case shows cumulative net cash flows for the electric vehicle public charging over 10 years utilizing the electric vehicle charging station financial analysis template from Project Get Ready (Rocky Mountain Institute) as a base model. The cash out-flows include equipment, installation, transaction costs, connectivity (data transmission) costs, maintenance, electricity, URT taxes, and sales tax. The total cash out-flow is net of grant funding. The cash out-flows vary based on the assumptions used to develop the pre-paid fee scenarios. The cash in-flows are the collection of the pre-paid fee for each charging session (which includes URT taxes and sales tax) and depend on the varying assumptions about the number of charges per port per day. All calculations apply Net Present Value with 2010 as the base year.



- | | |
|---|--|
| 1. IPL MORRIS STREET SC.
1230 W. MORRIS ST. | 7. INDIANAPOLIS AIRPORT
7801 COL. H. WEIR COOK MEM. DR. |
| 2. IPL ARLINGTON SC
3600 N. ARLINGTON AV. | 8. JW MARRIOTT
10 S. WEST ST. |
| 3. DENISON MERCHANTS GARAGE
31 S. MERIDIAN ST. | 9. STATE OF INDIANA
100 N. SENATE AV. |
| 4. SIMON MALL GARAGE 1
50 W. GEORGIA ST. | 10. CONVENTION AND VISITORS BUREAU
100 S. CAPITOL AV. |
| 5. SIMON MALL GARAGE 2
129 W. MARYLAND ST. | 11. IUPUI
1040 W. MICHIGAN ST. |
| 6. IMA
4000 MICHIGAN RD. | 12. ENER DEL
8740 HAGUE RD. |

PROPOSED
(subject to change)

	INDIANAPOLIS POWER & LIGHT CO.
	PUBLIC CHARGING STATION LOCATIONS
<small>DRAWN BY: RLW DATE: 8-11-10</small>	charging-station-location.dwg

Verified Statement of Indianapolis Power & Light Company (IPL)

**Concerning Notification of Customers Affected by the Experimental Service for
Electric Vehicle Charging on Public Premises**

Indianapolis Power & Light Company complied with the Notice Requirements under 170 IAC 1-6-6 in the following manner:

- beginning on December 3, 2010 and continuing through the filing date, the attached notice was posted in the Customer Service Office at 2102 N. Illinois Street
- beginning on December 3, 2010 and continuing through the filing date, the same notice was posted on IPL's website under the Pending section of the Rates, Rules and Regulations area
- a legal notice placed in the Indianapolis Star on December 4, 2010 as evidenced by the attached Publishers Affidavit; and
- beginning on the filing date, a copy of the Experimental Electric Vehicle Charging 30 day filing will be included on IPL's website under the Pending section of the Rates, Rules and Regulations area

I affirm under penalties for perjury that the foregoing representations are true to the best of my knowledge, information, and belief.

Dated this 10th day of December, 2010.



Ken Flora
Director, Regulatory Affairs

LEGAL NOTICE

Notice is hereby given that on or about December 10, 2010, Indianapolis Power & Light Company expects to file a request for approval of an Experimental Tariff, entitled Rate EVP— Experimental Service For Electric Vehicle Charging on Public Premises, with the IURC. The new Rate EVP will affect only those members of the public who voluntarily pre-pay for public vehicle charging. IPL anticipates approval of the filing on or before January 26, 2011. The experimental rates will be in place for approximately two years, or until they are terminated or superseded by new rates approved by the IURC.

This notice is provided to the public pursuant to 170 IAC 1-6-6. The contact information, to which an objection should be made, is as follows:

Secretary
Indiana Utility Regulatory Commission
101 W. Washington Street, Suite 1500 East
Indianapolis, Indiana 46204
Telephone:(317) 232-2700
Fax: (317) 232-6758
Email: info@urc.in.gov

Office of Utility Consumer Counselor
115 W. Washington Street, Suite 1500 South
Indianapolis, Indiana 46204
Telephone:(317) 232-2484
Toll Free: 1-888-441-2494
Fax: (317) 232-5923
Email: uccinfo@oucc.in.gov

Dated December 4, 2010.

that on or about December 10, 2010, Indianapolis Power & Light Company expects to file a request for approval of an Experimental Tariff, entitled Rate EVP-Experimental Service For Electric Vehicle Charging on Public Premises, with the IURC. The new Rate EVP will affect only those members of the public who voluntarily pre-pay for public vehicle charging. IPL anticipates approval of the filing on or before January 26, 2011. The experimental rates will be in place for approximately two years, or until they are terminated or superseded by new rates approved by the IURC.

This notice is provided to the public pursuant to 170 IAC 1-6-6. The contact information, to which an objection should be made, is as follows:

Secretary
Indiana Utility
Regulatory Commission
101 W. Washington
Street, Suite 1500 East
Indianapolis, Indiana
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Toll Free:
1-888-441-2494
Fax: (317) 232-5923

Email:
uccinfo@oucc.in.gov
Dated December 4,
2010.
(S - 12/4/10 - 5746926)

PUBLISHER'S AFFIDAVIT

State of Indiana SS:
MARION County

Personally appeared before me, a notary public in and for said county and state.

the undersigned **Kerry Dodson** who, being duly sworn, says that SHE is clerk

of the INDIANAPOLIS NEWSPAPERS a DAILY STAR newspaper of general circulation

printed and published in the English language in the city of INDIANAPOLIS in state

and county aforesaid, and that the printed matter attached hereto is a true copy,

which was duly published in said paper for 1 time(s), between the dates of:

12/04/2010 and 12/04/2010

Kerry Dodson

Clerk
Title

Subscribed and sworn to before me on 12/04/2010

Louise M. Powell

Notary Public

My commission expires: _____

