Minutes of the Retail Settlements Code Development Task Force Second Meeting April 27, 1999 9:00am - 4:00pm

Location: Ontario Energy Board offices

Opening Remarks by Paula Conboy

Paula Conboy from the Board noted that minutes will be e-mailed to Task Force members rather than mailed. Members are asked to provide their comments on minutes through e-mail. Steve George of PHB was introduced as the consultant assisting the Board to develop licences and codes. S. George was attending the meeting to present the recommendations of the Market Design Committee's (MDC) Retail Technical Panel dealing with retail settlements. Bruce Bacon of Econalysis Consulting Services was asked to provide a summary of the recommendations of Performance Based Regulation (PBR) Rates Task Force. Paula noted that a Chair to the Task Force will be appointed near the end of the meeting following the presentations by Steve George and Bruce Bacon.

Presentation on Retail Technical Panel Recommendations on Retail Settlements

S. George noted that his presentation today was the same presentation given to the MDC last December, and it is essentially a summary of Section 3 of Volume Four of the MDC Final Report. (Copies of the presentation overheads were provided as a handout at the meeting.)

S. George noted that the Second Interim Report of the MDC provided the "marching orders" to the Retail Technical Panel which was assigned the responsibility to work out, among other retail issues, the implementation details to retail settlement.

One member of the Task Force asked for clarifications on the requirements of local distribution companies (LDCs) to provide their load forecasts to the Independent Electricity Market Operator (IMO).

S. George said further clarification is required from the IMO, but his understanding is that LDCs will not be required to provide forecasts for load scheduling. They may do so as an option but otherwise the IMO will schedule loads on their behalf.

S. George noted that whether the standard service (default supply) is a fixed price or a spot price[1], it is not a concern for designing a settlement system given that the purpose of settlement is to allocate the hourly spot price to each customer, regardless of arrangements used to smooth out or hedge spot prices. He noted that physical bilateral contracts have not been incorporated in the retail settlement system (whereas physical bilateral contracts have been incorporated in the wholesale settlement system) and LDCs may provide support for physical bilateral contracts if the

[1]The rules associated with standard supply service are subject to another consultation process by the Board.

full incremental costs of providing this service is paid by its users.

In response to a question, Paula Conboy noted that the Board has not formally agreed to the Retail Technical Panel recommendations on retail settlement and this Task Force has been asked to review the recommendations and determine whether there are any major problems that should be considered by the Board.

One member said that it may be difficult to know at this time whether the recommendations are workable because many details must first be worked out.

In response, S. George said the purpose of the Task Force is to develop the details and to flag recommendations that are not workable.

One member noted that the implications of physical bilateral contracts needs to be considered as the details are worked out, otherwise a settlement approach may be adopted that could pose a roadblock to physical bilateral contracts.

S. George agreed and also noted that the Task Force will need to clarify what elements should be mandatory in the settlement process and where some flexibility can be allowed.

S. George reviewed the diagrams (in the Section 3 of Volume Four of the MDC Final Report) explaining the settlement information flows and the settlement processing flows. It was noted that the flow diagram included a specific transmission loss factor which the IMO is not planning to use in its wholesale settlement system. In addition, power factors will not be considered at the wholesale level. S. George emphasized that these diagrams should be considered illustrative only. The work of the IMO, the rate task force and the settlements task force will determine the detailed adjustments and calculations that must be incorporated in the settlement system.

It was noted that the IMO will track power from generators and pay generators on a discrete five minute basis, but non-dispatchable loads will only see hourly prices.

There was a discussion concerning how direct wholesale market participants will be treated. In brief, the IMO will read the meters of these customers directly and subtract the relevant load amount, adjusted for losses, from the total load of the relevant LDC prior to sending a settlement statement to the LDC. Wholesale customers must have interval meters with remote meter-reading capability. LDCs will likely still be responsible for billing these customers for wires charges. on whether a customer served by an LDC could be a wholesale market participant.

Paula Conboy noted that Greg Hine has agreed to provide an update on IMO requirements at the next meeting.

Action by: IMO

S. George discussed the settlement processing flow diagram (in the Section 3 of Volume Four of the MDC Final Report) and noted that there are four modules that will need to be developed (represented by black boxes in the handout due to a software glitch).

- The IMO will send data (hourly amounts, hourly prices, fixed charges) to the LDC which will need to be processed by the LDC to establish billing determinants.
- There will be a module for calculating the LDC's distribution loss factor and unaccounted for energy. (The Retail Technical Panel recommended that two approaches be developed - one being simple and the second being more complex for LDCs who want to use it.)
- There will be a module for calculating the net system load shape of the LDC by subtracting the hourly readings of the remotely read interval meters from the LDC's hourly load.
- There will be a module which will calculate the settlement and bills for each customer. (If the bill is based on a smoothed spot price, the difference between the bill and the spot price settlement will need to be tracked.)

One member noted that the distribution loss factor for each hour could be calculated through a linear equation.

One member said the LDC's overall average losses and unaccounted for energy will require some work to establish. The meter readings of all end use meters would need to be totaled and compared to the wholesale meter reading over the same period. Given meter reading schedules and difficult to access meters, the period may be a year.

It was noted that some unaccounted for energy could be caused by slow versus fast meters.

S. George reviewed the reasons why the Retail Technical Panel decided to use the net system load shape (NSLS) approach to calculate spot prices for non-interval metered customers. The Retail Technical Panel reviewed a few load shape methodologies including static load shapes that don't reflect the impact of weather, dynamic load shapes based on load research which vary with weather input, and dynamic load shapes based on a statistical sample of interval metered customers representing a class. The Retail Technical Panel compared the results of the NSLS approach with the dynamic load shape approach, and found that the differences were acceptable, in that they were within the ranges of existing rates discrepancies.

He noted that the NSLS approach was considerably easier to use and could be used immediately without having to wait for the development of load shapes based on load research. He noted that the load shape approach would also require constant updating as more customers install interval meters. The NSLS approach may also better reflect the local circumstances of an LDC rather than a load shape developed from load research obtained from some other sample region.

There was some discussion on whether the customers remaining under the NSLS would be at a disadvantage once customers move to interval meters. It was noted that larger customers with poor load shapes would not want to have interval meters, and smaller customers with good load shapes could not justify the cost of interval meters. It was generally agreed by members that LDCs should be allowed to mandate interval meters for customers above a certain size to improve cost tracking.

There was also a discussion on whether load controlled customers could continue to see a benefit. It was suggested that if the controlled load was separately metered, and when controlled there is

no load, then the hourly price during control would be zero. It was noted that most load controlled water heaters are not separately metered.

The Retail Technical Panel had assumed that there were few customers with time-of-use meters (TOU) and so recommended that the settlement process should not have to accommodate TOU customers and that TOU meters be treated the same as kWh meters. Subsequently, it was found that some utilities have many customers with TOU meters. Thus, the task force should consider whether, on an optional basis, settlement for these customers may be treated differently, taking into account the additional information provided by TOU metering. Consideration must also be given to who should pay for any incremental cost associated with development and processing of such information (e.g., whether all ratepayers should cover the cost of providing this capability, or only those with TOU meters).

In response to a question whether an LDC could decide on its own to use load shapes rather than NSLS, Steve George said he believes it would not be allowed due to the increased regulatory burden. He noted that comparing the NSLS approach with the load shape approach, for most classes the errors were around 2%. (This exercise was undertaken by the MDC's RTP)

One member believed that the NSLS approach with larger customers on interval meters, is more accurate than the present approach which uses utility profiles rather than class profiles and therefore an improvement over what is done today.

One member noted that in Scandinavia countries, interval meters are mandatory for customers over 100 kW, so the residual load is more uniform, being mostly residential and small commercial.

S. George noted that interval meters that were not remotely read would not be subtracted from the utility load and would not be used to establish the NSLS, but they would receive the hourly price. This will lead to errors with the NSLS, and therefore there may be settlement errors that would have to be tracked by distributors.

One member asked whether settlement areas will be restricted to LDC boundaries or whether LDCs could group their loads to establish a single settlement and a single NSLS, in order to share the costs of settlements.

S. George said it should work in principle, but if the losses between the LDCs was considerably different, it could lead to cross-subsidies.

One member asked how settlements would be calculated for unmetered loads such as streetlights.

S. George agreed that some loads such as streetlights can be accurately profiled and thus could in theory be treated the same as interval metered load, however there is a 'slippery slope' in terms of which unmetered loads should or should not be included, and we don't know where to draw the line (e.g. would phone booths be included). As such, the MDC's RTP recommended that all unmetered loads be included in the NSLS calculation.

S. George noted that the Retail Technical Panel recommended that for each LDC, the losses and

unaccounted for energy adjustments would apply equally to interval and non-interval customers. Unaccounted for energy (UFE) covers theft, meter errors and profile errors. He noted that representatives of larger customers opposed the same application of UFE since they thought customers with accurate meters shouldn't pay for metering or profiling inaccuracies of other customers.

It was noted that there may be issues regarding how to provide an incentive to LDCs to manage their losses and UFE

S. George noted that the Retail Technical Panel recommended that for customers without demand meters, demand charges for distribution and transmission should not be allocated based on NSLS data, since NSLS is not a good determinant of demand.

It was noted that LDCs will be required to have the ability to redirect customer bills to retailers and to split bills into wires bills sent to customers and energy commodity bills sent to retailers. The LDC can also send bills on behalf of retailers to customers, but the additional cost of this service would be recovered from those retailers.

It was noted that it might be useful to have a representative of the gas industry explain to the group how they offered the billing service to gas retailers (known as agent billing and collecting).

S. George noted that incorporated LDCs will not be able to place tax liens on property, so deposits will be needed to mitigate default payment risks. With retailers representing a large number of customers, the payment risk is greater. However, as a retailer becomes larger, it may have better credit worthiness. Given that having each retailer negotiate with each LDC would result in high transaction costs, the Retail Technical Panel recommended that a process be established to facilitate retailers meeting prudential requirements. One suggestion was to establish a retailer prudential clearinghouse. This issue could be dealt with by a subgroup of the Task Force since it is a stand alone issue.

The Retail Technical Panel recommended that estimated meter readings could be used for settlements once, but if the meter was not read on the next billing cycle, then the customer could choose to accept the second estimated reading as final. This approach was recommended to provide an incentive to LDCs to address the problem of hard-to-read meters. It was noted that an OEB accepted methodology for estimating meter readings is desirable.

There was some discussion on when payments would be due to the IMO from the LDC. It was suggested that this issue be presented by a representative of the IMO at the next meeting.

Presentation on PBR Rates Task Force

Bruce Bacon said the Performance Based Regulation (PBR) Rates Task Force has been working for a few weeks and is nearing the completion of its assignments. The PBR Rates Task Force has arrived at some conclusions on distribution rate structures.

He noted that the Task Force has recommended that distribution losses be recovered as an uplift

to energy and that losses be established based on a 5 year rolling average in order to provide incentives to LDCs to reduce losses. The Task Force also noted that a more complicated loss estimation process taking into account load profiles, voltage and geography, should be allowed.

One member expressed some concerns about allowing the LDC to use a rolling average rather than the actual losses as this would lead to inaccuracies in the settlement process.

S. George agreed that an LDC could reduce its losses substantially in the first year, thus resulting in a settlement inaccuracy for a number of years.

B. Bacon said these recommendations will be sent out for comment. It may be that more weight could be given the most recent years, but some method is needed to provide an incentive to reduce losses when economical.

B. Bacon said the PBR Rates Task Force recommended that metering, billing and collection costs be recovered through a fixed customer charge to each class. Distribution related costs would be collected partially through a fixed customer charge to recover minimum distribution system costs (for providing 100watts capacity to each customer) and the remaining distribution costs would be recovered through a demand charge. The Task Force noted that the LDC could choose to recover all its distribution related costs through a usage charge. For customers without demand meters, the distribution costs would be allocated based on class profiles and charged on kWh.

Transmission and IMO charges will be considered a pass-through cost and allocated on demand. The IMO charges are presumed to include items such as IMO administration costs, rural rate assistance, uplift and ancillary service costs. The costs would be allocated based on a forecast of demands and there will be a true-up process to hold the LDC harmless.

It was noted that the PBR Task Force does not know how the IMO will charge for its services. It was noted that the IMO may have a kWh charge rather than a kW charge. If the IMO charge is based on kWh, then it would be passed onto customers as a kWh charge.

Paula Conboy reminded the group that questions should be kept to those of clarification only. The Board will be undertaking stakeholder consultation for the recommendations made by the PBR Task Forces.

Selection of Task Force Chair

Paula Conboy noted that the OEB is seeking an industry representative to lead the Task Force. The responsibility of the Chair would be to organize meetings, set agendas, facilitate the meetings, coordinate with Board staff and consultants, ensure minutes are taken, ensure the process is open and consultative, and ensure the workplan is accomplished. It is expected that a lot of work could be done concurrently, so the Chair may want to set up and coordinate between subgroups.

Once the Task Force has completed its work, it will be reviewed by the Board, and the Board will be looking for overall stakeholder consensus.

P. Conboy noted that two names have been nominated for Chair - Richard Crouch of Ontario

Hydro Services Company and Don Thorne of Milton Hydro.

D. Thorne noted that he has been appointed to the IMO Technical Panel, and given his time commitments, he suggested Richard Crouch be appointed Chair.

P. Conboy suggested that it may be beneficial to have co-chairs to share the task.

One member noted that D. Thorne has pointed out at the previous meeting that he has a conflict of interest.

S. George said he has worked with both Richard and Don and he expects that they will be diligent, ethical and objective.

One member said his concern was just one of optics - the perception of stakeholders not attending the meetings.

After some discussion the members of the Task Force agreed on Richard Crouch and Don Thorne as co-chairs.

Next Meeting

The Task Force decided to schedule its next four meetings. The majority preferred Tuesdays, so the schedule was proposed as May 4, 11, 18 and 25. Steve George was asked to provide his presentation on the Retail Technical Panel's recommendations on Customer Registration and Transfer Procedures. After the first few overheads, the meeting was running late and most of the Task Force members had left, so it was decided to defer this presentation to the next meeting.