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Filed Pursuant to Rule 424(b)(5) Registration No. 333-200941-01

CALCULATION OF REGISTRATION FEE

Title of each class of securities to be registered	Maximum aggregate offering price	Amount of registration fee (1)
3.400% Senior Debentures due 2025	\$249,350,000	\$17,354.47 (2)

- (1) The filing fee is calculated in accordance with Rule 457(r) under the Securities Act of 1933.
- (2) Pursuant to Rule 415(a)(6) under the Securities Act of 1933, \$100,000,000 in aggregate offering price of Interstate Power and Light Company's unsold debt securities were carried forward on registration statement No. 333-200941-01 filed by the registrant on December 15, 2014, for which \$11,460 in registration fees were previously paid and are being applied to \$100,000,000 in aggregate offering price of the Senior Debentures. The registration fee listed above relates to the remaining part of the aggregate offering price of the Senior Debentures.

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Prospectus Supplement (To Prospectus dated December 15, 2014)

\$250,000,000

Interstate Power and Light Company

3.400% Senior Debentures due 2025

We will pay interest on the senior debentures semi-annually in arrears on February 15 and August 15 of each year, beginning on February 15, 2016. The senior debentures will mature on August 15, 2025. We may redeem some or all of the senior debentures at any time and from time to time at the applicable redemption price described in this prospectus supplement.

The senior debentures will be our unsecured senior obligations and rank equally with our other unsecured senior indebtedness from time to time outstanding. The senior debentures will be issued only in registered form in minimum denominations of \$1,000 and integral multiples of \$1,000 in excess thereof. The senior debentures are a new issue of securities with no established trading market. We currently have no intention to apply to list the senior debentures on any securities exchange or to seek their admission to trading on any automated quotation system.

Investing in the senior debentures involves risks. See "Risk Factors" beginning on page 22 of our Annual Report on Form 10-K for the year ended December 31, 2014, as such discussion may be amended or updated in other reports filed by us with the Securities and Exchange Commission. These Risk Factors, as amended or updated, are incorporated by reference herein.

	Per	
	Debenture	Total
Public offering price(1)	99.740%	\$249,350,000
Underwriting discount	0.65%	\$ 1,625,000
Proceeds, before expenses, to Interstate Power and Light Company(1)	99.090%	\$247,725,000

⁽¹⁾ Plus accrued interest, if any, from August 18, 2015, if settlement occurs after that date.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal

offehttp://www.oblible.com

The debentures will be available for delivery in book-entry form only through The Depository Trust Company on or about August 18, 2015.

Joint Book-Running Managers

MUFG Mizuho Securities

Wells Fargo Securities

Co-Managers

Barclays KeyBanc Capital Markets

The Williams Capital Group, L.P.

The date of this prospectus supplement is August 13, 2015.

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ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts. The first part is this prospectus supplement, which describes the specific terms of this offering. The second part, the accompanying prospectus, gives more general information, some of which may not apply to this offering. You should read the entire prospectus supplement, as well as the accompanying prospectus and the documents incorporated by reference that are described under "Where You Can Find More Information" in the accompanying prospectus. Some of these documents, however, are filed on a combined basis with our parent, Alliant Energy Corporation, and its direct subsidiary, Wisconsin Power and Light Company. Information contained in these documents relating to those entities is filed by them on their own behalf and not by us and is not incorporated by reference in this prospectus supplement or the accompanying prospectus. The senior debentures are not obligations of, or guaranteed by, Alliant Energy Corporation or Wisconsin Power and Light Company and you should not rely on that information when deciding whether to invest in our senior debentures. In the event that the description of the offering varies between this prospectus supplement and the accompanying prospectus, you should rely on the information contained in this prospectus supplement.

You should rely only on the information relating solely to Interstate Power and Light Company contained or incorporated by reference in this prospectus supplement, the accompanying prospectus and any related free writing prospectus prepared by or on behalf of us or to which we have referred you. We have not, and the underwriters have not, authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We are not, and the underwriters are not, making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference is accurate only as of the respective dates of those documents in which the information is contained. Our business, financial condition, results of operations and prospects may have changed since any such date.

Unless we otherwise indicate or unless the context requires otherwise, all references in this prospectus supplement to "we," "our," "us" or similar references mean Interstate Power and Light Company.

Our principal executive offices are located at Alliant Energy Tower, 200 First Street, SE, Cedar Rapids, Iowa 52401, and our telephone number is (319) 786-4411.

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FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus and the information incorporated by reference herein or therein contain forwardlooking statements intended to qualify for the safe harbors from liability established by the Private Securities Litigation Reform Act of 1995. All statements, other than statements of historical fact, included in this prospectus supplement, the accompanying prospectus or incorporated by reference herein or therein, including statements regarding anticipated financial performance, business strategy and management's plans and objectives for future operations, are forward-looking statements. These forward-looking statements can be identified as such because the statements generally include words such as "may," "believe," "expect," "anticipate," "plan," "project," "will," "projections," "estimate," or other similar expressions. These forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from those expressed in, or implied by, these statements. Readers are cautioned not to place undue reliance on these forward-looking statements. All forward-looking statements included in this prospectus supplement, the accompanying prospectus or in any document incorporated by reference herein or therein speak only as of the date of this prospectus supplement, the accompanying prospectus or the document incorporated by reference, as the case may be. Additional information concerning factors that could cause actual results to differ materially from those in the forward-looking statements is contained under "Risk Factors" on page 4 of the accompanying prospectus and in other documents that we file from time to time with the U.S. Securities and Exchange Commission ("SEC") that are incorporated by reference into this prospectus supplement and the accompanying prospectus, including, but not limited to, the risk factor disclosure beginning on page 22 of our Annual Report on Form 10-K for the fiscal year ended December 31, 2014. Some, but not all, of the risks and uncertainties that could materially affect actual results include the following:

- federal and state regulatory or governmental actions, including the impact of energy, tax, financial and health care legislation, and regulatory agency orders;
- our ability to obtain adequate and timely rate relief to allow for, among other things, the recovery of fuel costs, operating costs, transmission costs, deferred expenditures, capital expenditures, and remaining costs related to electric generating units ("EGUs") that may be permanently closed, earning our authorized rates of return, and the payments to our parent of expected levels of dividends;
- the ability to continue cost controls and operational efficiencies;
- the impact of our retail electric base rate freeze in Iowa during 2015 and 2016;

- weather effects on results of utility operations, including impacts of temperature changes in our service territory on customers' demand for electricity and gas;
- the impact of the economy in our service territory and the resulting impacts on sales volumes, margins and the ability to collect unpaid bills:
- the impact of customer- and third party-owned generation, including alternative electric suppliers, in our service territory on system reliability, operating expenses and customers' demand for electricity;
- the impact of energy efficiency, franchise retention, customer- and third party-owned generation and customer disconnects on sales volumes and margins;
- the impact that price changes may have on our customers' demand for electric, gas and steam services, and their ability to pay their bills:
- developments that adversely impact our ability to implement our strategic plan, including unanticipated issues with new emission controls equipment for our various coal-fired EGUs, construction of the Marshalltown Generating Station, various replacements and expansion of our natural gas distribution systems, and the potential decommissioning of certain of our EGUs;
- issues related to the availability and operations of EGUs, including start-up risks, breakdown or failure of equipment, performance below expected or contracted levels of output or efficiency, operator error, transmission constraints, compliance with mandatory reliability standards and risks related to recovery of resulting incremental costs through rates;

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- disruptions in the supply and delivery of coal, natural gas and purchased electricity;
- changes in the price of delivered coal, natural gas and purchased electricity due to shifts in supply and demand caused by market
 conditions and regulations, and the ability to recover and to retain the recovery of related changes in purchased power, fuel and fuelrelated costs through rates in a timely manner;
- issues associated with environmental remediation and environmental compliance, including compliance with the Consent Decree between us, the United States of America Environmental Protection Agency (the "EPA"), the Sierra Club, the State of Iowa and Linn County in Iowa, the Coal Combustion Residuals Rule, future changes in environmental laws and regulations, including the EPA's regulations for carbon dioxide emissions reductions from new and existing fossil-fueled EGUs, and litigation associated with environmental requirements;
- the ability to defend against environmental claims brought by state and federal agencies, such as the EPA, state natural resources agencies or third parties, such as the Sierra Club, and the impact on operating expenses of defending and resolving such claims;
- the ability to recover through rates all environmental compliance and remediation costs, including costs for projects put on hold due to uncertainty of future environmental laws and regulations;
- impacts that storms or natural disasters in our service territory may have on our operations and recovery of, and rate relief for, costs associated with restoration activities;
- the direct or indirect effects resulting from terrorist incidents, including physical attacks and cyber attacks, or responses to such incidents:
- the impact of penalties or third-party claims related to, or in connection with, a failure to maintain the security of personally identifiable information, including associated costs to notify affected persons and to mitigate their information security concerns;
- the direct or indirect effects resulting from breakdown or failure of equipment in the operation of natural gas distribution systems, such as leaks, explosions and mechanical problems, and compliance with natural gas distribution safety regulations, such as those that may be issued by the Pipeline and Hazardous Materials Safety Administration;
- risks associated with implementing a new customer billing and information system currently expected by the end of the first quarter of 2016:
- impacts of future tax benefits from Iowa rate-making practices, including deductions for repairs expenditures and allocation of mixed service costs, and recoverability of the associated regulatory assets from customers, when the differences reverse in future periods;
- any material post-closing adjustments related to any past asset divestitures, including the sales of our Minnesota electric and natural gas

distribution assets, which could result from, among other things, warranties, parental guarantees or litigation;

- continued access to the capital markets on competitive terms and rates, and the actions of credit rating agencies;
- inflation and interest rates;
- changes to the creditworthiness of counterparties with which we have contractual arrangements, including participants in the energy markets and fuel suppliers and transporters;
- issues related to electric transmission, including operating in Regional Transmission Organization energy and ancillary services markets, the impacts of potential future billing adjustments and cost allocation changes from Regional Transmission Organizations and recovery of costs incurred;
- current or future litigation, regulatory investigations, proceedings or inquiries, including the flood damage lawsuit pending against Cedar Rapids and Iowa City Railway Company;

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- employee workforce factors, including changes in key executives, collective bargaining agreements and negotiations, work stoppages or restructurings;
- access to technological developments;
- adverse developments in the food manufacturing industry, including animal flu and other illnesses;
- changes in technology that alter the channels through which electric customers buy or utilize power;
- material changes in retirement and benefit plan costs;
- the impact of performance-based compensation plans accruals;
- the effect of accounting pronouncements issued periodically by standard-setting bodies, including a new revenue recognition standard, which is currently expected to be adopted in 2018;
- the impact of changes to production tax credits for wind projects;
- the impact of adjustments made to deferred tax assets and liabilities from state apportionment assumptions;
- the ability to utilize tax credits and net operating losses generated to date, and those that may be generated in the future, before they expire;
- the ability to successfully complete tax audits and changes in tax accounting methods, including changes required by new tangible property regulations with no material impact on earnings and cash flows; and
- factors listed in Management's Discussion and Analysis of Financial Condition and Results of Operations in the combined Quarterly Report on Form 10-Q and Annual Report on Form 10-K filed by Alliant Energy Corporation, Wisconsin Power and Light Company and us for the quarter ended June 30, 2015 and the year ended December 31, 2014, respectively.

We assume no obligation, and disclaim any duty, to update the forward-looking statements in this prospectus, except as required by law.

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PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights information contained elsewhere in this prospectus supplement and the accompanying prospectus. This summary may not contain all of the information that may be important to you. You should read this entire prospectus supplement and the accompanying prospectus carefully before making a decision to invest in our senior debentures.

Our Company

We are a public utility serving customers in Iowa. We are engaged principally in:

- the generation and distribution of electricity in select markets in Iowa;
- the distribution and transportation of natural gas in select markets in Iowa;
- the delivery of electricity to wholesale customers in select markets in the Midwest; and
- the generation and distribution of steam for two customers in Cedar Rapids, Iowa, and various other energy-related products and services.

As of December 31, 2014, we served 529,192 retail electric customers in 752 communities and 235,014 retail gas customers in 243 communities. As of December 31, 2014, Minnesota retail electric and gas customers were 42,338 and 10,712, respectively.

All of our common stock is owned by Alliant Energy Corporation, a regulated investor-owned public utility holding company with subsidiaries, including us, serving primarily electricity and natural gas customers in the Midwest.

In April 2015, we completed the sale of our Minnesota natural gas distribution assets and received proceeds of \$11 million and a promissory note of \$2 million. In July 2015, we completed the sale of our Minnesota electric distribution assets and received proceeds of \$127 million, which were used to reduce cash proceeds received from our sales of accounts receivable program. Final proceeds are subject to post-closing adjustments based on the value of the net assets as of the closing date and are expected to be approximately \$130 million. The premium received over the book value of the property, plant and equipment sold was more than offset by tax-related regulatory assets associated with the distribution assets, resulting in pre-tax charges of \$12 million. In July 2015, the Federal Energy Regulatory Commission, or FERC, approved the wholesale power supply agreement between us and Southern Minnesota Energy Cooperative, which became effective upon the sale of our Minnesota electric distribution assets.

We are subject to the jurisdiction of the Iowa Utilities Board, or IUB. We are also subject to the jurisdiction of FERC. Our parent corporation, Alliant Energy Corporation, is a "holding company" and we are a "subsidiary company" within the Alliant Energy Corporation "holding company system" as defined under the Public Utility Holding Company Act of 2005. As a result, we are subject to some of the regulatory provisions of that Act.

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The Offering

The following is a brief summary of some of the terms of this offering. For a more complete description of the terms of the senior debentures, see "Description of Senior Debentures" in this prospectus supplement and "Description of Debt Securities" in the accompanying prospectus.

Issuer Interstate Power and Light Company

Senior debentures offered \$250 million aggregate principal amount of 3.400% senior debentures due 2025.

Maturity August 15, 2025.

Interest payment dates February 15 and August 15 of each year, beginning on February 15, 2016.

Ranking The senior debentures will be our unsecured senior obligations and rank equally with

our other unsecured senior indebtedness from time to time outstanding. The senior debentures will also be subordinated to any secured indebtedness to the extent of the assets securing such indebtedness. We do not currently have any secured indebtedness.

Optional redemption

The senior debentures will be redeemable, at our option, in whole or in part at any time or from time to time prior to May 15, 2025, at the applicable redemption price described in "Description of Senior Debentures—Optional Redemption" plus accrued and unpaid interest, if any, to, but excluding, the redemption date. We may also redeem all or a portion of the senior debentures at our option at any time on or after May 15, 2025, at a redemption price equal to 100% of the principal amount of the senior debentures to be redeemed, plus accrued and unpaid interest, if any, to, but excluding, the redemption date.

Covenants

The indenture governing the senior debentures contains covenants that, among other things, limit our ability to:

- create certain types of secured indebtedness without providing for the senior debentures to be equally and ratably secured; and
- consolidate, merge or sell assets.

These covenants are subject to important exceptions and qualifications, which are described under the heading "Description of Debt Securities" in the accompanying prospectus.

No limitation on debt

The indenture governing the senior debentures does not limit the amount of senior unsecured debt securities that we may issue or provide holders any protections should we be involved in a highly leveraged transaction.

Use of proceeds

We estimate that we will receive net proceeds from this offering of approximately \$247.2 million, after deducting the underwriting discount and estimated offering expenses payable by us. We intend to use the net proceeds from this offering to reduce commercial paper

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classified as long-term debt, reduce outstanding capital under our receivables purchase and sale program and/or for general corporate purposes.

Denominations

The senior debentures will be issued in minimum denominations of \$1,000 and integral multiples of \$1,000 in excess thereof.

Absence of market for the senior debentures

The senior debentures are a new issue of securities with no established trading market. We currently have no intention to apply to list the senior debentures on any securities exchange or to seek their admission to trading on any automated quotation system. Accordingly, we cannot provide any assurance as to the development or liquidity of any market for the senior debentures. See "Underwriting." Furthermore, the market price for the senior debentures may be adversely impacted by fluctuations in interest rates.

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Summary Consolidated Financial Information

The summary consolidated financial information below was selected or derived from our consolidated financial statements. The unaudited interim period financial information, in our opinion, includes all adjustments, which are normal and recurring in nature, necessary for a fair presentation for the periods shown. Results for the six months ended June 30, 2015 are not necessarily indicative of results to be expected for the full fiscal year. The information set forth below is qualified in its entirety by and should be read in conjunction with our Management's Discussion and Analysis of Financial Condition and Results of Operations and our consolidated financial statements and related notes incorporated by reference into this prospectus supplement and the accompanying prospectus. See "Where You Can Find More Information."

	Year Ended December 31,			Six Months Ended June 30,		
	2012	2013	2014	2014	2015	
	(In millions)					
Income Statement Data:						
Operating revenues	\$1,650.3	\$1,818.8	\$1,848.1	\$940.8	\$871.2	
Operating income	200.3	212.0	209.2	91.5	99.3	
Net income	150.2	189.9	194.6	66.9	69.6	
Earnings available for common stock	137.6	173.6	184.4	61.8	64.5	

	As of December 31,		As of June 30,			
	2013	2013 2014		2015		
		(In millions)				
Balance Sheet Data:						
Current assets	\$ 535.9	\$ 556.1	\$	542.9		
Property, plant and equipment, net	4,136.8	4,554.7		4,687.8		
Investments and other non-current assets	1,133.3	1,351.0		1,357.2		
Current liabilities	524.3	705.9		543.2		
Long-term debt, net (excluding current portion)	1,520.0	1,618.7		1,730.2		
Other non-current liabilities	1,882.0	2,123.1		2,205.8		

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Ratios of Earnings to Fixed Charges

The following table sets forth our ratio of earnings to fixed charges for the periods presented:

	Yo	ear Ended December	31,		Six Months Er	nded June 30,
2010	2011	2012	2013	2014	2014	2015
3.23x	2.70x	2.64x	2.85x	2.57x	2.28x	2.30x

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USE OF PROCEEDS

We estimate that we will receive net proceeds from this offering of approximately \$247.2 million, after deducting the underwriting discount

and estimated offering expenses payable by us. We intend to use the net proceeds from this offering to reduce commercial paper classified as long-term debt, reduce outstanding capital under our receivables purchase and sale program and/or for general corporate purposes. As of June 30, 2015, our \$111.2 million of outstanding commercial paper classified as long-term debt had a weighted average interest rate of 0.5% and a weighted average remaining maturity of six days. As of June 30, 2015, our receivables purchase and sale program had an outstanding balance of \$100.0 million and an annualized commercial paper yield rate of 0.21%. Pending application of the net proceeds from this offering, we intend to place the proceeds in short-term instruments.

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CAPITALIZATION

The following table sets forth our consolidated capitalization as of June 30, 2015 on an actual basis and as adjusted to give effect to this offering, the anticipated use of the net proceeds from this offering as described under "Use of Proceeds."

		As of June 30, 2015			
	Actual	As Adjusted	% of Total as Adjusted		
Common equity:	(111 11	illillolis)			
Common stock	\$ 33.4	\$ 33.4	0.8%		
Additional paid-in capital	1,342.8	1,342.8	33.8		
Retained earnings	532.5	532.5	13.4		
Total common equity	1,908.7	1,908.7	48.0		
Cumulative preferred stock	200.0	200.0	5.0		
Long-term debt, net					
Existing long-term debt	1,730.2	1,619.0	40.7		
Senior debentures offered hereby		250.0	6.3		
Total long-term debt, net	1,730.2	1,869.0	47.0		
Total capitalization	\$3,838.9	\$ 3,977.7	100.0%		

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THE COMPANY

We are a public utility serving customers in Iowa. We are engaged principally in:

- the generation and distribution of electricity in select markets in Iowa;
- the distribution and transportation of natural gas in select markets in Iowa;
- the delivery of electricity to wholesale customers in select markets in the Midwest; and
- the generation and distribution of steam for two customers in Cedar Rapids, Iowa and various other energy-related products and services.

As of December 31, 2014, we served 529,192 retail electric customers in 752 communities and 235,014 retail gas customers in 243 communities. As of December 31, 2014, Minnesota retail electric and gas customers were 42,338 and 10,712, respectively.

All of our common stock is owned by Alliant Energy Corporation, a regulated investor-owned public utility holding company with subsidiaries, including us, serving primarily electricity and natural gas customers in the Midwest.

In April 2015, we completed the sale of our Minnesota natural gas distribution assets and received proceeds of \$11 million and a promissory note of \$2 million. In July 2015, we completed the sale of our Minnesota electric distribution assets and received proceeds of \$127 million, which

were used to reduce cash proceeds received from our sales of accounts receivable program. Final proceeds are subject to post-closing adjustments based on the value of the net assets as of the closing date and are expected to be approximately \$130 million. The premium received over the book value of the property, plant and equipment sold was more than offset by tax-related regulatory assets associated with the distribution assets, resulting in pre-tax charges of \$12 million. In July 2015, FERC approved the wholesale power supply agreement between us and Southern Minnesota Energy Cooperative, which became effective upon the sale of our Minnesota electric distribution assets.

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DESCRIPTION OF SENIOR DEBENTURES

We have summarized provisions of the senior debentures below. This summary supplements and, to the extent inconsistent with, replaces the description of the general terms and provisions of the debt securities under the caption "Description of Debt Securities" in the accompanying prospectus. We will issue the senior debentures as a separate series of securities under an indenture, dated as of August 20, 2003, between us and The Bank of New York Mellon Trust Company, N.A., as successor trustee. The indenture is described in the accompanying prospectus.

General

The indenture does not limit the aggregate principal amount of senior unsecured debt securities that we may issue under it, and provides that we may issue, without the consent of holders of the senior debentures, securities under the indenture from time to time in one or more series pursuant to the terms of one or more supplemental indentures, board resolutions or officer's certificates creating the series. The indenture does not give holders of the senior debentures protection in the event we engage in a highly leveraged or other transaction that may adversely affect holders of the senior debentures. As of the date of this prospectus supplement, we have \$250.0 million aggregate principal amount of 7.25% senior debentures due 2018, \$100.0 million aggregate principal amount of 5.875% senior debentures due 2018, \$200.0 million aggregate principal amount of 3.65% senior debentures due 2020, \$250.0 million aggregate principal amount of 3.25% senior debentures due 2024, \$50.0 million aggregate principal amount of 6.45% senior debentures due 2033, \$125.0 million aggregate principal amount of 6.30% senior debentures due 2034, \$300.0 million aggregate principal amount of 6.25% senior debentures due 2039 and \$250.0 million aggregate principal amount of 4.70% senior debentures due 2043 outstanding under the indenture.

We are initially offering the senior debentures in the aggregate principal amount of \$250 million. We may, without the consent of the holders of the senior debentures, issue additional senior debentures in the future having the same ranking, interest rate, maturity and other terms, except for the public offering price, issue date and, if applicable, the initial interest payment date as the senior debentures we offer by this prospectus supplement. Any such additional senior debentures having such similar terms, together with the senior debentures, may constitute a single series of senior debentures under the indenture.

No sinking fund will be established for the benefit of the senior debentures.

Maturity and Interest

The senior debentures will mature on August 15, 2025. Each senior debenture will bear interest from August 18, 2015, or from and including the most recent interest payment date to which we have paid interest, at the rate of 3.400% per year. We will pay interest semi-annually in arrears, on February 15 and August 15, commencing February 15, 2016, to the persons in whose names the senior debentures are registered at the close of business on the fifteenth calendar day (whether or not a business day) before each interest payment date. Interest will be computed on the basis of a 360-day year comprised of twelve 30-day months. In the event that any interest payment date does not fall on a business day, interest on the senior debentures will be paid on the immediately succeeding business day, without any additional interest paid as a result of such delay.

Ranking

The senior debentures will be our senior, unsecured and unsubordinated obligations, ranking equally and ratably with all our other senior, unsecured and unsubordinated obligations from time to time outstanding. The senior debentures will be effectively subordinated to all of our secured indebtedness to the extent of the assets securing such indebtedness. We do not currently have any secured indebtedness.

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As of June 30, 2015, giving pro forma effect to this offering and our expected use of the net proceeds of the offering, we would have had \$1,869.0 million aggregate principal amount of unsecured long-term debt outstanding (excluding current portion).

Optional Redemption

At any time or from time to time prior to May 15, 2025 (the "Par Call Date"), the senior debentures will be redeemable as a whole or in part, at our option, at a redemption price equal to the greater of (i) 100% of the principal amount of such senior debentures and (ii) the sum, as determined by the Independent Investment Banker and delivered to the Trustee, of the present values of the remaining scheduled payments of principal and interest thereon that would be due if the senior debentures matured on the Par Call Date (exclusive of interest accrued to the date of redemption) discounted to the redemption date on a semiannual basis (assuming a 360-day year consisting of twelve 30-day months) at the Treasury Rate plus 20 basis points, plus in each case accrued and unpaid interest, if any, to, but excluding, the redemption date. At any time on or after May 15, 2025, the senior debentures will be redeemable as a whole or in part, at our option, at a redemption price equal to 100% of the principal amount of the senior debentures being redeemed plus accrued and unpaid interest, if any, to, but excluding, the redemption date.

"Comparable Treasury Issue" means the United States Treasury security or securities selected by an Independent Investment Banker as having an actual or interpolated maturity comparable to the remaining term of the senior debentures (assuming for this purpose that the senior debentures matured on the applicable Par Call Date) to be redeemed that would be utilized, at the time of selection and in accordance with customary financial practice, in pricing new issues of corporate debt securities of a comparable maturity to the remaining term of such senior debentures.

"Comparable Treasury Price" means, with respect to any redemption date, (A) the average of the Reference Treasury Dealer Quotations for such redemption date, after excluding the highest and lowest such Reference Treasury Dealer Quotations, or (B) if the Independent Investment Banker obtains fewer than four such Reference Treasury Dealer Quotations, the average of all such quotations.

"Independent Investment Banker" means one of the Reference Treasury Dealers appointed by us.

"Reference Treasury Dealer" means each of (i) a primary U.S. Government securities dealer located in the United States (a "Primary Treasury Dealer") selected by Mitsubishi UFJ Securities (USA), Inc. or one of its affiliates, (ii) Mizuho Securities USA Inc., (iii) a Primary Treasury Dealer selected by Wells Fargo Securities, LLC or one of its affiliates, and (iv) one Primary Treasury Dealer selected by the Company, and such Primary Treasury Dealers' respective successors; provided, however, that if any of the foregoing or their affiliates shall cease to be a Primary Treasury Dealer, we shall substitute therefor another Primary Treasury Dealer.

"Reference Treasury Dealer Quotations" means, with respect to each Reference Treasury Dealer and any redemption date, the average, as determined by the Independent Investment Banker, of the bid and asked prices for the Comparable Treasury Issue (expressed in each case as a percentage of its principal amount) quoted in writing to the Independent Investment Banker by the Reference Treasury Dealers at 3:30 p.m. New York time on the third business day preceding such redemption date.

"Treasury Rate" means, with respect to any redemption date, the rate per annum equal to the semiannual equivalent yield to maturity or interpolated (on a day count basis) of the Comparable Treasury Issue, assuming a price for the Comparable Treasury Issue (expressed as a percentage of its principal amount) equal to the Comparable Treasury Price for such redemption date.

Notice of any redemption will be mailed or sent electronically pursuant to applicable DTC procedures at least 30 days but not more than 60 days before the redemption date to each holder of senior debentures to be redeemed. If the senior debentures to be redeemed are not global securities then held by DTC, the senior debentures to be redeemed will be selected by the trustee pursuant to the indenture.

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Unless we default in payment of the redemption price, on and after the redemption date interest will cease to accrue on the senior debentures or portions thereof called for redemption.

The Trustee

The Bank of New York Mellon Trust Company, N.A., will act as trustee, registrar, transfer agent and paying agent for the senior debentures. We can remove the trustee with or without cause so long as no event which is, or after notice or lapse of time would become, an event of default shall have occurred and be continuing.

We and certain of our affiliates maintain banking and other business relationships in the ordinary course of business with the trustee and its

affiliates. In addition, the trustee and certain of its affiliates may serve as trustee for other securities issued by us or by our affiliates.

To the extent provided in the indenture, the trustee will have a prior claim on amounts held by it under the indenture for the payment of its compensation and expenses and for the repayment of advances made by it to effect performance of some covenants in the indenture.

Book-Entry Delivery and Settlement

We will issue the senior debentures in the form of one or more global certificates, which we refer to as global securities. We will deposit the global securities with or on behalf of The Depository Trust Company, referred to as DTC, and registered in the name of Cede & Co., as nominee of DTC, or else the global securities will remain in the custody of the trustee in accordance with the FAST Balance Certificate Agreement between DTC and the trustee.

DTC has advised us that:

- DTC is a limited-purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code and a "clearing agency" registered under Section 17A of the Securities Exchange Act of 1934;
- DTC holds securities that its direct participants deposit with DTC and facilitates the settlement among direct participants of securities transactions, such as transfers and pledges, in deposited securities through electronic computerized book-entry changes in direct participants' accounts, thereby eliminating the need for physical movement of securities certificates;
- direct participants include securities brokers and dealers, banks, trust companies, clearing corporations and other organizations;
- DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation, which is owned by the users of its regulated subsidiaries;
- access to the DTC system is also available to indirect participants such as securities brokers and dealers, banks, trust companies and
 clearing corporations that clear through or maintain a custodial relationship with a direct participant, either directly or indirectly; and
- the rules applicable to DTC and its direct and indirect participants are on file with the SEC.

We have provided the following descriptions of the operations and procedures of DTC solely as a matter of convenience. These operations and procedures are solely within the control of DTC and are subject to change by them from time to time. Neither we, the underwriters nor the trustee take any responsibility for these operations or procedures, and you are urged to contact DTC or its participants directly to discuss these matters.

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We expect that under procedures established by DTC:

- upon deposit of the global securities with DTC or its custodian, DTC will credit on its internal system the accounts of direct participants designated by the underwriters with portions of the principal amounts of the global securities; and
- ownership of the senior debentures will be shown on, and the transfer of ownership of the senior debentures will be effected only through, records maintained by DTC or its nominee, with respect to interests of direct participants, and the records of direct and indirect participants, with respect to interests of persons other than participants.

The laws of some jurisdictions require that purchasers of securities take physical delivery of those securities in the form of a certificate. For that reason, it may not be possible to transfer interests in a global security to those persons. In addition, because DTC can act only on behalf of its participants, who in turn act on behalf of persons who hold interests through participants, the ability of a person having an interest in a global security to pledge or transfer that interest to persons or entities that do not participate in DTC's system, or otherwise to take actions in respect of that interest, may be affected by the lack of a physical definitive security in respect of that interest.

So long as DTC or its nominee is the registered owner of a global security, DTC or that nominee will be considered the sole owner or holder of the senior debentures represented by that global security for all purposes under the indenture and under the senior debentures. Except as described below, owners of beneficial interests in a global security will not be entitled to have senior debentures represented by that global security registered in their names, will not receive or be entitled to receive the senior debentures in the form of a physical certificate and will not be considered the owners or holders of the senior debentures under the indenture or under the senior debentures, and may not be entitled to give the trustee directions, instructions or approvals. Any notices required to be given to the holders while the senior debentures are global securities will be

given to DTC. For that reason, each holder owning a beneficial interest in a global security must rely on DTC's procedures and, if that holder is not a direct or indirect participant in DTC, on the procedures of the DTC participant through which that holder owns its interest, to exercise any rights of a holder of senior debentures under the indenture or the global security.

Neither we nor the trustee will have any responsibility or liability for any act or omission by DTC, including any aspect of DTC's records relating to the senior debentures or relating to payments made by DTC on account of the senior debentures, or any responsibility to maintain, supervise or review any of DTC's records relating to the senior debentures.

We will make payments on the senior debentures represented by the global securities to DTC or its nominee, as the registered owner of the senior debentures. We expect that when DTC or its nominee receives any payment on the senior debentures represented by a global security, DTC will credit participants' accounts with payments in amounts proportionate to their beneficial interests in the global security as shown in DTC's records. We also expect that payments by DTC's participants to owners of beneficial interests in the global security held through those participants will be governed by standing instructions and customary practice as is now the case with securities held for the accounts of customers registered in the names of nominees for such customers. DTC's participants will be responsible for those payments.

Payments on the senior debentures represented by the global securities will be made in immediately available funds. Transfers between participants in DTC will be made in accordance with DTC's rules and will be settled in immediately available funds.

Certificated Senior Debentures

We will issue certificated senior debentures to each person that DTC identifies as the beneficial owner of senior debentures represented by the global securities upon surrender by DTC of the global securities only if:

• DTC notifies us that it is no longer willing or able to act as a depositary for the global securities, and we have not appointed a successor depositary within 90 days of that notice;

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- an event of default with respect to the senior debentures has occurred and is continuing; or
- we decide not to have the senior debentures represented by a global security.

Neither we nor the trustee will be liable for any delay by DTC, its nominee or any direct or indirect participant in identifying the beneficial owners of the related senior debentures. We and the trustee may conclusively rely on, and will be protected in relying on, instructions from DTC or its nominee, including instructions about the registration and delivery, and the respective principal amounts, of the senior debentures to be issued.

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UNDERWRITING

Mitsubishi UFJ Securities (USA), Inc., Mizuho Securities USA Inc. and Wells Fargo Securities, LLC are acting as representatives of each of the underwriters named below. Subject to the terms and conditions set forth in a purchase agreement among us and the underwriters, we have agreed to sell to the underwriters, and each of the underwriters severally and not jointly has agreed to purchase from us, the principal amount of senior debentures set forth opposite its name below.

Underwriters	Principal Amount of Senior Debentures
Mitsubishi UFJ Securities (USA), Inc.	\$ 62,500,000
Mizuho Securities USA Inc.	62,500,000
Wells Fargo Securities, LLC	62,500,000
Barclays Capital Inc.	20,834,000
KeyBanc Capital Markets Inc.	20,833,000
The Williams Capital Group, L.P.	20,833,000

Total \$ 250,000,000

The underwriters have agreed, subject to the terms and conditions contained in the purchase agreement, to purchase all of the senior debentures sold under the purchase agreement if any of these senior debentures are purchased. If an underwriter defaults, the purchase agreement provides that the purchase commitments of the non-defaulting underwriters may be increased or the purchase agreement may be terminated.

The underwriters are offering the senior debentures, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel, including the validity of the senior debentures, and other conditions contained in the purchase agreement, such as the receipt by the underwriters of officer's certificates and legal opinions. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part. The offering of the notes by the underwriters is subject to receipt and acceptance and subject to the underwriters' right to reject any order in whole or in part.

The senior debentures are a new issue of securities with no established trading market. The senior debentures will not be listed on any securities exchange or on any automated dealer quotation system. The underwriters may make a market in the senior debentures after completion of the offering, but will not be obligated to do so and may discontinue any market-making activities at any time without notice. No assurance can be given as to the liquidity of the trading market for the senior debentures or that an active public market for the senior debentures will develop. If an active public trading market for the senior debentures does not develop, the market price and liquidity of the senior debentures may be adversely affected.

Commissions and Discounts

The representatives have advised us that the underwriters propose initially to offer the senior debentures to the public at the public offering price on the cover page of this prospectus supplement, and may offer the senior debentures to certain dealers at that price less a concession not in excess of 0.40% of the principal amount of the senior debentures. The underwriters may allow, and the dealers may reallow, a discount not in excess of 0.25% of the principal amount of the senior debentures to other dealers. After the initial public offering, the public offering price, concession and discount may be changed.

The expenses of this offering, not including the underwriting discount, are estimated at \$500,000 and are payable by us.

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No Sale of Similar Securities

We have agreed, with exceptions, not to sell or transfer any of our senior debentures from the date of this prospectus supplement until the issuance of the senior debentures without first obtaining the written consent of the representatives on behalf of the underwriters. Specifically, we have agreed not to directly or indirectly:

- offer, pledge, sell or contract to sell any debt securities;
- sell any option or contract to purchase any debt securities;
- purchase any option or contract to sell any debt securities;
- grant any option, right or warrant to sell any debt securities;
- lend or otherwise dispose of or transfer any debt securities;
- file a registration statement related to any debt securities; or
- enter into any swap or other agreement that transfers, in whole or in part, the economic consequence of ownership of any debt securities, whether any such swap or transaction is to be settled by delivery of debt securities or other securities, in cash or otherwise.

This lockup provision applies to any of our debt securities and to securities convertible into or exchangeable or exercisable for our debt securities.

Indemnification

We have agreed to indemnify the several underwriters against certain liabilities, including certain liabilities under the Securities Act of 1933, as amended, or to contribute to payments the underwriters may be required to make in respect of those liabilities.

Price Stabilization and Short Position

In connection with the offering, the underwriters are permitted to engage in transactions that stabilize the market price of the senior debentures. Such transactions consist of bids or purchases to peg, fix or maintain the price of the senior debentures.

If the underwriters create a short position in the senior debentures in connection with the offering, i.e., if they sell more senior debentures than are listed on the cover page of this prospectus supplement, then the representatives may reduce that short position by purchasing senior debentures in the open market. Purchases of our senior debentures to stabilize or reduce a short position could cause the price of our senior debentures to be higher than it might be in the absence of such purchases.

Neither we nor any of the underwriters makes any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of the senior debentures. In addition, neither we nor any of the underwriters makes any representation that the representatives will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

Other Relationships

The underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include sales and trading, commercial and investment banking, advisory, investment management, investment research, principal investment, hedging, market making, brokerage and other financial and non-financial activities and services. Certain of the underwriters and their respective affiliates have provided, and may in the future provide, a variety of these services to the issuer and to persons and entities with

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relationships with the issuer, for which they received or will receive customary fees and expenses. In particular, affiliates of each of Mitsubishi UFJ Securities (USA), Inc., Mizuho Securities USA Inc., Wells Fargo Securities, LLC, Barclays Capital Inc. and KeyBanc Capital Markets Inc. are lenders under our credit facility.

In the ordinary course of their various business activities, the underwriters and their respective affiliates, officers, directors and employees may purchase, sell or hold a broad array of investments and actively trade securities, derivatives, loans, commodities, currencies, credit default swaps and other financial instruments for their own account and for the accounts of their customers, and such investment and trading activities may involve or relate to assets, securities and/or instruments of the issuer (directly, as collateral securing other obligations or otherwise) and/or persons and entities with relationships with the issuer. The underwriters and their respective affiliates may also communicate independent investment recommendations, market color or trading ideas and/or publish or express independent research views in respect of such assets, securities or instruments and may at any time hold, or recommend to clients that they should acquire, long and/or short positions in such assets, securities and instruments.

Selling Restrictions

European Economic Area

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a Relevant Member State), each underwriter has represented and agreed that with effect from and including the date on which the Prospectus Directive is implemented in that Relevant Member State (the Relevant Implementation Date) it has not made and will not make an offer of notes which are the subject of the offering contemplated by this prospectus supplement to the public in that Relevant Member State other than:

- (a) to any legal entity which is a qualified investor as defined in the Prospectus Directive
- (b) to fewer than 150 natural or legal persons (other than qualified investors as defined in the Prospectus Directive) subject to obtaining the prior consent of the relevant Dealer or Dealers nominated by the issuer for any such offer; or
- (c) in any other circumstances falling within Article 3(2) of the Prospectus Directive, provided that no such offer of notes shall require the issuer or any underwriter to publish a prospectus pursuant to Article 3 of the Prospectus Directive.

For the purposes of this provision, the expression an "offer of notes to the public" in relation to any notes in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the notes to be offered so as to enable an investor to decide to purchase or subscribe the notes, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State, the expression "Prospectus Directive" means Directive 2003/71/EC (as amended, including by

Directive 2010/73/EU), and includes any relevant implementing measure in the Relevant Member State.

United Kingdom

Each underwriter has represented and agreed that:

- (a) it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the FSMA) received by it in connection with the issue or sale of the notes in circumstances in which Section 21(1) of the FSMA does not apply to the issuer; and
- (b) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the notes in, from or otherwise involving the United Kingdom.

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LEGAL MATTERS

The validity of the senior debentures will be passed upon for us by Perkins Coie LLP. Certain legal matters relating to Iowa law will be passed upon for us by Nyemaster Goode, P.C. The underwriters have been represented by Gibson, Dunn & Crutcher LLP.

EXPERTS

The consolidated financial statements and the related financial statement schedule incorporated in this prospectus supplement and the accompanying prospectus by reference from Interstate Power and Light Company's Annual Report on Form 10-K for the year ended December 31, 2014 have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report, which is incorporated herein by reference. Such financial statements and financial statement schedule have been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

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PROSPECTUS

Interstate Power and Light Company

Preferred Stock

Debt Securities

We may offer and sell from time to time, in one or more issuances in amounts, at prices and on terms determined at the time of offering, the following securities:

- · preferred stock; and
- · debt securities.

This prospectus provides you with a general description of the securities we may offer. Each time securities are sold using this prospectus, we will provide one or more prospectus supplements containing specific information about the offering and the terms of the securities being sold, including the offering price. Each prospectus supplement may also add, update or change information contained in this prospectus. You should carefully read this prospectus and the prospectus supplement relating to the specific issue of securities, together with the documents we incorporate by reference, before you invest.

We may offer and sell these securities to or through underwriters, dealers or agents, or directly to investors, on a continuous or a delayed basis. The applicable prospectus supplement will provide the specific terms of the plan of distribution.

Investing in our securities involves risk. See "Risk Factors" on page 4 of this prospectus and in any prospectus supplement or in such other document we refer you to in any prospectus supplement for a discussion of certain risks that prospective investors should consider before investing in our securities.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

This prospectus is dated December 15, 2014.

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ABOUT THIS PROSPECTUS

References in this prospectus to "we," "us" and "our" refer to Interstate Power and Light Company, unless the context otherwise requires.

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or the SEC, utilizing a "shelf" registration process. Under this shelf registration process, we may, from time to time, sell the securities or combinations of the securities described in this prospectus in one or more offerings. This prospectus provides you with a general description of those securities. Each time we offer securities, we will provide a prospectus supplement that will contain specific information about the terms of that offering. The prospectus supplement may also add, update or change information contained in this prospectus and may include other special considerations applicable to such offering of securities. If there is any inconsistency between the information in this prospectus and any prospectus supplement, you should rely on the information in the prospectus supplement. You should read this prospectus and any prospectus supplement together with the additional information described under the heading "Where You Can Find More Information."

You should rely only on the information contained or incorporated by reference in this prospectus and in any prospectus supplement. "Incorporated by reference" means that we can disclose important information to you by referring you to another document filed separately with the SEC. We have not authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it.

This prospectus and any prospectus supplement or information incorporated by reference herein or therein contains summaries of certain agreements that we have filed as exhibits to various SEC filings, as well as certain agreements that we will enter into in connection with the offering of securities covered by any prospectus supplement. The descriptions of these agreements contained in this prospectus and any prospectus supplement or information incorporated by reference herein or therein do not purport to be complete and are subject to, or qualified in their entirety by reference to, the definitive agreements. Copies of the definitive agreements will be made available without charge to you by making a written or oral request to us. See "Where You Can Find More Information."

We are not making offers to sell nor soliciting offers to buy, nor will we make an offer to sell nor solicit an offer to buy, securities in any jurisdiction where the offer or sale is not permitted.

You should assume that the information appearing in this prospectus and any supplement to this prospectus, or the information we file or previously filed with the SEC that we incorporate by reference in this prospectus or any prospectus supplement, is accurate only as of their respective dates. Our business, financial condition, results of operations and prospects may have changed since those dates.

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FORWARD-LOOKING STATEMENTS

This prospectus, any prospectus supplement and the information incorporated by reference herein and therein contain forward-looking statements intended to qualify for the safe harbor from liability established by the Private Securities Litigation Reform Act of 1995. All statements, other than statements of historical fact, included in this prospectus or any prospectus supplement or incorporated by reference herein or therein, including statements regarding anticipated financial performance, business strategy and management's plans and objectives for future operations, are forward-looking statements. These forward-looking statements can be identified as such because the statements generally include words such as "may," "believe," "expect," "anticipate," "plan," "project," "will," "projections," "estimate," or other words of similar import. These forwardlooking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from those expressed in, or implied by, these statements. Readers are cautioned not to place undue reliance on these forward-looking statements. All forward-looking statements included in this prospectus, any prospectus supplement or in a document incorporated by reference herein or therein speak only as of the date of this prospectus, the applicable prospectus supplement or the document incorporated by reference, as the case may be. Additional information concerning factors that could cause actual results to differ materially from those in the forward-looking statements is contained under "Risk Factors" on page 4 of this prospectus and other documents that we file from time to time with the SEC that are incorporated by reference into this prospectus and any prospectus supplement. Numerous important factors described in this prospectus, any prospectus supplement and/or any document incorporated by reference in this prospectus and/or any prospectus supplement could affect these statements and could cause actual results to differ materially from our expectations. We assume no obligation, and disclaim any duty, to update or revise publicly any forwardlooking statements, whether as a result of new information, future events or otherwise, except as required by law.

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INTERSTATE POWER AND LIGHT COMPANY

We are a public utility serving customers in Iowa and southern Minnesota. We are engaged principally in:

- the generation and distribution of electricity in selective markets in Iowa and southern Minnesota;
- · the distribution and transportation of natural gas in selective markets in Iowa and southern Minnesota; and
- the generation and distribution of steam for two customers in Cedar Rapids, Iowa.

All of our common stock is owned by Alliant Energy Corporation, a regulated investor-owned public utility holding company with subsidiaries, including us, serving primarily electricity and natural gas customers in the Midwest.

We are subject to the jurisdiction of the Iowa Utilities Board and the Minnesota Public Utilities Commission with respect to various portions of our operations. We are also subject to the jurisdiction of the Federal Energy Regulatory Commission. Our parent corporation, Alliant Energy Corporation, is a "holding company" and we are a "subsidiary company" within the Alliant Energy Corporation "holding company system" as defined under the Public Utility Holding Company Act of 2005. As a result, we are subject to some of the regulatory provisions of such Act.

Our principal executive offices are located at Alliant Energy Tower, Cedar Rapids, Iowa 52401, and our telephone number is (319) 786-4411.

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RISK FACTORS

Investing in our securities involves risk. You should carefully consider the specific risks discussed or incorporated by reference in the applicable prospectus supplement, together with all the other information contained in the prospectus supplement or incorporated by reference in this prospectus. You should also consider the risks and uncertainties discussed under the caption "Risk Factors" included in our Annual Report on Form 10-K for the year ended December 31, 2013, which is incorporated by reference in this prospectus, and which may be amended, supplemented or superseded from time to time by other reports we file with the SEC in the future.

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RATIO OF EARNINGS TO FIXED CHARGES AND RATIO OF EARNINGS TO COMBINED FIXED CHARGES AND PREFERRED DIVIDEND REQUIREMENTS

The following table shows our ratio of earnings to fixed charges and ratio of earnings to combined fixed charges and preferred dividend requirements for the periods presented:

	Year Ended December 31,				Ended September 30,	
	2009	2010	2011	2012	2013	2014
Ratio of earnings to fixed charges	3.32x	3.23x	2.70x	2.64x	2.85x	3.02x
Ratio of earnings to combined fixed charges and preferred dividend requirements	2.69x	2.61x	2.29x	2.32x	2.58x	2.77x

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USE OF PROCEEDS

Unless we inform you otherwise in the applicable prospectus supplement, we intend to use the net proceeds from the sale of the securities for

general corporate purposes, which may include repayment or refinancing of debt, acquisitions, working capital, capital expenditures, investments and repurchases and redemptions of securities. Net proceeds may be temporarily invested prior to use.

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DESCRIPTION OF PREFERRED STOCK

The following description of our preferred stock summarizes certain general terms and provisions that apply to our preferred stock. The summary may not contain all of the information that is important to you and is subject to and qualified in its entirety by reference to our amended and restated articles of incorporation, which is filed as an exhibit to the registration statement of which this prospectus is a part. See "Where You Can Find More Information."

We will describe the particular terms of any series of preferred stock more specifically in each prospectus supplement relating to that series of preferred stock. We will indicate in the prospectus supplement whether the general terms and provisions described in this prospectus apply to a particular series of preferred stock.

General

Our total authorized capital stock as set forth in our amended and restated articles of incorporation consists of 40,000,000 shares, of which 24,000,000 are designated common stock, par value \$2.50 per share, and 16,000,000 shares are designated preferred stock, par value \$.01 per share. As of the date of this prospectus, all of our outstanding common stock was owned by our parent corporation, Alliant Energy Corporation and we had 8,000,000 shares of our 5.100% Series D cumulative perpetual preferred stock issued and outstanding.

Under our amended and restated articles of incorporation, our board of directors may establish one or more series of preferred stock to be issued out of authorized preferred stock. Our board of directors, without approval of our shareowners, may determine the rights and preferences of the shares of preferred stock of any series so established.

Terms

Prior to the issuance of shares of each series of our preferred stock, our board of directors is required to adopt resolutions and file articles of amendment to our amended and restated articles of incorporation with the Secretary of State of the State of Iowa. The articles of amendment will fix for each series the designation and number of shares and preferences, limitations, relative rights and other terms of the shares including, among other things:

- the voting power, if any, of the shares;
- · the rate and times at which, and the terms and conditions upon which, dividends will be paid on the shares;
- the price and the terms and conditions on which the shares may be redeemed;
- the right, if any, of holders of the shares to convert the shares into, or exchange the shares for, other classes of our stock, and the terms and conditions of the conversion or exchange;
- the rights of the holders of the shares, including the amount payable on the shares upon our voluntary or involuntary liquidation, dissolution or winding up; and
- the sinking fund provisions, if any, for the redemption or purchase of the shares.

In addition to the terms listed above, we will set forth in a prospectus supplement the following terms relating to the series of preferred stock being offered:

- the number of shares of preferred stock offered, the liquidation preference per share and the offering price of the preferred stock;
- any listing of the preferred stock on any securities exchange; and

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• a discussion of certain material U.S. federal income tax considerations, if any, applicable to the preferred stock.

All shares of our preferred stock will, when issued, be fully paid and nonassessable and will not have any preemptive or similar rights.

Ranking

The preferred stock will rank, with respect to dividends and upon our liquidation, dissolution or winding up:

- senior to all classes or series of our common stock and to all of our equity securities ranking junior to the preferred stock;
- on a parity with all of our equity securities the terms of which specifically provide that the equity securities rank on a parity with the preferred stock; and
- junior to all of our equity securities the terms of which specifically provide that the equity securities rank senior to our preferred stock.

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DESCRIPTION OF DEBT SECURITIES

The following description of our debt securities sets forth certain general terms and provisions of the debt securities to which any prospectus supplement may relate. The following description does not purport to be complete and is subject to, and is qualified in its entirety by reference to, the indenture between us and The Bank of New York Mellon Trust Company, N.A., as trustee, dated August 20, 2003, as it may be supplemented and amended from time to time. The indenture is filed as an exhibit to the registration statement of which this prospectus is a part and is incorporated by reference into this prospectus. See "Where You Can Find More Information." The terms of the debt securities will include those stated in the indenture and those made a part of the indenture by reference to the Trust Indenture Act of 1939, as amended.

The particular terms of the debt securities offered by any prospectus supplement and the extent, if any, to which the provisions described in this prospectus may apply to the offered debt securities will be described in the prospectus supplement relating to the offered debt securities. Accordingly, for a description of the terms of a particular issue of debt securities, reference must be made to both the prospectus supplement relating thereto and to the following description.

General

The indenture does not limit the aggregate principal amount of senior unsecured debt securities that we may issue under it, and provides that we may issue securities under the indenture from time to time in one or more series pursuant to the terms of one or more supplemental indentures, board resolutions or officer's certificates creating the series.

Terms

We will describe in each prospectus supplement the following terms that apply to the debt securities offered under that prospectus supplement:

- the title of the series of debt securities;
- any limit on the aggregate principal amount of the debt securities of that series;
- the persons to whom we must pay interest on the interest payment dates;
- the dates on which we must pay principal;
- the rates at which the debt securities will bear interest or the manner in which interest will be determined, if any interest is payable;
- the dates from which any interest will accrue, the dates on which we must pay interest and the record date for determining who is entitled to any interest payment;
- the places where we must pay the debt securities;
- the terms and conditions on which we may, or may be obligated to, redeem the debt securities;
- the terms and conditions of any sinking fund;

- if other than in denominations of \$1,000 and integral multiples thereof, then the denominations in which we may issue the debt securities;
- if other than the currency of the United States, then the currencies, including composite currencies, in which we will make payments on the
 debt securities;
- if we or a holder may elect to have the principal or interest on the debt securities be payable in a currency other than the debt securities' stated currency, then the terms of this election;

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other company;

- if the principal of, or premium, if any, or interest on, the debt securities is payable in securities or other property, then the type and amount of the securities or other property, or the manner in which the amount will be determined;
- if we or a holder may elect to have the principal or interest on the debt securities be payable in securities or other property, then the terms of this election;
- if the principal, premium, if any, or interest payable is determined with reference to an index or other fact or event outside the indenture, then the manner in which the amounts will be determined;
- if other than the principal amount of the securities, then the amount we will pay if the maturity of the debt securities is accelerated;
- other than those specified in the indenture, any events of default and any covenants we make for the benefit of the holders of the debt securities;
- the terms, if any, pursuant to which the debt securities may be converted into or exchanged for shares of stock or other securities of us or any
- if the debt securities are issued as bearer securities, then all terms and conditions to the bearer securities that are not specifically addressed in a supplemental indenture;
- any limitations on the rights of the holders of debt securities in global form to transfer the debt securities; and
- any other terms of the debt securities that are not inconsistent with the indenture.

Ranking

The debt securities will be our senior, unsecured and unsubordinated obligations, ranking equally and ratably with all our other senior, unsecured and unsubordinated obligations. The debt securities will be effectively subordinated to all of our future secured indebtedness.

Payments

Unless we otherwise state in the prospectus supplement, we will pay principal of, and premium and interest on, if any, the debt securities at the office or agency we maintain for that purpose, initially the corporate trust office of the trustee. We will pay interest on debt securities issued in registered form on any interest payment date to the registered owners of the debt securities at the close of business on the regular record date for the interest payment date. We will name in the prospectus supplement all paying agents we initially designate for the debt securities. We may designate additional paying agents, rescind the designation of any paying agent or approve a change in the office through which any paying agent acts, but we must maintain a paying agent in each place where payments on the debt securities are payable.

Purchase and Cancellation

We may at any time purchase debt securities in the open market or otherwise at any price, subject to applicable U.S. securities laws. Any debt securities so purchased must be promptly surrendered to the trustee for cancellation.

Material U.S. Federal Income Tax Considerations

We may issue the debt securities as original issue discount securities, bearing no interest or bearing interest at a rate, which, at the time of issuance, is below market rates, to be sold at a substantial discount below their principal amount. We will describe some material U.S. federal income tax and other considerations applicable to any debt securities that are issued as original issue discount securities in the applicable prospectus supplement.

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If the purchase price of any debt securities is payable in one or more foreign currencies or composite currencies, if any debt securities are denominated in one or more foreign currencies or composite currencies or if any payments on the debt securities are payable in one or more foreign currencies or composite currencies, then we will describe the restrictions, elections, some U.S. federal income tax considerations, specific terms and other information about the debt securities and the foreign currency or composite currencies in the prospectus supplement.

Restrictive Covenants

Except as otherwise set forth under "—Satisfaction and Discharge" below, for so long as any debt securities remain outstanding or any amount remains unpaid on any of the debt securities, we will comply with the terms of the covenants set forth below. If we issue additional series of securities under the indenture in the future, those series may or may not have different covenants.

Limitations on Liens

The indenture provides that we will not, and we will not permit any of our subsidiaries to, create or allow to be created or to exist any lien on any of our properties or assets to secure any indebtedness, without making effective provision that makes the debt securities to which this limitation applies equally and ratably secured with or prior to all such indebtedness and with any other indebtedness that is also entitled to be equally secured. This restriction does not apply to or prevent the creation or existence of:

- liens on property existing at the time of acquisition or construction of such property (or created within one year after completion of such acquisition or construction), whether by purchase, merger, construction or otherwise (or on the property of a subsidiary at the date it became a subsidiary), or to secure the payment of all or any part of the purchase price or construction cost thereof, including the extension of any such liens to repairs, renewals, replacements, substitutions, betterments, additions, extensions and improvements then or thereafter made on the property subject thereto;
- any extensions, renewals or replacements (or successive extensions, renewals or replacements), in whole or in part of liens permitted by the above-listed item:
- the pledge of any bonds or other securities at any time issued under any of the liens permitted by the above-listed items;
- liens for taxes, assessments and other governmental charges or requirements not delinquent or which can thereafter be paid without penalty or which are currently being contested in good faith by appropriate proceedings;
- mechanics', workmen's, repairmen's, materialmen's, warehousemen's and carriers' liens, liens or privileges of any of our employees for
 salary or wages earned, but not yet payable, and other liens, including without limitation liens for worker's compensation awards, arising in
 the ordinary course of business for charges or requirements which are not delinquent or which are being contested in good faith and by
 appropriate proceedings;
- liens in respect of judgments or awards with respect to which we (i) are in good faith prosecuting an appeal or other proceeding for review and with respect to which we have secured a stay of execution pending such appeal or other proceeding or (ii) have the right to prosecute an appeal or other proceeding for review;
- easements, leases, reservations or other rights of others in, on and/or over, and laws, regulations and restrictions affecting, and defects and irregularities in record title to, our property or any part thereof; provided, however, that such easements, leases, reservations, rights, laws, regulations, restrictions, defects and irregularities do not, in our reasonable judgment, in the aggregate materially impair our use of such property considered as a whole for the purposes for which it is held;

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• any defects or irregularities in title to any rights-of-way and/or to any real estate used or to be used primarily for right-of-way purposes or held under lease, easement, license or similar right; provided, however, that (i) we have obtained from the apparent owner of the lands or estates therein covered by any such right-of-way a sufficient right, by the terms of the instrument granting such right-of-way, lease, easement, license or similar right, to the use thereof for the purpose for which we acquired the same, (ii) we have power under eminent domain, or similar statutes, to remove such defects or irregularities or (iii) such defects or irregularities may be otherwise remedied without undue effort

or expense;

- liens securing indebtedness neither created, assumed nor guaranteed by us nor on account of which we customarily pay interest, existing on the date of the indenture, or, as to property thereafter acquired, at the time of the acquisition thereof, upon real estate or rights in or relating to real estate acquired by us for rights of way for distribution and transmission lines and for pipes, substations, structures and appurtenances thereto;
- leases existing on the date of the indenture affecting property owned by us on such date and renewals and extensions thereof and leases for a term of not more than ten years (including extensions or renewals at the option of the tenant) affecting property acquired by us after the date of the indenture;
- any controls, restrictions, obligations, duties and/or other burdens imposed by any federal, state, municipal or other law, or by any rule, regulation or order of any governmental authority, upon any of our property or the operation or use thereof or upon us with respect to any of our property or the operation or use thereof or with respect to any franchise, grant, license, permit or public purpose requirement, or any rights reserved to or otherwise vested in any governmental authority to impose any such controls, restrictions, obligations, duties and/or other burdens;
- liens granted on air or water pollution control or sewage or solid waste disposal facilities in connection with the issuance of industrial development revenue bonds;
- any right which any governmental authority may have by virtue of any franchise, license, contract or statute to purchase, or designate a purchaser of or order the sale of, any of our property upon payment of cash or reasonable compensation therefor or to terminate any franchise, license or other rights or to regulate our property and business;
- any liens which have been bonded for the full amount in dispute or for the payment of which other adequate security arrangements have been made or which, in the opinion of counsel, are not material;
- any lien securing indebtedness for the payment of which money in the necessary amount shall have been irrevocably deposited in trust with the trustee or other holder of such lien; provided, however, that if such indebtedness is to be redeemed or otherwise prepaid prior to the stated maturity thereof, any notice requisite to such redemption or prepayment shall have been given in accordance with the mortgage or other instrument creating such lien or irrevocable instructions to give such notice shall have been given to such trustee or other holder;
- liens resulting from good faith deposits made in connection with bids, tenders, contracts or leases to which we are a party and liens resulting from deposits made to secure public or statutory obligations or for the purpose of obtaining a stay or discharge in the course of any legal proceedings;
- the pledge or assignment in the ordinary course of business of electricity, gas (either natural or artificial) or steam, accounts receivable or customers' installment paper;
- rights reserved to or vested in others to take or receive any part of the electricity, gas (either natural or artificial), steam or any by-products thereof generated or produced by or from any of our properties or with respect to any other rights concerning electricity, gas (either natural or artificial) or steam supply, transportation, or storage which are in use in the ordinary course of the electricity, gas (either natural or artificial) or steam business;
- any landlord's lien;

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- any lien of the trustee for payment for services, reasonable expenses, disbursements and advances, or for indemnification payments; and
- liens not otherwise permitted if, at the time we incur the lien and after giving effect to the lien, the aggregate of all obligations secured by the lien does not exceed 10% of our tangible net worth, as defined in the indenture.

This restriction will not apply to or prevent the creation or existence of leases we enter into, or on existing property we acquire, in the ordinary course of our business.

Consolidation, Merger and Sale of Assets

The indenture provides that we will not consolidate with or merge into any other corporation, or sell all or substantially all of our assets to any other person unless:

- the continuing corporation or the purchasers of assets, as the case may be, will be an entity organized and existing under the laws of the United States, any state of the United States or the District of Columbia, and such entity will expressly assume the payment of the principal of, and premium, if any, or interest on, the debt securities outstanding and the performance and observance of all of our covenants under the indenture by executing a supplemental indenture satisfactory to the trustee;
- after giving effect to the transaction, no event of default and no event which, after notice or lapse of time, would become an event or default under the indenture, will have occurred or be continuing; and
- we have delivered to the trustee an officer's certificate and an opinion of counsel, each stating that such transaction and such supplemental indenture complies with the provisions of the indenture governing consolidation, merger, conveyance, transfer or lease and that all conditions precedent to the transaction have been complied with.

The indenture further provides that our successor will be substituted for us, after which all of our obligations under the indenture will terminate.

Events of Default

Each of the following will be an event of default with respect to the debt securities of a series under the indenture:

- failure to pay interest on the debt securities of the series within 60 days after a due date;
- failure to pay principal of, or premium, if any, on the debt securities of the series within 10 days after a due date;
- failure to perform or satisfy any of our other covenants or warranties in the indenture, which failure continues for 60 days after we receive notice of the failure from the trustee or the holders of at least 33% in principal amount of the debt securities of the series;
- specified events relating to our bankruptcy, insolvency or reorganization; and
- a specified event of default provided for in the terms of the series of the debt securities.

If an event of default occurs and continues, then either the trustee or the holders of at least 33% in principal amount of the outstanding debt securities of the series in default may declare the principal amount of the debt securities immediately due and payable.

The trustee can require that it be indemnified before it enforces the indenture or any outstanding debt securities. Subject to some limitations, holders of a majority in principal amount of the outstanding debt securities of a series can direct the trustee in its exercise of any trust or power. The trustee does not have to give

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holders notice of any continuing default, except a default in payment of principal or interest, if it in good faith determines that withholding notice is in the interests of the holders. We are required to give the trustee a certificate certifying as to our compliance with all conditions and covenants under the indenture at least once a year.

Modification of the Indenture

The holders of at least a majority in principal amount of outstanding debt securities of a series may waive any existing default and its consequences under the indenture. However, holders cannot waive (i) a default in the payment of the principal of, or premium, if any, or interest on, any debt securities or (ii) a default in respect of a provision that cannot be modified or amended without the consent of each holder of the outstanding debt securities of the series.

With the consent of the holders of at least a majority in aggregate principal amount of outstanding debt securities, we and the trustee can enter into supplemental indentures to amend or modify the indenture. If a proposed supplemental indenture affects the rights of the holders of one or more, but less than all, of the outstanding series of debt securities, or tranches thereof, then we and the trustee can enter into such supplemental indenture with the consent only of the holders of at least a majority in aggregate principal amount of outstanding series, or tranches thereof, so affected, voting together as one class. However, we cannot make modifications or amendments without the consent of all of the holders of the outstanding series of debt securities if the amendments or modifications would:

• change the stated maturity, reduce the principal amount of, or reduce or change the method of calculating the rate of interest on, the debt securities of a series;

- change the coin or currency or the property in which we must pay principal of, or premium, if any, or interest on, the debt securities of a series;
- impair the right to institute suit for the enforcement of any payment of principal of, or premium or interest on, the debt securities after the due date of the payment;
- reduce the percentage in principal amount of the outstanding debt securities of any series or any tranche thereof, the consent of the holders of which is required to enter into any supplemental indenture;
- · reduce the amount of debt securities whose holders must consent to an amendment or waiver of the provisions of the indenture; or
- make modifications to any of the provisions we describe in this paragraph and in the paragraph immediately above.

We and the trustee can also enter into supplemental indentures to amend or modify the indenture or the debt securities without the consent of any holders of the debt securities. We can only do so if those amendments or modifications would be limited to specific purposes, including:

- showing that another person has succeeded us and assumed our obligations under the covenants of the indenture and the debt securities;
- adding to our covenants under the indenture for the benefit of all holders of debt securities under the indenture or surrender any right or power we have under the indenture or to add any event of default;
- adding to, changing or eliminating any of the provisions of the indenture; provided, however, that if such change, elimination or addition will adversely affect the interests of the holders of debt securities of any outstanding series or tranche on the date of such supplemental indenture in any material respect, such change, elimination or addition will become effective (i) with respect to such series or tranche only or (ii) when no debt securities of such series or tranche remain outstanding;
- to provide collateral security for all but not part of the debt securities;

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- establish the form or terms of debt securities of any series;
- to provide for the procedures required to permit us to utilize, at our option, a non-certificated system for registration for all, or any series of, the debt securities;
- to change any place where (i) principal, premium and interest may be payable, (ii) debt securities may be surrendered for transfer or exchange and (iii) notices to us may be served;
- evidencing the appointment of a successor trustee or a change in any of the provisions of the indenture to facilitate administration by more than one trustee; or
- making clarifying changes to ambiguous, incorrect or inconsistent language in the indenture or the debt securities that do not adversely affect the rights of the holders of the debt securities under the indenture in any material respect.

Satisfaction and Discharge

The indenture provides that we can at any time terminate almost all of our obligations with respect to any outstanding debt securities and the indenture. We cannot, however terminate some obligations, including our obligations to register the transfer or exchange of the debt securities, replace mutilated, destroyed, lost or stolen debt securities, to maintain agencies in respect of the debt securities and hold moneys for payment in trust.

If we desire to exercise our option to satisfy and discharge our obligations under the indenture, then we must deposit in trust with the trustee or any paying agent (other than us) money or U.S. government obligations sufficient to pay the outstanding principal amount of the debt securities as well as the interest and premium, if any, on the debt securities to maturity. In addition, we must provide to the trustee and the paying agent:

- if such deposit shall have been made prior to the maturity of such debt securities, a company order stating that the money and U.S. government obligations deposited in accordance with indenture shall be held in trust;
- if U.S. government obligations have been deposited, an opinion of counsel that the obligations so deposited constitute U.S. government obligations and do not contain provisions permitting the redemption or other prepayment at the option of the issuer thereof, and an opinion of an independent public accountant of nationally recognized standing, selected by us, to the effect that such U.S. government obligations will be sufficient in accordance with the indenture; and

• if such deposit shall have been made prior to the maturity of such debt securities, an officer's certificate stating the intention that, upon delivery of such officer's certificate, the indebtedness in respect of such debt securities or portions thereof will have been satisfied and discharged as contemplated by the indenture.

Governing Law

The indenture and the debt securities will be governed by, and construed in accordance with, the laws of the State of New York.

Global Securities

We may issue the securities in whole or in part in the form of one or more global certificates or notes, which we refer to as global securities, that we will deposit with a depository or its nominee that we identify in the applicable prospectus supplement.

We will describe the specific terms of the depository arrangement covering the securities in the prospectus supplement relating to that series. We anticipate that the following provisions will apply to all depository arrangements.

Upon the issuance of the securities in the form of one or more global securities, the depository or its custodian will credit, on its book-entry registration and transfer system, the number of shares or principal amount

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of securities of the individual beneficial interests represented by these global securities to the respective accounts of persons who have accounts with the depository. Ownership of beneficial interests in the global securities will be shown on, and the transfer of this ownership will be effected only through, records maintained by the depository or its nominee with respect to interests of participants and the records of participants with respect to interests of persons other than participants. These accounts initially will be designated by or on behalf of the underwriters, initial purchasers or agents, or by us if we offer and sell the securities directly, and ownership of beneficial interests in the global securities will be limited to participants or persons who hold interests through participants. Qualified institutional buyers may hold their interests in the global securities directly through the depository if they are participants in this system, or indirectly through organizations which are participants in this system. The laws of some states of the United States may require that some purchasers of securities take physical delivery of the securities in definitive registered form. These limits and the laws may impair your ability to own, transfer or pledge interests in the global securities.

So long as the depository, or its nominee, is the registered owner or holder of the securities, the depository or its nominee, as the case may be, will be considered the sole owner or holder of the securities represented by the global securities for all purposes. No beneficial owner of an interest in the global securities will be able to transfer that interest except in accordance with the depository's procedures.

We will make dividend payments on, or payments of the principal of, and premium, if any, and interest on, the global securities to the depository or its nominee, as the case may be, as the registered owner of the global securities. We will not have any responsibility or liability for any aspect of the records relating to or payments made on account of beneficial ownership interests in the global securities or for maintaining, supervising or reviewing any records relating to the beneficial ownership interest.

We expect that the depository or its nominee, upon receipt of any dividend payment on, or payment of the principal of, and premium, if any, and interest on, the global securities, will credit participants' accounts with payments in amounts proportionate to their respective beneficial interests in the securities as shown on the records of the depository or its nominee. We also expect that payments by participants to owners of beneficial interests in the global securities held through the participants will be governed by standing instructions and customary practice, as is now the case with securities held for the accounts of customers registered in the names of nominees for their customers. These payments will be the responsibility of the participants. Transfers between participants in the depository will be effected in the ordinary way through the depository's settlement system in accordance with the depository rules and will be settled in same day funds.

We will issue securities in certificated form in exchange for global securities if:

- the depository notifies us that it is unwilling or unable to continue as a depository for the global securities or ceases to be a "clearing agency" registered under the Securities Exchange Act of 1934 and a successor depository is not appointed by us within 90 days of the notice;
- an event of default under the instrument governing the securities has occurred and is continuing; or
- we determine that the securities will no longer be represented by global securities.

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PLAN OF DISTRIBUTION

We may sell our securities in any one or more of the following ways from time to time: (1) through agents; (2) to or through underwriters; (3) through brokers or dealers; (4) directly by us to purchasers, including through a specific bidding, auction or other process; or (5) through a combination of any of these methods of sale. The applicable prospectus supplement will contain the terms of the transaction, name or names of any underwriters, dealers, agents and the respective amounts of securities underwritten or purchased by them, the initial public offering price of the securities, and the applicable agent's commission, dealer's purchase price or underwriter's discount. Any dealers and agents participating in the distribution of the securities may be deemed to be underwriters, and compensation received by them on resale of the securities may be deemed to be underwriting discounts.

Any initial offering price, dealer purchase price, discount or commission may be changed from time to time.

The securities may be distributed from time to time in one or more transactions, at negotiated prices, at a fixed price or fixed prices (that may be subject to change), at market prices prevailing at the time of sale, at various prices determined at the time of sale or at prices related to prevailing market prices.

Offers to purchase securities may be solicited directly by us or by agents designated by us from time to time. Unless otherwise indicated in the prospectus supplement, any such agent will use its commercially reasonable efforts to solicit purchases for the period of its appointment or to sell securities on a continuing basis. Agents may receive compensation in the form of commissions, discounts or concessions from us. Agents may also receive compensation from the purchasers of the securities for whom they sell as principals. Each particular agent will receive compensation in amounts negotiated in connection with the sale, which might be in excess of customary commissions. Any such agent may be deemed to be an underwriter, as that term is defined in the Securities Act of 1933, or the Securities Act, of the securities so offered and sold. Accordingly, any commission, discount or concession received by them and any profit on the resale of the securities purchased by them may be deemed to be underwriting discounts or commissions under the Securities Act. We have not entered into any agreements, understandings or arrangements with any underwriters or broker-dealers regarding the sale of their securities. As of the date of this prospectus, there are no special selling arrangements between any broker-dealer or other person and us. No period of time has been fixed within which the securities will be offered and sold.

If underwriters are utilized in the sale of any securities in respect of which this prospectus is being delivered, such securities will be acquired by the underwriters for their own account and may be resold from time to time in one or more transactions, including negotiated transactions, at fixed public offering prices or at varying prices determined by the underwriters at the time of sale. Securities may be offered to the public either through underwriting syndicates represented by managing underwriters or directly by one or more underwriters. If any underwriter or underwriters are utilized in the sale of securities, unless otherwise indicated in the applicable prospectus supplement, the obligations of the underwriters are subject to certain conditions precedent, and the underwriters will be obligated to purchase all such securities if they purchase any of them.

If a dealer is utilized in the sale of the securities in respect of which this prospectus is delivered, we will sell such securities to the dealer as principal. The dealer may then resell such securities to the public at varying prices to be determined by such dealer at the time of resale. Transactions through brokers or dealers may include block trades in which brokers or dealers will attempt to sell shares as agent but may position and resell as principal to facilitate the transaction or in cross trades, in which the same broker or dealer acts as agent on both sides of the trade. Any such dealer may be deemed to be an underwriter, as such term is defined in the Securities Act, of the securities so offered and sold.

Offers to purchase securities may be solicited directly by us, and the sale thereof may be made by us, directly to institutional investors or others who may be deemed to be underwriters within the meaning of the Securities Act with respect to any resale thereof.

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Agents, underwriters and dealers may be entitled under relevant agreements with us to indemnification by us against certain liabilities, including liabilities under the Securities Act, or to contribution with respect to payments which such agents, underwriters and dealers may be required to make in respect thereof. The terms and conditions of any indemnification or contribution will be described in the applicable prospectus supplement.

We may also sell securities through various arrangements involving mandatorily or optionally exchangeable securities, and this prospectus

may be delivered in connection with those sales.

We may enter into derivative, sale or forward sale transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement indicates, in connection with those transactions, the third parties may sell securities covered by this prospectus and the applicable prospectus supplement, including in short sale transactions and by issuing securities not covered by this prospectus but convertible into, exchangeable for or representing beneficial interests in securities covered by this prospectus, or the return of which is derived in whole or in part from the value of such securities.

Underwriters, broker-dealers or agents may receive compensation in the form of commissions, discounts or concession. Underwriters, broker-dealers or agents may also receive compensation from the purchasers of securities for whom they act as agents or to whom they sell as principals, or both. Compensation as to a particular underwriter, broker-dealer or agent will be in amounts to be negotiated and might be in excess of customary commissions. In effecting sales, broker-dealers may arrange for other broker-dealers to participate in the resales.

Any securities offered other than common stock will be a new issue and will have no established trading market. We may elect to list any series of securities on an exchange, but, unless otherwise specified in the applicable prospectus supplement and/or other offering material, we shall not be obligated to do so. No assurance can be given as to the liquidity of the trading market for any of the securities.

Agents, underwriters and dealers may engage in transactions with, or perform services for, us or our subsidiaries in the ordinary course of business.

Any underwriter may engage in overallotment, stabilizing transactions, short covering transactions and penalty bids in accordance with Regulation M under the Securities Exchange Act of 1934. Overallotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum. Short covering transactions involve purchases of the securities in the open market after the distribution is completed to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a covering transaction to cover short positions. Those activities may cause the price of the securities to be higher than it would otherwise be. If commenced, the underwriters may discontinue any of the activities at any time. An underwriter may carry out these transactions on an exchange, in the over-the-counter market or otherwise.

The place and time of delivery for securities will be set forth in the accompanying prospectus supplement.

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WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports and other information with the SEC (File No. 1-4117). We also filed a registration statement on Form S-3, including exhibits, under the Securities Act with respect to the securities offered by this prospectus. This prospectus is a part of the registration statement, but does not contain all of the information included in the registration statement or the exhibits to the registration statement. You may read and copy the registration statement and any other materials that we file with the SEC at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. You may call the SEC at 1-800-SEC-0330 for information on the operation of the Public Reference Room. Our reports and other SEC filings are also available at the SEC's web site at http://www.sec.gov.

We are "incorporating by reference" specified documents that we file with the SEC, which means:

- incorporated documents are considered part of this prospectus;
- we are disclosing important information to you by referring you to those documents; and
- information we file with the SEC will automatically update and supersede information contained in this prospectus.

We incorporate by reference the documents listed below and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, after the date of this prospectus and before the end of the offering of the securities pursuant to this prospectus:

- our Annual Report on Form 10-K for the year ended December 31, 2013;
- our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2014, June 30, 2014 and September 30, 2014;
- our Current Reports on Form 8-K dated February 10, 2014, May 13, 2014, November 17, 2014 and December 10, 2014; and

• the description of our 5.100% Series D cumulative perpetual preferred stock in our Registration Statement on Form 8-A, dated March 21, 2013, and any amendment or report updating that description.

Notwithstanding the foregoing, information furnished under Items 2.02 and 7.01 of any Current Report on Form 8-K, including the related exhibits under Item 9.01, is not incorporated by reference in this prospectus.

Some of these reports, however, are filed on a combined basis with our parent, Alliant Energy Corporation, and its direct subsidiary, Wisconsin Power and Light Company. Information contained in these reports relating to these entities is filed by them on their own behalf and not by us.

You may obtain copies of documents incorporated by reference in this prospectus, at no cost, by request directed to us at the following address or telephone number:

Interstate Power and Light Company Alliant Energy Tower Cedar Rapids, Iowa 52401 Attention: Corporate Secretary (319) 786-4411

Any statement contained herein or in a document incorporated or deemed to be incorporated by reference herein will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained herein, in any other subsequently filed document which also is or is deemed to be incorporated by reference herein or in any prospectus supplement, modifies or supersedes such statement. Any such statement so modified or superseded will not be deemed, except as so modified and superseded, to constitute a part of this prospectus.

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LEGAL MATTERS

Unless otherwise specified in a prospectus supplement accompanying this prospectus, the validity of the securities offered in this prospectus and certain legal matters will be passed upon for us by Perkins Coie LLP, and, with respect to certain matters of Iowa law, Nyemaster Goode, P.C. If the securities are being distributed in an underwritten offering, certain legal matters will be passed upon for the underwriters by counsel identified in the related prospectus supplement.

EXPERTS

The consolidated financial statements, and the related financial statement schedule, incorporated in this prospectus by reference from Interstate Power and Light Company's Annual Report on Form 10-K have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report, which is incorporated herein by reference. Such financial statements and financial statement schedule have been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

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\$250,000,000

Interstate Power and Light Company

3.400% Senior Debentures due 2025

PROSPECTUS SUPPLEMENT

Joint Book-Running Managers

MUFG

Mizuho Securities

Wells Fargo Securities

Co-Managers
Barclays
KeyBanc Capital Markets
The Williams Capital Group, L.P.

August 13, 2015