

The practices of the four boards in meter-reading, billing, collection and follow-up of overdue customer accounts

Introduction

4.1 This chapter describes and sets out by means of schematic flow charts the activities of the four boards in respect of meter-reading, billing, collection and follow-up of overdue customer accounts and identifies some interesting differences.

4.2 At their simplest the reference activities involve:

- (a) recording or estimating the units of electricity consumed by customers;
- (b) converting units of electricity consumed into monetary values; and
- (c) a series of processes for collecting money due from customers.

4.3 Within the ESI the majority of customers have their electricity consumption measured by meters in order to determine the charge to be made. A small number of supplies, for example public lighting, are unmetered.

4.4 Commercial, industrial and domestic customers may have more than one meter depending upon the kind of supply they require. Domestic customers' meters may be located either inside or outside the premises depending by and large on the age of the property; most modern housing estates make provision for the meter or meters to be located outside. Meters may have more than one set of dials depending upon the tariff, for example customers on Economy 7 will have a meter with two separate registers, one for daytime consumption and one for off-peak consumption. Some forms of routine remote reading exist within the boards but the number of customers involved is quite small.

4.5 Meter-reading involves a visit to the meter by a board employee (usually a 'meter attendant' or 'meter operative') who is employed specially for that purpose and who will be based at a district or local office or one of the board's depots.

4.6 With the exception of the Immediate Billing System (IBS) operated in SWEB, where the meter is read and where the bill is produced 'on the doorstep', meter-readings are recorded on a meter-read sheet which is processed using computer facilities to produce a bill which is then despatched to the customer. Where reading of meters is not possible, for example if the meter reader cannot gain access, various forms of estimating customers' consumption are employed by the boards to produce bills.

4.7 With IBS the meter-reader carries a portable billing machine (PBM), which is a small computer capable of printing a bill to be handed to the customer a few seconds after the meter-reading has been keyed in. It will also calculate and print an estimated bill if the meter-reader is unable to gain access to the premises. (IBS is discussed more fully in Chapter 10.)

4.8 If the customer has not settled the bill within a predetermined time, reminder notices are sent by the boards in an attempt to encourage the customer to pay. Failure to pay the bill may ultimately result in disconnection of the supply.

The four boards' practices

4.9 We have discussed with the managements of the four boards, at both headquarters and district levels, the physical practices employed by them for meter-reading, billing, collection and follow-up of overdue customer accounts.

4.10 The charts at Appendices 4.1 to 4.4 set out in detail the practices of each of the four boards in schematic flow formats. The days shown on the charts are working days; they do not include weekends, bank holidays and public holidays. The distinction is important since, for example, a meter-reading taken on a Friday will not generally be processed for billing until Monday, that is within two working days but four calendar days.

4.11 The chart for SWEB (Appendix 4.4) includes the board's quarterly meter 'book system' although this is currently being phased out. An examination of the four charts shows a number of differences in practice which are described in the following paragraphs. We have not illustrated on the charts the practices which relate specifically to pre-payment meter customers, since the information provided by the boards indicated that there were few significant differences as compared with credit customers.

Preparation for meter-reads

4.12 Preparation of the meter-read sheets and associated route information differs in minor respects between the four boards as follows:

- (a) NEEB meter-read sheets are generated centrally in route order. The route information is in the computer and districts are responsible for keeping it up-to-date.
- (b) SEEB produces a meter-read sheet and a separate route information sheet at its Central Accounting Office for use by its districts. SEEB's route information sheets contain confidential information such as the place where a customer's key can be found. The sheets do not contain the addresses of customers and thus if either the route book or the route information sheet is lost there is no breach of security.
- (c) EMEB meter-read sheets only are generated centrally since the districts already have route information.
- (d) SWEB's IBS (which covered some 25 per cent of quarterly credit customers by the end of August 1984, and will cover all such customers by October 1985) does not use meter-read sheets. The relevant data is transmitted from the headquarters mainframe computer daily (via tele-processing lines) to local office mini-computers. Once detailed work programming has been completed the information is automatically loaded into portable billing machines (PBMs). Separate route information sheets are produced daily by the local office computer. Meter-read sheets are currently used for monthly and pre-payment customers, although the board is considering using IBS for these reads.

4.13 There are differences of format in the meter-read sheets of the four boards which may marginally influence printing costs.

4.14 Table 4.1 shows the times at which the district/local offices in each board receive meter-read sheets.

TABLE 4.1 Times at which district/local offices receive meter-read sheets

Board	Quarterly reads	Monthly reads
NEEB	6-5 days before read	6-5 days before read
SEEB	10 days before read	5 days before read
EMEB	4 days before read	Sheets held at districts
SWEB	3 days before read (refreshed up to day of read)	Sheets held at local office

Source: NEEB, SEEB, EMEB and SWEB.

4.15 Reasons given by the boards for providing meter-read sheets and other associated documentation in advance of the read include the following:

- (a) In the event of a computer failure sufficient meter-reading sheets are available to enable meter-reading staff to continue their work, and this avoids disruption in billing and the consequent cash flow.
- (b) The span of advanced time enables the district planning and supervisory staff to adjust workloads in the light of local knowledge of walks, routes and staff availability, and also to plan use of their vehicle fleets for staff transportation.

4.16 There are differences both within and between boards regarding what is done with the meter-read sheets once they have been received in the district/area offices. We have been told by district staff at the boards that some re-sorting of the batching and ordering of read-sheets takes place in an effort to ensure that workloads distributed to meter-readers take account of the effects of continuing property developments and actually represent a full day's work.

4.17 NEEB told us that batches of read-sheets representing one day's work per man were sent to the district but that on occasions it might be necessary to adjust the size of a batch at the district office.

4.18 SEEB told us that such re-sorting normally only occurred when there were specific staff difficulties or if uncompleted work (no calls attempted) had been returned and needed to be added to the work for the next day.

4.19 EMEB told us that current computer developments within the board (ie the Customer Related Suite) would reduce the re-programming work at their districts, beginning in 1985.

4.20 SWEB told us that under IBS the local supervisor was able to adjust the workload for each meter operative, via a visual display unit, up to the evening before the day of reading.

4.21 Minor differences exist between all four boards as to when the meter-readers receive their read-sheets (or when PBMs are loaded in SWEB's case). To a large extent these differences are due to local (ie district) methods of

working which result in some meter-readers receiving their sheets (or loading their PBMs) on the day prior to the day of read (pm) whilst others receive their sheets at the commencement of the day of read.

Reading of the meter

4.22 Meter-reading is organised and managed at district/local office level. A variety of arrangements exist between the four boards, and to some extent within boards, as to what takes place on the day of intended read, which is identified by all four boards as day 1.

4.23 Monthly commercial and industrial meter-reads are generally achieved on the scheduled read day (day 1). This is less likely for quarterly domestic and pre-payment meter-reads because of the possibility that customers may be out when the meter-reader calls.

Action taken if the meter cannot be read (domestic customers)

4.24 The major differences in the boards' meter-reading arrangements relate to domestic non-access, whether second calls are made and what happens if they are not. The following table and related notes illustrate this.

TABLE 4.2

	NEEB	SEEB	EMEB	SWEB
Are second calls made	No	No	Yes*	No
Are self-read cards left for completion by customer	No	No	Yes	No
Can customer telephone in own reading	Yes	Yes	No	Yes
First call access rate (%)	78	72	76	80
Number of outside meter boxes ('000)	92	100	348	126
Must-be-read ratio†	1:4	1:4	1:6	1:6

Source: NEEB, SEEB, EMEB and SWEB.

*EMEB's second calls in 1983-84 amounted to 24 per cent of total calls. 'Total calls' is the number of potential calls ie actual calls (including no access calls) on first visit.

†1:4 means that after three consecutive estimates or meter-reads by the customer the fourth must be read by the meter-reader. 1:6 means that after five consecutive estimates or meter-reads by the customer the sixth must be read by the meter-reader.

4.25 If NEEB meter-readers are unable to gain access to domestic premises a card is left showing the estimated reading which will be used for billing. If this estimate is not acceptable to the customer, he may telephone his own reading to the local office. At night the call is recorded by the emergency telephone operator or by recorded message equipment.

4.26 If SEEB meter-readers are unable to gain access to domestic premises a card is left informing customers that an estimated reading will be used to calculate their bills. If, when the customer receives the bill, the estimated consumption differs from the actual consumption the customer can notify the local office of the actual reading either by telephone or by completing a 'block' on the back of the account and returning this to a Freepost address. SEEB told us that only about 5 per cent of customers concerned asked for their bills to be based on their own readings.

4.27 EMEB alone has built into its existing procedure the provision for second calls, although districts have some discretion to discontinue these calls in exceptional circumstances (for example long-term sickness, abnormal

weather conditions) to maintain the meter-reading programme. EMEB is conducting a trial at six of its districts where second calls have been dropped and a phone-in option introduced (with the exception of 'must-be-reads'). EMEB told us that it expected to eliminate the second call when the six months' trial had been completed. It estimated that there would be a saving of about £350,000 by the elimination of the second call, and that this would be achieved without a deterioration in the service levels to its customers.

4.28 An EMEB meter-reader who is unable to gain access to domestic premises on the second visit leaves a card which tells the customer that, if he is not satisfied with the estimate, he should get in touch with the board immediately on receipt of the estimated bill. There is no stipulated time limit for the customer to react to an estimated bill.

4.29 SWEB is phasing out the use of self-read cards. Under the revised arrangements an estimated bill is provided if the meter-reader was unable to gain access. If the customer is not satisfied with the estimate a facility is provided (on the reverse of the bill) for the customer to enter the actual reading and either return the bill to the appropriate office or telephone the local office with the revised reading.

4.30 The following table illustrates the differences between the four boards in respect of the times which customers are given to react to estimated reads.

TABLE 4.3 **Times allowed for customers to react to estimates**

<i>Board</i>	<i>Time given</i>
NEEB	24 hours (until 11.00 of the following day)
SEEB	7 days
EMEB	No specific time limit
SWEB	No specific time limit

Source: NEEB, SEEB, EMEB and SWEB.

We have been told by SEEB that in spite of the fact that it expects its customers to respond to estimated accounts within seven days, customers with genuine reasons for responding late will receive an amended account.

'Must-be-read'

4.31 Cards are left by all four boards in the event of non-access for 'must-be-reads'. NEEB and EMEB inform the customer when the meter-reader will call again, and SEEB and SWEB invite the customer to make an appointment. The must-be-read ratios of the four boards are set out in the bottom line of Table 4.2.

Other arrangements affecting second calls and frequencies of meter-reading

4.32 NEEB, SEEB and SWEB meter-readers' productivity is assessed on the number of successful reads. This is particularly relevant since all these boards informed us that they did not make second calls except for 'must-be-reads' and disconnections. In practice, however, second calls, not necessarily associated with 'must-be-reads' or at the discretion of local management, are sometimes made as a result of a decision taken by the meter-reader himself.

4.33 All the boards have either considered reducing the frequency of quarterly readings, or are at present doing so in various ways. In discussions on the subject they made the following points. While savings in meter-reader and transport and travelling costs could clearly be expected, additional but less easily forecastable costs would be involved if any change was to be made acceptable to customers. Estimated accounts were sent when actual readings were not available. This led to several difficulties. Complaints or queries about these accounts might arise. Customers were entitled—if not offered in the first place—to have their accounts based on their own readings; sending out revised accounts added to the board's costs. Some customers might find it difficult to pay their accounts if a previous under-estimate resulted in an unduly large bill after the next actual reading; the risk of an increase in bad debts then arose. The following paragraphs describe the different positions and experience of the four boards.

4.34 In NEEB all meters are read quarterly. It experimented by omitting a reading for one quarter in 1973 but reverted to quarterly readings because an independent survey revealed adverse reaction by customers. There was also a significant increase in disputed accounts and the cost of dealing with them.

4.35 We found staff at SEEB districts re-allocating non-access calls for reads the following day. SEEB has advised us that it has a policy of no second calls and that the practice referred to which occurred in one or two districts has now ceased.

4.36 SEEB, with the support of the SEE Consultative Council, resorts to block estimating of meter-reads when that is necessary to maintain the meter-reading programme and to obviate the need for overtime working brought about by sickness or annual leave. It told us that only about 5 per cent of customers who were then sent estimated accounts asked for those accounts to be based on their own readings instead.

4.37 EMEB is experimenting with reducing the number of readings, starting with annual readings at holiday homes in East Lincolnshire. It had considered going over to annual readings with monthly estimated bills, a procedure known as the Hamburg system and followed in a number of European countries, but rejected it because the United Kingdom does not have a formal system for monitoring movements between premises and because United Kingdom customers, although liable for standing charges in respect of the current quarter, are liable only for actual and not estimated units of consumption.

4.38 SWEB told us that it did not make second calls except for some pre-payment customers, 'must-be-reads' and disconnections. Second calls were made for some pre-payment customers to avoid the cost of a possible subsequent 'call-out' to empty a meter which was full.

4.39 SWEB, in agreement with the SWE Consultative Council, has moved to a twice-yearly reading of meters in more remote areas in Cornwall, Devon and Somerset. This involves some 21,000 customers. SWEB told us that the arrangement had produced some saving of costs. It added that, while it was easy to estimate the savings in meter-reading and travelling costs as a result of less

frequent readings, it was more difficult to estimate the additional costs of dealing with disputed accounts or complaints. The main increase in costs, however, arose from offering own-reading facilities to all customers who wanted them, instead of an estimated reading, as the basis for their accounts. About 15 per cent of customers had asked for this facility.

Pre-payment meters

4.40 Arrangements for paying rebates to customers with pre-payment meters vary between boards. At each meter-reading the amount due from the customer is calculated. NEEB and SWEB immediately refund any rebate which may be necessary, provided the customer or other responsible adult is present. In SEEB any refund due will be paid by cheque within a week of the collection if requested by the customer; otherwise the board will make an end-of-year reconciliation and then pay any refund which may be necessary. EMEB pays its rebates the following quarter.

Billing

4.41 Billing is a centralised and computerised operation in all four boards. The meter-reading is processed and a bill produced, enveloped and despatched to the customer. The main difference between the boards now is that SWEB's IBS produces the bill 'on the doorstep'.

4.42 In EMEB, SEEB and NEEB the methods are generally similar except that EMEB and SEEB use optical character recognition to read the meter-reading sheets whilst in NEEB the data are keyed into the computer via a terminal.

4.43 There are some differences in respect of the day when bills are despatched to customers and the following table shows for each of the four boards when bills are despatched for monthly and quarterly reads, that is the speed normally achieved in practice.

TABLE 4.4 Time of bill despatch

Board	Quarterly bills	Monthly bills
NEEB	Day 2	Day 3 to day 6
SEEB	Day 2	Day 3
EMEB	Day 2	Day 2
SWEB (a) IBS	Day 1 (Quarterly bills— at present 30% of them)	
(b) Pre-IBS	Day 3 to day 6	Day 3

Source: NEEB, SEEB, EMEB and SWEB.

4.44 The further delay involved before the customer receives the bill will depend largely on the Post Office and the priority given at the time to second class bulk posting. All four boards claim that in excess of 60 per cent of their bills are received by their customers one day after despatch. With SWEB's IBS there is of course no postal delay as bills are left at the customers' premises at the time of the meter-reading.

Methods of payment

4.45 These are considered more fully in paragraphs 9.4 to 9.21. Table 4.5 below summarises the methods of payment available to customers in each board, and shows that payments are received at shops, at central accounting units and at other premises of the boards such as district/area offices.

TABLE 4.5 Payment methods available

<i>Method of payment</i>		<i>NEEB</i>	<i>SEEB</i>	<i>EMEB</i>	<i>SWEB</i>
(a)	By post to centralised A/C unit	YES	YES	YES	YES
(b)	At shops/showroom	YES	YES	YES	YES
(c)	At board premises other than (a) + (b) above	YES	YES	YES	YES
(d)	Via agencies	YES	YES	NO	NO
(e)	Via PO Giro	YES	YES	YES	YES
(f)	Via bank	YES	YES	YES	YES
(g)	By pre-payment meters	YES	YES	YES	YES
(h)	By 'open-box' pre-payment meters	NO	NO	YES	NO
(i)	By deduction from salary/pension	YES	YES	YES	YES
(j)	By direct debit to credit card accounts	NO	NO	YES	YES

Source: Electricity Council questionnaire completed by boards on customer-related topics, 1983-84.

4.46 We note that neither EMEB nor SWEB operate a payment through 'agencies' other than Post Office Giro and banks. EMEB told us that it discontinued the use of agencies (primarily sub-post offices) many years ago following the introduction of National Giro. Neither NEEB nor SEEB accept credit card payment. All four boards offer those methods by which the vast majority of customers wish to pay, ie lines (a), (b), (c), (e), (f) and (g) in Table 4.5.

Follow-up of overdue customer accounts

4.47 This subject is dealt with more fully in paragraphs 9.29 to 9.43. In the following paragraphs we summarise the practices of the four boards.

4.48 Reminders, letters offering a means of settlement, and disconnection lists are generated centrally by computer. Beyond that, each overdue account is handled on an individual basis by headquarters in NEEB and by district, area or local offices in SEEB, EMEB and SWEB. The following table indicates the differences between the four boards in the 'follow-up' working days.

TABLE 4.6 Times of 'follow-up' procedures (working days)

<i>Follow-up activities</i>	<i>NEEB</i>		<i>SEEB</i>		<i>EMEB</i>		<i>SWEB</i>	
	<i>Q</i>	<i>M</i>	<i>Q</i>	<i>M</i>	<i>Q</i>	<i>M</i>	<i>Q</i>	<i>M</i>
Reminder despatched	—	—	17	—	—	—	—	—
Final notice despatched	15	—	27	—	14	12	16	11
Offer letter despatched					23	—	26	—
Disconnection list generated	25	11	33	15	33	12	31	16
Local office actions disconnection	35+	15+	34+	16+	34+	13+	32+	17+

Source: NEEB, SEEB, EMEB and SWEB.

Q=Quarterly
M=Monthly

4.49 NEEB does not actually generate disconnection lists, but on day 25 the computer produces disconnection letters which are sent direct to quarterly customers informing them of the disconnection date. All subsequent action is initiated by the head office debt control section.

4.50 SEEB dispenses with the 'normal' reminder for customers with poor payment records and sends the final notice instead after 17 days.

4.51 SWEB's offer letter is a 'disconnection/repayment' letter which, in addition to offering a payment arrangement to clear the outstanding debt, also confirms that in the event of non-payment a call will be made to disconnect (the date is specified) and if access is not gained action will be taken to obtain a warrant for entry.

4.52 As described more fully in paragraphs 9.36 to 9.43, the speed at which disconnection will take place varies considerably after the beginning of the formal disconnection phase shown in the bottom line of Table 4.6.

General comments

4.53 It is of interest to note that in the Deloitte Haskins and Sells report¹ of January 1983, on revenue collection by the Eastern, North Western, and Midlands electricity boards, similar differences in practices and procedures were revealed.

Comments by the four boards

4.54 The boards made the following comments about the differences between them in practices and procedures. They accepted that not all the differences were justified; some were being eliminated and that process would continue. They argued that the situation also reflected the strength as well as the weakness of the federal structure of the industry. It would be unwise to stifle local initiative, which could lead to beneficial innovations that other boards or the whole industry might later adopt. Insistence on complete uniformity could increase the damage that might be done if wrong decisions were taken. A further problem was that boards were often at different stages in the development of their systems.

4.55 The boards referred to the continuing exchange of information and search for best practices which take place within the industry. This is done partly through the network of Committees, Conferences and working groups which the Electricity Council provides (see Chapter 2). In some instances this results in the selection of 'lead' boards to conduct trials or experiments the results of which are then made available to the Council and the other boards, as for example in the new technology projects described in Chapter 13. Comparisons of practices are also made through contacts between individual boards either on an *ad hoc* basis, or on a more long-term basis such as the arrangements between SWEB and the Eastern Electricity Board for their Severnside and Thameside areas (see paragraph 7.34(d)). EMEB told us that it had a general arrangement to compare practices with its neighbour, the Midlands Electricity Board. It also said that it intended to hold discussions with NEEB as a result of studying the cost comparisons on meter-reading which the Commission had

¹Report on a review of standing charges for the Electricity Council'.

circulated (see Chapter 8). As a general comment on the situation, the boards considered that there had been greater co-operation between themselves on these matters since they had given assurances to the Secretary of State for Energy in 1980 to increase co-operation and thus to improve the efficiency of the industry.

4.56 Nevertheless the boards thought that some difference in practices were inevitable. Their main reason was that their customers were different and reacted differently throughout the country. A practice, or a proposal for change, which was acceptable in one area was not acceptable in another. EMEB told us that it had had to abandon some years ago, because of adverse customer and press reaction, a trial system under which actual readings were replaced by estimated readings for one quarter each year. Other examples mentioned were differences in attitudes towards monthly billing, paying by banker's order or by cheque instead of cash. The 'must-be-read' arrangements were also affected; in areas with comparatively mobile populations it was necessary for meters to be read more frequently, in order to reduce payment difficulties because customers had moved before receiving their bills.

Conclusions

4.57 We have commented in this chapter on some of the differences in detailed practices or procedures as between the four boards, based on the flow charts at Appendices 4.1 to 4.4. We note that the four boards had not prepared such flow charts for themselves. We believe that the boards can benefit, individually and collectively, from a systematic examination of the ways in which they collect revenue, using all this detailed information. Some such benefits have already arisen from the contacts between the Commission and the boards, who, after seeing summaries of the particulars shown in each other's flow charts, have suggested changes or improvements to their own.

4.58 The area in which the most important differences occur is the frequency with which meters are read for quarterly customers. First, EMEB stands out as being the only board in which a second attempt is still a full part of its arrangements. We deal with this in paragraph 8.61. Secondly we note some instances in which meters are read less frequently than quarterly, on a planned basis. We suggest that boards should keep under regular review the question of whether costs can be reduced by reducing the annual number of reads, but that any change should be considered by the industry as a whole, rather than applied partially. The electricity industry should take into account the experience of the gas industry, which we understand has already gone over to twice-yearly readings in some regions. The consultative councils told us that they were not generally in favour of reducing the frequency of quarterly readings, in particular because more people might get into difficulties over payment of large amounts following previous under-estimates. The boards share this concern. We recognise the need to build into any arrangements for less frequent meter-readings measures to deal with customers' problems or reactions (as SWEB, for example, has done—see paragraph 4.39). Thirdly, there is the related question of the boards' 'must-be-read' arrangements, which differ. Changes to these arrangements may also give rise to the problems with customers already noted. The boards will need to keep this matter under review as part of consideration of the frequency of quarterly meter-reading.

4.59 We do not believe that there should be so many differences in practices and procedures between the boards, since the objectives and tasks of revenue collection are the same for all boards. Nor do we think that the differences between customers in the various regions are so immutable as the boards implied, or that customers cannot be persuaded to accept changes, especially when care is taken to deal with points of concern to them. That has happened, for example, in SEEB's (paragraph 4.36) and SWEB's (paragraph 4.39) arrangements for reading meters less frequently—arrangements which have been initiated by the boards themselves. The reduction of the multiplicity of practices and procedures we have found would lead to greater confidence in the results of inter-board comparisons of costs and performances, which are necessary as a spur to efficiency.

4.60 The boards told us that they compared their practices and procedures on a continuous basis, to identify best practice, sometimes directly with each other and sometimes by using the Electricity Council's arrangements, and that that would continue. They said that there was now more co-operation between boards in this matter. We acknowledge what the boards told us; however we were not satisfied that this constitutes a sufficiently systematic analysis of the differences between boards' practices and performances. We believe that more should be done to achieve greater consistency in the way in which revenue is collected and that a systematic drive is required to identify best practices and apply them throughout the boards after appropriate consultations with staff and trades unions and with the consultative councils. The unions told us that they supported the development of best practices. Accordingly we recommend that the Electricity Council and the boards should take steps to ensure that differences in practices between boards, and ideas for changes and improvements, are systematically identified and analysed on an industry-wide basis.

4.61 We believe that such analysis will in many cases highlight best or improved practices and that all boards should then be asked to make the appropriate changes. If after a two-year period inadequate progress has been made in achieving standard practices throughout the industry, we believe that the Secretary of State should then consider strengthening the formal powers of the Electricity Council in relation to the area boards so that it may properly fulfil its remit to improve the industry's efficiency.