

Subj: **Not "Bilateral" Inadvertents, but Inadvertent "with the (rest of the) Interconnection" represents the true SOURCES and SINKS of Inadvertent and is not an obstacle to next-hour bilateral energy payback with the Interconnection.**
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To: WEQ Inadvertent Interchange Task Force

Take Balancing Authority A, and say its actual generation is 50 MWh short of scheduled and its actual load equals scheduled load. Balancing Authority A is 50 MWh "short". Short with whom? Short with the (rest of the) Interconnection!

Take two neighboring Balancing Authorities B & C, and assume that the Interconnection consists of A, B, & C. Assume that B is "short" 100 MWh, and the vagaries of the power flow of Inadvertent are such that B is drawing 50 MWh in the form of Inadvertent from A and 50 MWh from C. So, besides being "short" 50 MWh, A is "long" 50 additional megawatts with B. That means A has to get 100 MWh of Inadvertent from C, and B has to get 50 MWh of Inadvertent from C. Accordingly C is "long" 150 MWh by, say, having actual generation 150 MWh in excess of scheduled and its actual load equaling scheduled load. How does the "long" or "short" Inadvertent of each of these Balancing Authorities "with the Interconnection", decompose into "bilateral" "long" or "short" Inadvertents with each other?

A. Balancing Authority A's 50 MWh "shortage" is its Inadvertent with the Interconnection. That Inadvertent "decomposes" into a 50 MWh "long" Inadvertent with B and a 100 MWh "short" Inadvertent with C.

B. Balancing Authority B's 100 MWh "shortage" is its Inadvertent with the Interconnection. That Inadvertent "decomposes" into a 50 MWh "short" Inadvertent with A and a 50 MWh "short" Inadvertent with C.

C. Balancing Authority C's 150 MWh "surplus" is its Inadvertent with the Interconnection. That Inadvertent "decomposes" into a 100 MWh "long" Inadvertent with A and a 50 MWh "long" Inadvertent with B.

Bilateral decomposition A complicates and misrepresents Balancing Authority A's "Imbalance" which is best represented by A's Inadvertent with the Interconnection. A is not actually providing 50 MWh of Inadvertent to B as the bilateral "decomposition" would suggest: instead, C is providing that 50 MWh "through" A. A is actually drawing not 100 MWh of Inadvertent from C, but 50 MWh of Inadvertent from C. On the other hand B is drawing not merely 50 MWh of Inadvertent from C as the bilateral "decomposition" would suggest: B is actually drawing 100 MWh of Inadvertent from C, half of it "through" A.

Bilateral decompositions B and C are nicely additive, but they too misrepresent the true source of the Inadvertent:

--In decomposition B, of B's 100 MWh "shortage",

----A is not at all providing 50 MWh of Inadvertent to B but merely shipping 50 MWh from C.

----C is providing not a mere 50 MWh of Inadvertent to B but all 100 MWh of Inadvertent to B

--In decomposition C, of C's 150 MWh "surplus"

----A is receiving not 100 MWh of Inadvertent from C but merely 50 MWh from C and on-shipping the remaining 50 MWh to B.

----B is receiving not merely 50 MWh of Inadvertent from C but 100 MWh of Inadvertent from C, half of it "through" A.

Inadvertent with the Interconnection is not an obstacle to "next hour" bilateral payback with the Interconnection. A Balancing Authority would default to paying back the Interconnection in kind through bilateral schedule in the absence of a valid market price. In the above Interconnection, absent market pricing in A, A would pay back bilaterally while C receives financial payment. Where would the financial payment to C come from? From the generator that the Interconnection decrements to provide a counterparty for A's bilateral payback. From that generator's or the Interconnection's point of view the transaction is not a "payback" for anything, just a transaction, with the Interconnection serving just as a middleman to the individual Balancing Authorities having payback with it. We know that the decrementing generator cannot be located in A because the price that generator pays to decrement is a market price and A is paying back in kind because it has no market price internally. The generator would likely be located in Balancing Authority B provided B is settling financially, because the Interconnection will choose the highest priced available generator to decrement and we assume on average that Inadvertent flows in the direction of higher price and that therefore the Interconnection will tend to overcollect rather than undercollect financial settlements over time, to reflect price differences capturing congestion among other things. It is also a logical necessity to have the decrementing generator located in B since C has already settled financially and shouldn't have to pay out its financial settlement as a payment to decrement. That would be tantamount to C's "receiving back" in kind instead of receiving financial compensation. Furthermore, the Interconnection will be long the proceeds paid by B. If C is also "receiving back" in kind, the incrementing generators to pay back the Inadvertent drawn by B from C must certainly be in B. These generators would be paid by the Interconnection from the financial settlement proceeds received from B for the same amount of Inadvertent originally drawn by B from C. If all three Balancing Authorities are paying/receiving back in kind, there are no payments made/received. Instead, C's own decrement is matched by A's and B's own increments, with no need for the Interconnection to separately deploy decrementing or incrementing generation counterparties to complete bilateral payback schedules.

Attempts at unilateral payback by scheduling deliberate imbalance with the Interconnection is not payback-in-kind that has economic value related to the original Inadvertent. For one thing, you cannot schedule Inadvertent payback with precision by scheduling a unilateral generation/load imbalance because the amount of Inadvertent payback created will depend on the imbalances of the other Balancing Authorities and those are beyond the scheduling Balancing Authority's control. Instead, unilateral payback by scheduling deliberate imbalance with the Interconnection is nothing but NEW INADVERTENT that would need to be paid back by bilateral schedule. That new Inadvertent creates risk to the Interconnection that depends on where frequency is at the time, and the actions by the other Balancing Authorities, none of which are under the control of the Balancing Authority attempting the unilateral payback.