

**Prospectus Supplement**  
**(To Prospectus dated August 6, 2008)**

**\$250,000,000**

**Interstate Power and Light Company**

**7.25% Senior Debentures due 2018**

We will pay interest on the senior debentures on April 1 and October 1 of each year, beginning on April 1, 2009. The senior debentures will mature on October 1, 2018. We may redeem some or all of the senior debentures at any time and from time to time at the redemption prices 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 denominations of \$1,000, and will not be listed on any securities exchange.

**Investing in the senior debentures involves risks. See “Risk Factors” on page 17 of our Annual Report on Form 10-K for the year ending December 31, 2007 and on page 70 of our Quarterly Report on Form 10-Q for the quarterly period ending June 30, 2008.**

	<u>Per Senior Debenture</u>	<u>Total</u>
Public offering price <sup>(1)</sup>	99.129%	\$247,822,500
Underwriting discount	0.650%	\$ 1,625,000
Proceeds, before expenses, to Interstate Power and Light Company <sup>(1)</sup>	98.479%	\$246,197,500

(1) Plus accrued interest if any, from October 6, 2008, 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 offense.

The senior debentures will be ready for delivery in book-entry form only through The Depository Trust Company on or about October 6, 2008.

*Joint Book-Running Managers*

**Barclays Capital**

**Citi**

**J.P. Morgan**

**<http://www.oblible.com>**

*Co-Managers*

**BNY Mellon Capital Markets, LLC**

**Lazard Capital Markets**

**RBS Greenwich Capital**

The date of this prospectus supplement is October 1, 2008

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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 these entities is filed by them on their own behalf and not by us. The senior debentures are not obligations of 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 to Interstate Power and Light Company contained or incorporated by reference in this prospectus supplement and the accompanying prospectus. 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 respective dates of those documents in which the information is contained. Our business, financial condition, results of operations and prospects may have changed since those dates.

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 we incorporate by reference into this prospectus supplement and the accompanying prospectus contain forward-looking statements that are 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, 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 "expect," "intend," "believe," "anticipate," "estimate," "plan" or "objective" or other similar expressions. These forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially from those expressed in, or implied by, these statements. Additional information concerning factors that could cause actual results to differ materially from those in the forward-looking statements is contained from time to time in our U.S. Securities and Exchange Commission, or SEC, filings, including, but not limited to, the risk factor disclosure beginning on page 17 of our Annual Report on Form 10-K for the fiscal year ending December 31, 2007 and on page 70 of our Quarterly Report on Form 10-Q for the quarterly period ending June 30, 2008. Some, but not all, of the risks and uncertainties include the following:

- federal and state regulatory or governmental actions, including the impact of energy-related and tax legislation and regulatory agency orders;
- our ability to obtain adequate and timely rate relief to allow for, among other things, the recovery of operating costs, capital expenditures and deferred expenditures, and the earning of reasonable rates of return;
- current or future litigation, regulatory investigations, proceedings or inquiries;
- developments that adversely impact our ability to implement our strategic plans, including unanticipated issues in connection with construction of our new generating facilities;
- issues related to the availability of our generating facilities and the supply and delivery of fuel and purchased electricity and price thereof, including the ability to recover and retain purchased power, fuel and fuel-related costs through rates in a timely manner;
- the impact fuel and fuel-related prices and other economic conditions may have on our customers' demand for utility services;
- issues associated with environmental remediation efforts and with environmental compliance generally, including changing environmental laws and regulations and the ability to recover through rates all environmental compliance costs;
- potential impacts of any future laws or regulations regarding global climate change or carbon emissions reductions;
- weather effects on results of operations;
- financial impacts of hedging strategies, including the impact of weather hedges on our earnings;
- unplanned outages at our generating facilities and risks related to recovery of incremental costs through rates;

- the direct or indirect effects resulting from terrorist incidents or responses to such incidents;
- unanticipated impacts that storms or natural disasters in our service territories may have on our operations, including uncertainties associated with efforts to remediate the effects of the June 2008 Midwest flooding, reimbursement of storm-related costs covered by insurance, rate relief for costs associated with restoration, and the impact of the flooding on the economic conditions of the affected service territories;
- economic and political conditions in our service territories;
- the growth rate of ethanol and biodiesel production in our service territories;

- any material post-closing adjustments related to any of our past asset divestitures;
- employee workforce factors, including changes in key executives, collective bargaining agreements or work stoppages;
- continued access to the capital markets under competitive terms and rates;
- access to technological developments;
- issues related to electric transmission, including operating in the Midwest Independent Transmission System Operator, or MISO, energy market, the impacts of potential future billing adjustments from MISO and recovery of costs incurred;
- inflation and interest rates;
- the impact of necessary accruals for the terms of our incentive compensation plans;
- the effect of accounting pronouncements issued periodically by standard-setting bodies;
- our ability to continue cost controls and operational efficiencies; and
- our ability to successfully complete ongoing tax audits and appeals with no material impact on our earnings and cash flows.

We assume no obligation, and disclaim any duty, to update these forward-looking statements.

## 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 the 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 and Minnesota. We are engaged principally in:

- the generation and distribution of electric energy in selective markets in Iowa and Minnesota;
- the distribution and transportation of natural gas in selective markets in Iowa and Minnesota; and
- the provision of steam services to certain customers in Cedar Rapids, Iowa and various other energy-related products and services.

As of December 31, 2007, we served approximately 526,000 retail electric customers in approximately 750 communities and approximately 234,000 retail gas customers in approximately 240 communities.

All of our common stock is owned by Alliant Energy Corporation, an energy-services provider with subsidiaries, including us, serving primarily electric and natural gas customers in the Midwest.

We are subject to the jurisdiction of the Iowa Utilities Board, or IUB, and the Minnesota Public Utilities Commission, or MPUC, with respect to various portions of our operations. We are also subject to the jurisdiction of the Federal Energy Regulatory Commission, or 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.

### 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 the 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 7.25% senior debentures due October 1, 2018.
Maturity	October 1, 2018.
Interest payment dates	April 1 and October 1 of each year, beginning on April 1, 2009.



## 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.

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Optional redemption	The senior debentures will be redeemable, at our option, in whole or in part at any time and from time to time, at the redemption prices described in “Description of Senior Debentures—Optional Redemption.”
Covenants	<p>The indenture governing the senior debentures contains covenants that, among other things, limit our ability to:</p> <ul style="list-style-type: none"><li>• create certain types of secured indebtedness without providing for the senior debentures to be equally and ratably secured; and</li><li>• consolidate, merge or sell assets.</li></ul> <p>These covenants are subject to important exceptions and qualifications, which are described under the heading “Description of Debt Securities” in the accompanying prospectus.</p>
No limitation on debt	The indenture governing the senior debentures does not limit the amount of senior debentures that we may issue or provide holders any protections should we be involved in a highly leveraged transaction.
Ratings	Moody’s Investors Service, Inc. has assigned the senior debentures a rating of A3. Standard & Poor’s Ratings Services has assigned the senior debentures a rating of BBB+. Ratings are not a recommendation to buy, sell or hold the senior debentures. We cannot give any assurance that the ratings will be retained for any time period or that they will not be revised or withdrawn by the ratings agencies.
Use of proceeds	We estimate that we will receive net proceeds from this offering of approximately \$245.9 million, after deducting the underwriting discount and estimated offering expenses payable by us. We intend to use the proceeds from this offering initially to repay short-term debt, invest in short-term assets and redeem \$13.3 million of long-term debt and thereafter to fund capital expenditures, including new generating facilities, environmental projects and other utility capital projects, and for general working capital purposes.
Denominations	The senior debentures will be issued in minimum denominations of \$1,000 and integral multiples of \$1,000.

**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.”

### Summary 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, 2008 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,	
	2005	2006	2007	2007	2008
(In millions)					
<b>Income Statement Data:</b>					
Operating revenues	\$1,681.7	\$1,754.8	\$1,695.9	\$ 823.8	\$ 858.0
Operating income	304.0	304.9	535.1	113.9	90.0
Net income	165.1	172.4	290.3	53.2	49.0
Earnings available for common stock	149.7	157.0	274.9	45.5	42.0

	As of December 31,		As of June 30,
	2006	2007	2008
(In millions)			
<b>Balance Sheet Data:</b>			
Current assets	\$ 769.1	\$ 355.1	\$ 317.0
Property, plant and equipment, net	2,484.1	2,590.5	2,803.0
Investments and other non-current assets	375.4	416.4	422.0
Current liabilities	519.1	371.2	458.0
Long-term debt (excludes current portion)	813.5	761.5	760.0
Other non-current liabilities	949.9	1,118.0	1,102.0

### Ratios of Earnings to Fixed Charges

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

Year Ended December 31,					Six Months Ended June 30,	
2003	2004	2005	2006	2007	2007	2008
3.48x	3.59x	4.39x	4.30x	8.25x	3.53x	3.14x

## USE OF PROCEEDS

We estimate that we will receive net proceeds from this offering of approximately \$245.9 million, after deducting the underwriting discount and estimated offering expenses payable by us. We intend to use the proceeds from this offering initially to repay short-term debt, invest in short-term assets and redeem \$13.3 million of long-term debt and thereafter to fund capital expenditures, including new generating facilities, environmental projects and other utility capital projects, and for general working capital purposes. Our short-term debt was incurred to fund additional working capital, to finance capital expenditures and for other general corporate purposes and had a weighted average interest rate as of June 30, 2008 of 3.16%. Of the long-term debt that we intend to redeem, \$10.0 million has an interest rate of 3.60% and a maturity date of November 1, 2023, and \$3.3 million has a variable interest rate, which was 3.70% as of December 31, 2007, and a maturity date of February 1, 2010.

## CAPITALIZATION

The following table sets forth our consolidated capitalization as of June 30, 2008, on an actual basis and as adjusted to give effect to this offering and the anticipated use of the net proceeds from this offering as described under “Use of Proceeds.”

	As of June 30, 2008		% of Total as Adjusted
	Actual (In millions)	As Adjusted	
Common stock	\$ 33.4	\$ 33.4	1.5%
Additional paid-in capital	973.1	973.1	43.8
Retained earnings	32.6	32.6	1.5
Total common equity	1,039.1	1,039.1	46.8
Cumulative preferred stock	183.8	183.8	8.3
Long-term debt (excluding current portion):			
Existing long-term debt	760.5	747.2	33.6
Debentures offered hereby	—	250.0	11.3
Total long-term debt (excluding current portion)	760.5	997.2	44.9
Short-term debt (including current maturities of long-term debt)	71.4	—	—
Total capitalization (including short-term debt)	<u>\$2,054.8</u>	<u>\$ 2,220.1</u>	<u>100.0%</u>

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## THE COMPANY

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

- the generation and distribution of electric energy in selective markets in Iowa and Minnesota;
- the distribution and transportation of natural gas in selective markets in Iowa and Minnesota; and
- the provision of steam services to certain customers in Cedar Rapids, Iowa and various other energy-related products and services.

As of December 31, 2007, we served approximately 526,000 retail electric customers in approximately 750 communities and approximately 234,000 retail gas customers in approximately 240 communities.

All of our common stock is owned by Alliant Energy Corporation, an energy-services provider with subsidiaries, including us, serving primarily electric and natural gas customers in the Midwest.

### Competitive Strengths

We believe that our competitive strengths include the following:

*Enhanced Regulatory and Investment Certainty:* The Iowa legislature enacted a measure with the goal of giving utilities in Iowa more regulatory certainty when financing electric generation projects, including providing utilities with a fixed rate of return and recovery period for these investments. The law requires a public utility that proposes to construct certain electric generation, combined-cycle natural gas-fired and renewable generating resources facilities to apply to the IUB in advance for rate-making principles that the IUB will apply to the facility. The project, if approved, must be constructed using the rate making principles ordered by the IUB or not constructed at all.

*Our Generation Plans:* We are pursuing many investments to provide new generation capacity for our customers. Our plans include the following:

- In the fourth quarter of 2007, we acquired a 500 megawatt wind farm site in Franklin County, Iowa. In February 2008, we received approval from the IUB to construct a wind farm with capacity of up to 200 megawatts. In June 2008, our affiliate, Alliant Energy Corporate Services, Inc., entered into a master supply agreement to purchase wind turbine generator sets and related equipment, and we anticipate purchasing 200 megawatts of those wind turbine generator sets for this wind farm. The wind farm is expected to be in service by 2010. Future development of the balance of the wind farm will depend on numerous factors such as renewable portfolio standards and availability of wind turbines.
- In August 2008, we received a written order approving, with certain conditions, our siting certificate application for a new 630 megawatt coal-fired electric generating facility adjacent to our existing Sutherland Generating Station in Marshalltown, Iowa, which also includes an additional 19 megawatt equivalent of steam cogeneration for use by nearby industries. We expect to use up to 350 megawatts of the facility's output and obtain partners who will jointly own the facility or enter into purchased power agreements for the remainder of its output. In March 2008, we filed for advanced rate making principles with the IUB for our share of the cost of the facility, and we expect to receive a decision from the IUB in the fourth quarter of 2008.

*Operate Our Distribution Business to High Standards of Customer Service and Reliability.* We have over 83 years of experience in operating and managing rate-regulated electric and gas distribution businesses and we use this experience to seek to achieve high standards of customer service and reliability in a cost-effective manner.

## Strategy

Our strategic focus continues to be on:

- Execution of our new generation and environmental compliance plans; and
- Meeting or exceeding our customers' and regulators' expectations regarding reliability, availability, customer service and community support.

To do this, we intend to:

- Provide safe, reliable, affordable and environmentally responsible energy for current and future generations;
- Balance the needs of our customers, shareowners and the environment;
- Invest in infrastructure to meet customer demand and environmental compliance requirements;
- Maintain availability and reliability at or above target levels; and
- Prepare for a carbon-constrained future by continuing to invest in energy efficiency, monitoring and influencing legislation and evaluating opportunities that would enhance customer options.

## Operations

During 2007, we had total operating revenues of approximately \$1,695.9 million, which included \$1,270.1 million in electric revenues, or 74.9% of revenues, \$364.5 million in gas revenues, or 21.5% of revenues, and \$61.3 million in other revenues, or 3.6% of revenues. No single customer accounted for more than 10% of our consolidated revenues in 2007. Our electric and gas revenues for 2007, sales for 2007 and customers as of December 31, 2007 consisted of the following:

	Electric					
	<u>Revenues</u> (Millions)	<u>%</u>	<u>Sales</u> (Thousands of megawatt- hours)	<u>%</u>	<u>Customers</u>	<u>%</u>
Residential	\$ 451.2	35.5%	4,204	23.4%	444,974	84.3%
Commercial	316.2	24.9%	3,912	21.8%	79,473	15.1%
Industrial	402.0	31.7%	7,750	43.2%	1,954	0.3%
Other	100.7	7.9%	2,080	11.6%	1,398	0.3%
<b>Total</b>	<b>\$1,270.1</b>	<b>100.0%</b>	<b>17,946</b>	<b>100.0%</b>	<b>527,799</b>	<b>100.0%</b>

  

	Gas					
	<u>Revenues</u> (Millions)	<u>%</u>	<u>Sales</u> (Thousands of dekatherms)	<u>%</u>	<u>Customers</u>	<u>%</u>
Residential	\$ 203.4	55.8%	16,541	25.0%	206,873	88.4%
Commercial	115.0	31.5%	11,080	16.7%	26,664	11.4%
Industrial	31.2	8.6%	3,811	5.8%	366	0.2%
Other	14.9	4.1%	34,760	52.5%	N/A	N/A



Total	\$ 364.5	100.0%	66,192	100.0%	233,903	100.0%
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*Electric Operations.* In 2007, we had a maximum peak hour demand of 3,085 megawatts in August. During 2007, our sources of generation included 57% coal, 33% purchased-power and 10% gas/other.

*Gas Operations.* We maintain purchase agreements with several suppliers of natural gas from various gas producing regions of the U.S. and Canada. The majority of the gas supply contracts are for terms of six months or less, with the remaining supply contracts having terms through the first quarter of 2009.

## Transmission Assets

In December 2007, we completed the sale of our electric transmission assets located in Iowa, Minnesota and Illinois to ITC Midwest LLC, or ITC, a subsidiary of ITC Holding Corporation. Under the terms of the IUB's approval of the sale, we are obligated to refund to our customers payments of \$13 million per year for eight years beginning in the year our customers experience an increase in rates relating to the transmission charges assessed by ITC. We also committed that we would not file for a common equity ratio in excess of 50% in our next retail electric rate case filed in Iowa. The transmission rates that ITC charges its utility customers for transmission service are fully regulated by FERC. We pay the regulated rates to ITC for transmission services needed to serve our customers.

## Rates and Regulatory Environment

We are subject to regulation by the IUB related to our operations in Iowa regarding retail utility rates and standards of service, accounting requirements and approval of the location and construction of electric generating facilities. Requests for retail rate relief are based on historical test periods, adjusted for certain known and measurable changes occurring up to nine months from the end of the historical test period. An Iowa law, HF 577, provides Iowa utilities with the necessary rate making principles—and resulting, increased regulatory and investment certainty—prior to making certain generation investments in Iowa.

We are subject to regulation by the MPUC related to its operations in Minnesota for various issues including, but not limited to, retail utility rates and standards of service, accounting requirements, issuance and use of proceeds of securities, annual approval of our capital structure, and approval of the location and construction of electric generating facilities located in Minnesota. Requests for retail rate relief can be based on either historical or projected data and interim retail rates are permitted.

Our retail electric and retail gas tariffs provide for subsequent adjustments to rates for changes in commodity costs. We generally address the recovery of our other utility cost increases through rate filings. We currently have no rate cases pending in Iowa or Minnesota. Our recent rate cases are summarized as follows (dollars in millions):

Case	Utility Type	Filing Date	Increase Requested	Final Increase Granted	Final Effective Date	Return on Equity
2005 MN Retail	Electric	5/05	\$ 5	\$ 1	5/06	10.39%
2005 IA Retail	Gas	4/05	19	14	11/05	10.40%
2004 IA Retail	Electric	3/04	149	107	2/05	(a)

(a) Emery Generating Station – 12.23% (fixed) and Other – 10.7%.

The FERC has jurisdiction under the Federal Power Act over some of our electric utility facilities and operations, wholesale rates and accounting practices, and in some other respects.

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, including provisions relating to the issuance and sales of securities.



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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 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 \$100.0 million aggregate principal amount of 5.875% senior debentures due 2018, \$50.0 million aggregate principal amount of 5.50% senior debentures due 2025, \$100.0 million aggregate principal amount of 6.450% senior debentures due 2033 and \$125.0 million aggregate principal amount of 6.30% senior debentures due 2034 outstanding under the indenture.

We are initially offering the senior debentures in the aggregate principal amount of \$250.0 million. We may, without the consent of the holder 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 and issue date, and with the same CUSIP number 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 October 1, 2018. Each senior debenture will bear interest from October 6, 2008, or from and including the most recent interest payment date to which we have paid interest, at the rate of 7.25% per year. We will pay interest semi-annually in arrears, on April 1 and October 1, commencing April 1, 2009, 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.

### 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.

As of June 30, 2008, giving pro forma effect to this offering and our expected use of the net proceeds of the

offering, we would have had \$997.2 million aggregate principal amount of unsecured long-term debt outstanding

### **Optional Redemption**

The senior debentures will be redeemable as a whole or in part, at our option at any time or from time to time, 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 (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 50 basis points, plus in each case accrued interest to the date of redemption.

*“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 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 Barclays Capital Inc., Citigroup Global Markets Inc. and J.P. Morgan Securities Inc. or their affiliates which are primary U.S. Government securities dealers and one additional primary U.S. Government securities dealer located in The City of New York (a “Primary Treasury Dealer”) selected by us, and their 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 at least 30 days but not more than 60 days before the redemption date to each holder of senior debentures to be redeemed.

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.

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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 whole or in part in the form of one or more global certificates or debentures, 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, trust companies, clearing corporations and other organizations;
- DTC is owned by a number of its direct participants and by the New York Stock Exchange, Inc., the American Stock Exchange LLC and the Financial Industry Regulatory Authority;
- access to the DTC system is also available to indirect participants such as securities brokers and dealers, banks and trust companies 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.

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. 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 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 depository for the global securities, and we have not appointed a successor depository within 90 days of that notice;
- 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.



## UNDERWRITING

Barclays Capital Inc., Citigroup Global Markets Inc. and J.P. Morgan Securities Inc. 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
Barclays Capital Inc.	\$ 67,084,000
Citigroup Global Markets Inc	67,083,000
J.P Morgan Securities Inc.	67,083,000
BNY Mellon Capital Markets, LLC	16,250,000
Greenwich Capital Markets, Inc.	16,250,000
Lazard Capital Markets LLC	16,250,000
Total	<u>\$ 250,000,000</u>

The representatives 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 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 \$260,000 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 for 15 days after the date of this prospectus supplement 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 the debt securities and to securities convertible into or exchangeable or exercisable for or repayable with the debt securities.

## **Indemnification**

We have agreed to indemnify the underwriters against certain liabilities, including certain liabilities under the Securities Act of 1933, 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.

In general, purchases of a security to stabilize the price or to reduce a short position may cause the price of the security to be higher than it might be in the absence of these 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**

Each of the underwriters or their affiliates have provided investment or commercial banking services to us in the past and are likely to do so in the future. They receive customary fees and commissions for these services. In particular, affiliates of each of Barclays Capital Inc., Citigroup Global Markets Inc., J.P Morgan Securities

Inc., BNY Mellon Capital Markets, LLC and Greenwich Capital Markets, Inc. are lenders under our credit facility. In addition, Lazard Capital Markets LLC has entered into an agreement with Mitsubishi UFJ Securities (USA), Inc., or MUS(USA), pursuant to which MUS(USA) provides advisory and other services to Lazard Capital Markets LLC, including in respect of this offering. In return for the provision of such services by MUS(USA) to Lazard Capital Markets LLC, Lazard Capital Markets LLC will pay to MUS(USA) a mutually agreed upon fee. Bank of Tokyo-Mitsubishi UFJ, an affiliate of MUS(USA), is a lender under our credit facility. The trustee for the senior debentures is an affiliate of BNY Mellon Capital Markets, LLC.

## **LEGAL MATTERS**

The validity of the senior debentures will be passed upon for us by Foley & Lardner LLP. Some legal matters will be passed upon for the underwriters by Gibson, Dunn & Crutcher LLP.

## **EXPERTS**

The consolidated financial statements and the related financial statement schedules 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, 2007 have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report, which is incorporated herein by reference (which report expresses an unqualified opinion and includes an explanatory paragraph relating to the adoption of new accounting standards), and 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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# **Interstate Power and Light Company**

**\$500,000,000 Aggregate Amount**

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**Preferred Stock**

**Debt Securities**

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By this prospectus, we may offer from time to time up to an aggregate of \$500,000,000 of our securities. We will provide specific terms of the securities, including the offering prices, in supplements to this prospectus. The supplements may also add, update or change information contained in this prospectus. You should read this prospectus and the prospectus supplement relating to the specific issue of securities carefully before you invest.

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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.

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The date of this prospectus is August 6, 2008.

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## ABOUT THIS PROSPECTUS

In this prospectus, “we,” “us” and “our” refer to Interstate Power and Light Company.

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or SEC, utilizing a “shelf” registration process. Under this shelf process, we may, from time to time, sell the securities or combinations of the securities described in this prospectus in one or more offerings with a maximum aggregate offering price of up to \$500,000,000. This prospectus provides you with a general description of the securities that we may offer. 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. You should read both this prospectus and any prospectus supplement together with additional information described under the heading “Where You Can Find More Information.”

We may use this prospectus to offer from time to time shares of our preferred stock and our unsecured debt securities. In this prospectus, we sometimes refer to our preferred stock and debt securities collectively as the securities.

You should rely only on the information contained or incorporated by reference in this prospectus and in any supplement. 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. You should assume that the information appearing in this prospectus and the accompanying prospectus supplement is accurate as of the date

of their respective covers. Our business, financial condition, results of operations and prospects may have changed since those dates.

## INTERSTATE POWER AND LIGHT COMPANY

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

- the generation and distribution of electric energy in selective markets in Iowa and Minnesota;
- the distribution and transportation of natural gas in selective markets in Iowa and Minnesota; and
- the provision of steam services to certain customers in one community in Iowa and various other energy related products and services.

All of our common stock is owned by Alliant Energy Corporation, an energy-services provider with subsidiaries, including us, serving primarily electric and natural gas customers. Providing its customers in the Midwest with regulated electric and natural gas service is Alliant Energy Corporation's primary focus.

We are subject to the jurisdiction of the Iowa Utilities Board and the Minnesota Public Utilities Commission. We are also subject to the jurisdiction of the Federal Energy Regulatory Commission. Alliant Energy Corporation is a registered holding company under the Public Utility Holding Company Act of 2005 and is subject to regulation by the Federal Energy Regulatory Commission under that Act. We are also subject to some requirements of that Act.

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.

## USE OF PROCEEDS

Unless otherwise specified in the applicable prospectus supplement, we will use the net proceeds from the sale of the securities for general corporate purposes. These purposes may include repayment of our short-term debt, refinancing our maturing debt, financing our capital expenditures and funding additional working capital. Until we use the net proceeds from the sale of the securities for these purposes, we may place the proceeds in temporary investments.

## 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:

	<u>Year Ended December 31,</u>					<u>Three Month Ended March 31, 2008</u>
	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	
Ratio of earnings to fixed charges	3.48	3.59	4.39	4.30	8.25	4.0
Ratio of earnings to combined fixed charges and preferred dividend requirements	2.61	2.73	3.34	3.32	5.96	2.8

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## DESCRIPTION OF PREFERRED STOCK

The following description of our preferred stock summarizes the general terms and provisions that apply to our preferred stock. 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.

The following is a summary of some general terms and provisions of our preferred stock. Since this is only a summary, it does not contain all of the information that may be important to you. The summary is subject to and qualified in its entirety by reference to our restated articles of incorporation, which are filed as an exhibit to the registration statement of which this prospectus is a part and incorporated by reference into this prospectus. See “Where You Can Find More Information.”

### General

Our total authorized capital stock as set forth in our 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.

Under our 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 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 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
- 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 the terms of our debt securities summarizes general terms and provisions that apply to the debt securities. We will describe the particular terms of any debt securities more specifically in each prospectus supplement relating to those debt securities. We will indicate in the prospectus supplement whether the general terms and provisions described in this prospectus apply to a particular series of debt securities.

From time to time we may issue, in one or more series, debt securities under an indenture, dated as of August 20, 2003, between us and The Bank of New York Trust Company, N.A., as successor trustee, as supplemented and amended from time to time. This indenture, as supplemented and amended, is referred to in this prospectus as the indenture. This section summarizes the indenture. Since this is only a summary, it does not contain all of the information that may be important to you. The summary is subject to and qualified in its entirety by reference to the indenture which is filed as an exhibit to the registration statement of which this prospectus is a part and incorporated by reference into this prospectus. See “Where You Can Find More Information.” Parenthetical section references under this heading are references to sections of the indenture.

### 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. (Section 301).

### 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;
- 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 pursuant to which the debt securities may be converted into or exchanged for shares of stock or other securities of us or any other company;
- 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. (Section 301).

## **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 existing and 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. (Sections 301, 307 and 602).

## **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. (Section 309).

## **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.

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 “—Defeasance” 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, then those series may or may not have different covenants.

### ***Limitations on Liens***

The indenture provides generally 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 a 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 that existed when we acquired or constructed the property or were created within one year after that time;
- liens on property that secure payment of all or part of the purchase price or construction cost of the property, including the extension of any liens to repairs or improvements made on the property;
- the pledge of any bonds or other securities at any time issued under any of the liens permitted by the above-listed items;
- tax liens and other governmental charges which are not delinquent or which can be paid without penalty or which are being contested;
- liens incurred in the ordinary course of business for charges that not delinquent or that are being contested, including mechanics’, workmen’s, repairmen’s, materialmen’s, warehousemen’s and carriers’ liens and liens securing workers’ compensation and other employee awards;
- liens in respect of judgments or awards with respect to which we have the right to prosecute an appeal or other proceeding for review;
- easements, reservations, regulations and rights of others in, and defects of title in, some of our property;
- any defects or irregularities in title to any rights-of-way and/or to any real estate used or to be used for right-of-way purposes or held under lease, easement, license or similar right;
- liens securing indebtedness neither created, assumed nor guaranteed by us nor on account of which we customarily pay interest;
- some leasehold interests;
- any controls, restrictions, obligations or other burdens imposed by any law, rule or regulation of any governmental authority on any of our property or the operation or use of any of our property;

- liens on our pollution control and sewage and solid waste disposal facilities incurred 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 any of our property on payment of reasonable compensation, or to terminate any franchise, license or other rights or to regulate our property and business;
- any liens that have been bonded for the full amount in dispute;

- prepaid liens;
- 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 our public or statutory obligations;
- the pledge or assignment in the ordinary course of business of electricity, gas 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, steam or any by-products generated or produced by any of our properties;
- any landlord's lien;
- 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. (Section 608).

### ***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 the 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 and conditions under the indenture by executing a supplemental indenture satisfactory to the trustee; and
- after giving effect to the transaction, no event which, after notice or lapse of time, would become a default under the indenture, will have occurred or be continuing. (Section 1101).

The indenture further provides that our successor will be substituted for us, after which all of our obligations under the indenture will terminate. (Section 1102).

### **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; and
- specified events relating to our bankruptcy, insolvency or reorganization. (Section 801).

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. (Section 802).

The trustee can require that it be indemnified before it enforces the indenture or any outstanding debt securities. (Section 903). 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. (Section 812). The trustee does not have to give 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. (Section 902). 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. (Section 606).

### **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 a default in the payment of the principal of, or premium, if any, or interest on, any debt securities or a default in respect of a provision we describe in the following paragraph. (Section 813). These defaults cannot be waived 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. 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 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, the consent 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. (Section 1202).

We cannot enter into supplemental indentures to amend or modify the indenture in ways that affect other series of debt securities under the indenture without the consent of the holders of at least a majority in aggregate principal amount of all securities issued under the indenture that will be affected by the amendment, voting together as one class. Further, if any amendment or modification would have any of the effects described in the previous two paragraphs, and would affect more than one series of securities issued under the indenture, then we cannot make the amendment or modifications without the consent of all of the holders of the securities issued under the indenture that would be affected by them.

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;

- adding to, changing or eliminating any of the provisions of the indenture in respect of the debt securities, but only if the change does not adversely affect the rights of holders of the debt securities under the indenture in any material respect;
- establish the form or terms of debt securities of any series;
- 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. (Section 1201).

## **Defeasance**

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. (Section 701).

If we desire to exercise our option to satisfy and discharge our obligations under the indenture (a defeasance), then we must deposit in trust with the trustee money or U.S. government obligations sufficient to pay the outstanding principal amount of the debt securities as well as the interest on the debt securities to maturity. We must also comply with some other provisions. In particular, we must obtain:

- an opinion of tax counsel that the defeasance will not result in recognition of any gain or loss to holders of the debt securities for federal income tax purposes;
- an opinion of counsel that any U.S. government obligation that we deposit in trust meet the requirements of U.S. government obligations set forth in the indenture; and
- an opinion of a nationally recognized independent public accountant to the effect that we have deposited with the trustee money or U.S. government obligations sufficient to pay the outstanding principal amount of the debt securities as well as the interest of the debt securities to maturity.

## **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. (Section 112).

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## 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 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 the offered securities in and outside the United States (1) through underwriters or dealers, (2) directly to purchasers, including our affiliates, (3) through agents or (4) through a combination of any of these methods. The prospectus supplement will include the following information:

- the terms of the offering;
- the names of any underwriters, dealers or agents;
- the name or names of any managing underwriter or underwriters;
- the purchase price of the securities;
- the net proceeds from the sale of the securities;
- any delayed delivery arrangements;
- any underwriting discounts, commissions and other items constituting underwriters' compensation;
- any initial public offering price;
- any discounts or concessions allowed or reallocated or paid to dealers; and
- any commissions paid to agents.

### **Sale Through Underwriters or Dealers**

If we use underwriters in the sale, the underwriters will acquire the securities for their own account for resale to the public. The underwriters may resell the securities from time to time in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. Underwriters may offer securities to the public either through underwriting syndicates represented by one or more managing underwriters or directly by one or more firms acting as underwriters. Unless we inform you otherwise in the prospectus supplement, the obligations of the underwriters to purchase the securities will be subject to certain conditions, and the underwriters will be obligated to purchase all of the offered securities if they purchase any of them. The underwriters may change from time to time any initial public offering price and any discounts or concessions allowed or reallocated or paid to dealers.

Representatives of the underwriters through whom the offered securities are sold for public offering and sale may engage in over-allotment, stabilizing transactions, syndicate short covering transactions and penalty bids in accordance with Regulation M under the Securities Exchange Act of 1934. Over-allotment involves syndicate sales in excess of the offering size, which creates a syndicate short position. Stabilizing transactions permit bids to purchase the offered securities so long as the stabilizing bids do not exceed a specified maximum. Syndicate covering transactions involve purchases of the offered securities in the open market after the distribution has been completed in order to cover syndicate short positions. Penalty bids permit the representative of the underwriters to reclaim a selling concession from a syndicate member when the offered securities originally sold by such syndicate member are purchased in a syndicate covering transaction to cover syndicate short positions. Such stabilizing transactions, syndicate covering transactions and penalty bids may cause the price of the offered securities to be higher than it would otherwise be in the absence of such transactions. These transactions may be effected on a national securities exchange and, if commenced, may be discontinued at any time.

Some or all of the securities that we offer through this prospectus may be new issues of securities with no established trading market. Any underwriters to whom we sell our securities for public offering and sale may make a market in those securities, but they will not be obligated to do so and they may discontinue any market making at any time without notice. Accordingly, we cannot assure you of the liquidity of, or continued trading markets for, any securities that we offer.

If we use dealers in the sale of securities, we will sell the securities to them as principals. They may then resell those securities to the public at varying prices determined by the dealers at the time of resale. We will include in the prospectus supplement the names of the dealers and the terms of the transaction.

### **Direct Sales and Sales through Agents**

We may sell the securities directly to a limited number of purchasers or a single purchaser. In this case, no underwriters or agents would be involved. We may also sell the securities through agents designated from time to time. In the prospectus supplement, we will name any agent involved in the offer or sale of the offered securities, and we will describe any commissions payable to the agent. Unless we inform you otherwise in the prospectus supplement, any agent will agree to use its reasonable best efforts to solicit purchases for the period of its appointment.

We may sell the securities directly to institutional investors or others who may be deemed to be underwriters within the meaning of the Securities Act of 1933 with respect to any sale of those securities. We will describe the terms of any such sales in the prospectus supplement.

### **Remarketing Arrangements**

Offered securities may also be offered and sold, if so indicated in the applicable prospectus supplement, in connection with a remarketing upon their purchase, in accordance with a redemption or repayment pursuant to their terms, or otherwise, by one or more remarketing firms, acting as principals for their own accounts or as agents for us. Any remarketing firm will be identified and the terms of its agreements, if any, with us and its compensation will be described in the applicable prospectus supplement. Remarketing firms may be deemed to be underwriters, as that term is defined in the Securities Act of 1933, in connection with the securities remarketed.

### **Delayed Delivery Arrangements**

If we so indicate in the prospectus supplement, we may authorize agents, underwriters or dealers to solicit offers from certain types of institutions to purchase securities from us at the public offering price under delayed delivery contracts. These contracts would provide for payment and delivery on a specified date in the future. The contracts would be subject only to those conditions described in the prospectus supplement. The prospectus supplement will describe the commission payable for solicitation of those contracts.

### **General Information**

We may have agreements with the underwriters, dealers and agents to indemnify them against certain civil liabilities, including liabilities under the Securities Act of 1933, or to contribute with respect to payments that the underwriters, dealers or agents may be required to make.

Underwriters, dealers and agents may be customers of, engage in transactions with, or perform services for, us in the ordinary course of our business.

## WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports and other information with the SEC. We have also filed a registration statement on Form S-3, including exhibits, under the Securities Act of 1933 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. You may read and copy the registration statement and any other document that we file at the SEC's public reference room at 100 F Street, N.E., Washington D.C. You can call the SEC at 1-800-SEC-0330 for further information on the operation of the public reference room. You can also find our public filings with the SEC on the internet at a web site maintained by the SEC located 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 herein:

- our Annual Report on Form 10-K for the year ended December 31, 2007;
- our Quarterly Report on Form 10-Q for the quarter ended March 31, 2008;
- our Current Reports on Form 8-K dated February 11, 2008 and June 1, 2008; 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 (i) after the date of the registration statement on Form S-3 filed under the Securities Act of 1933 with respect to securities offered by this prospectus and prior to the effectiveness of such registration statement and (ii) after the date of this prospectus and before the end of the offering of the securities pursuant to 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 request a copy of any of these filings, at no cost, by writing to F. J. Buri, Corporate Secretary, Interstate Power and Light Company, 4902 North Biltmore Lane, Madison, Wisconsin 53718, or by calling Mr. Buri at (608) 458-3311.

## LEGAL MATTERS

The validity of the securities offered by this prospectus will be passed upon for us by Foley & Lardner LLP.

## EXPERTS

The consolidated financial statements and the related financial statement schedules 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 (which report expresses an unqualified opinion and includes an explanatory paragraph relating to the adoption of new accounting standards), and have been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

**\$250,000,000**

**Interstate Power and Light Company**  
**7.25% Senior Debentures due 2018**

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**PROSPECTUS SUPPLEMENT**

**October 1, 2008**

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*Joint Book-Running Managers*

**Barclays Capital**

**Citi**

**J.P. Morgan**

*Co-Managers*

**BNY Mellon Capital Markets, LLC**

**Lazard Capital Markets**

**RBS Greenwich Capital**

