RTO West Losses Subgroup
November 1, 2002
A discussion of why loss schedules should be treated as a separate schedule as opposed to increase in transmission schedules.

The Loss workgroup has discussed a number of options for losses: marginal locational, system average, license plate, zonal, ex-ante vs. ex-post. Regardless of the methodology used, I advocate losses remaining a separate schedule to the control area operator as they are today. Today we actually do a memo schedule to the control areas operator since there is no actual transmission schedule but the control area operator needs to distinguish losses from other inadvertent.

There is no doubt that generation schedules must be increased to meet the loss obligation (if one is self providing losses). Retaining a separate schedule (memo or other) allows parties to analyze, settle, and examine the different parts (losses, imbalance, forecast error) of their transactions more easily.

This approach could be used with any method of loss allocation and with either loss return or purchase. It would be essential from an administrative ease standpoint to use a separate loss schedule if losses are to be adjusted on an ex-post basis.

Today, in BPA's system, losses are returned (via memo schedule if losses are generated within the control area) 168 hours later based on scheduled amounts. An example of this is attached. The other transmission schedules have been blocked and only the loss return schedule remains. Keeping the loss schedule separate protects for all types of confusion and administrative quagmires.

Let's look at the alternative – grossing up both POI and POW amounts. This method would change these amounts by the amount of the losses. Confusion arises in many ways from changing either injection or withdrawal data. First, good injection or withdrawal data can be hard to come by in the first place. This is especially true on the withdrawal side. Missing, late, or erroneous load data is much more common than any of us would like. Thus, when we are comparing scheduled withdrawals to load data, the fewer adjustments to the data, the better. Some will argue that this is really only a spreadsheet adjustment, and they would be right. However, my experience is that **the level of confusion and potential for time-consuming and compounding errors increase exponentially with the amount of data manipulation required.**

The losses group has discussed that if losses are grossed up, they would simply be treated as imbalance energy. There are many reasons why one would want to know the magnitude of the true imbalance not including losses. If one is trying to hone a forecasting system, knowing what part of imbalance is forecast error and what is losses is important. If losses are just dumped into imbalance energy, controlling imbalance

becomes more difficult and any look at imbalance data requires a scrubbing of the imbalance data.

Withdrawal schedules and actual load data should be kept on the same basis, as should injections. This basis should be without losses. This data should remain as clean as possible. This allows easy use of both generation and withdrawal for uses such as reserve calculations, flowpath calculations, settlements, load or generation forecasting, etc.

Keeping the raw data separate from the loss data is especially important if the loss percentage factor changes frequently. Reconstructing the load or generation data for other uses could be especially messy if loss factors change more frequently than once per year.

There is also the problem of forecasting error that will be compounded if losses are included in the schedules for withdrawals and injections. It will be difficult for schedulers to have a feel for the loads if constantly changing loss factors are grossed up into load and gen schedules. Grossing up for losses will also complicate the verification of a balanced schedule

Further, if schedules have to be grossed up for losses, **reporting** becomes more difficult. For example, transmission schedules may be used for a variety of reporting requirements. If this data has to be cleaned of loss inclusion, the data becomes less suitable or more difficult to use other purposes.

Remember that it is schedulers, billers, power system analysts, accountants, and accounting technicians who will be dealing with the data on a day-to-day basis. Personally, I have never had a short conversation about losses with any of these people. The cleaner and easier to understand the system is, the more smoothly the entire process will proceed.

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