

STATE OF IOWA  
DEPARTMENT OF COMMERCE  
UTILITIES BOARD

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IN RE:  INTERSTATE POWER AND LIGHT COMPANY	DOCKET NO. RPU-05-3 (TF-05-211, EEP-02-38)
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**FINAL DECISION AND ORDER**

(Issued April 28, 2006)

**I. PROCEDURAL HISTORY**

On June 30, 2005, Interstate Power and Light Company (IPL) filed with the Utilities Board (Board) proposed electric tariffs, identified as TF-05-211. The tariff represents proposed electric rate schedules and tariff changes that would consolidate tariff structures in IPL's four rate zones and accomplish another step toward equalizing rates across those four zones. IPL designed the proposed changes to be revenue neutral; that is, the proposed tariff changes do not provide increased revenues to IPL.

IPL's filing is a consolidation of two filings required by the Board in its final order issued on January 14, 2005, in Docket No. RPU-04-1. Ordering clause number three of the January 14 order directed IPL to file a proposal consolidating class rate structures and redefining customer classes. This has come to be known as tariff consolidation. Ordering clause number four directed IPL to begin making annual, revenue-neutral equalization filings. These filings have generally been

referred to as rate equalization. The Board by order issued May 16, 2005, allowed IPL to consolidate these two filings. The Board said that this would allow IPL to focus on the end state that reflects the impacts of both tariff consolidation and rate equalization. The Board noted it made no sense to increase a rate element in one proceeding and decrease that same element in a separate, tandem proceeding.

IPL also filed separately on June 30, 2005, some tariff changes to implement a settlement in its energy efficiency plan docket, Docket No. EEP-02-38. IPL asked that these changes be implemented simultaneously with changes proposed in the tariff consolidation and rate equalization docket. Because the changes are related, the Board, on its own motion, consolidated this filing with the tariff consolidation and rate equalization filing in the docketing order in Docket No. RPU-05-3 issued on July 29, 2005. A procedural schedule was also set in the July 29 docketing order.

In addition to the Consumer Advocate Division of the Department of Justice (Consumer Advocate), intervenor status in this proceeding has been granted to Ag Processing Inc and the IPC Zone Employers Group (Ag Processing), the Community Coalition for Rate Fairness (CCRF), the Iowa Consumers Coalition (ICC), the Lee County Board of Supervisors, and Swiss Valley Farm, Co. All parties had the opportunity to submit prefiled testimony and exhibits.

There was a prehearing dispute over certain testimony and exhibits of CCRF witness Latham. The Board denied a motion to strike filed by Consumer Advocate in an order issued November 10, 2005. In that order, the Board reminded the parties that the Board did not intend to relitigate issues from Docket No. RPU-04-1 and that

class revenue allocations in the present docket are to be based on the settlement allocations in Docket No. RPU-04-1 and not on a new class cost-of-service study or revenue requirement. In other words, as envisioned by the Board in its January 14, 2005, final order in Docket No. RPU-04-1, class cost-of-service issues will be taken up only after tariff consolidation is accomplished.

A hearing for introduction of testimony and cross-examination of testimony was held beginning January 17, 2006. All parties had the opportunity to file initial briefs on February 13, 2006, and reply briefs on February 27, 2006.

Board member Stamp previously was an attorney with Dickinson, Mackaman, Tyler & Hagen, P.C., Law Firm, which is representing CCRF in this matter. However, during his time with the firm as it pertains to this matter, Board member Stamp did not do any work for CCRF and was not privy to any confidential information involving CCRF. After reviewing the relevant professional codes, the Board's General Counsel has advised Board member Stamp that he may participate in the decision-making in this docket.

## **II. INTRODUCTION**

IPL's four separate pricing zones are the result of mergers and consolidations that Iowa's electric industry has experienced in the last two decades. Three of these zones, IES-N, IES-S, and IES-SE, correspond to the former IES Utilities. The fourth, IPC, corresponds to the former Interstate Power Company. Currently, IPC rate structures are significantly different from those in the other three zones. Rate

structures in the IES-N and IES-S zones are similar, but overall rate levels are higher in the IES-N zone. The IES-N and IES-SE zones share identical class rates, except for general service.

As noted in the procedural history, IPL's filing in this case is a consolidation of two filings. The first is a proposal to consolidate class rate structures and redefine customer classes, commonly referred to as rate consolidation. The second is the initial step in a series of annual, revenue-neutral equalization filings, commonly referred to as rate equalization. In IPL's filing, it presents the equalization step proposed for this case as well as its target rate design, or end-state rates, that would exist at the conclusion of the equalization process. Consumer Advocate also presents an end-state proposal. In order to understand the parties' arguments on specific contested issues in this case, it is helpful to understand the background of the filing and the parties' general positions.

IPL said its filing is a revenue-neutral proposal to consolidate its customer class rate structures based on a target rate design and to implement the first step of the Board's rate equalization and consolidation schedule ordered in Docket No. RPU-04-1 (the target time for completion varies with the customer class). If this first step is approved, IPL said the result will be class rate structures that are more similar to one another, but proportionally different based on remaining rate zone differentials within the class. As the rate consolidation and equalization phase-in is completed over future years, the remaining rate zone differentials and rate differences will

disappear, and class customers will be charged the same rates. IPL's rules and regulations tariff was previously consolidated in TF-05-67.

Consistent with the Board's final order in Docket No. RPU-04-1, IPL's target rate design assumes no change in IPL's overall revenue requirement and no change in its class revenue levels. The IPL proposal is based on class revenues and billing determinants approved in Docket No. RPU-04-1 and class load data from the 2003 test year. IPL intends to file a separate case for realigning its class revenues after the rate consolidation and equalization phase-in process is complete.

With some exceptions, IPL has generally based its target rate design for residential, general service, and large general service (LGS) on the rate structures used in the IES-N and IES-S zones. IPL said customers in these two zones represent 75 percent of its customers and 70 percent of its usage, so that using the rate structures in these two zones reduces potential customer billing impacts. (Exh. 1, Sch. C). IPL noted its target rate design is supported by extensive cost and load research.

IES rate structures differ from those in the IPC zone mainly in terms of block rates, seasonal definitions, and time-of-use (TOU) rate periods. IPL maintained that declining-block rates encourage more efficient usage by recognizing the higher costs associated with low load factor customers and do not send the wrong price signals as long as they are based on cost. IPL also said that the IES seasonal definitions are supported by peak load data for the past ten years. (Exh. 1, Sch. E). Finally, IPL said the IES TOU rate design is more attractive to customers than the IPC TOU rate

design because the IES rate design offers longer off-peak periods. (Exh. 1, Sch. F). IPL proposed a corrective measure to address revenue losses it believes will be associated with adoption of the IES TOU rate design in the IPC zone.

IPL proposed to phase in the target rate design over time. When the process is complete, each set of separate class rates and rate structures will be consolidated into a single class rate structure. In accordance with the Board's final decision in Docket No. RPU-04-1, residential and general service rate equalization and rate structure consolidation will be phased-in over five years; LGS and lighting will be phased-in over three years. IPL provided estimated ranges of individual billing impacts by rebilling either representative customer samples or entire populations. IPL noted that none of the other parties provided estimated billing impacts for their alternative rate designs.

Consumer Advocate in its target rate design was particularly critical of IPL's use of a declining-block rate structure, arguing that such a rate structure sends confusing price signals to customers and conflicts with the significant energy efficiency commitments and investments made in Iowa over the past 15 years. (Exh. 100, Sch. A-D.) Consumer Advocate maintained that demand and energy charges should not decline as customer load and usage increases unless flat rates produce large intra-class subsidies or if they promote increased usage during off-peak periods.

Consumer Advocate said that IPL's argument that increases in customer load factor tend to follow increases in usage, resulting in lower embedded costs per kWh,

is only true if the increased usage is in off-peak periods. Otherwise, increased usage during peak periods might lead to increased plant usage, contributing to the need for new generation, which would be contrary to the goals of energy efficiency programs.

As pointed out by Consumer Advocate, IPL defined its customer classes based on specific usage criteria and accounts for intra-class differences and attempts to reduce intra-class subsidies through the use of seasonal differences in demand and energy charges, declining block demand and energy charges, and demand ratchets for LGS. Consumer Advocate said it might be desirable to create more homogeneous customer classes, arguing that if rates are properly designed to reflect cost differences across and within customer classes, then customer migration among customer classes ought to be allowable, in order to reduce intra-class subsidies due to differences in customer size and load factor.

Ag Processing argued that IPL should have presented more than one target rate design, and in particular should have presented one based on the IPC design, particularly for LGS rates. Ag Processing agreed with Consumer Advocate's comments regarding declining block energy rates, and believed those comments applied also to declining block demand rates. Ag Processing said while there may be some validity for reflecting load factor improvements in declining-block rates for small customers billed only on kWh usage, there is no justification for extending the practice to customers who are billed separately for their kW demand.

ICC generally supported IPL's target rate design and tariff consolidation proposals, except for bulk and standby power. ICC said with these exceptions, IPL's

proposal reasonably balances competing interests and is consistent with the Board's final order in Docket No. RPU-04-1.

CCRF also generally supported IPL's target rate design, consolidated tariff, and first step changes proposed in this docket. In particular, CCRF agreed with IPL's use of the class cost-of-service study from Docket No. RPU-04-1 for functionalizing and classifying costs into demand, energy, and customer-related components, and supported use of this cost information and load research to develop a cost-based target rate design.

CCRF disagreed with Consumer Advocate's arguments regarding declining block rates, arguing that if properly structured according to cost and load research, these rates can provide accurate price signals for the efficient use of demand and energy components of IPL's electric power system. CCRF argued that an arbitrarily flat kWh rate structure would price kWh above cost for high usage customers and below cost for low usage customers, resulting in high usage customers subsidizing low usage ones. CCRF noted that this does not mean high income customers would be subsidizing low income customers; research in the 1980s showed no correlation between usage levels and income. Lower income households may have high usage due to poorly insulated housing and inefficient heating and air conditioning, for example.

While the decisions the Board makes in this docket regarding equalization and tariff consolidation will be revenue neutral to IPL, the Board recognizes that the decisions will not be revenue neutral for individual customers. This decision will have

a positive effect on the many customers who will experience decreased rates, but a large number of customers will experience rate increases, some of which are significant. The Board is mindful of the impact its decision will have on these customers and will require IPL to make every reasonable effort to explain the bill impact of the decision to those customers and present them with information about programs that are available to mitigate the rate increases. IPL's energy efficiency plan has programs available for all customer classes that assist customers in reducing and better managing their energy usage. For larger customers, other rate options may be available, such as the interruptible rate program. The Board encourages all customers to carefully examine these programs to see which ones might benefit them.

As the Board next addresses individual contested issues in this proceeding, it wants to emphasize that its decision is based on the evidence available to it in this proceeding. In the continuing move towards equalization and the subsequent class cost-of-service study case, the Board expects IPL, and other parties, to look hard at the rate design for the various classes and the price signals that rate design sends. It may be that better information and analysis, and a look at different rate designs, may present a more optimal set of rates than could be implemented in this docket based on the information before the Board. In other words, the Board believes that its findings and conclusions in this order are reasonable based on the record before it, but more information and analysis might produce a future rate design that, given current and projected energy prices, would be even better.

### **III. CLASS REVENUE LEVELS AND PROPOSED REALIGNMENTS**

IPL's target rate design started with the final class revenues and billing determinants, and class cost-of-service study, from its last rate case, Docket No. RPU-04-1. The final class revenues and billing determinants from that case provide the basic data used by IPL for class rate design in this proceeding. IPL used the class cost-of-service study to divide class revenues into relative portions of demand and energy-related costs. (Exh. 2, Sch. A). The study data is combined with class load research data to determine cost allocations between peak/off-peak and seasonal rates.

CCRF offered an alternative, proposing that customer class revenues be realigned according to the results of IPL's Docket No. RPU-04-1 class cost-of-service study. (Tr. 620-24, 652-53, 677-80; Exh. 401, Sch. A). CCRF argued that if this was not done, rates resulting from the rate equalization and rate consolidation process will not reflect the cost of providing service to each class, resulting in significant realignments later.

Consumer Advocate, ICC, and Ag Processing all opposed the class revenue alignments proposed by CCRF. IPL noted that CCRF's proposal was contrary to the Board's final decision in Docket No. RPU-04-1, in which the Board accepted IPL's baseline assumptions for this proceeding and the rate equalization and rate consolidation process, which included holding constant the class revenue allocations approved in that docket. IPL said it cannot efficiently accomplish the Board's rate

equalization and consolidation goals if at the same time class cost-of-service revenue realignments must also be addressed. IPL reiterated its intent to address class cost-of-service issues after the conclusion of the rate equalization and consolidation process.

The Board's final decision in Docket No. RPU-04-1 approved certain baseline assumptions to be used in this proceeding, including the use of the final class revenue requirement allocations approved in that proceeding. (Final Decision, p. 43). This means there should be no class cost-of-service issues in IPL's rate equalization and rate consolidation filing. IPL filed a class cost-of-service study in this case only for the purpose of designing class rates, not for use in reallocating class revenue requirements. It would not be fair to IPL, or the other parties, for the Board to change now the assumptions it approved in Docket No. RPU-04-1. The other parties have not had an opportunity to present their own class cost-of-service studies or competing class revenue allocations.

The Board continues to believe that the class revenue relationships established in Docket No. RPU-04-1 should be preserved to avoid combining the rate impacts from potential inter-class revenue shifts and intra-class rate equalization. The principle of cost-based rates must be balanced with other ratemaking principles, such as the avoidance of unnecessary rate shock. CCRF has not persuaded the Board that the issues related to class cost-of-service and the baseline assumptions from Docket No. RPU-04-1 should be relitigated in this proceeding. It is not appropriate to consider CCRF's proposed realignment at this time and it will be

rejected in this proceeding. To ensure revenue neutrality in this proceeding, IPL's proposal to transfer the Docket No. RPU-04-1 billing determinants and revenues of reclassified customers from their old classes to their new customer classes will be adopted.

Earlier in this docket the Board stated its intent not to relitigate the issues from Docket No. RPU-04-1. In an order issued November 10, 2005, denying a motion to strike some of CCRF's testimony in this proceeding, the Board said it would base class revenue allocations in this case on the settlement allocations in Docket No. RPU-04-1 and not on a new class cost-of-service study or revenue requirement, in the absence of good cause for doing so. Good cause was not established then and it has not been established now.

#### **IV. RESIDENTIAL CHANGES**

IPL's target rate design for residential customers includes a \$10.50 per month customer charge, an average 2 cents per kWh seasonal rate differential, and a three-step declining block rate structure. (Exh. 2, Sch. A, F, G). IPL's proposed first step in this case toward the target rate design would change the current IPC rate structure to match the main features of the residential rate structures used in the IES zones.

The primary disputes centered on the declining block rate structure and the monthly customer charge. IPL proposed a three-step declining block rate for both summer and winter, arguing that IPL data shows a positive relationship between energy usage and load factor. IPL said that as customer usage increases, maximum

demand tends to increase at a slower, decreasing rate relative to energy usage, resulting in higher load factors and lower costs per kWh at the higher kWh usage levels. (Ex. 2, Sch. C, D, E). IPL argued that differences in load factor are a significant factor in cost causation, and that as load factor increases, the relative portion of demand costs in the kWh rate decreases.

Consumer Advocate opposed the three-step declining block target residential rate design and instead proposed a flat summer energy rate and a two-step declining block winter energy rate. Consumer Advocate argued that IPL's analysis justifying its declining block design, with a regression analysis showing customers with high kWh usage levels having high load factors, was flawed because it was based on data from only two months and defined demand in terms of maximum customer demand, rather than customer demand at the time of system peak. Consumer Advocate said IPL's rate design is likely to reduce the residential load factor because a summer tail block will encourage greater use of air conditioning, which is not associated with load factor improvements.

CCRF supported IPL's declining block rate design. CCRF said the rate design was appropriately based on cost of service and load research. CCRF said there were several flaws in Consumer Advocate's analysis, including the arbitrary reclassification of 50 percent of IPL's demand costs as energy costs and an underestimation of load factor improvements by relying on average rather than marginal changes in load factor.

The energy landscape has changed with recent trends in electricity and natural gas prices. The Board believes it is more important than ever to promote energy efficiency as a way to mitigate the effect of general price increases and better utilize valuable resources. In promoting energy efficiency, utilities need to take new looks at their rate designs to make sure that their rate designs are consistent and promote energy efficiency.

In this case, IPL's target rate design for the summer months is not consistent with the energy efficiency message that has been sent to residential customers. It is counterintuitive and confusing to customers to have a summer rate design with declining block rates while messages regarding the importance of energy efficiency and reducing peak demand are being constantly sent by the utility, Board, and others. The message a declining block rate sends to residential customers on a summer peak day is that the more you use, the cheaper each subsequent kWh will be. This is the wrong message to send to residential customers.

The Board will reject IPL's summer declining block approach and adopt Consumer Advocate's proposal for a flat summer target rate design. A flat rate is consistent with the message the Board is sending regarding energy efficiency to residential customers. On a going-forward basis, the Board believes rate design for all customer classes should be reevaluated and specifically consider the impact of the rate design on energy efficiency and the energy efficiency messages being sent to the particular customer class.

However, this change represents a significant change in IPL's current summer residential rate design. Therefore, IPL will be required to phase-in the summer residential rate design change relatively evenly over all steps of the residential equalization process and should recalibrate its first step residential rate proposals in this case accordingly.

The Board will accept the three-step declining block rate structure as proposed by IPL for the winter months. The analysis presented by IPL shows significant load factor improvements with increased levels of kWh usage, which means demand costs decline on an average per-kWh basis as usage increases. The rate structure does not send a confusing message on energy efficiency in the winter months, when cost pressures for reducing peak demand are not as great.

The other contested issue regarding residential rates is the monthly customer charge. IPL and Consumer Advocate supported the \$10.50 per month customer charge proposed by IPL, while CCRF would increase the charge to \$12.17, reflecting the full customer cost. The Board will adopt the \$10.50 charge, which mitigates the billing impacts on IPC customers, who would otherwise experience a 60 percent customer charge increase under CCRF's proposal. In designing rates, the Board must consider not only cost issues, but also rate impacts.

The other aspects of IPL's target residential rate design and first step rates were not contested. They will be adopted, although again the rates will need to be recalibrated to reflect the changes to IPL's target rate design made by the Board in adopting a flat summer energy rate.

## **V. GENERAL SERVICE CHANGES**

For the general service class, IPL proposed a target rate design with a \$17.80 monthly customer charge, an average 2 cents per kWh seasonal rate differential, and a two-step declining-block kWh rate structure. (Ex.2, Sch. A, F, K, O). IPL's first step toward the target rate design would change the current IPC rate structures to match the main features of the general service rate structures used in the IES-N and IES-S zones.

As was true with residential rates, IPL presented evidence supporting its declining block structure. Consumer Advocate proposed to reduce IPL's price differential between the two blocks by 50 percent because it claimed the general service rate design discriminates against small customers who, in addition to paying a significantly higher first block rate, also would pay a \$17.80 customer charge. CCRF disagreed with Consumer Advocate's analysis, stating that the analysis suffers from the same shortcomings as Consumer Advocate's residential analysis because it focuses on average rather than marginal load factors and on adjustments designed to flatten the rate structure.

The main differences in the results produced by IPL and Consumer Advocate, both for this class and the residential class, appear to be based on the different underlying class cost-of-service and cost classification methodologies that each uses for designing rates. Consumer Advocate's rates show significantly less per-kWh demand cost differences than IPL's because Consumer Advocate's method classifies

significantly less cost as demand-related. IPL's classification of demand costs is part of the same class cost-of-service methodology last approved in Docket Nos. RPU-02-3 and RPU-02-8. IPL's rate design methodology is consistent with previous Board decisions on class cost-of-service methodology and should be used in this case as well.

An argument could be made that declining summer block rates send the wrong energy efficiency messages to the general service class. This is an issue that will be explored in future proceedings. For purposes of this proceeding, the evidence shows that the general service class is more diverse than the residential class and a uniform kWh structure may not adequately reflect intra-class cost differences. There is no information showing billing impacts from a uniform per kWh summer rate and the Board is reluctant to order a uniform summer rate without knowing the billing impacts. Billing impacts were available for the residential class, given the simpler structure of residential rates. The Board will adopt IPL's general service target rate design and its first step general service rates, with exceptions for four frozen rates, as described below.

There are four frozen rate codes in the general service class, 240 (IPC kW/kWh general service), 650 (IES-SE general service), 820 (IPC three-phase farm), and 520 (IPC municipal pumping). The target rate design changes for these rate groups are substantial and IPL proposed to implement most of the structural changes with the first-step rate changes in this case, which could have extreme billing impacts for some customers. To mitigate these potential impacts, IPL will be required to

phase-in its rate design changes for these four rate groups more evenly over all steps of the general service equalization process and should recalibrate its first-step proposals for these four groups accordingly. IPL will also be required, as part of a communications plan that will be discussed in greater detail later under LGS changes, to assist these customers in adjusting to the rate design changes they face and in exploring measures such as energy efficiency to mitigate their billing impacts.

## **VI. LARGE GENERAL SERVICE (LGS) CHANGES**

The target rate design proposed by IPL for the LGS class included realigned kW demand/kWh energy charge ratios, average seasonal rate differentials of \$6 per kW and 0.7 cents per kWh, and a five-step declining-block kW demand rate structure. IPL's first step changes proposed in this case will begin to change the current IPC LGS rate structure to match the main features of the LGS rate structures used in the IES zones.

Various parties commented on several aspects of IPL's proposed LGS changes. The major contested issues will be addressed separately.

### **A. Declining Block kW Demand Rate Structure**

Consumer Advocate opposed IPL's five-step declining-block kW demand rate target rate design, advocating instead a two-step declining-block design. While Consumer Advocate agreed that IPL's LGS load factors tend to increase as customer demand increases, Consumer Advocate said this did not by itself justify a declining-block demand rate structure. (Ex. 101, Sch. A, p. 18).

Ag Processing opposed any use of declining-block demand rates, particularly for IPC LGS customers. Ag Processing argued that there was not sufficient empirical evidence to show that capacity costs decrease with increased levels of demand and it believed the lower-tail block rates would encourage increased demand and accelerate the need for new generation. (Ex. 200, Sch. 2-3). Ag Processing said that either five or two steps would be confusing for IPC customers, who currently pay a flat seasonal kW demand rate. Ag Processing urged the Board to require IPL to re-file its proposal with alternatives for the Board to consider or, in the alternative, that the IPC LGS structure be adopted for the IES rate zones and IPC bulk power customers.

CCRF supported IPL's declining-block demand rate structure as cost-justified. CCRF noted the first blocks include customer costs that would otherwise be recovered through a separate customer charge. CCRF said the third through fifth blocks reflect service at higher voltage levels, which involve lower distribution system investments and reduced line losses. CCRF argued there was no support in the record for Ag Processing's contention that IPL's proposed target rate design will lead to increased demand by LGS customers.

CCRF opposed Consumer Advocate's proposal, saying its analysis focused entirely on demand costs and coincident peak demand, ignoring cost differences and energy loss differences related to delivery voltage levels. CCRF also argued that Consumer Advocate's analysis ignored customer costs.

ICC also supported IPL's declining-block demand rate structure and opposed Consumer Advocate's proposal. ICC noted that the LGS class accommodates a wide range of customer sizes and delivery service characteristics. ICC said the initial blocks are designed to recover customer costs (because there are no separate customer charges) and the remaining blocks are priced to reflect the cost of service differences among the members of the LGS class, which includes customers with monthly average demands ranging from 500 kW to more than 30,000 kW, served at different voltage levels. ICC noted that Consumer Advocate's analysis is limited because the focus is on LGS customer contributions to coincident peak demand and includes LGS customers that are proposed to be transferred to the general service class.

The energy efficiency messages sent by a declining-block demand rate design are less important for large customers, who have a business economic incentive to closely monitor usage and are always looking for ways to be more efficient and price competitive, whether by use of interruptible rates, TOU rates, or energy efficiency programs. While the Board understands Ag Processing's and Consumer Advocate's points about simplifying the rate design, the LGS class is so diverse that any benefits of simplification appear to be outweighed by the need to reflect what might be significant cost differences in serving a broad and diverse customer class.

The Board believes IPL's declining block kW demand rate structure most accurately reflects the costs of serving LGS customers and best serves the wide variety of customers included in the class. The Board will adopt the proposal.

Upon completion of the tariff consolidation and rate equalization process, which should be in two more steps for the LGS class, IPL is encouraged to consider pricing alternatives, such as reducing the number of demand block rates and reflecting service voltage cost differences in other ways, or some other alternative. The rate design structure presented by IPL is the most reasonable based on the record in this proceeding, but that does not mean it is the best rate design going forward after the equalization and consolidation process is complete. In future proceedings, the Board will expect more evidence about different alternatives that are available and the advantages and disadvantages of each.

The Board acknowledges that there may be a learning curve for IPC LGS customers in adapting to the changes approved here. To assist those customers, the Board will require IPL to contact and offer assistance to IPC customers in understanding the rate design changes for the LGS class. This is part of a broader communication plan/assistance program the Board will require IPL to implement to provide ongoing assistance for customers most impacted by the rate equalization and tariff consolidation process.

**B. Reactive Demand**

Reactive demand is a power quality issue and is measured in terms of power factor percentage. The greater the power factor percentage, the lower the reactive demand and the higher the power quality. IPL proposed to adopt the IES method for calculating reactive demand charges for the IPC zone. The IES method provides for greater customer pricing incentives to improve power factor percentage. These

incentives are provided through positive and negative adjustments to the customer demand charge, rather than charging a flat reactive demand rate. An analysis of a sample of LGS customers by IPL suggests that the IES method will benefit most IPC customers, although some could experience sizable increases. (Tr. 195; Ex. 2, Sch. AA). CCFR supported IPL's proposal, stating that IPC customers should have the same pricing incentive to improve power factor as IES LGS customers.

Ag Processing opposed the change, concerned about the effect on some customers and arguing the proposed charges are too high and not cost-based. Ag Processing argued that IPL should be required to study and quantify the costs associated with reactive demand before implementing this change.

The Board will approve IPL's method for calculating the reactive demand charge. IPL's analysis suggests that most IPC customers will benefit. Also, under current IPL tariffs, IPL can require customers to correct their power factors at their own expense. (Tr. 222-24). IPL's proposed reactive demand charges are therefore an alternative to the customer, not a requirement. The Board believes it is appropriate to offer customers this additional option.

### **C. Standby Service**

IPL said it intended to adopt the IES standby service provisions for its consolidated LGS tariff and continue applying the IPC version for the LGS bulk power class. The ICC opposed this change, believing the IPC standby provisions are superior to those offered in the IES zones. ICC argued that IPL should be required to file a new standby service tariff in its next rate case.

IPL agreed to file a new standby tariff in its next rate case or as a separate filing. IPL pointed out that the IPC standby service provisions are not currently used by any IPC LGS customers and by only one bulk power customer, who will continue to use the provisions uninterrupted.

Both the IPL and ICC proposals do no harm because no IPC LGS customers will be affected. The Board, in the interests of advancing tariff consolidation, will adopt the IPL proposal, but order IPL to file a new standby tariff, pursuant to its commitment, in its next equalization filing or as a separate filing.

**D. Minimum Billing Demand**

IPL proposed to adopt the IPC 50 kW minimum billing demand for all LGS customers, arguing it is more consistent with the 20,000 kWh minimum monthly usage requirement and more appropriately reflects the higher loads of LGS customers. IPL stated the change would mostly affect LGS customers who would no longer qualify for LGS rates and will be reclassified as general service customers. IPL noted the change ensures some minimum recovery of customer costs because the initial demand block rates are designed to recover LGS customer costs.

Consumer Advocate opposed the increase in minimum billing demand. Consumer Advocate said a 50 kW minimum is not cost justified and would discriminate against some customers who otherwise would qualify for LGS service.

The Board will approve IPL's change. It is consistent with the current 50 kW minimum demand requirement for new LGS customers and would generally affect only those LGS customers being transferred to general service rates, which is

discussed in subsection E, below. The change ensures that small LGS customers contribute a minimum share of LGS customer costs. Other aspects of IPL's LGS target rate design, which are not discussed in detail, will be adopted.

**E. Transfer of LGS Customers to General Service**

Approval of IPL's proposal for the LGS class completes the changes begun in Docket Nos. RPU-02-3 and RPU-02-8, where a definitional boundary was drawn between LGS and general service rates. Prior to that time, customers could move freely between the two rates, according to which rate the customer regarded as most advantageous. After the changes, IPL assigned new commercial and industrial customers to LGS rates if they consumed an average 20,000 kWh per month or more and they had an estimated demand of 50 kW or more. New commercial and industrial customers with lower usage and demand were assigned to general service rates. Existing LGS customers who did not meet the new criteria were grandfathered in the LGS class as a transitional measure; IPL in this docket proposed to complete the transition by transferring these approximately 1,400 small LGS customers to the general service class.

Consumer Advocate and CCRF both opposed in this docket the definitional changes made in Docket Nos. RPU-02-3 and RPU-02-8. Consumer Advocate proposed changing the definitional boundary between the two classes, while CCRF prefers a return to the time when customers could move freely between the two rates.

The Board is not persuaded to change the definitional criteria established in Docket Nos. RPU-02-3 and RPU-02-8 and the Board believes it is time to move

forward on the transition for the grandfathered customers. The Board is concerned that any changes in definitional criteria in this proceeding might have unintended consequences between the LGS and general service classes that have not been analyzed and could challenge the revenue neutrality concept if significant migration between classes were to occur.

Of the approximately 1,400 customers, many will benefit from the change to general service. The Board is concerned, however, that some of the customers proposed to be moved from LGS to general service will experience dramatic rate increases. In order to mitigate some of these impacts, the Board will direct IPL to identify those customers whose billing increases are projected to be less than 20 percent if transferred from current LGS rates to IPL's first-step general service rates. Those customers, who by the Board's estimate are approximately 1,100, will be transferred to the general service class.

IPL will next be directed to identify those customers (approximately 300-400) whose billing increases are projected to be 20 percent or more if they move from current LGS rates to first-step general service rates. Once these customers are identified, IPL will be required to pinpoint those customers who would receive greater increases if they instead moved from current LGS rates to first-step LGS rates and transfer those customers to the general service class. The remainder will be allowed to stay on LGS rates for one more year only and IPL, as part of the communication plan discussed earlier in this order, will be required to contact each of those customers to explain what will happen, the billing projected impacts, and any

mitigation measures that are available. These customers are to be contacted as soon as possible so that they will have the maximum time available to plan for their transfer in one year from LGS to general service rates.

**F. Conclusion on Large General Service Rates**

The Board will adopt IPL's LGS target rate design and first step LGS rates, recalibrated as necessary to reflect the changes described above. The Board expects IPL to develop an aggressive communication plan to communicate these changes to LGS customers and upcoming proposed changes in the next two steps, along with information regarding potential mitigation measures.

The changes approved are significant, particularly for those in the IPC zone, because the approved rate structure more closely mirrors the IES zones than the IPC zone, although it contains features of both. By adopting many of the provisions of the IES rate structure, fewer customers are affected because the majority of the customers and load are in the IES zones. That makes it easier to provide information and assistance to those making the transition, because there are fewer customers to assist than if the IPC rate structure had been fully adopted.

**VII. DAY AHEAD HOURLY PRICING CHANGES**

IPL asked for changes in its day ahead hourly pricing (DAHP) pilot program to correct some problems IPL has identified in periodic status reports filed with the Board. IPL concluded that the pilot inadvertently encouraged participation from customers that benefited from the DAHP pricing structure without changing their

consumption patterns, which misses the purpose of the pilot. To remedy this, IPL proposed a two-part tariff design. The first part is the customer's calculated monthly bill under the standard LGS rate, called a base charge. The second part is a comparison of the customer's actual hourly usage with its historic baseline average. The incremental charge will be applied to that day's DAHP rate, which will be added to the base LGS charge. IPL said this would ensure that customer savings are due only to changes in usage. If the changes are adopted, IPL will lift the current freeze and accept additional customers in the pilot, up to a total load of 80 MW.

CCRF opposed the changes, arguing that the proposed modifications would essentially return pilot participants to standard LGS rates and that the baseline would be continually increasing, forcing more and more usage to be shifted to take advantage of any savings. While IPL said the initial baseline would be based on discussions with the customer, CCRF said there was no procedure to challenge the baseline if there was no agreement.

The Board will approve the changes proposed by IPL, provided they do not increase IPL's overall revenue requirement. The DAHP is a pilot program only. If the Board did not allow midcourse corrections in pilot programs that are having unintended consequences, it would discourage utilities from testing new and innovative programs. Because pilot participation is optional, customers that participate may return to their standard rate if the pilot is no longer beneficial to them.

The evidence demonstrates that because of the higher LGS rates in the IES-N zone, there has been significant pilot participation. Customers have taken advantage

of the favorable pricing, but there has been little or no change in customers' usage behavior, which is the purpose of the pilot and its pricing. These customers have received a windfall and IPL has lost revenue from a pilot that is not serving its intended purpose. Based on filings in Docket No. RPU-04-1, IPL appears to have absorbed this revenue loss, not customers.

However, the Board is concerned, like CCRF, that the baseline not be a continually moving target. The Board will clarify that once the baseline is set, it can only be changed in a rate case or separate filing. Participants who change their usage patterns one year should not be punished the next by a revised baseline that continues to rise, reducing or eliminating the incentive to participate and shift load.

#### **VIII. BULK POWER CHANGES**

IPL's current bulk power rate is available to only two customers in the IPC pricing zone; these customers take service at a voltage of 69 kV or higher, with a minimum monthly demand of 25,000 kW and minimum kWh usage equivalent to about a 55 percent load factor. IPL proposed to make this tariff available in all pricing zones, with two changes. First, the minimum billing demand would increase from 25,000 kW to 60,000 kW (during the course of these proceedings, IPL reduced this to 55,000 kW). Second, a five-year contract and five-year termination notice would be required.

IPL said the purpose of raising the minimum demand level was to ensure the current composition of the bulk power class does not change, either from the addition

of new customers or loss of load due to customer-owned cogeneration. IPL proposed the five-year contract and termination requirements to avoid large, relatively sudden losses of bulk power load, which can shift costs to other customers. IPL said one bulk power customer has disclosed its intent to install cogeneration facilities.

Ag Processing proposed that the IPC LGS rate structure be adopted for IPC bulk power customers. Ag Processing also agreed with concerns raised by the ICC about changes to restrict eligibility. ICC opposed any increase in minimum monthly demand to more than 40,000 kW, noting that one existing customer would barely qualify at 60,000 kW, leaving no room for that customer to implement energy efficiency improvements. It was in response to this argument that IPL modified its proposal to only 55,000 kW of minimum monthly demand.

ICC also opposed the five-year contract and notice requirements for existing bulk power customers, pointing out that the current two customers had been on the rate for over ten years with no minimum contract or notice requirement. ICC argued that because of IPL's projected firm peak load growth, the loss of a bulk power customer would free capacity for sale to other customers. ICC alternatively suggested a one-year notice and termination requirement; it said IPL could file a rate case to cover any revenue loss in that time.

ICC disagreed with Ag Processing's proposal to consolidate the bulk power and LGS classes. ICC noted that bulk power customers have unique usage and service characteristics and no support for the change was provided.

CCRF opposed IPL's proposed changes, seeing them as a means of preventing other customers from taking advantage of bulk power rates. CCRF said there was no support for the 40,000, 55,000, or 60,000 kW minimum demand levels. CCRF also alternatively suggested one-year contract and termination provisions for both new and existing customers.

The Board believes it is appropriate to have a separate bulk power class. Although small in number, these customers have usage and voltage characteristics unlike the typical customer in the LGS class. There has been no persuasive evidence presented to combine the class with LGS.

With respect to any new tariff terms, some of the parties appeared to be trying to negotiate a new bulk power tariff through testimony. IPL is concerned about new customers entering the bulk power class and current customers leaving the class due to cogeneration. However, there is little justification presented for IPL's proposal, which appears to be results-oriented. For example, no explanation is given why the cost of serving a 25,000 kW high voltage, high load factor customer is significantly different than serving a 55,000 KW customer with similar voltage and load patterns.

The Board understands the concern with potential revenue loss if the tariff is expanded to all pricing zones. If there are significant migrations from LGS to bulk power, the goal of revenue neutrality in the tariff equalization and consolidation process could be compromised. However, because no lost revenue estimates were presented, the Board has no reasonable way of projecting what those potential impacts might be.

The Board also understands there is potential revenue loss if a current bulk power customer installs cogeneration, but dealing with that issue is outside the scope of this tariff consolidation and rate equalization proceeding. The Board will not adopt changes to the tariff in this case simply to mitigate potential cogeneration revenue loss associated with possible cogeneration. Because of the lack of support for any changes in the bulk power rate, the Board will extend the bulk power rate to make it applicable to all pricing zones, but will freeze the rate's availability to the two current customers until IPL presents an analysis of the costs and rate impacts of its proposed changes in its next rate case or rate equalization filing.

The five-year contract and termination requirements proposed are unreasonable for existing customers. The Board will adopt one-year requirements on a temporary basis; it is reasonable that IPL have some notice of these customers leaving the system or substantially reducing their loads so that IPL can take appropriate steps in a timely manner.

The Board will also require IPL to survey its LGS and bulk power customers for purposes of considering an expansion or reconstitution of the class. The survey results and any proposal to expand or reconstitute the class, including potential class cost-of-service study impacts, may be presented in IPL's next general rate case.

## **IX. LIGHTING CHANGES**

IPL said that it was unable to develop a target rate design for consolidating its lighting tariffs in time for presentation in this docket. IPL stated it would not object if

the Board ordered that a target rate design be filed as part of IPL's next rate equalization or general rate case.

In this docket, the lighting tariff changes proposed by IPL are primarily format changes and the elimination of unused tariff provisions. The equalization step IPL proposed will reduce IES-N and IPC lighting rates by about 1.2 percent and increase IES-S lighting rates by about 3.9 percent.

The lighting changes proposed by IPL are uncontested, although CCRF urged the Board to require IPL to file a target rate design and consolidated tariff for lighting in IPL's next equalization or general rate case. The Board will approve the lighting changes proposed by IPL in this docket, but will require that a target rate design and consolidated tariff for lighting be part of IPL's next equalization or general rate case filing, whichever comes first.

#### **X. TIME-OF-USE (TOU) LOST REVENUE RECOVERY**

IPL maintained the revised IPC TOU rate design it proposed will encourage greater TOU participation by IPC customers, resulting in revenue reductions for IPL. To reduce the lost revenue impact, IPL proposed adjustments to class base rates to reflect the estimated losses from shifting billing determinants from non-TOU to TOU class rates. (Exh. 2, Sch. H, P, and Z). The IPL adjustments would be paid by non-TOU class customers and updated in future equalization or rate case filings.

Ag Processing advocated that IPL use a tracking mechanism for TOU migration that includes an annual reconciliation. CCRF agreed with IPL that

increased use of TOU rates will lead to reduced revenues, but suggested IPL implement an automatic mechanism to adjust for TOU revenue erosion as it occurs. (Tr. 690-91). IPL believed that either of these two mechanisms could be administratively burdensome and difficult to implement, but IPL said it was not opposed to using the energy efficiency cost recovery (EECR) factor to flow through any over- or under-collections on an annual basis. CCRF did not object to IPL's suggestion to use the EECR for an annual reconciliation, but reserved the right to contest specific features of any recovery or reconciliation mechanism filed for approval.

In response to questions from the Board at hearing, IPL estimated that its base revenue adjustments for expected revenue loss due to TOU rate migrations would be about \$360,000. Of this amount, approximately \$110,000 would be from the residential class, \$39,000 from the general service class, and \$210,000 from LGS. (Tr. 313). IPL also said that the base rate adjustments would apply to the IPC zone residential and general service rates, and to IPC and IES-S zone LGS rates. IPL included the IES-S zone because it is planning a TOU promotion in the IES-S zone. (Tr. 314).

The lost revenue adjustment due to a planned TOU promotion is not appropriate for consideration in this proceeding because it introduces rate adjustments based on estimated changes unrelated to the rate design issues being considered. In other words, for the IES zone, lost revenue projections are due to expected migration to TOU rates because of a planned promotion of TOU rates; in

the IPC zone, lost revenue projections are due to TOU rate design changes. The lost revenue adjustment will only be considered for the IPC zone.

IPL's offer to file an annual reconciliation of estimated versus actual TOU lost revenues in its annual EECR filing appears to have resolved the lost revenue issue as litigated by the parties. The Board will allow the base rate adjustment for the limited purpose of reflecting estimated customer migrations due to TOU rate design changes in the IPC rate zone only; the adjustment will not be allowed in the IES zones because any migration and subsequent lost revenue is unrelated to the rate design changes in this case. IPL will be required to file a separate EECR proposal for annually reconciling estimated versus actual revenue changes caused by customer migrations to TOU rates in the IPC zone. Copies of IPL's proposal must be served on parties to this proceeding and parties to Docket No. EEP-02-38.

## **XI. INTERRUPTIBLE CREDITS**

IPL filed separate tariff changes on the same date as its equalization filing to implement a settlement in Docket No. EEP-02-38, IPL's energy efficiency plan docket. The proposed tariff changes involve phasing-in the equalization of IPL's interruptible credits over the same time frame as the equalization and consolidation of IPL's LGS class rates. IPL asked that these interruptible changes be implemented simultaneously with changes proposed in Docket No. RPU-05-3, the tariff consolidation and rate equalization docket. Because the changes are related, the Board consolidated the filings in the docketing order issued July 29, 2005.

The interruptible changes are unopposed and are consistent with the settlement approved by the Board on April 27, 2005, in Docket No. EEP-02-38. The Board will approve them. The changes are a revenue-neutral first step toward equalization of interruptible credits.

## **XII. FINAL OVERVIEW OF PROPOSED CHANGES**

The tariff consolidation and rate equalization decisions the Board has made are significant to all IPL customers and represent another step toward consolidation and equalization of IPL's four pricing zones. The proposed tariff sheets filed by IPL will be corrected to reflect the decisions contained in this order. Textual errors in Original Tariff Sheets 54, 55, and 61 of IPL's consolidated tariff, which were pointed out by IPL in its initial brief at page 42 and not opposed, will also be approved.

IPL noted that it faced significant administrative challenges in implementing the proposed rate design changes, particularly because of metering changes needed in the IPC pricing zone. To allow sufficient time for review of IPL's compliance tariffs, the Board will order that compliance tariffs be made effective on June 30, 2006, and will require compliance tariffs to be filed by a date that accommodates this schedule. A June 30 effective date will avoid proration difficulties in the changeover to summer season rates and will allow time for the metering changes in the IPC pricing zone. If IPL requires more time to complete its work, it may request an extension. However, the Board expects that IPL will use its best efforts to file compliance tariffs in sufficient time for the review process to be completed by June 30, 2006, so that the

equalization process continues to move forward at the pace anticipated by the Board, and the parties, as a result of the final order in Docket No. RPU-04-1.

Finally, to facilitate review of the compliance tariffs, IPL will be required to file “Revenue Verification—frequency summaries” with its compliance tariffs. The verification will be required in both hard copy and electronic format and should be similar to what IPL filed with its compliance tariffs in Docket No. RPU-04-1.

### **XIII. FINDINGS OF FACT**

Based on a thorough review of the entire record in these proceedings, the Board makes the following findings of fact:

1. It is unreasonable in this proceeding to realign customer class revenues and reasonable to preserve the same class revenue relationships established in prior proceedings.
2. It is reasonable, in order to preserve revenue neutrality in this proceeding, to adopt IPL’s proposal to transfer the Docket No. RPU-04-1 billing determinants and revenues of reclassified customers from their old classes to their new customer classes.
3. It is reasonable to adopt a flat summer energy rate target rate design for residential customers, as proposed by Consumer Advocate, and the winter three-step declining-block target rate design proposed by IPL.
4. It is reasonable to adopt IPL’s \$10.50 target residential customer charge and all other aspects of IPL’s residential target rate design.

5. It is reasonable for IPL to phase-in the flat summer energy rate residential target rate design, relatively evenly over all steps of the residential equalization process, and to recalibrate its first step residential rate proposals accordingly.

6. It is reasonable to transfer grandfathered non-qualifying LGS customers to general service as proposed by IPL, with the transfer of LGS customers revised as described in the body of this order.

7. It is reasonable to allow remaining non-qualifying LGS customers to remain on LGS rates for no more than one year before also being transferred to general service in IPL's next equalization filing.

8. It is reasonable to adopt IPL's general service target rate design, recalibrated as necessary to reflect the revised transfer of grandfathered LGS customers to general service.

9. It is reasonable for IPL to phase-in its general service target rate design changes relatively evenly for the four general service rate groups identified in the body of this order (IPC kW/kWh general service, IES-SE general service, IPC three-phase farm, and IPC municipal pumping), and to recalibrate its first step rate proposals as necessary to reflect these changes and the revised transfer of grandfathered LGS customers to general service.

10. It is reasonable to adopt IPL's LGS target rate design and first step rate proposals, recalibrated as necessary to reflect the revised transfer of grandfathered LGS customers to general service.

11. It is reasonable to apply the IES zone reactive demand charges to LGS customers in the IPC zone.

12. It is reasonable to apply the IES zone standby service provisions to LGS customers in the IPC zone and to require IPL to file a new standby service tariff, as proposed, in its next equalization filing or as a separate filing.

13. It is reasonable to allow IPL to make its proposed changes to the Day Ahead Hourly Pricing pilot program, as long as its overall revenue requirement is not increased.

14. It is reasonable to change customers' baseline usage amounts for the Day Ahead Hourly Pricing program only in the context of a rate case or separate filing.

15. It is reasonable to extend the bulk power rate to all pricing zones, but freeze the rate's availability to the two current bulk power customers until additional analysis on cost and rate impacts is presented.

16. It is reasonable to adopt a one-year contract and one-year termination notice for bulk power on a temporary basis.

17. It is reasonable to approve IPL's proposed lighting class changes and to require IPL to propose a target rate design and consolidated tariff for lighting in its next equalization or general rate case.

18. A rate base adjustment for the limited purpose of reflecting estimated customer migrations due to TOU rate design changes in the IPC rate zone only is reasonable; it is unreasonable to allow this adjustment in any other rate zone.

19. It is reasonable to require IPL to file a separate EECR proposal for annually reconciling estimated versus actual revenue changes caused by customer migrations to TOU rates in the IPC zone.

20. IPL's first-step equalization of interruptible credits is reasonable.

21. Proposed tariff sheets filed by IPL are reasonable, corrected as necessary to reflect the decisions in this order.

22. It is reasonable to correct textual errors in Original Tariff Sheets 54, 55, and 61.

### **XIII. CONCLUSIONS OF LAW**

The Board has jurisdiction of the parties and the subject matter in this proceeding, pursuant to Iowa Code chapter 476 (2005).

### **XV. ORDERING CLAUSES**

#### **IT IS THEREFORE ORDERED:**

1. Tariff filing TF-05-211 is rejected and Interstate Power and Light Company is directed to file compliance tariffs consistent with this order within 20 days of the date of this order, with an effective date of the proposed compliance tariffs of June 30, 2006. IPL shall include with its compliance tariff filing a "Revenue Verification—frequency summaries" in electronic and hardcopy format.

2. IPL shall develop and implement a communications plan for all customers to communicate changes made in this order and additional changes planned in the remaining equalization steps for their respective customer classes,

including information regarding potential mitigation measures. Among other things, the plan shall provide specific education and outreach to IPC LGS customers on declining block rates and outreach to general service customers in the four frozen rate groups. As part of the plan, IPL must also, as soon as practical, contact each customer allowed to remain grandfathered in LGS rates for one year for the purpose of explaining what will happen, bill impacts, and mitigation measures that are available. Within 90 days of the date of this order, IPL shall file its plan and detail the measures it has taken and will take to implement the plan; the Board expects that much of the plan will be at least partially implemented within the 90 days, particularly for grandfathered customers.

3. IPL shall conduct a survey of its LGS and bulk power customers for purposes of considering an expansion or reconstitution of the class in IPL's next rate case.

4. IPL shall file a target rate design and consolidated tariff for lighting as part of its next equalization or general rate case, whichever comes first.

5. IPL shall file as soon as practical a separate EECR proposal for annually reconciling estimated versus actual revenue changes caused by customer migrations to TOU rates in the IPC zone. Copies of the proposal shall be served by IPL on parties to this proceeding and Docket No. EEP-02-38.

6. Motions and objections not previously granted or sustained are denied or overruled. Any argument in the briefs not specifically addressed in this order is

rejected either as not supported by the evidence or as not being of sufficient  
persuasiveness to warrant comments.

**UTILITIES BOARD**

/s/ John R. Norris

/s/ Diane Munns

ATTEST:

/s/ Judi K. Cooper  
Executive Secretary

/s/ Curtis W. Stamp

Dated at Des Moines, Iowa, this 28<sup>th</sup> day of April, 2006.