Printed by Boston Edison Company
for the Information of Customers and Employees

The Commonwealth of Massachusetts

DEPARTMENT OF PUBLIC UTILITIES

DPU 8862 March 4, 1953.

Investigation by the Department upon its own motion as to the propriety of schedules identified as Supplements 2, 3 and 4 to M. D. P. U. No. 54 and proposing amended "Terms and Conditions applicable to all rates for Electric Service," filed on November 22, 1949, to become effective January 1, 1950, by Boston Edison Company.

APPEARANCES: Frederick Manley Ives, Esq., for Boston Edison Company

Edward O. Proctor, Esq., for the First Realty Trust

Max R. Kargman, Esq., pro se

Loring P. Jordan, Jr., Esq., for Quaker Building Corporation

William F. Byrne, Esq., for Building Owners & Managers Association

John R. McVey, Esq., *vice* John F. Hurley, Esq., for Boston Housing Authority

Paul C. Reardon, Esq., for Longwood Towers

Joseph W. Mulhern, Esq., for A. W. Perry, Inc. and State Airport Management Board

Edward McGrath, for State Airport Management Board

Ernest W. Dullea, Esq., Counsel for State Airport Management Board

Charles M. McCue, Esq., for Public Housing Administration

Boston Edison Company has filed new schedules identified as Supplements Nos. 2, 3 and 4 to M. D. P. U. No. 54, amending Sheets 3 and 4 thereof in certain respects as hereinafter set forth. In effect they declare that Edison will not furnish electric current of any description after six months from the effective date which is to be resold by the purchaser. The effective date of the application of these provisions was suspended by order of the Department, which then entered upon an investigation thereof on its own motion. It proved to be impracticable to complete the hearings and adjudication of this matter within the ten months limited by section 94 of G. L., chapter 164, and Edison waived such limitation, permitting the suspension to remain in effect until the present.

1. HISTORY

In order to understand fully the nature of the matters here before us, it is necessary to outline briefly the background behind them.

The practices which are the subject of this investigation were commenced many years ago by Edison in order to discourage competition within its territory and to expand its activities. We do not find anything inherently wrong in this ambition. *Boston* v. *Edison Electric Electric Illuminating Co.*, 242 Mass. 305. In 1912, there were about 500 privately owned electric generating plants in Edison's territory. Some of these plants served factories or similar locations. But another type furnished power to the tenants of a given building or to a group of buildings within a city block, and from these

plants grew Edison's present troubles. Edison negotiated with the owners of these plants to accomplish their abandonment and in some cases in order to accomplish this result arranged to sell the building owners electricity in bulk, recognizing that they were in turn planning to resell this current to their tenants. Edison's rate schedule is so designed that the revenue to Edison per kilowatt hour decreases with increased use, and also so that the unit price of electricity to a given customer decreases as his load factor increases. In the normal course, the load factor of a group of customers is better than for any of the customers individually.

For these reasons, the building owners could afford to purchase current from Edison in large blocks and resell in relatively small blocks to their tenants at Edison's own rates. The spread between the unit price to the building owner and the unit price to the tenant was substantial and resulted in considerable room for profit to these middlemen. This spread is the result of so-called step rates which are in Edison's rate schedules today, and are normal and customary features of practically all electric utility schedules. They will in nearly all cases result in a lower price per unit for a larger number of units. This was a useful device during the development period and is still generally regarded as sound rate-making.

Edison was successful in its efforts to buy out almost all of these competitors, or otherwise to persuade them to take its service and abandon the private generating stations, but it created a Frankenstein's monster in the process. In 1923, a survey by the Company disclosed 200 customers engaged in resale. At this time, the Company looked upon the practice as a necessary evil. But about 1930, a new survey indicated that the practice was increasing to the point where it was beginning to have a detrimental effect upon Edison's revenues. Some enterprising individuals at about this time were even offering to Edison's customers a rate for current lower than Edison's rates if they would contract under a resale arrangement. As the result of this tendency and upon the recommendation of one A. S. Knight, a rate expert to whom the problem had been referred for study, on December 1, 1930, Edison circularized those of its customers whom it knew to be engaged in non-tenant resale, advising them that further extensions of the practice were no longer permitted, and that Edison was seriously considering forbidding all such resale.

In 1930 or 1931 there was a flurry of applications for changes in existing service where Edison was then selling direct so as to sell through the landlord. In the nine locations in which such change was made in this period, Edison was receiving $95,939 yearly in gross revenues prior to the change-over, and received $23,086 less than such amount thereafter. In 1937, after notice to the persons affected, Edison stopped the practice which it had theretofore followed of renting, servicing and reading metering equipment located on the premises of sub-distributors. Edison was then renting 947 such meters to some 80 customers, but there may have been and probably were many more such items in service owned by these or other sub-meterers.

There was no limitation in Edison's tariffs specifically providing that electricity would not be furnished for resale purposes until December 1937, at which time a partial restriction was filed, which did not, however, affect the customers taking service, under certain schedules. Edison's sales force was, however, instructed from time to time to discourage all resale arrangements, and its official policy from about 1930 on and until and after January 1, 1948, was to make such contracts only where it could not, for one reason or another avoid it.

In 1947, A. W. Perry, Inc. brought proceedings under section 92A of chapter 164 of the General Laws to compel Boston Edison Company to supply it with alternating current electricity. It appeared that Perry wanted such an order so as to enable it to resell, re-meter or sub-meter (as the practice is variously termed) this current to its own tenants and to other customers in the same city block within which Perry was located. We refused to enter such an order after full hearing (D. P. U. 7697) on the various grounds specified in our findings, and dismissed the petition.

On December 17, 1947, Edison filed, to become effective January 1, 1948, a new paragraph 17 of its Terms and Conditions Applicable to All Rates for Electric Service, under which it stated that it would refuse thereafter to furnish current for resale to anyone except to the extent it was doing so already. In effect, this provision "froze" the availability of current for use for this purpose as of that

date. It further gave notice that it was its intention to stop all resale after six months thereafter, except under rate schedules specifically designed for that purpose.

Subsequent to the Perry decision, which was entered on October 31, 1947, Boston Edison Company first considered a complete prohibition of resale. After much intra-company discussion, however, it decided not to file such a provision at that time, but instead it designed and filed a new rate schedule stated therein to be applicable to only persons desiring to resell current to their tenants under the exception contained at the end of paragraph 17 as theretofore filed. The existing prohibition against resale of Edison's current to persons other than the tenants of its customers was explicitly retained. The application of this rate schedule was suspended by the Department and an order entered, after rather exhaustive analysis of the facts and the law, which in effect held that the use to which the current was to be put by the customer was not a proper basis for a rate classification in the absence of any other distinguishing characteristics, and that the proposed rate schedule was improper. *Re Boston Edison Company*, D. P. U. 8228.

Edison, apparently feeling that the problems posed by Perry in D. P. U. 7697 were still important to it and that, since the Department felt that a compromise such as was in issue in D. P. U. 8228 was unlawful, it must either reconcile itself to an untrammeled expansion of the resale practice or else put an end to it once and for all, proceeded along the latter path.

The proposed regulations governing resale which are now under suspension and investigation provide as follows:

1: To amend paragraph 7 of Edison's Terms and Conditions to provide for "series" metering, i.e., an arrangement whereby a master meter measures all current coming into a building, behind which are separate meters for each tenant, the bill for the owner's use being arrived at by a process of subtraction.

2: To amend paragraph 18 of Edison's Terms and Conditions to restrict metered resale after six months following the effective date to (a) other utilities, (b) special contract customers and (c) customers to whom Edison lawfully is directed by the Department to furnish service in accordance with G. L., Chap. 164, Sec. 92 and 92A.

3: To amend paragraph 19 of Edison's Terms and Conditions to restrict resale where no specific charge is made for electric service and where the charge does not depend on use to (a) special contract customers, (b) customers to whom Edison is lawfully directed by the Department to furnish service in accordance with G.L. Chapter 164, Sec. 92 and 92A, (c) Rate B (Residences) and Rate C (Apartment House) customers and (d) customers whose use is minor, intermittent or impracticable to sever from the sub-meterer's use.

In arriving at a decision to prohibit submetering, Edison's officials gave consideration to the effect of such action on the real estate market, the loss which might result to the building owners, the possible expense to which such landlords might be put in re-wiring their premises, and the possibility that they might decide to install private generating plants as the result of this prohibition. In general, the economics inherent in generation of large quantities of electricity such as Edison manufactures are adequate to enable Edison to meet the competition of private plants. Edison's management has concluded that few, if any, building managers can manufacture power and distribute to tenants at a rate which will meet Edison's rates, and still make a profit.

In the meantime, and on September 27, 1949, Max R. Kargman et al, d/b/a The First Realty Co., filed a petition for an order directing Edison to furnish it with alternating current for resale to their tenants at No. 18 Tremont Street, Boston. This was docketed in D. P. U. 8787, and a separate order is being entered therein on the facts stated there and in this opinion. The same individuals thereafter filed another petition docketed as D. P. U. 8886, in which they pose a situation identical with that presented in the *Perry* case, D. P. U. 7697 and, in effect, ask us to reverse ourselves. A separate order is being entered in this proceeding, also. All three proceedings were heard jointly and various motions to sever were denied in the course of the hearings.

The transcript of the hearings in D. P. U. 8228 encompassed some 2160 pages of testimony and was accompanied by 92 exhibits. The Department was engaged in hearings in that matter on 23 days.

The transcript of the instant hearing covers 2097 pages and is supplemented by some 98 exhibits. The hearings consumed all or a large portion of 25 days. A very large portion of the ground covered in the hearings in D. P. U. 8228 is covered by the instant proceedings and a large portion of the testimony in the first case is duplicated in the second. We regret the apparent necessity for also duplicating our own lengthy findings on identical evidence, but see no escape for it if a complete record of findings of fact is to be presented for review. We doubt very seriously that many situations have ever had the thorough and extended consideration that this one has in the course of three separate, stubbornly fought and protracted hearings. Certainly no facts or arguments that would help either side have been ignored by the able battery of counsel in this case.

2. EDISON'S FINANCIAL SITUATION

As of December 31, 1949, Boston Edison Company served 471,716 customers' meters in Boston and thirty-nine nearby towns and cities in a territory covering some 600 square miles. Its rates to any given class of customers are uniform throughout its territory. It had a gross electric plant investment as of December 31, 1949, of $239,156,443, subject to a depreciation reserve of $60,952,154. The then outstanding securities of the company included $61,716,400 in par value of common stock on which $41,105,947.45 had been paid as premiums, and $72,321,000 in long-term debt. Its income statement for 1949 showed a balance transferable to profit and loss of $7,172,367. It had a total profit and loss surplus of $10,304,015 on December 31, 1949. Dividends paid during the year 1949 totaled $6,912,230 and were at the rate of $2.80 annually or 11.2 per cent on its stock and 6.72 per cent on its stock and premium. Gross earnings of $9,727,155 for 1949 represented a return of slightly over 5.45 per cent on plant account less depreciation.

Edison's equity securities are selling on the market to yield slightly over six per cent. Its current debt ratio of about 41.3 per cent indicates strongly that it is going to be required to float equity securities if it needs additional capital and hence that it is important that the Department cooperate with the management of Edison so far as the public interest permits in its endeavor to maintain the company in a strong financial condition. See G.L., Chap. 164, Sec. 13; *New Eng. Tel. & Tel. Co.* v. *Dept. Pub. Util.*, 327 Mass. 81.

Edison does not now contemplate any such offering of equity securities, and is of the opinion that it can carry through its present expansion program without such money. We feel it is our duty not so to undermine investor confidence in the company, however, that it will be unable to call upon such capital if conditions should change.

We find that the company is in sound financial condition and that its earnings in 1949 were adequate to maintain its credit and the necessary confidence of investors in its securities.

Edison's total sales in 1949 under all of its various rate schedules amounted to 2,604,012,280 kilowatt hours. Its total electric operating expenses (before taxes or interest) were $39,665,295. Its average cost per kilowatt hour on this basis was, therefore, 1.52 cents. In 1949, it sold 1,015,724,891 kilowatt hours to other electric companies and to various municipal electric departments at an average revenue per kilowatt hour of .9907 cents. It purchased 178,717,009 kilowatt hours of current during 1949 from other generating sources (principally New England Power Company, a hydro-generating company) at an average cost per kilowatt hour of 1.0491 cents. It is not correct, however, to deduce from this that Edison was selling power to other electric companies at less than cost to it, and we do not find this to be the fact. Electric operating expenses include costs of distribution, utilization, new business, general office and all other operating costs. The cost at the bus bar, i.e., generating costs alone, for all current generated in 1949 was .744 cents per kilowatt hour. Its purchases from other companies were for peaking purposes, having no backlog of steady load to cut the cost of such power. Its sales to other companies were firm sales having a fairly constant demand and a reasonable load factor. The characteristics of the electric business, from an accounting standpoint, are peculiar in this respect, due to the fundamental fact that electric current may not be stored for future use, but must be generated as used. This fact carries with it many results, accounting-wise, which makes it impossible to draw the conclusion that Edison is selling wholesale at a loss.

3. EFFECT OF RESALE ON EDISON'S FINANCES

Edison quite properly felt impelled to act both promptly and decisively after the *Perry* case (D.P.U. 7697) and the Rate R case (D.P.U. 8228). In the fifteen months ending November, 1947, there were at least eleven substantial customers of Edison who had demanded and had received the right to resell current in their premises. Edison could not refuse to do so without proper tariff restrictions. *Main Realty Co.* v. *Blackstone Valley Gas & Electric Co.*, 59 R.I. 29.

It is urged by Edison that the practice of resale of electricity was and is detrimental to the finances of the Edison Company and accordingly to the disadvantage of its other customers. This is the fundamental reason for the attitude which Edison has taken toward resale and is the basis upon which it claims the right to file the provisions now before us. We find that this contention of Edison is true. It was maintained by Edison's witnesses that its cost of supplying current in the congested downtown areas in Boston is less per customer than the cost in the balance of its system, and hence that the submeterers were taking the cream of Edison's business. This assertion was not supported by any cost studies. The expert for the building owners was of a contrary opinion, which was also unsupported by any cost data. Without pretending to be experts in cost analysis, it would seem to us that studies of this nature should be available and should have been placed in evidence. Faced, as we are here, by the necessity of deciding between contrary opinions of eminent and qualified witnesses, it is difficult for us to make a respectable finding. It is true that Edison should be and was required to bear the burden of proof in these proceedings. However, an opinion as to the costs is essentially a statement of fact which, when made by competent, qualified persons as to matters under their direct supervision, at least requires negation by something more than a contrary statement. We find that the cost per unit of supplying current to the areas in which resale is prevalent is less than the cost per unit in other areas in Edison's territory.

Since the practice of resale has been very largely confined to crowded business areas in Boston, where the costs are thus found to be lowest, the lower resulting net revenue per customer to the Edison Company in serving resale customers has to be made up at the expense of other users not taking service under these conditions. For the law requires, with but a few inapplicable qualifications, that this Department permit any utility to collect charges from the aggregate of its customers sufficient to cover all of its costs and leave a profit sufficient to assure confidence in the financial integrity of the enterprise so as to maintain its credit and attract new capital. They must yield a fair return on the aggregate value of all the property employed by the utility in the public service after paying costs and carrying charges. *Lowell Gas Company* v. *Department of Public Utilities*, 324 Mass. 80; *New England Telephone & Telegraph Co.* v. *Department of Public Utilities*, 327 Mass. 81. And, obviously, the lower the revenue per unit sold to one class of consumer, the higher must be the revenue per unit from the balance of the consumers.

At the time of the hearing in D.P.U. 8228 in 1947, there were about 161 building owners buying current from Edison at the D-1 Rate who were reselling direct current to about 8,000 tenants, though in many of such cases, the amount of resale was relatively negligible. There were about 33 more such customers who purchased current at other rates, usually the Industrial G-1 Rate, and which were reselling to about 841 tenants. About 40 other customers were purchasing electricity at various rates, usually the D-1 Rate, and who were reselling current to about 1549 consumers, some of whom were non-tenants of Edison's customers. There were then seven housing developments in operation involving some 4826 dwelling units where the Housing Authorities were then purchasing under either the so-called D-2 or special contract rates and reselling the current to their tenants.

As of October 31, 1949, Edison had knowledge of about 156 locations at which its customers took current under its Rate Schedule D-1 and resold substantial portions to their respective tenants. The estimated number of tenants in these buildings runs from 5756 to 6487. Most of them are commercial office buildings, though there are some tenants engaged in light manufacturing and other businesses, and there are included several residential apartment houses. Most of these customers were served by direct current, but there were a substantial number served by alternating current or by both AC and DC. At the same time there were 34 customers on the G-1 or other rates except D-1 whom Edison knew to be reselling current to an estimated 959 tenants. In addition, Edison had knowledge of 33 locations at

which it furnished current, principally at D-1 rates, from which current was resold to non-tenants, and in most cases to tenants as well. In so far as the information could be obtained, this involved some 1363 ultimate consumers, tenants and non-tenants.

There were 11 locations at which Edison's customers discontinued service from Edison direct between August 1, 1946, and November 17, 1947, and took service through a submetering tenant resale arrangement. The revenue to Edison from nine of these locations during the 12-month period ending with the change-over totaled about $75,167 at an average revenue per kilowatt hour of about 4.74 cents. During the next year after the change to resale was effective, the total revenue to Edison from these locations amounted to about $56,629, or an average revenue per kilowatt hour of about 3.09 cents. Thus, Edison lost from its gross revenues in the nine cases noted, 1.65 cents per kilowatt by this change-over or about 34.8 per cent of the revenue it had previously derived from these locations.

Data collected for the year 1949 by the Building Owners Association covering 72 fairly representative locations of various types in Boston at which resale was practiced, some to tenants only and some to tenants and non-tenants, showed that these landlords paid Edison a total of $1,009,172 for 37,681,301 kilowatt hours of current at an average price of 2.67 cents per kwh. These building owners, in turn, sold 28,204,207 kwh or 74.5 per cent of their purchases to their tenants for $1,246,608, or at an average price of 4.42 cents, and increase of 65 per cent over the average purchase price. This indicates that an average of about 25.5 per cent of the power purchased was used for building purposes, such as elevators, building lighting, etc., for which the cost to the landlords was from zero or less than zero to a fraction of a cent per kilowatt hour. If resale is abolished, the estimated cost of current to a building owner for their own use will be about 3.6 cents per kilowatt hour, on an estimated average annual building use of 175,000 kilowatt hours.

Edison estimated in 1948 on the data then available that if all of the ultimate consumers who were then known to be purchasing current through a submeterer were purchasing direct from Edison, it would mean an increase in Edison's gross revenues of $1,017,950. On the basis of present data, this figure is $1,056,152. These estimates have been arrived at by using only those situations, some 156 in number, where the circumstances are such as to avoid distortion of the estimate. They do not include those customers engaged in non-tenant resale many of whom are so special in character that their inclusion might distort the estimate. They assume that the customers of the present submeterers would all take direct from Edison under the A Rate and that none of the buildings in question would install their own private plants. These are reasonable assumptions to make in an estimate of this nature. There is no doubt but that there would be more than this number of additional customers who will take direct from Edison, if resale is discontinued. On the other hand, there is no evidence that this is not a fair sample or that the addition of other customers will not bring in at least sufficient additional revenue so that the net effect on Edison's earning picture will be still more favorable.

We find that the effect to Edison of the proposed prohibition against reselling would be to increase its gross revenues by not less than $1,056,152. Income at the D-1 Rate at these locations is about $1,755,606 per annum. The income to Edison per kilowatt hour on the D-1 Rate amounts to about 2.77 cents. Under the proposed arrangement, it would be about 4.32 cents. This indicates an increase in Edison's gross revenues from these locations under the instant proposal of about 60.2 per cent.

The expert testifying for the building owners came to a rather different conclusion. He estimated that the difference in revenue to the various submeterers as between the present situation and that under Edison's proposal would be about $2,360,000 a year. He gave an even higher figure of over $3,000,000 a year under certain postulates. In certain ways, his estimate appears worthy of respect. He had the advantage, for example, of important data which were not available to Edison. As we see it, what the real figure is or may be found to be does not greatly matter. It is enough that it is very substantial. As we said in the *Perry* case, D.P.U. 7697: "This Department would consider a request of Edison for $1,000,000 additional gross revenue per year as a major item on its calendar." That this controversy may involve as much as $2,360,000 a year or more only makes us the more eager to see that the public interest is adequately protected. In this quarrel between a great utility on the one hand and large real estate operators on the other, we find no difficulty in confining our interest to the position of the general public.

There is some evidence that some landlords in downtown Boston furnish electricity to their tenants without making a specific charge for it. This practice, known as rent inclusion, is also met with in numerous other situations, such as sub-leases of desk space, rental or concessionaire space, etc. Edison has attempted to meet some of the problems of this nature by the exceptions to the proposed paragraphs 18 and 19. It contemplates, however, that the practice of rent inclusion in general will be abolished along with the prohibition against metered sales. This proposal will be discussed later in these findings.

4. EDISON'S LETTER OF JULY 27, 1948

On July 27, 1948, the president of Boston Edison Company addressed a letter to the Department reading as follows:

> "In connection with the suspension proceeding, dockets D.P.U. 8228, which involves proposed rates and regulations of this Company governing the resale and redistribution of electricity by its customers, I am pleased to answer your inquiry and to state that it is the Company's intention, upon which the Department may rely, to devote the proceeds of any recovery, which may result from a discontinuance or curtailment of the resale or redistribution activities of its customers, for the benefit of those customers who take service under the residence rates, unless the Department should request a different use."

As we found in D.P.U. 8228, and as we find here, this letter was interpreted by both Edison and the Department to mean, and was intended to mean that Edison would, from time to time and as the Department ordered or unless it otherwise ordered, lower or maintain the level of its Residence B rates in such a manner that, if M.D.P.U. 55 (Rate R) had been allowed or if reduction of the practice of submetering was accomplished in any other way, the net revenues of Edison would remain unaffected. At the hearings in the instant case, this stand of the company was reaffirmed. It stated that it considered itself as bound at the present time by the commitments of that letter. In other words, Edison's net earnings are not going to be increased in any way by our decision in these proceedings.

This letter seemed to be particularly annoying to the protestants in these proceedings. Edison's proposal as contained therein was variously and picturesquely described from time to time during the hearings. The argument generally seemed to be that such a shift in revenues could not be justified except on the basis of cost studies demonstrating that the existing level of the rates concerned was improper. Dr. Maltbie, an expert produced by the landlords here, was critical of the situation presented by this letter, though the force of his testimony was considerably vitiated when it became apparent that he had not been informed of its terms prior to the hearing. It furthermore appeared that the attitude of the Department as expressed in its inquiry and the fundamental sense of Edison's reply were thoroughly consistent with the manner in which the witness dealt with a similar situation when he was chairman of the New York Commission.

However, it was admitted that there was no reason why the Department should not ask for a statement of the intentions of Edison in this regard, or why Edison should not reply to such request. It was also admitted that Edison would be quite right in filing tariffs providing for a reduction in its residential rates if its net revenues became over-generous, and that we would not be expected to suspend such rates or demand that a cost study or any other supporting data be filed with it to substantiate such schedules. It is, moreover, within our power to require that such cost studies or any other data which we believe to be relevant be submitted to us in connection with our determination as to the proper steps to be taken when the effects of Edison's instant proposals appear in its earnings statement. It seems to us that Edison replied to the Department's inquiry with a pledge that it was not seeking, by the Rate R suggestion or by the present suggestion, to increase its earnings, and we think too little emphasis has been given to the words, which to us seem very important: "... unless the Department shall request a different use." Whether Edison is going to modify its Residential Rate B or some other rate or all of its rates is going to be a matter in which this Department will have a substantial voice, which we intend to use. Consequently, we believe that the criticisms voiced at the hearing and in the briefs as to this letter have little substance.

It is quite apparent that Edison felt, as we have very often stated, that no utility could appear before us with any proposal which might increase its earnings without either proving to us that its financial position was such as to justify it in such request or providing for a readjustment of its situation in such a way as to avoid any increase in its net. See *Re Hudson Bus Lines*, D.P.U. 8666, 9031. Edison is pursuing the latter course in these proceedings. We believe we have the power to decide at any time whether any class of consumer is receiving treatment by a utility which is inequitable from the standpoint of the general public and to remedy this situation if it exists. See G.L., Ch. 164, Sec. 93. We further believe that we have power to determine, upon the basis of the commitments of the utility which we believe we can enforce and police, that such action will not increase its net revenues. We believe we need not open up the entire earnings picture of the Company in its rate structure in the course of such investigation. *Re Boston Edison Company*, D.P.U. 8228.

Whether Edison is in such financial condition that there is little or no danger that it will apply in the near future for increases in its rates seems to us to be immaterial. If this be true, then the increase in Edison's earnings which would result from prohibiting resale would justify the Department in insisting upon a reduction in rates whether or not Edison had previously so committed itself to the Department. And if this be not true, then we should be doubly careful that all possible inequities in Edison's rate schedules be eliminated before a general rate increase is applied for. And we feel obliged to keep in mind that the threat of the inflationary spiral to electric rates is no chimera. We are afraid that this industry in general and Edison in particular cannot continue forever to escape the forces which are reflected in practically all other prices which the public is paying for services or commodities. We believe it is our duty to assist Edison or any other utility in its efforts to avoid such a contingency, not to hinder it. And for the same reason, it does not seem to us to be material whether or not the estimates before us of the revenue effect upon Edison of the proposed regulations are strictly accurate. It is enough for us to find, as we have and do, that these revenue effects will not be inconsiderable.

5. EFFECT OF RESALE UPON CONSUMERS

Generally speaking, the tenants are buying from submeters at the same rates that Edison would apply under its rate schedules. There is no assurance that higher rates might not be collected as the building owners may need additional income for their general purposes. Unless the building so furnishing current is held to be an electric company under G.L., Chapter 164, the tenant is at the untrammeled mercy of his landlord in this respect. There is nothing in the history of the law of landlord and tenant that would indicate any reluctance on the part of the landlord to take advantage of this situation. It is equally true that one tenant may be able to buy current from his landlord at a discount and thus be the recipient of favors which Edison could not legally grant him. Though none of the landlords admit charging more than Edison rates, they do admit giving discounts in some locations for one reason or another.

There are about fifty cases in which about ten building owners sell to their tenants on a flat rate basis, i.e., the tenants pay a certain amount per month for electricity regardless of their actual usage. In still other locations, a group of tenants are sold current in bulk, the price of which they split among themselves under personal agreement. In short, as might be expected in the absence of regulation, there is no protection available to any user of electricity against overcharges, undue discrimination or any of the other evils that go with unfettered monopoly. To our minds, the building owner who supplies electric current to his tenant is operating as much of a monopoly as is Edison in furnishing current to its customers, and he is presently operating it without control or supervision.

It appears that, as billing is handled by some landlords, tenants having space on more than one floor may receive combined bills on their various meters, a practice which is not employed under either the present or proposed paragraph 7 of Edison's Terms and Conditions. We believe that this complaint is part of the larger problem, as to whether any person is entitled to service within Edison's territory at a different rate or under different operating practices than is another comparable person. We do not think so, and if the result of Edison's proposal is to increase electric rates to some persons who have been receiving special treatment by their landlords, we believe that result to be proper and sound.

6. RESALE FROM A REGULATORY STANDPOINT.

We held in the Perry case that: "As was pointed out in *Sixty-seven South Munn v. Public Service Electric & Gas Co.*, 106 N.J.L. 45, cer. den. 283 U.S. 828, and as Edison's witnesses testified, there is nothing to prevent an extension of this practice of resale to the point where each business block in the city would be furnished current by its own retailer which might so adversely affect Edison's revenues as to require revision of its rates to the detriment of its ordinary customers." We also pointed out there that we saw no logical reason for differentiation in treatment of customers depending upon whether they were served by alternating or direct current, and that, absent such differentiation, it would be difficult, if not impossible, for Edison to confine non-tenant resale to the present DC areas of Boston. We found that Perry is competing with Edison in the sale and distribution of electricity within the city of Boston. We make the same findings as to the building owners in the instant case who are reselling to their tenants or to non-tenants.

There is no question but that the landlords make a substantial profit under Edison's present resale provisions. The result is, of course, that an office building which receives this revenue needs just so much less revenue from rentals, and is in a superior competitive position in the struggle for tenants. The petitioners in D.P.U. 8787 frankly admit this in their brief. The important thing for us to note is that we find that this superior position is subsidized by Edison at the expense of its rate-payers generally.

The extent to which the resale practice can go and some of the difficulties with which we are faced are illustrated by the situation at Logan Airport in East Boston, where the Airport Management Board is buying current from Edison, apparently at its D High-Tension Rate. The Board is reselling this current to many concessionaires and airlines who occupy stores, offices and hangars on the field. Logan Airport is a very large project extending over many acres of land. We feel that the tenants of the Airport are entitled to the same recourse to the Department against misuse of monopolistic powers as are any other persons in Boston. Yet, we cannot visualize ourselves in the position of attempting to assume jurisdiction over the Airport Management, a corollary branch of the government of the Commonwealth.

There was considerable controversy at the hearings over the treatment accorded submetering in our neighboring jurisdiction of New York. The Building Owners Association sought to lay this controversy at rest by retaining the former chairman of the New York commission as an expert witness. While his testimony is entitled to and has been given the utmost respect by this Department as coming from a very eminent and experienced source, we are in the end compelled respectfully to differ with him for two reasons.

In the first place, Dr. Maltbie based his entire testimony upon his understanding of the law of Massachusetts to the effect that this Department has jurisdiction to control the rates and practices of submeterers. He stated that, in New York, the Public Service Commission was specifically deprived of such jurisdiction, that it had had many complaints as to unfair treatment of tenants by submeterers which it was thus unable to remedy and that he considered that the power which he had been informed was so vested in our Department would enable us adequately to control submetering from the public standpoint. The trouble with the hypothesis assumed by Dr. Maltbie is that it postulates that the landlords are electric companies. We have no jurisdiction over anything else. If this is so, then they are plainly competing with Edison within its territory, and we have already held that we will not compel Edison to sell current to a competing organization (*Re A. W. Perry, Inc.*, D.P.U. 7697). And the results which would accrue if we were to permit the establishment of hundreds of little electric companies within the city of Boston are appalling. We have for many years maintained that we must confine the profit of an electric company to a reasonable return upon its investment in utility property. If each building in downtown Boston is permitted to become and remain a separate electric company, obviously the rates in each building will differ according to its peculiar investment, and what will result will be little short of chaos. We are not prepared to permit this to happen. The fact that we have never assumed the jurisdiction which is thus granted us has no bearing on the case. The situation has been brought to our attention, and we do not feel we can close our eyes to it from now on.

In the second place, we are no longer left in doubt as to the position of the regulatory authority in our sister state. In a long, detailed and able opinion in Case No. 14279, handed down on July 25, 1951, as a part of the very important *Consolidated Edison* case, the New York Commission made the following statement:

> "Essentially, the practice of submetering is parasitic and undesirable. The unregulated submeterer fastens himself upon an essential utility service and, in most instances, profits by purchasing such service and reselling it at a higher rate. It competes with the central station service by selling it to the ultimate consumers who would otherwise be customers of the company. To the extent to which the submeterer pockets the difference between the wholesale rate and the rate which the company would receive from direct sale to the ultimate consumers, he deprives the company of revenues and resultant operating income which must necessarily be added to the bills of the company's other customers if it is to derive a just return. Or stated another way, practically all of the profit to submeterers would be available either for reducing rates to other customers or as an aid in maintaining the level of rates in a period of rising costs . . .
>
> "No judicial decision in any jurisdiction has been brought to my attention which holds that there exists a common law or statutory right to purchase electric energy from a utility company at wholesale rates and to resell it at retail rates nor to compel the utility to provide service for such purpose."

Exactly the same arguments were used by the building owners in that case without effect as are presented to us here. The commission proceeded to order the utility to file tariffs prohibiting metered residential resale, and ordered a freezing of non-residential resale pending further study of the desirability of completely prohibiting commercial resale as well. It stated that "the reasons advanced for the abolishment of residential submetering were equally applicable to the non-residential resale of energy. So far as it can be ascertained, there are no unusual differences—from the company's standpoint—between supplying current to residential and non-residential submeterers." This decision of the New York Commission has been upheld on appeal to the Appellate Division of the Supreme Court, Third Department. *Campo Corporation* v. *Feinberg*, 279 App. Div., 93 Pur(ns) 53, decided January 1952, affirmed without opinion, 303 N. Y. 995.

With all due deference to the deeply respected opinion of the former chairman, we feel that this recent official pronouncement settles the matter. It restated in far more cogent and trenchant language than we have used the identical thoughts which we were attempting to synthesize in both the *Perry* case and the *Rate R* case.

7. EFFECT OF PROPOSED TARIFF ON BUILDING OWNERS

Where Edison's outside distribution system wires are underground, it is its general practice to furnish wiring to a point in the building two feet beyond the street line. All other wiring in any building served by Edison is installed and maintained by the building owner, whether the current is sold direct to the tenants by Edison or indirectly to the tenants through the resale mechanism. This is true in residences, commercial establishments, manufacturing plants and every other type of building to which Edison gives service. And Edison has always and quite properly insisted that the wiring within the buildings must be such as to comply with Edison's reasonable requirements.

Edison now provides in its Residence Rate B' for apartment dwellings where it is difficult or expensive to rearrange wiring upon remodelling, etc., so that the current is measured on one meter and the number of kilowatt hours in each block of the residence rate is multiplied for rate purposes by the number of apartments supplied. It also offers an Apartment House Wholesale Rate C which differs from Rate B as so applied only in the level of the rate. Edison does not lose any material amount of revenue through the use of these rates as compared with individual service direct to the tenants. The important differences between residence service and office building service lie in

the respective availability clauses under Rates B and C as compared with Rate A and in the respective rate levels. There is ample justification for different treatment of residential and commercial users based upon the type of load, the load factor and the possibilities of development of use.

Customers of the type who now buy from submeterers would usually take service from Edison under its General Rate A, stated to be available for any commercial or industrial use. While it is difficult to compare this rate with Residence Rate B, because of a demand feature in the A Rate, generally speaking Edison now realizes a somewhat higher revenue per unit from customers on the A Rate than it does from customers on the B Rate. The average revenue per kilowatt hour from all customers taking service on the A Rate in 1949 was 5.389 cents, while the similar figure for the B Rate was 4.5364 cents. The A and B rates were originally designed many years ago. The D-1 and other rates were introduced later in an effort to expand the industrial business, and may be termed development rates. The level of the A and B rates has, of course, been lowered from time to time over the years, but they are still materially higher than the so-called wholesale rates.

In arriving at the level of rates as between various classes of service, Edison has not made a strict allocation of costs. Such an allocation is practically impossible except within very wide limits. It is possible to determine a minimum below which it will not furnish service on the ground that to do so would be to operate at a loss, but the various factors of judgment, competition, load factors and history have all played a part in the differentials which now exist between various types of use.

The D-1 Rate is designed to meet use with a certain load factor and use characteristics. The A Rate, under which the building tenants will be served if we approve Edison's proposals here, is designed to meet another and different average load factor and other use characteristics. We see nothing erroneous in Edison's insisting that consumers whose use comports with that contemplated in designing the D-1 Rate should pay that rate, and those consumers whose use is similarly consistent with the A Rate should pay that rate. This is what rate classifications are for; they were not introduced in order to permit a middleman to profit by the spread between the wholesale and retail block steps.

If Edison's proposals are approved, the landlords contend that they will be faced with substantial expense in rewiring their buildings to provide for service by Edison direct to the tenants. Of course, this will not be true in that very large proportion of these buildings which, at one time or another, have been served by Edison but where the landlord has subsequently interposed himself between Edison and its customers. And a substantial, but undisclosed percentage of the cost estimates placed in evidence were predicated upon the apparent necessity for rewiring each building to allow any tenant who occupies several non-contiguous offices in the building to have the benefit of combined billing. We have previously indicated our dissent to this practice. Furthermore, it is clear that a large proportion of the remaining expense can be avoided by the use of series meters.

By series metering is meant an arrangement where current flows first through a master meter at the point of connection with Edison's general service, and then through a number of smaller meters located in the quarters occupied by the tenants. The individual meters are read and the tenants billed accordingly. The individual demands and usage may then be totaled, and the result subtracted from those shown on the master meter, the remainder being billed to the landlord. The coordinate arrangement, which may be termed multiple metering, contemplates a separate meter for the landlord and for each tenant, all of which feed direct from the source of supply of Edison's current.

We do not agree with the Edison's proposal that it should determine whether series metering is necessary in a given situation. It is to the landlord's advantage to have multiple metering, since in that event the current necessary to run the individual meters, the variations between actual and metered current on the tenants' meters (due to the fact that electric meters have a tendency to under-measure), and the current loss between the service entrance and the tenants' meters is Edison's worry; whereas under series metering the landlord has to pay for it. We think that it is appropriate that the landlord should have the privilege of deciding whether he will spend the money (if he is going to have to rewire) or subject himself to the vicissitudes of series metering. Certainly the Department does not care to be the final arbiter in such situations, as it would be if Edison is given the privilege of final determina-

tion. The use of series metering is not desirable generally from Edison's standpoint, but it offers a fair compromise which should be freely available when a change is proposed which is as radical as the instant proposal.

The proposed modification of paragraph 7 of Edison's Terms and Conditions offers an opportunity for buildings where it is unduly expensive to rewire to accommodate separate and independent customers' meters to take service under a reasonably satisfactory alternative. We find that the building owner can, by using a series meter arrangement under the proposed revised paragraph 7, discontinue submetering in case the wiring in his building makes it impracticable or unduly expensive to make a complete change-over, without suffering any substantial financial loss other than that due to cessation of submetering profits. Such an arrangement is feasible and not unusual, and is used, for example, in New York City under regulations substantially less equitable to the building owners.

Edison presently supplies direct current (DC) in only a portion of the city of Boston and nowhere else. The system was originally designed to distribute DC current and was converted to alternating current (AC) only after much of its downtown distribution system was installed and customers' apparatus had been purchased which used this type of current. It has the intention of converting all of its service to AC, but since that requires changes in motors, etc., belonging to its customers, it has adopted the policy of making the conversion gradually over a period of years. Its present program in this regard may take as long as fifteen years to complete and will involve expenditures of about $8,000,000 by Edison over this period of time. This does not include any central office generating system changes, since the company now generates AC current and converts whatever part is necessary to DC. Its peak DC load in 1949 was 55,943 kilowatts as compared with the company system peak of 517,300 kilowatts of combined AC and DC. It was contended by the building owners that this change would involve the buildings in further substantial expense in rewiring. We do not understand how this fact, if it be such, is relevant to the issues in the instant case, since no one has denied that, if a change is made from DC to AC, the building owners will incur this expense, regardless of the status of the resale provisions of Edison's tariff. Its D-1 rate, under which DC current has been supplied for both tenant and non-tenant resale, is becoming less and less used. Under the rates applicable for AC service, non-tenant resale has not been condoned. Until January 1, 1948, Edison never flatly refused to furnish AC current for tenant resale. However, its refusal to supply AC current for non-tenant resale led to the *Perry* case, as hereinbefore noted.

A great deal of emphasis was devoted by the protestants to their claim that the Edison Company was estopped to change these rates and to improve its net earnings picture at what they claim to be the expense of the building owners, because of its actions in the past in persuading them to sell or dismantle their private plants and to purchase their current from the Edison Company.

There is no doubt but that Edison for many years actively encouraged building owners in its territory to go into the resale business as an incident to capturing the building's business for Edison and smothering the competition of privately-owned generating plants.

The facts as shown in this record are identical with those shown in the *Rate R* case, D. P. U. 8228, and are treated in adequate detail *infra*. We do not see anything to be gained by repeating the reasoning which impelled us to our determination in the prior proceedings. It is, we feel, adequate to say that we are of the opinion that the Edison Company can not be and is not estopped from filing these new rates and regulations, and we are not prevented from approving them, if we find this action to be in the public interest.

There is some testimony, and we have no doubt there could be much more, that present owners of real estate have relied on resale revenue in determining the price they would pay for purchasing such property from the former owners. This testimony seems to us to be entitled to little weight in the light of our determination that no one has any right to rely upon the immutability of utility rates or practices. This is another attempt to raise an estoppel against rate changes which must fall before the same arguments as do the others.

The cost of the necessary wiring changes in the buildings affected would be substantial in the event resale is prohibited, and the landlord does not care to go in for series metering. It was estimated

that this cost might be as much as $1,600,000 for the 270 buildings known to be in the resale business, plus a possible $500,000 additional required by simultaneous conversion to AC, or a total of $2,100,000. We can not unqualifiedly find this to be a fact, since such estimate ignores the fact that there are admittedly a number of these buildings at which Edison served the tenants direct at one time or another, in which buildings it would cost little or nothing to change back. Regardless of this, however, we can not conclude that, if the public interest demands it, we should hesitate because the landlords may be required to invest an average of something under $10,000 each in adapting their buildings to permit Edison to render service direct to their tenants.

It is possible, though we can not find it as a fact, that the building owners might be forced by the Boston Wire Inspector to modernize their complete wiring if they were to replace any substantial part of it in the process of changes required to allow Edison to serve their tenants direct. There is no evidence as to the extent of such expense in any case, or anything but conjecture as to whether it would actually be incurred.

There is no satisfactory evidence that the large office buildings in Boston do now or have in the past found it necessary to submeter solely in order to provide a measure of flexibility and convenience in building management. There are, on the contrary, a number of such buildings which have not done so and apparently manage to exist. But that such buildings as remain may find that their competitive position will not permit them to remain aloof from such practice is illustrated by the success which attended the organized efforts of submetering agents prior to November 1947, to convert the remaining buildings. The existence of submetering companies which for the landlords a share in the profits if they will permit the submetering companies to do all the work appears constantly in the records, as it did in a similar record in New York City. See *Re Consolidated Edison Co.*, referred to at length hereinbefore. For further illustrations of the growing dangers to Edison's revenues of this practice, it is only necessary to refer to the companion petitions of the Kargman's, D. P. U. 9787 and 8886.

The assessors of the City of Boston rely principally upon capitalization of net income to arrive at a valuation of business buildings for tax assessment purposes. However, that is not the only criterion considered by them, such other factors as contemporary sales being of some importance. This attitude is consistent with the law governing such assessments. See *Massachusetts General Hospital* v. *Belmont*, 233 Mass. 190; *Assessors of Quincy* v. *Boston Cons. Gas Co.*, 309 Mass. 60.

The fact, if it be such, that tax assessment values of the buildings affected may be diminished by our action in approving the abolition of submetering does not change our decision. If, as we hold, these regulations will only return the building owners generally to a fair competitive position as between themselves, then it is their privilege to offset the decrease in their net revenues by an increase in their rents. We find that the effect on taxable real estate values of the adoption of the provision prohibiting resale will be negligible.

Some of the other arguments for retention of submetering are equally fallacious. For example, we do not believe that the convenience of the landlord is to be consulted by us any more than is Edison's whim, and we remain unimpressed by the argument that the practice of submetering better meets the rental problems of the landlords. In a word, it seems to us that, if the practice is fundamentally unsound, as we believe it to be, we should add our blessing to its discontinuance, even though this may involve some expense and annoyance to those who have benefitted for many years by its presence.

If the abolition of the practice of submetering is approved in these proceedings, it will take some time to make the necessary changes, both as to Edison and as to the building owners. It is contemplated in the filed provisions that they shall not be completely effective for six months after their approval. The expert for the building owners testified that 18 months should be the minimum period, and that 24 or 30 months would be safer. We believe Edison is minimizing the difficulties it is facing. On the other hand, we believe the building owners are guilty of some exaggeration. We find that a period of one year should be adequate to cover any ordinary situation. We think Edison should be empowered to collect, at the end of such moratorium, rates based on substantially what would happen if the delinquent building owner had complied with Edison's reasonable require-

ments as to metering facilities. To this end, we will allow Edison to bill all landlords after one year from the effective date of this order at a rate made up of the sum of the estimated rates which would be collected from the building itself and the individual tenants involved if they were severally served direct, including the sum of the estimated demands. In the event any landlord is unwilling to cooperate even to the extent of furnishing Edison with the number of tenants in its premises, we believe Edison will be justified in making a reasonable estimate of this factor as well. If any building owner has reasonable grounds for requesting further time, the situation may be coped with under the special contract provisions of the proposed paragraph 18.

8. RENT INCLUSION

We do not consider that a building owner who includes electric service as a part of the consideration for his rent falls within the same category as one who resells Edison's current to his tenants on a metered basis. It does not seem to us that, unless he either meters the consumption or makes a separate charge for electric service, or both, he is selling electricity under our statutes. We believe that the distinction is there, though it may be logically tenuous. It is clear, for example, that parcel delivery by a store in its own truck is not subject to the provisions of chapter 159B of the General Laws, though we have no doubt that the cost of the delivery is paid by the customer as part of the purchase price of the merchandise. Accordingly, we do not believe that a landlord who furnishes unmetered current as part of the service furnished under the lease of his premises and without making a separate charge for it, is in the business of selling electricity. It has never been held that a landlord furnishing unmetered water as a part of his duties as a landlord is in the water utility business, though the amount of his water rates are a part of his operating costs which the rent he receives must cover.

Edison's position in regard to rent inclusion is the same as it is with regard to metered sales, to wit, that it is entitled to the revenue from direct sales without the use of wholesale rates where the current is to be used by someone other than Edison's customers. We are not inclined to follow the company to this extent. The benefit accruing to the other customers of Edison is only one of the considerations which lead us to the conclusion to which we have come in these proceedings. Our function is not to protect Edison, which is perfectly able to take care of itself, but to regulate its activities in the public interest. From this point of view, we are not willing at least at the present time and on the evidence before us, to go to the extent of approving the prohibition of resale as it is present in the practice of rent inclusion. If this in turn gets out of hand to the detriment of the public interest, or if the privilege is abused in any way, we are ready to listen to any such evidence and to order such relief as may then appear proper. For now, there is no evidence of the extent of the practice, of its effect on Edison's revenues, of its inherent undesirability or of any one of a half a dozen other objections which we have to metered resale.

9. EXPENSE TO EDISON OF PROPOSED TARIFFS

If Edison is to take over the supplying of all current direct to the user, it will sustain some additional expense in meter reading and maintenance, customer accounting and taxes which is now paid by the building owners. Such expense would not exceed $100,000 a year for the 156 locations used as the basis for arriving at the estimated gross revenue increase hereinbefore referred to. This compares with the estimate of $1,056,000 additional gross revenue expected to result from the termination of the practice of resale at these locations. However, this estimate is on a pro rata basis. In any organization of the size of the Boston Edison, a substantial amount of additional business can be handled by the existing organization. Edison's financial officer estimated that the cost of 7172 additional accounts on such incremental basis would not be more than $12,000. It is apparent, however, that this testimony must be considered in its context, since there are substantial costs which will be incurred on new business on any basis, such as carrying charges on meters and reserves for uncollectible accounts all of which must be added to this estimate of incremental costs. We find that on an incremental basis, such cost would be about $51,000, or about $7 per customer per year. This additional cost would be far more than carried by the additional revenue accruing.

The capital investment for the 7172 meters required to be installed by Edison would be about $104,380, computed on the average present investment. As previously pointed out, this expense is estimated on the basis of 156 locations screened out of all those at which resale is known to exist in order to arrive at an undistorted picture. There would be substantially more than this 7172 customers added to Edison's books in all by the prohibition of resale. On the other hand, there is no reason to assume that the expense attendant upon such additional customers will not also be far more than offset by still further increases in gross revenue resulting therefrom. It does not appear what this total investment at present day prices would be, but the carrying charges on any conceivably larger investment would not make so great a change in the figures as to cause us to change our ultimate conclusion, to wit, that Edison's net operating revenues would show an increase of more than $1,000,000 a year under the proposed prohibition of submetering, and before any rate adjustment.

If non-tenant resale is prohibited by approval of the proposed regulations, Edison might be forced to install new connections from its street mains to each of the buildings other than those through which service is now rendered to the submeterer. There are thirty-one submeterers in this category, serving a total of 89 other buildings and an estimated 756 non-tenants. The estimated cost of the necessary street construction is $80,723 or an average of about $900 a building. There was long cross-examination as to this figure, which served no purpose except to characterize it as an estimate, which it admittedly was. The expert for the building owners gave a substantially larger estimate, amounting to some $375,000. We are inclined to give rather more credence to the estimates of Edison's engineers who are, or should be, far more familiar with its own plant arrangements and costs. This cost would be a properly capitalizable expenditure, the carrying charges on which would not exceed 16 per cent or about $13,000 a year. The additional revenue to be derived therefrom by Edison would much more than warrant such expenditure. The original cost of an estimated 12,731 DC watt hour meters owned by submeterers and now used in resale is about $180,000. These include an estimated 7129 DC and 5604 AC meters. There are also an undisclosed number of demand meters owned by the landlords. It is possible that many of the meters now so used to meter the tenants' current could not meet Edison's specifications. Such meters should not, as a matter of fact, be in use at all. Edison now has on hand in stock about 8500 DC meters which would be available to supply consumers shifting over to direct use, which would probably be an adequate supply. On the other hand, an electric meter has a very long life, and there is no reason for us to force the economic waste of discarding the existing serviceable meters owned by the landlords. We believe Edison should offer to purchase such of these items as it can use at a price based on original cost less reasonable depreciation.

10. HOUSING DEVELOPMENTS

On October 31, 1949, Edison was furnishing electricity to 14 housing developments in its territory, all but one of which were paying the D-2 Rate, and the other the D (High Tension) Rate. Nine of these projects, providing for an estimated total of 5,870 tenants were under the jurisdiction of the Boston Housing Authority and the other five, having an estimated 243 tenants were built under other auspices. There are a very substantial number of other such developments in the planning and construction stages within Edison's territory. In these locations, there is no separate charge made for electricity, it being included in the rents paid by the tenants. In the case of the Housing Authorities, at least, this charge in the aggregate is equivalent to Edison's bill, and no profit is realized by the Authority.

On October 16, 1950, after the hearings in the instant proceedings, Edison filed another proposed modification of its tariffs by the introduction of the so-called Rate K, under which it intended to treat these Housing Developments in a manner similar to that in which residential premises are handled under Residence Rate B, with certain modifications based on estimated savings to Edison. We are filing separate findings in D. P. U. 9265, permitting such proposals to become effective. For this reason, it is unnecessary to make findings here as to the application of the resale regulations to such customers. Under the proposed Rate K the problems peculiar to multiple unit housing developments are recognized and specially treated. Resale will be condoned in such situations under a rate schedule designed to bring in to Edison substantially the same net revenues as would be the case if service were rendered direct to the occupants of the premises.

11. SPECIAL CONTRACTS

Edison now has certain contracts in effect between it and some customers who are reselling the current supplied to them thereunder. These contracts call for the application of Edison's filed rates and consequently many of them have not been filed with the Department under Section 94 of Chapter 164. It will be necessary for the company to analyze each of these contracts and determine whether they must be refiled with the Department under the proposed regulations. We foresee no difficulty in their doing so, and we believe that we are peculiarly able to determine whether such contracts are in the public interest.

It must never be forgotten in considering situations of this nature that neither the common law nor the statutes forbid discrimination of any kind. There is bound to be some variance in treatment as between utility customers so long as there is more than one rate schedule in effect, and there are bound to be situations in a utility of the size of Boston Edison which have special requirements justifying the use of special contracts, little as we like them as a matter of principle. All that we are bound to do is to make sure that such treatment is not dictated by favoritism or prejudice or by any motive except sound business and public policy. Such latitude as the Department might give in this matter would be adequate to protect vested contract rights, and similar situations as to which there was much pother at the hearings. Furthermore, such a provision gives Edison and its customers, under supervision of the Department, time to iron out such difficulties as they come up. Under this provision, for example, Edison can allow any customer who has cooperated in good faith to meet the deadline, but who is unable for some reason to do so, to have additional time to rearrange his system. We consider this to be a desirable and salutary provision from all points of view, and we do not believe it extends the jurisdiction of the Department beyond that granted by G. L., Chapter 164.

In 1938, Park Square Building, which happens to be the largest single office building in New England, entered into a contract with Edison whereby the building was paid $16,500 by Edison to cover damages on a contract which Park Square had made for the installation of a private power and steam plant. Edison agreed to pay Park Square $11,000 a year rental for the boilers in the building. Park Square agreed to buy all of its electric and steam requirements from Edison at Edison's regular rates for a term of years. The petitioner in D. P. U. 8787 and 8886, introduced this evidence and argues, so far as we can strip his argument of epithet and generalities, that this constitutes an illegal contract, which was discriminatory as against him. We find that Edison was justified in making this contract, that it could use and does use in its steam business the boiler capacity so rented, that the benefits to Edison and to the public in avoiding the installation of a private generating plant at this location warranted the payment made to cover cancellation damages, and that the contract and the payments made thereunder do not constitute undue or unreasonable discrimination as against any other customers of Edison.

Similarly, on July 27, 1948, Edison made a contract with Physicians Hall, Inc., whereby it agreed to furnish service for resale by the latter to its tenants, and Physicians agreed to pay a rate similar to the then pending Rate R, with the proviso that upon determination of the proceedings in D. P. U. 8228, Physicians would either continue resale under the R Rate, or would discontinue resale and make the wiring changes necessary for Edison to sell direct to Physician's tenants. The petitioner in D. P. U. 8787 and 8886 also cites this as discrimination in his attempts to justify his demand for an order from us requiring Edison to furnish him current for resale in violation of paragraph 17 of its Terms and Conditions of Service. We do not find this agreement to be unduly or unreasonably discriminatory as against him, but, on the contrary, to be a perfectly reasonable method of meeting a special situation such as was contemplated by the exceptions contained in paragraph 17. We find that the making of this contract was approved by the Department as required in Edison's tariff.

12. QUAKER BUILDING COMPANY

Quaker Building Company serves 83 customers through 127 electric meters in part of the block in Boston bounded by Devonshire, Summer, High, Federal, and Franklin Streets. There are 21 buildings in this area, some of which are set off from each other by fire walls, through which no wires

are permitted to be run. Its wires do not cross any public streets, but do cross or run along Milton Place and Federal Court. These latter ways are not public streets, being posted every 20 years by the abutting joint owners, but they are alleys open to and used by the public for access to the rear of the buildings surrounding them. They are the only means of access to the buildings owned by Quaker and in which its offices and steam plant are located. Quaker rents a portion of these premises to others and sells current to such tenants. It takes delivery of direct current from Edison at the street line at 10 High Street, from which location Quaker's wires run through that building to Milton Place and Federal Court, under which alleys its distribution lines run to the rear of the 21 buildings so served.

Quaker sells current under eleven rate schedules, some of which are identical with Edison's Rate A schedule, and others of which are discounted, special or other rates plainly discriminatory on their face. Quaker's largest customer is the building at No. 10 High Street, the owners of which buy from Quaker and resell to their tenants. This building, known as the Rice Building, bought 499,830 kilowatt hours from Quaker at an average cost of 3.01 cents, or a total of $15,029 and sold to its tenants 304,726 kilowatt hours for $15,516, or an average of 5.09 cents. The building itself, thus, uses about 195,000 kilowatt hours of energy to run its elevators and light its halls, which cost it less than nothing. Thus, we get resale upon resale, each submeterer taking a profit out of the margin between Edison's wholesale and the various retail rates charged by the submeterers. The same situation is, incidentally, effective as between two other buildings in Boston, not affiliated with Quaker, to wit, 111 Devonshire Street and 115 Devonshire Street. The petitioners in D. P. U. 8886 would like to establish still another one.

Quaker has been purchasing current from Edison since 1915. Edison knew then of Quaker's position, and the extent and nature of its business. Quaker qualified in 1932 with the Internal Revenue Department of the United States as an electric company for the purposes of exemption from energy taxes. It received from Edison the letter of December 1, 1930, regarding non-tenant resale as well as the letter of February 1, 1937, regarding meter rental. Quaker has not expanded its business since 1930, and has conducted it without change since that time, except for normal substitution of customers and normal growth in use by the consumers of current.

Quaker Building Co. has filed annual returns with the Department as an electric company since 1916, having commenced doing so as the result of service upon it of a general order of the Board of Gas and Electric Light Commissioners, one of the predecessors to this Department, requiring filing of rate schedules by all electric companies. It filed such returns for the calendar year 1949, which was the last year before the hearing in this matter. Its profit and loss statement for 1949 shows receipts of $53,080.35 from sales of electric current, which cost it $34,139.30 to purchase at Edison's D-1 and H Rates. It purchased 1,423,800 kilowatt hours at an average cost of 2.3977 cents per kwh, and sold 1,341,849 kwh at an average revenue of 3.9554 cents, or an increase over Edison's revenues per kwh of 39.3 per cent. It showed a net operating profit of $2407 for the year, after treating as expenses at least $3,000 which is a non-recurring item and other items as to the allocation of which we find it impossible to agree. Its balance sheet shows net property, aside from land which is not used in the electric business of only $9434. This account includes boilers and other property used only for the steam business. Even assuming the necessity for as much as $10,000 working capital, it is apparent that, if it is an electric company, Quaker Building Company is enjoying a return of upward of 25% on its net invested capital—a return which would be considered shockingly exorbitant in any rate case.

Quaker was incorporated in 1911, but was in existence as a partnership long before then. None of the buildings which it serves has ever taken electricity from anyone but Quaker. Prior to 1915, it furnished both steam and electricity to these buildings, which it generated in its own boilers and dynamos. In 1915, it ceased using its electric generating equipment, which it has since dismantled and junked, and it has bought current from Edison ever since for resale purposes.

The present statutes in Massachusetts do not specifically provide for the granting of franchises as such to public service companies, as do those of so many states. An electric company may be formed under chapter 164 of the General Laws, presumably for the purposes stated in its charter. However,

a corporation formed under any provisions of law may be so classified, if it engages in such activities as to warrant such treatment. G. L., Ch. 164, Sec. 3. But the right to do business is still granted by the Commonwealth in the corporate charter. *Metropolitan Home Tel. Co. v. Emerson*, 202 Mass. 402. It is fundamental that an electric company operates best and most efficiently if it is a monopoly within an extensive territory. *Weld* v. *Gas & Electric Light Comm.*, 197 Mass. 556; *Boston* v. *Boston Electric Ill. Co.*, 242 Mass. 305. It was in order to reconcile this economic fact with a well-founded distrust of monopolies that the Legislature delegated to us the power to regulate such monopolies in the public interest. It is just as much in the public interest to protect the utility from unjust competition as it is to prevent abuse of the privilege so granted.

The sole statutory protection given to Edison is contained in G. L., chapter 164, sections 87 and 88. Under these sections, no new company may be granted locations within the streets of a town already served with electricity without notice to and a hearing granted to such utility. And, furthermore, if the existing utility does not like such a grant after such hearing, it may appeal to the Department.

The original undertaking of Boston Edison was to serve the city of Boston as part of its territory. As then constituted, this excepted the now Charlestown section of the city, presently served by another electric company. Quaker has never sought a street location from the city of Boston, but we find it difficult to imagine evidence which would persuade us to sustain such a grant on appeal. Furthermore, if we sustain Quaker in its present contention, and hold that it is not competing with Edison, we would find it difficult to reconcile such a holding with the *Perry* case. If A. W. Perry, Inc. is an electric company, as we there stated, it is entitled to protection equal to that which Quaker seeks. If it files its rates and returns with us and submits to our jurisdiction, we would be hard put to it to continue in our position that we would not order Edison to supply it with power if we here follow the argument advanced by Quaker. Quaker is a relic of the "block plant" days to the same extent as is Perry. We see no distinction between them, and we would be equally unable to see the distinction between Quaker on the one hand and, on the other hand, Perry at any other location than the Hecht Building which was the subject of the proceedings in D. P. U. 7697 or any other person who wanted to set up a submetering company within the confines of a city block. Such a situation would be intolerable, but it requires very little foresight for us to be able to predict that it would eventuate if we granted Quaker's petition here. We believe that Quaker's position must fall with the rest, and that Commissioner Gadsby was in error in coming to a contrary conclusion in his concurring opinion in D. P. U. 8228.

13. GENERAL FINDINGS AND CONCLUSIONS

We doubt that it is strictly true, as is argued by the landlords here, that Edison may not inquire as to the use to which its service is to be put, so long as it is paid according to its rate schedule. Edison is not selling a commodity; it is selling a service. It may inquire as to whether the putative customer is going to use such service in competition with Edison's service. (*Brand* v. *Water Commissioners of Billerica*, 242 Mass. 22; *People ex rel New York Edison Co.* v. *Public Service Commission*, 191 A. D. 237, aff'd 230 N. Y. 574; *Re A. W. Perry, Inc.*, D. P. U. 7697). And it could refuse to furnish current which its customer intends to use for an illegal purpose (*Petition of A. C. Company et al*, D. P. U. 8672; *McCabe* v. *New Eng. Tel. & Tel. Co.*, D. P. U. 8616; *Shillitini* v. *Valentine*, 296 N. Y. 161).

We think that we can go a step further and say that a utility may refuse to furnish service which will be used against the best interests of the public, even though such interests have not been formally announced in the form of a penal statute. That this is a sound legal argument is evidenced by the long line of cases to which we referred in the *Perry* case, D. P. U. 7697, and to which should be added the citations in the concurring opinion in D. P. U. 8228 and the *Consolidated Edison* case, supra. Until we are otherwise informed by the courts, we are inclined to maintain the position we established in the *Perry* case, that the holding in *Brand* v. *Water Commissioners*, 242 Mass. 223, is in point in these proceedings and is binding upon us. The ingenious arguments of counsel to the contrary notwithstanding, we are unable to find any substantial distinction between these cases and the instant case. We believe them to be good precedents and sound precedents from respectable jurisdictions

and to which a very large number of eminent legal and administrative minds have given painstaking thought, and we do not feel inclined to hold otherwise. We have been able to find no cases to the contrary. If the express and freight forwarders' cases (*I. C. C.* v. *D. L. & W. R. Co.*, 220 U. S. 235; *I. C. C.* v. *B. & O. R. R.*, 225 U. S. 326) are to be considered as authorities *contra*, it is enough to say that they are products of another era and another set of economic and regulatory conditions, and that we do not follow them.

It is true that, so far as we are able to discover, this case and the *Consolidated Edison* case in New York are the only places where the utility has propounded a rule of this nature in its tariff. We see no distinction, however, between approving the tariff provision *a priori* and ruling upon a complaint of a putative consumer that the utility has refused to render service under these conditions. We said in the *Perry* case, that we thought Edison should clearly state its position in its filed tariffs, and we feel that it is in far better legal and ethical position in so doing than in relying upon moral suasion to discourage the spread of the practice of resale.

The legislative policy of this Commonwealth is stated in G. L., Chapter 164, Section 92A, to be that the Department may not order any electric company to extend its service where such extension will result in permanent financial loss to the utility. We believe, by the same token, that the Department may approve a regulation eliminating an existing permanent financial loss to the utility. We find, on the evidence, that Edison is suffering such permanent financial loss by the existence of the practice of submetering, and that it is threatened with further such loss unless it guards against extension of the practice. Nowhere in the statute does it say that the expressed legislative policy is dependent upon the financial strength of the utility concerned, and we believe it to be immaterial that Edison is a sound operating company. The interest which the public has in maintaining this sound condition is paramount. See *New Eng. Tel. & Tel. Co.* v. *Dept. Pub. Util.* 327 Mass. 81.

It is maintained in the briefs in this case as in the *Kargman* cases, D. P. U. 8787 and 8886, decided herewith, that the Department is not vested with power under G. L., Chapter 164, to approve a regulation under which Edison refuses to furnish service for resale. Section 94 of said chapter, under which this investigation has proceeded refers only to authority over the "rates, prices and charges" of the utilities subject to departmental jurisdiction. We are of the opinion that the terms and conditions under which service is to be furnished to its customers are an inherent, inseparable portion of its rates and charges. To the extent that this is a question of fact, we find it in this case. Furthermore, if we do not have this authority under chapter 164, then we had no power to suspend the application of these provisions, to investigate them or to make any order with reference thereto, and the sole recourse of persons threatened with what they conceive to be unfair treatment through regulations alone would lie in an application under section 92 to compel a supply of electricity. We are unwilling to admit that our delegated powers were so limited in scope. Certainly, we have never thought so and if it actually be so, it is a matter for instant legislation. In such event, however, in order not to compel still another trial of this much-tried issue, we will interpret the appearance of the building owners and their whole-hearted participation in the proceedings to be the equivalent of an application under section 92 of chapter 164. Certainly, we would come to no different conclusion or to an order of different substance in such a proceeding.

There is no doubt, as argued by the petitioners in D. P. U. 8787 and 8886, that a utility which has once undertaken to furnish a particular service may not discontinue it unless it proves that such service is no longer required to meet the public convenience and necessity, as best illustrated by the railroad and bus company cases. See, among very many other cases, *Gilet Mfg. Co.* v. *B. & M. R. R.*, D. P. U. 9863; *Re Complaint of Mayor of Lawrence*, D. P. U. 9573. The utility in the instant case is not proposing to discontinue service to anyone. It offers to serve both the landlords and the tenants with electric service after the effective date of the proposed new tariff provisions just exactly as it did before. No one is being deprived of electric service by any interpretation one may place on the instant proposal. The utility is admittedly changing its rates and practices, but it is not abandoning service. Consequently, the numerous cases relating to abandonment proceedings have no bearing on the present situation. To hold that Edison can not change its rates because such a change would

take away profit theretofore resulting to its customers would be completely at variance with all principles of utility regulation.

Fundamentally, what the proposed regulations say is that Edison will not furnish service under certain of its rate schedules for certain use. It has been its practice, and it is the practice of electric utilities everywhere in this country, to limit the application of certain schedules to certain types of use. Nowhere is it provided that a commercial customer may take service on residential rates, or vice versa. Edison freely offers to continue service to these buildings for their own use. It insists, however, that it shall not be required to furnish such electricity for use by tenants at other than its regular rates. We believe this is well within its powers to propose and ours to approve.

It is argued that Edison is acting against its own best interests in this proposal—that the result will be that the building owners will install their own generating systems in order to serve their tenants and realize the profits which it will be impossible for them to make under Edison's proposals. Whether Edison's proposals are or are not in its own best interests is, strictly speaking, a matter of indifference to us. We are not in office as an appellate board of directors of Edison, nor to interpose an omniscient veto over the decisions of Edison's management. *New Eng. Tel. & Tel. Co.* v. *Dept. of Pub. Util.*, 262 Mass. 137. Our function is to regulate its activities in the public interest. Edison has decided, as we have stated, that it is in little or no danger of competition from this source, and we are not inclined to come to a contrary conclusion.

Furthermore, the expert testifying for the landlords in the instant case has stated that it is his understanding of the law that we have jurisdiction under the definition of an electric company in G. L. Chapter 164, over the activities of any person who sells electricity in this Commonwealth, regardless of whether he uses the public streets, exercises the power of eminent domain or holds himself out to serve the general public. We think this reading of the statute is correct, and we so stated in our decision in the *Perry* case (D. P. U. 7967), whether or not such holding there has a more respectable standing than pure dictum. We do not believe it to be necessary to make any further exposition of our views here, except to say that they have not changed.

If what we have said is true, then any building which decides that there is an economic advantage to be derived from installing an electric generating plant must take this into account. We have no intention of permitting tenants of any building to be at the mercy of their landlord in this respect, and if the building or anyone else sees fit to become an electric company as defined in the statutes, we shall promptly assume jurisdiction over its rates and practices to precisely the same extent as we do over those of Edison, and it will be permitted no greater latitude in earnings than is any other electric company. We do not believe that the economics of such situations will prove out in enough cases to result in any serious burden on us.

The various parties have filed with us requests for findings of fact and rulings of law, severally waiving the time limitations of section 5 of chapter 25 of the General Laws. We dispose of such requests as follows:

Quaker Building Company: We grant its requests for rulings of law numbered 1, 2, 3 and 4. We deny such requests numbered 5, 6, 7, 8 and 9. We grant its request No. 5 for findings of fact. We deny such requests numbered 1, 2, 3, 4, 6, 7, 8, 9, 10 and 11.

Building Owners and Managers Association: We grant its requests for rulings of law numbered 17, 18, and 19. We deny its said requests numbered 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 20, 21, 22, 23, 24, 25, 26, 27 and 28.

Boston Edison Company: We grant its requests for rulings of law numbered 1, 2, 3, 4, 5, 6, 7, 11, 12, 13, 14, 15, 16 and 17. We deny its said requests numbered 8, 9, 10 and 18. We deny its said request No. 19 as unnecessary (S.M.1990).

The Building Owners and Managers Association moved that D. P. U. Docket No. 8862 be severed from Docket Nos. 8787 and 8886. Insofar as this means that the moving party wishes separate orders

to be entered in the respective proceedings, the motion is granted. It was never our intention to do more than hear these matters together. This has been done, and we are entering separate orders with separate findings, except as incorporated by reference.

We are of the opinion that Edison's proposals are unjust and inequitable in certain respects, and we feel that for the sake of putting an end to this interminable quarrel, we should order into effect substitute provisions which are, in our opinion, just and equitable. See G. L., chapter 164, section 94. Some of these criticisms we have alluded to in the course of these findings, and others are to be inferred therefrom.

Upon all the evidence, after due notice, public hearing, investigation and consideration, it is hereby

ORDERED: That Supplements Nos. 2, 3 and 4 to M. D. P. U. No. 54 filed by Boston Edison Company on November 22, 1949, to be effective January 1, 1950, be and the same hereby are disapproved and disallowed; and it is further

ORDERED: That Boston Edison Company file, on or before April 1, 1953, new supplements amending its M. D. P. U. No. 54 modifying the same as follows:

1. By striking out the provision numbered 7 of its "Terms and Conditions Applicable to all Rates for Electric Service" and inserting in place thereof a new provision numbered 7, reading as follows:

   (a) Such meters and accessory equipment as may be required to determine the quantity and rate of taking of electricity delivered shall be installed by the Company on meter boards provided and wired by the customer at points most convenient for the Company's service. If, on any rate, more than one set of meters is installed for a customer's service, the use registered on each set of meters shall be billed separately unless the additional meters are installed for the Company's convenience. Where separate circuits and meters are required by the Company for supplying devices which may cause sudden or violent fluctuations in the voltage, the use registered on such meters shall be billed separately.

   (b) Metering equipment for a customer will not be installed in series with the metering equipment of another customer except in buildings which have been wired for series metering prior to the effective date hereof and when the landlord in good faith notifies the Company that rewiring for the installation of multiple metering equipment would be impracticable. In such cases the billing quantity (kilowatt hours) for the customer having the master metering equipment shall be the difference between the total quantity determined thereby and the sum of the quantities determined by the meters for customers installed in series with the master metering equipment; and the billing demand (kilowatts) for such customer having the master metering equipment shall be the same proportion of the demand determined thereby as the ratio of the said billing quantity to the said total quantity, unless such customer installs the necessary facilities for determining in whole or in part that portion of the demand attributable to his own use which is supplied through the master metering equipment. If such facilities provide for determining his demand only in part, the remaining portion attributable to his use shall be prorated. In no case shall the billing demand be less than the minimum provided in the rate.

2. By adding a new paragraph numbered 18 to its "Terms and Conditions Applicable to all Rates for Electric Service," reading as follows:

   18. After the expiration of one year following the date upon which this provision becomes effective, electricity will not, without the approval of the Department of Public Utilities, be supplied by the Company to any customer of the Company for resale or redistribution by the customer to or for the use of others (whether or not the latter are tenants of the

customer) if a specific charge or price, or a charge or price which varies with the quantity resold or redistributed, is made therefor by the customer, except

(1) to municipal light plants and to electric companies whose customers are located outside of the territory within which the Company distributes and sells electricity, or

(2) as provided in a special contract duly filed with the Department of Public Utilities in accordance with the provisions of section 94 of chapter 164 of the General Laws, or

(3) as lawfully directed and required by said Department in accordance with the provisions of sections 92 and 92A of said chapter

(4) at locations where electricity was so resold or redistributed on July 1, 1951, and where the customer has refused or failed to rewire the building or buildings concerned and to apply for the installation of either series or multiple metering equipment. At such locations, one year after the effective date hereof and until satisfactory arrangements are made for such series or multiple metering and the Company is notified that electricity is no longer desired for purposes of resale or redistribution, the Company will charge for electricity as though there were as many individual meters installed at the General Rate A as there are tenants in the building, plus one for the building use, each of which meters showed the same demand and energy use, the totals of which would be those shown on the master meter. If the customer refuses to furnish the exact number of tenants involved, the Company will substitute therefor its best estimate of the number of tenants involved.

3. By adding a new paragraph numbered 19 to its "Terms and Conditions Applicable to all Rates for Electric Service," reading as follows:

19. When any customer of Edison was reselling or redistributing electricity on July 1, 1951, and thereafter applies for the installation of series or multiple metering equipment for the purpose of enabling the Company to give service direct to those persons to whom the customer has been reselling or redistributing, the Company will purchase from such customers such demand or watt-hour meters, or both, as the customer has on hand and which may meet with the customary and usual current specifications of Edison for such equipment at a price equal to the original cost thereof less depreciation thereon accrued at the rate of three per cent per year.

4. By adding a new paragraph numbered 20 to its "Terms and Conditions Applicable to all Rates for Electric Current", reading as follows:

20. Parsgraph 17 of these Terms and Conditions, filed December 17, 1947, and effective January 1, 1948, shall he ineffective after the expiration of one year following the date upon which the provisions of paragraphs 18 and 19 hereof shall become effective.

And it is further

ORDERED: That the investigation by the Department in D. P. U. 8862 be and the same is hereby terminated and closed.

By order of the Department,

[signed] JAMES M. CUSHING
Secretary.

A true copy.

Attest:

JAMES M. CUSHING
Secretary.