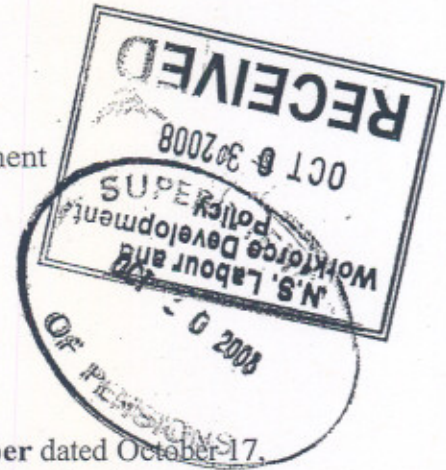


Pension Review Panel,  
c/o Nova Scotia Department of Labour and Workforce Development  
Policy Division  
PO Box 697  
Halifax NS  
B3J 2T8



Gentlemen:

I have read with considerable interest your **Interim Position Paper** dated October 17, 2008. I am responding in this letter to your invitation to interested parties to send you their comments.

I have recently retired from the firm of \_\_\_\_\_ after \_\_\_\_\_ years as a consulting actuary, mainly in the pension area. The comments in this letter are entirely my own and do not in any way represent the views of \_\_\_\_\_. My clients have included pension plan sponsors, employee groups, and multi-employer trusts in every province of Canada, including several large plans in Nova Scotia. I was also a member of the Pension Commission of Ontario from 1977 to 1983 and 1988 to 1994. I have been an active participant in committees and task forces of the Canadian Institute of Actuaries on various pension-related matters.

For the most part, my comments are confined to the Panel's proposals related to funding, but before proceeding to them, I will comment on a few other aspects of your paper.

I am particularly concerned that if Nova Scotia adopts all or most of your recommendations, the result will be to increase the fragmentation of the employment-related pension system in Canada. Your comments on pages 6 and 7 and on page 21 indicate that you are aware of this danger and perhaps it is not within your mandate to address it, since it is the legislators who will eventually decide whether a made-in-Nova Scotia system of pension regulation that differs in important respects from the systems in other jurisdictions is really in the best interests of plan members and plan sponsors. In any event, the timing of your report, almost simultaneously with reports of independent panels to the governments of British Columbia, Alberta and Ontario, in each case addressing all the same issues as your report, appears to provide the governments of those provinces as well as the Nova Scotia government with a great opportunity to move forward on a coordinated basis that would take account of all these reports and strive to develop, as much as possible, a common set of laws. There is a precedent for such an approach. In the mid-1980's, most of the provinces and the federal government took part in lengthy consultations which resulted in a substantially uniform set of reforms to their pension laws. Unfortunately, most reforms since then have been piecemeal from one jurisdiction to another, which has taken us in the opposite direction. The value of these reforms, where enacted, has been substantially diminished as a result. I think it would be helpful if the panel could give the legislators some indication of the importance of this issue for the survival and effectiveness of the pension system not just in Nova Scotia but

in the whole country. The issues and problems are basically the same in every jurisdiction and the best solutions should be the same, too.

There is also a problem with your proposal for plans with some members outside Nova Scotia. You say that "when a plan is administered outside Nova Scotia, and has a majority of members outside Nova Scotia, the province where the plan is administered can regulate Nova Scotia employees in accordance with the rules in the province where the plan is administered". How is one to determine where the plan is administered? This has generally been done on the basis of where there is a plurality (not a majority) of members, the exception being where there are some members who are in "included employment" under the federal legislation. One could have a plan with 40% of members in Nova Scotia and thus a majority outside Nova Scotia, but with no other province having as many as 40%. In that case, the administering province should be Nova Scotia. But does that mean that the law of the administering province should apply to all members? In theory at least, what happens now is that the administering province applies the law of the member's province of employment. Otherwise, for example, Nova Scotia would apply Nova Scotia law to Quebec employees. That would likely be a problem.

Apart from these broader issues, one particular area that concerns me is your proposals in the related areas of partial windups and the funding of deficits when a plan terminates. You propose to do away with the whole concept of partial windups (as Quebec has already done) but you may not be aware of the reason why this concept was introduced, initially in Ontario. It had to do with the disposition of surplus. Imagine a plan with a large surplus. The employer decides to effect a partial termination that takes 95% of plan members out of the plan. They get their full commuted values but do not participate in the benefit of the surplus, which goes instead to the employer and the other 5% of the members. It is true that surpluses are not so common nowadays but they still exist for some plans and may become more common in future. If you do away with the concept of partial terminations, that would mean ignoring that possible situation in the future.

As for plans that terminate with a deficit, you may think that you have addressed that situation by requiring that the employer is responsible for funding the deficit. I am surprised that your legislation does not already require that (as Ontario has done for many years) but the more urgent question relates to the plan that terminates because the employer is bankrupt. Who then is going to fund that deficit? Ontario alone has addressed this problem by creating a guarantee fund. It is far from a perfect solution but it is an attempt at least, and your report does not even address the problem.

Let me finish this letter with my comments on your proposed revised basis for minimum funding requirements. I have two main criticisms. The first is that the definition of the "Minimum Funding Current Service cost" (MFCSC) is quite unclear. Under item d. on page 29, it is not clear whether the valuation procedure described applies to the plan membership as a whole (which would require assumptions as to the number of new entrants and their age, sex and earnings) or to individual members. As best as I can make out, the procedure would apply to each member and would be as follows;

$$\text{MFCSC} = [\text{Ben}(1)*\text{C}(x) + \text{Ben}(2)*\text{C}(x+1) + \text{Ben}(3)*\text{C}(x+2) + \text{Ben}(4)*\text{C}(x+3) + \text{Ben}(5)*\text{C}(x+4)] / \text{Sal}[1 + (1+e) + (1+e)^2 + (1+e)^3 + (1+e)^4]$$

Where  $\text{Ben}(t)$  = benefit accrued for service in year  $t$   
 $= \text{Ben}(1) * (1+e)^{\text{to power } (t-1)}$

$\text{C}(y)$  = unit benefit cost at age  $y$

$e$  = assumed annual rate of salary increase

If the above is more or less what the panel intended, I think the above expression could be simplified to  $\text{Ben}(1) * [1 + (1+e) + (1+e)^2 + (1+e)^3 + (1+e)^4] / 5$

All of the above is based on my interpretation of what the panel intended, which is not entirely transparent.

A second issue is the requirement for "straight-line" amortization of deficits. This contrasts with the universal use in pension regulation of "mortgage" amortization, i. e. with equal periodic instalments of combined interest and principal.

Straight-line amortization seems to me to be inappropriate for two reasons. First, it guarantees that unless there are other gains and losses, there will be a loss each year equal to interest for that year on the unamortized deficit. I worked out an example using 5% interest throughout and assuming no other gains or losses, with the interest loss each year amortized on a straight line basis over the next 8 years. The results are shown in the attached schedule. For an initial deficit of \$1,000,000, special payments increased from \$125,000 in year 1 to \$153,293 in year 8 and then reduced to \$29,404 in year 9 and declining thereafter to less than \$1,000 but never to zero. The unamortized balance after 8 years was \$254,777. Continued funding reduced that amount to \$8,371 at the end of 26 years after which the unamortized balance started to increase again.

So my question is, why set up a new funding standard that behaves so oddly, back-loading the funding in the first 8 years but then never requiring the complete amortization of the original deficit? It appears that the panel was aiming for a standard that would produce a minimum funding requirement somewhere between the current requirements on the solvency basis and on the going concern basis. If that is the case, why not set the amortization basis on the mortgage method with a 10 year period? For an initial deficit of \$1,000,000, the panel's proposal requires a first year payment of \$125,000. Using the mortgage method and a 10 year period, the first year payment would be \$120,889 with an interest rate of 4% or \$126,371 with interest at 5%.

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I would be glad to elaborate these comments or respond to questions from the panel. I will be unavailable from October 24 to November 6.

Respectfully submitted

October 22, 2008

## Nova Scotia Pension Review Panel

### Deficit amortization schedule per Panel funding proposal

Year	Deficit, Beginning of Year	Total Amortization Contribution	Interest @ 5% on Average Deficit Balance	Amortization of Deficit
1	1,000,000	125,000	46,875	0
2	921,875	130,859	42,823	5,859
3	833,838	136,211	38,287	11,211
4	735,914	140,997	33,271	15,997
5	628,188	145,156	27,781	20,156
6	510,813	148,629	21,825	23,629
7	384,009	151,357	15,485	26,357
8	254,477	153,293	8,891	28,293
9	110,075	29,404	4,761	29,404
10	85,440	24,141	3,668	24,141
11	64,967	19,248	2,767	19,248
12	48,486	14,808	2,054	14,808
13	35,732	10,906	1,514	10,906
14	26,340	7,622	1,126	7,622
15	19,844	5,035	866	5,035
16	15,675	3,207	704	3,207
17	13,172	2,184	604	2,184
18	11,592	1,664	538	1,664
19	10,466	1,272	492	1,272
20	9,646	987	458	987
21	9,117	757	437	757
22	8,797	623	424	623
23	8,598	535	417	535
24	8,480	479	412	479
25	8,413	443	410	443
26	8,380	418	409	418
27	8,371	403	408	403
28	8,376			