Trading Stage 2 - 31st May 2000

PRINCIPLES OF NHH SETTLEMENT ERROR CORRECTION

For Decision

This paper presents a set of principles for the correction of errors in NHH settlement. These principles will be used to guide process design when market participants consider processes that will correct such errors. TS2 is invited to agree these principles.

INTRODUCTION

1. The issue of removing excessive consumption from settlement has highlighted the need to establish a set of principles that can be used to guide the design of corrective processes.

2. TS2, for paper TS2/21/601, endorsed as a temporary emergency measure the proposals for the withdrawal of meter readings post-final reconciliation for the purposes of resolving the large EAC/AA issue. However, an enduring process still needs to be defined and principles need to be established to guide the designers of this process. It should be noted that designing processes according to these principles does not remove the need for TS2 authorisation of the processes or changes to be undertaken.

3. The principles described within this paper will be used by TS2 Service Delivery in their review of corrective action plans submitted by market participants as part of the market operation problem resolution process.

BACKGROUND

4. The issue of excessively large EACs and AAs has been presented to TS2 in paper TS2/22/632. It is recognised that erroneous meter readings have been incorrectly processed as valid measurements by Non Half Hourly Data Collectors (NHHDCs), giving rise to large positive and negative AAs and EACs. These large values have compromised the accuracy and integrity of settlement.

5. There needs to be a process that agents can use to remove these values, and future errors, from settlement.

6. Fundamentally, there are three long-term options to correct NHH values in settlement;

   a) Fully remove all erroneous values and replace with correct values;

   b) create an equal and opposite compensatory error, or

   c) write-off errors and make adjustments so that future settlement is correct.

7. In addition, values that have been finally reconciled shouldn't be changed unless they are the subjects of a dispute. Changing these values outside the disputes process will not achieve a correction to settlement and may interfere with any disputes raised for other errors.

8. Special attention needs to be given to corrective action that would alter the meter readings used for Change of Supplier (CoS). Compensatory errors will result in one Supplier being advantaged at the other's expense. Additionally, altering CoS readings may cause undesirable overheads for both the old and new Suppliers.

9. Before processes can be defined to correct NHH settlement errors, error correction principles need to be established to guide the process designers.

CORRECTION PRINCIPLES

10. When resolving Settlement errors, the costs and risks associated with the corrective action should be consistent with the level of the error being corrected. This gives two principles for corrective action:

    - ***The cost to Pool Members of corrective action should be consistent with the Settlement error being corrected.***

    - ***The risks to Settlement (Accuracy or Timetable) should be consistent with the Settlement error being corrected.***

11. As well as creating inaccurate Pool bills, errors in settlement will hamper the ability to monitor the effectiveness of the settlement process. Therefore, it is desirable that Settlement data is as accurate as possible. Wherever possible and consistent with the above principles all errors should be corrected.

    - ***Errors should be fully corrected wherever possible without undue risk to settlement or undue cost to Pool Members***.

12. When correcting energy measurements in settlement there may be times where it is both less costly and incurs less risk not to make a correction. However, this may require energy to be left under or over accounted for. This will result in the energy discrepancy being distributed to Suppliers via the GSP Group Correction Factor. Generally, this is not a desirable technique for correcting large errors but may have merits for addressing very small errors.

    - ***Small amounts of energy can be left under or over accounted for if the risk or cost of corrective action is high.***

13. It is a feature of the NHH market that where an inaccurate meter reading is processed it will generally create two errors; one for the preceding meter advance period and another in the subsequent meter advance period. These two errors will be equal and opposite, therefore the net energy settled over both meter advance periods will be correct. The Settlement error will depend on the relative Pool Prices during the two periods. This feature is termed a "Compensatory Error". Compensatory Errors could be utilised for corrective action. They have a distinct advantage where the first error can't be modified or where the first error would be unduly costly or risky to modify.

    - ***Compensatory Errors should be used to ensure that overall total energy levels are correctly accounted for in preference to writing off energy.***

14. Once a Settlement Day has been finally reconciled, changes to its data will not correct settlement. At this point errors are said to have "Crystallised". In extreme cases a Dispute Run (DF Run) can be used to reverse the "Crystallisation" process and allow the error to be corrected. However, making changes to "Crystallised" data outside the disputes process may undermine the objectives of disputes raised to correct other errors. This could introduce further error into settlement, especially where the period of dispute does not match the period of the amendment. Therefore, it is essential that "Crystallised" data is not changed unless supported by a dispute. Note that in some cases an AA may be partly crystallised where it spans a Final Reconciliation (RF) settlement date.

    - ***Settlement data that has been effective in a Final Reconciliation run should not be modified unless specifically authorised as part of a dispute.***

15. CoS readings are a special case for corrective action as they are significant for two Suppliers. Compensatory Errors will result in one Supplier being advantaged at the other's expense. Additionally, Suppliers will have operational difficulties processing modifications to CoS readings after customer accounts have been closed. It would therefore seem reasonable to make changes only where the error is significant and both Suppliers are in agreement over the replacement values.

    - ***Change of Supplier readings should be corrected where the error is significant and both Suppliers are in agreement over the replacement value.***

16. In some cases, correct data may not be available for replacing obviously incorrect data. For example, if a closing read from a meter change is lost or incorrect another can not be obtained from the meter. In these cases it would seem sensible to estimate the readings, preferably using a deemed reading.

    - ***Where data is missing or incorrect and processes can not be operated without this data, estimates can be utilised, preferably using a deemed reading process.***

17. It is important for the NHHDC to set their expected values correctly when validating meter readings. If the expected values are not derived correctly, then invalid data can be accepted into settlement and error correction of that data will be required. Where the expected values are derived from settlement data, it is key to use the correct business processes to derive accurate values. If an erroneous EAC is being used to derive the expected value, then that EAC should be corrected before it is used.

    - ***If an erroneous EAC is to be used to derive an expected meter reading, it is recommended that the EAC is corrected before it is used.***

RECOMMENDATIONS

18. TS2 is invited to agree the following principles for correcting NHH error in Settlement:

a) The cost to Pool Members of corrective action should be consistent with the Settlement error being corrected.

b) The risks to Settlement (Accuracy or Timetable) should be consistent with the Settlement error being corrected.

c) Errors should be fully corrected wherever possible without undue risk to settlement or undue cost to Pool Members.

d) Small amounts of energy can be left under or over accounted for if the risk or cost of corrective action is high.

e) Compensatory Errors should be used to ensure that overall total energy levels are correctly accounted for in preference to writing off energy.

f) Settlement data that has been effective in a Final Reconciliation run should not be modified unless specifically authorised as part of a dispute.

g) Change of Supplier readings should be corrected where the error is significant and both Suppliers are in agreement over the replacement value.

h) Where data is missing or incorrect and processes can not be operated without this data, estimates can be utilised, preferably using a deemed reading process.

i) If an erroneous EAC is to be used to derive an expected meter reading, it is recommended that the EAC is corrected before it is used.

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