

(1) Energy-only pricing of inadvertent rewards overfrequency & (2) Reliability deadband already exists.  
 Two comments submitted to Inadvertent Interchange Payback Taskforce  
 North American Energy Standards Board

1. **With no frequency-contribution adder, energy-only pricing can encourage over-frequency.** A frequency-contribution adder is needed to remove the perverse incentive energy-only pricing of inadvertent gives to over-frequency.

When frequency is below 60 Hz

- paying the energy price for taking inadvertent appropriately discourages hurting frequency and
- receiving the energy price for providing inadvertent appropriately rewards helping frequency.

However, when frequency is above 60 Hz

- paying the energy price for taking inadvertent inappropriately discourages helping frequency while
- receiving the energy price for providing inadvertent inappropriately rewards hurting frequency.

When frequency is above 60 Hz a frequency contribution adder reduces the perverseness of energy-only pricing by **REDUCING THE ENERGY-ONLY PRICE.**

When frequency is below 60 Hz a frequency contribution adder increases the appropriateness of energy-only pricing by **INCREASING THE ENERGY-ONLY PRICE.**

This concern should not be ignored on the basis that over-frequency is not as bad as underfrequency. At the January 2004 DOE/NRCan/NERC Blackout Technical Conference, the relaying break-out group concluded that over-frequency is as much a reliability concern as under-frequency. To see, cut, paste and click these links, search the word "frequency", and ignore R. Blohm's comments:

[http://www.nrcan-rncan.gc.ca/inter/powout/tech\\_transcript2\\_Jan9\\_e.html](http://www.nrcan-rncan.gc.ca/inter/powout/tech_transcript2_Jan9_e.html)

[ftp://www.nerc.com/pub/sys/all\\_updl/docs/blackout/Toronto-Presentation-01-09-04.zip](ftp://www.nerc.com/pub/sys/all_updl/docs/blackout/Toronto-Presentation-01-09-04.zip) open file:

Breakout4Report.doc

Furthermore, inadvertent interchange has been driving the Eastern Interconnection into increasing over-frequency for the past several years to the point where within a year frequency will reach the upper limit allowed by NERC's Control Performance Standard (CPS1). To see, cut, paste and click the following links:

[http://www.naesb.org/pdf/weg\\_ijptf033103w1.pdf](http://www.naesb.org/pdf/weg_ijptf033103w1.pdf)

[http://www.geocities.com/blohm\\_r/MyGraphInNYTimes.gif](http://www.geocities.com/blohm_r/MyGraphInNYTimes.gif)

[http://www.geocities.com/blohm\\_r/NYT200803.htm](http://www.geocities.com/blohm_r/NYT200803.htm)

2. **Reliability deadband already exists.** NERC's CPS1 is the reliability deadband on Inadvertent. But it applies to annual average inadvertent (actually tie-line error) and sets no limit on any particular error that contributed to the annual average. The question is whether to let unpriced inadvertent interchange continue to push and eventually keep average frequency so close to the limit of the deadband that a single control area's allowed variation becomes so narrow that small normal errors easily push it outside the deadband. By the same token a few very large errors can push everyone outside the deadband. Pricing the inadvertent inside the deadband would reverse the drift in frequency toward the limit and keep frequency more centered inside the deadband as well as equitably distribute cost between a control area outside the deadband and the control areas inside the deadband who contributed to that control area's being outside the deadband. Not pricing the inadvertent inside the deadband is to allow the beneficiaries of perverse economic incentives to continue pushing average frequency in an unreliable direction toward the knife-edge limit of the deadband, toward constant unfair shifting of penalties on others whose errors are normal, or toward having to pay anyway because a few large errors forced them outside the deadband.

