Settlement and Prudential Security Technical Group

Weekly Settlement Straw Man

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Purpose

1. The purpose of this SPSTG paper is to set out a "straw man" for how weekly settlement could work. Among other uses, a straw man for weekly settlement will enable the Authority to compare weekly and monthly settlement options.

Summary

- 2. The key features of the weekly settlement straw man are:
 - a. Reconciliation would remain a monthly process;
 - b. Generation and purchases would be settled weekly based on estimated quantities that 'balance';
 - c. HSAs would be settled weekly;
 - d. FTRs would be settled weekly but would remain a monthly product and the risk pool for FTRs would remain a monthly pool;
 - e. Ancillary services would be invoiced weekly where the amounts can be estimated with reasonable precision by the clearing manager and where the system operator confirms this is contractually permissible. For other items, monthly settlement would continue. The straw man would not rely on getting weekly information about ancillary service amounts from the system operator because this may be expensive. The idea is to allow the system operator's systems to remain completely unchanged;
 - f. Other invoice items (constrained on/off, MRDA) would be invoiced weekly based on estimated amounts:
 - g. The risk pool for the general account would remain a monthly risk pool;
 - h. Partial net settlement would apply 'as if the risk pool was weekly';
 - i. If there is any shortfall on a weekly settlement, short payments would be made as if the risk pool was weekly, but there would be an alignment process at the end of the month to achieve the same outcomes as if settlement had been monthly with a monthly risk pool;
 - j. There would be a monthly alignment process incorporated in the first weekly settlement occurring after the 20th of the month. Invoices containing reconciled quantities for the monthly wash-up and alignment process would continue to be issued on the 9th business day of the month;
 - Alignments and wash-ups would be recovered via a separate invoice and separate payments. Within that invoice they should be invoiced on a net basis. The risk of shortfall should be held by parties who are net receivers of those alignments/wash-ups;

- I. Future wash-ups would be performed, as at present, on months;
- m. Weekly settlements would occur 3 to 5 business days after the end of the billing week;
- There would be no cash requirement relating to prudential outstandings. This
 would not preclude participants choosing to provide cash as a form of
 prudential security.

Reconciliation would remain a monthly process

3. The WAG did not specifically consider whether reconciliation should move to a weekly cycle, but the implication from their report is that reconciliation would remain on a monthly basis. Moving reconciliation to a weekly cycle would be a substantial undertaking. Monthly reconciliation is taken as given in this note.

Need for 'balanced' estimates for weekly settlement

4. At present, the clearing manager already creates estimates of MWh quantities for past days, and in essence this estimation process would be continued under weekly settlement: it is just that the quantities would contribute to settlement payments rather than prudential requirements. However, there are some important differences. Under weekly settlement, the amounts estimated for payer and payee accounts would need to "balance" (so that the amount received by the clearing manager equals the amount paid out). Under monthly settlement, this balance is achieved through the reconciliation process, but is not a feature of the MWh estimates for prudential purposes.

HSAs would be settled weekly

- 5. Weekly settlement of HSAs would be relatively easy from an administrative perspective. It would also make sense since it would mean that the hedging properties of these contracts could be used to manage participants' cash flows.
- 6. Lots of notice (e.g. at least 6 months?) should be given to parties. If the parties cannot agree to have the hedge settled weekly then the HSA will be de-registered prior to the commencement of weekly settlement.

FTRs would be invoiced weekly but would remain a monthly product

7. FTRs would be settled weekly, but would remain a monthly product. The main reason for weekly settlement is that it is reasonably easy to do and will help parties hedge cash flows because the timing of FTR payments will match energy payments. Weekly settlement of FTR Hedge Values can be on the basis of values that will be known as soon as final prices are published. Weekly settlement of the FTR Acquisition Cost can be on the basis of the value pro-rated across the month. The only area where things can get a bit tricky is when an FTR is assigned part way through the month when some days in that calendar month have already been settled. The principle that should be achieved is that all parties should be left in the same position at the end of the month as if there had not been weekly interim settlements. That means that the former holder of an FTR who received/paid settlement amounts for the first x days in the

- month may need to make/receive adjustment payments later in the month even though they no longer hold the FTR.
- 8. FTRs would remain a monthly product to limit the number of changes that need to be made to FTR provisions, keeping the project as simple as possible.
- 9. Since FTRs remain a monthly product, the FTR risk pool should be monthly.

Ancillary services would be invoiced weekly where this does not require changes to SO systems

- 10. The invoicing of ancillary services (AS) will be influenced by the following factors:
 - a. AS amounts would be invoiced weekly to the extent this does not cause difficulties for the system operator or the clearing manager;
 - b. If the system operator is required to make any changes to its AS invoicing systems, this is expected to have a high system development cost;
 - AS reward payments arise legally from a contractual basis rather than from a statutory (Code) basis. Consequently, the settlement of AS reward payments must be consistent with those contracts; and
 - d. AS reward payments receive priority over other payments because they are to some extent 'guaranteed' by the system operator, and historically this guarantee has itself been underwritten by generators (or rather by the 'primary shortfall funding basis').
- 11. The clearing manager may be able to estimate weekly items for AS for reward payments and for cost recovery payments. If it can do this reasonably accurately, then there is no barrier to weekly settlement, but if it is difficult to estimate with any degree of accuracy, it may be best not to settle these amounts until after the end of the month, and probably until after reconciled quantities are available.
- 12. At present, the system operator provides information to the clearing manager about AS reward payments and cost recovery payments. It does this monthly in time for the monthly invoices. Any change to these systems is expected to be expensive. Consequently, a move to weekly settlement will only work if the *clearing manager* itself can estimate the weekly AS reward and cost recovery payments.
- 13. It would be useful to ask the system operator whether clearing manager estimated weekly payments would be consistent with existing AS contracts, and if not whether there is any easy process to make them so (especially given that AS providers would benefit from earlier receipt of those funds).

Other invoice items would be settled weekly based on estimates

14. MRDA amounts (both auction payments and rebates) would be invoiced weekly, provided this does not create undue complexity. Ideally, rebates would be placed on the payer account and payments would be placed on the payer account.

15. Constrained on/off amounts (both rewards and cost recovery) would also be invoiced weekly on the basis of dispatched quantities rather than the min/max of the difference between dispatched and reconciled quantities, at least until reconciled quantities became available.

General account risk sharing pool would remain monthly

16. It is proposed that the general account risk pool would remain monthly. If a payer fails to pay a weekly amount and there is a shortfall into the general account for that week, the shortfall will be shared initially by the payers for that week. However, as part of the monthly alignment process, the shortfall over the whole month will be shared by the payers for that month. This leaves arrangements as close as possible to existing arrangements.

Overlaps between weeks and months - need to split weekly invoices

- 17. Since we have a monthly FTR risk pool, and especially if we also have a monthly risk pool for the general account, there will be a need to split some weekly invoices between months. When a billing week overlaps a calendar month, the invoiced amounts may have to be separated into two: amounts relating to the earlier month and amounts relating to the later month.
- 18. There seems to be no particular problem in principle with having to make this split on invoices. However, it may add to the complexity of arrangements. In particular, if there is a settlement default relating to a week that spans two months, the default will affect two different risk pools.

Monthly alignment process

- 19. The monthly alignment process would, in principle, recalculate the payer and payee account amounts for the whole month (as if no weekly payments had been made), and then recognise the previous weekly payments as an offset.
- 20. The alignment would be performed at the same time as the first washup, which would be on or shortly after the 20th of the following calendar month when reconciled quantities become available. There could be a separate invoice paid on the 20th (washup and alignment invoice), or those items could be incorporated into the next normal weekly invoice.
- 21. Note that the alignment process is not a 'washup'. Washups are a revision to quantities for the billing period (and this has an impact on invoiced dollars), whereas the alignment process addresses other issues such as the length of the risk pool, and possibly the calculation of amounts such as FK costs which are allocated on a monthly basis.

Settlement delay would be 3 to 5 business days

22. Another issue to consider is the settlement delay: that is, the time between the end of the billing week and the settlement for that billing week. The WAG recommended that settlement occur immediately at the end of the billing week: that is, presumably the next day. However, this would mean that trades would be settled for the previous 1 to

- 2 days without knowing final prices for those days. This resembles the discussion we have had in the context of calculating prudential outstandings under monthly settlement, and in that context we resolved to use final or initial prices, but not other prices. By analogy, we should not propose to settle trading periods for which there is not at least a set of interim prices. It may be best from the point of view of reducing complexity to settle only those days for which there are final prices (this avoids the need for a further 'alignment process' to cope with revised prices. This would mean there would be a delay of perhaps a few business days after the end of the billing week before settlement could occur.
- 23. There is also a question about whether there should be a process in which invoices are issued, and some time allowed for resolving invoice disputes. It might be difficult to expect a participant to pay an invoice on the day it is issued, so some delay may be appropriate even if only to help the participant manage its cash requirements. A delay of perhaps 3 to 5 business days seems appropriate.

No obligation to provide prudential outstandings as cash

- 24. We could provide that the (net) outstandings portion of the required prudential level be provided in the form of a prudential cash deposit. In simple terms, this could mean that settlement would be a matter simply of transferring funds from a prudential account to a settlement account. In principle, this could mean that settlement could happen just as quickly after the end of the week as prudential outstandings can be calculated for those days.
- 25. There may be some complexities that would have to be overcome before this could be made to work. One issue is that prudential outstandings are calculated (essentially) as purchases minus generation. That is, prudential outstandings are calculated on a net basis. But if we have partial net settlement, the payer invoice to a participant could be for more than its net position, since it also needs to provide enough funds to manage the largest prudential contingency. Consequently, we would need to provide that parties have sufficient cash in that prudential account to cover their payer invoice. That could lead to other complexities (e.g. the cash requirement could be larger than their total prudential requirement).
- 26. For the purposes of the straw man proposal, we propose that there be no cash requirement relating to prudential outstandings.

Clearing house

27. Note that NZX has suggested that one possibility for managing weekly settlement would be for NZX to act as a clearing house. The details of that suggestion are yet to be worked through. They are not considered further in this paper.