

Before the
POSTAL REGULATORY COMMISSION
WASHINGTON, DC 20268-0001

Notice of Institutional Cost Contribution
Requirement for Competitive Products

Docket No. RM2012-3

COMMENTS BY WILLIAM C. MILLER IN RESPONSE TO THE POSTAL
REGULATORY COMMISSION'S NOTICE OF PROPOSED RULEMAKING TO
EVALUATE THE INSTITUTIONAL COST CONTRIBUTION
REQUIREMENT FOR COMPETITIVE PRODUCTS

(April 10, 2012)

Executive Summary

On January 6, 2012, the Postal Regulatory Commission (Commission) established Order No. 1108 to assess whether Postal Service competitive products, as a whole, should continue to fund at least 5.5 percent of Postal Service institutional costs each year.¹ The order requests interested parties to submit comments and recommendations to either keep, modify or eliminate the present funding share. The Commission's request complies with the PAEA's requirement to review the competitive product institutional funding share every five years from date of inception. Section 3622(b) of the Law also states that the review shall be conducted by considering "relevant circumstances, including the prevailing competitive conditions in the market, and the degree to which any costs are uniquely or disproportionately associated with any competitive products."

¹ Notice of Proposed Rulemaking to Evaluate the Institutional Cost Contribution Requirement for Competitive Products, January 6, 2012.

The following set of comments are submitted to aid the Commission in its review. As demonstrated below, findings indicate that in a profit improving or maximizing environment, supported by the necessary pricing flexibility, the Postal Service would always have a natural incentive to maximize the competitive share of institutional costs, thereby exceeding the institutional share requirement if capable of doing so. Stated differently, if the share requirement set by the Commission is at or below the resulting maximized share, the Postal Service would always comply with Section 3622(a)(3), as a natural consequence of its optimizing decisions.

However the share requirement does not affect Postal Service decisions at the margin under a contribution increasing/maximizing environment . Therefore, the Postal Service would be unable to comply with the requirement, if the minimum share is set higher than the maximized share, because the competitive sector contribution would already be at its limit. As a consequence, the Commission should consider eliminating the share requirement altogether. As a substitute, the Commission should consider conducting its own independent analysis of the maximum contribution possible from competitive product pricing, and then set an institutional funding share as a goal or objective, rather than a requirement which the Postal Service may be unable to meet because of constraining market forces.

The rest of these comments are organized as follows. The second and third sections clarify what appears to be the intended purpose for the institutional cost share requirement for competitive products by the Congress through the PAEA and as implemented by the Commission. The following section then provides a brief overview of Postal Service financials from FY2007 to FY2011, separately for competitive and market dominant sectors at a summary level. It is apparent from the data that a liberalized competitive sector has benefited greatly from removal of pricing obstacles, despite the recent recession and continued slow economic growth thereafter. Competitive price movements, exhibited in the aggregate over the indicated time span, have been consistent with profit improving or maximizing behavior. By comparison, it is also clear from the data that the coincident poor performance in the market dominant sector has been aggravated greatly by limited pricing flexibility.

The fifth section demonstrates in more detail how competitive sector price increases, as exhibited by the data, explain profit maximizing behavior. It also shows how any maximized share remains unaffected by any change to share requirements. Finally, this section indicates how revealed profit maximizing behavior enhances rather than suppresses competition. That is the Postal Service, in seeking higher profits, supports an expanded scope of operation by its rivals without need of an institutional cost share “yardstick”. The last section concludes.

Selection of the Initial 5.5 Percent Institutional Cost Share for Competitive Products

In Order No. 46, the Commission describes the process by which it assessed and eventually proposed the current 5.5 percent institutional cost share.² The Commission explains that rate making under the PRA and the PAEA fulfill fundamentally different purposes. Under the former, rates for the now competitive and market dominant products were set at breakeven levels using economic criteria and other non-cost factors in any rate making proceeding. *Id at 71*. Institutional cost shares for all products were then calculated residually as the exact contributions required from each product to fund all institutional costs plus some contingency to allow for risk. Any deviations from the breakeven requirement were then made whole in the next proceeding.

By contrast, the Commission explains in Order No. 46 that the new pricing flexibility for competitive products, granted by the PAEA, demands a fundamentally different approach for the funding of institutional costs. The Postal Service is now incentivized to set rates for market dominant and competitive products, principally guided by economic criteria. With the new pricing freedom for the Postal Service, the Commission recognizes that it should set an institutional cost share requirement as a lower bound aggregate for competitive products. In setting the lower bound, the Commission expected the Postal Service to equal or preferably exceed this threshold to

² Order Proposing Regulations to Establish a System of Ratemaking, August 15, 2007.

more easily fund the USO and alleviate rate pressure on market dominant products. *Id at 72.*

Additionally, the Commission explicitly acknowledges the impact on competition when setting the institutional cost share. In particular, the Commission notes:

The market is competitive; the Postal Service's market share is relatively small; and the Postal Service needs some flexibility to compete. On the other hand, the Commission has an obligation to preserve competition by not establishing a markup so low as to give the Postal Service an artificial competitive advantage. *Id at 73.*

Thus the Commission by reference to Section 3622(b) acknowledges the Postal Service as a participant in the competitive process and the attendant requirement that neither side (the Postal Service or its rivals) gains an unfair competitive advantage. In the Commission's view, competition is preserved by ensuring that all participants remain viable in the competitive process. Because the institutional cost share to be funded by Postal Service competitive products affects the Postal Service and its rivals differently, a careful evaluation of the appropriate share is required in order to preserve the desired competitive balance.

Keeping all these factors in mind and after careful consideration, the Commission proposed a 5.5 percent share level in the Order after examining the most recent historical shares funded before inception of the PAEA. The level proposed is very close to the estimated 5.4 and 5.7 percent of institutional costs funded by competitive products in FY 2005 and FY 2006 under the PRA. The Commission expected Postal Service competitive products to fund at least this share under the new pricing flexibility and incentives for cost efficiency afforded by the PAEA. *Id at 74.* In its final set of rules and regulations, the Commission adopted this figure as the new lower bound.³

³ Order Establishing Ratemaking Regulations for Market Dominant and Competitive Products, October 29, 2007, p.138.

A Closer Examination of Intentions for the Initial Share Requirement

Clearly, the Postal Service is afforded maximum pricing flexibility with a institutional cost share set at or close to zero. With this level of flexibility, the Postal Service can set competitive product prices low enough to only meet the attributable and incremental cost tests required by the Commission to implement Section 3633(a)(1) and Section 3633(a)(2) without any pricing/contribution upper bound. A zero institutional cost share is sufficient to preclude predatory or below cost pricing, established with the intent to drive out competition and gain market dominancy in a particular product or sector of the market.

However the Commission remains concerned with the Postal Service's potential for market power in competitive markets. It is well known that the Postal Service enjoys substantial network- related scale and scope economies to be among the most efficient producers in competitive markets, if not the low cost operator. It also operates in competitive markets where price differences observed across firms for essentially the same product are contained because of high substitutability. Accordingly, the Commission appears to have set the institutional cost share at its present level partially out of concern that the Postal Service might use its network-related cost advantage to price competitive products above incremental cost but still low enough to affect the market presence of existing and possible new competition that could form over time, absent such low rates.

In particular, the Commission appears to view the minimum required contribution from competitive products and the effect on competition as a trade-off that can be evaluated along a continuum. The Postal Service can increase rates and possibly competitive product contribution to benefit rivals at the same time, because the higher rates increase competitor pricing flexibility. In response to the Postal Service's higher rates, competitors can either respond with higher rates themselves or decrease rates to expand volume. On the other hand, the Postal Service can use its cost advantage to reduce competitive rates to sustainable levels, at or above incremental costs, and expand its market presence substantially. However the lower rates would reduce profits

for remaining firms and possibly cause firms who might otherwise enter the market to remain absent altogether.

The trade-offs between market share and contribution and the consequential evaluational process the Commission follows to select a minimum funding share can be summarized by reference to the Figure below.

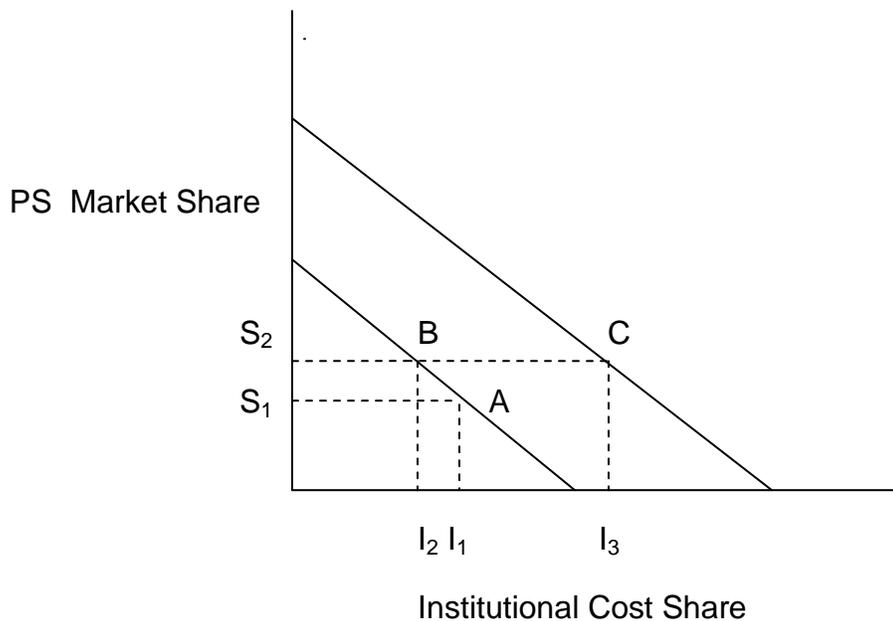


FIGURE 1

The two downward sloping lines indicate the possible trade-offs between Postal Service market shares (shown in the vertical axis) and institutional cost shares (shown in the horizontal axis). The inner most line indicates the trade-offs possible five years ago when the current share was set and the outermost line shows the current trade-off with market expansion (to be discussed later). Prior to passage of the PAEA, suppose the Postal Service's actual institutional funding share and volume-related market share for all competitive products is at point A. Further, assume the Commission sets a lower bound at I_2 for the next five years in order to let the Postal Service build volume, increase its market presence and reach a market share S_2 (point B). If the Postal Service had selected point B to build market share, it would have needed to lower competitive rates, thereby lose contribution to the minimum requirement set by the

Commission.⁴ Of course, the Postal Service could also have chosen a contribution increasing/maximizing strategy by raising rates and reducing volume to move down the same line.

Note that with market expansion, then the line shifts outward as shown. The Postal Service's actual contribution and market share would then be along the new line. As drawn, it is shown at point C under the assumption that: a) the Postal Service chose to pursue a volume growth strategy and therefore selected the Commission's lower bound at B, b) suppliers kept the same prices and c) market expansion yielded proportional volume gains for all competitors. Then volume growth alone would have pushed the fraction of institutional costs funded to I_3 , exceeding the Commission's requirement. However it is easy to see that if the market had contracted to shift the trade-off line inward (not shown), then the Postal Service would fund an actual share lower than and non-compliant with point B.

However, the evidence over the past five years suggests strongly that the Postal Service pursued a contribution improving/maximizing strategy instead and consequentially was able to increase competitive product contribution despite the recession. That evidence is examined below. The Postal Service's apparent strategy has important implications regarding what policy the Commission should pursue in implementing Section 3622(a)(3).

Financial Performance from FY 2007 through FY 2011

The financial performance of the Postal Service's competitive products sector from FY 2007 to FY 2011 has been striking despite significant volume drops in FY 2008 and FY 2009 of 3.4 percent and 12.3 percent, respectively, caused by the recession. In FY 2007, total competitive products sector contribution stood at \$1,786 Million according to the Commission's Annual Compliance Determination for that year. The

⁴ The assumption is that rivals would have been driven to reduce rates as well to contain volume losses. So even if the Postal Service were able to increase contribution at lower rates if rivals left their rates the same, the subsequent lower rates by competitors would drive enough volume away to net the Postal Service a contribution loss.

Commission's latest Report issued for FY 2011, indicates a total contribution for the competitive products sector of \$2,310 Million, representing a cumulative increase of 28 percent from four years ago. During the same period, institutional costs have decreased slightly from \$31,577 Million to \$29,554 Million, partially due to deferral of retiree health benefit payments in the last two fiscal years. As a result, the portion of institutional costs funded by the competitive products increased from 5.7 percent in FY 2007 to 7.8 percent in FY 2011. The factors contributing to the contribution increase are evident from TABLE 1.⁵

It is clear from the data that contribution increased significantly over the entire period except in FY 2011, despite the initial volume losses, because of growth in average per piece revenue that far outpaced growth in per piece attributable cost. The cost containment measures that the Postal Service has put in place are evident from the steady year over year percentage declines in per piece cost. That trend resulted in a 1.4 percent absolute decline in piece cost in FY 2010 compared to the previous year. However, total contribution declined in FY 2011 by 4.6 percent due to per piece revenue remaining virtually unchanged from the previous year and a modest increase in per piece cost. This combination resulted in a decline of per piece contribution of 8.0 percent. The 3.8 percent volume gain in the same year provided a partial offset to the contribution loss that would have otherwise resulted.

⁵ TABLE 1 and TABLE 2 data are extracted from the Postal Regulatory Commission ACDs for the corresponding years.

Competitive Products Financials from FY 2007 to FY 2011 (\$M except piece data)									
Category	FY2007	FY2008	%Δ	FY2009	%Δ	FY2010	%Δ	FY2011	%Δ
Volume	1,631	1,575	-3.4	1,381	-12.3	1,420	2.8	1,473	3.8
Revenue	7,909	8,382	6.0	8,132	-3.0	8,677	6.7	8,990	3.6
Att. Cost	6,123	6,600	7.8	6,172	-6.5	6,257	1.4	6,680	6.8
Contribution	1,786	1,782	-0.2	1,960	10.0	2,420	23.4	2,310	-4.6
Piece Rev.	4.85	5.32	9.7	5.89	10.7	6.11	3.8	6.10	-0.2
Piece Cost	3.75	4.19	11.6	4.47	6.7	4.41	-1.4	4.53	2.9
Piece Cont.	1.10	1.13	3.3	1.42	25.5	1.70	20.0	1.57	-8.0
Inst. Share	5.7%	5.5%		6.8%		7.1%		7.8%	

TABLE 1

The volume reductions taking place in the two earliest years are coincident with the depressed economy and the rate increases which apparently the Postal Service instituted for competitive sector products, shortly after enactment of the PAEA. Both factors would normally depress volumes, so it is difficult to identify the relative contribution of each factor to the volume decrease from the Table data alone. However, there is evidence suggesting that the recession caused the major portion of the volume loss from viewing similar data for market dominant products over the same five years. The percentage volume drops in FY 2008 and FY 2009 for market dominant products were virtually identical to those for competitive products, despite only inflationary adjustments for price capped market dominant rates. However, the competitive product market has recovered much more swiftly than the market dominant sector in the last two fiscal years. Competitive volume growth has been positive over the last two years, while market dominant volume has continued to slide to a new low of 166,461 Million pieces in FY 2011.

These results strongly suggest that the Postal Service instituted a deliberate contribution increasing/maximizing strategy rather than a volume growth strategy after inception of the PAEA. Such a strategy becomes even more apparent with the rate

increases executed during the recession. Under such circumstances, the Postal Service might have decreased competitive rates in the short term to reduce or reverse the volume drop caused by the slowing economy, without departing from a long term price and contribution increasing strategy. Nevertheless, the Postal Service increased competitive rates as soon as feasible despite the on-going recession.

Market Dominant Financials from FY 2007 to FY 2011 (\$M except piece data)									
Category	FY2007	FY2008	%Δ	FY2009	%Δ	FY2010	%Δ	FY2011	%Δ
Volume	210,603	201,128	-4.5	175,677	-12.7	169,154	-3.7	166,461	-1.6
Revenue	63,146	62,906	-0.4	56,958	-9.5	54,751	-3.9	53,432	-2.4
Att. Cost	37,507	36,826	-1.8	34,620	-6.0	33,148	-4.3	32,434	-2.2
Contrib.	25,640	26,080	1.7	22,338	-14.4	21,603	-3.3	20,997	-2.8
Piece Rev.	.30	.31	4.3	.32	3.7	.32	-0.2	.32	-0.8
Piece Cost	.18	.18	2.8	.20	7.6	.20	-0.6	.19	-0.6
Piece Cont.	.12	.13	6.5	.13	-1.9	.13	0.4	.13	-1.2

TABLE 2

Moreover, the rate increases implemented to follow the contribution increasing strategy appear to explain why the Postal Service was able to exceed the 5.5 percent institutional share requirement throughout the five year period, even when volumes dropped for two consecutive years. In terms of the above Figure, the Postal Service exhibited an incentive to exceed I_1 to increase contributions and maximize cash flow. Thus the actual amount of institutional costs funded from the competitive sector would have been the same, regardless of the positioning of I_2 along the inner trade-off line. However with any sustained volume loss, the Postal Service would have been especially vulnerable to non-compliance if it were already at or near its profit maximizing point. Any rate change under these circumstances, intended to offset the volume loss,

would only have accelerated the contribution loss and decreased the share of institutional costs funded.⁶

Changing the Required Institutional Funding Share Has No Impact on Postal Service Contribution Maximizing Decisions

It is clear from the data that the Postal Service would always meet or exceed the present funding share requirement if the actual share funded is at or close to the requirement under a contribution maximizing strategy and if market conditions remain stable. If the Postal Service can increase contribution by increasing competitive rates, it would do so and exceed the requirement. If it is already at or close to its profit maximizing point, then it is capable of remaining at its present funding share and remain compliant. However the Commission has expressed in the present Order that it “has an obligation to preserve competition by not establishing a markup so low as to give the Postal Service an artificial competitive advantage.” The statement implies that the Postal Service has the ability to increase its contribution and remain compliant if the minimum funding share is increased over actual share levels.

To examine this possibility more closely, consider a simple case of a competitive market consisting of the Postal Service and another competitor each offering a different but substitutable product. The demand for the Postal Service’s product is described by $V^S(P^S, P^C)$ where P^S and P^C are prices for the Postal Service product and the competitor product. A suitable macro variable such as national income can also be expected to affect demand, but that variable is suppressed since it is assumed constant. Demand is downward sloping with respect own price but shifts to the right with respect to the competitor’s price because of substitutability. The related marginal conditions are given by $\partial V^S / \partial P^S < 0$ and $\partial V^S / \partial P^C > 0$. On the cost side, Postal Service incremental costs for the competitive product exhibits standard scale effects, described by a constant

⁶ In terms of Figure 1, the trade-off line would shift to the left from the innermost line, so that the maximum funding share would occur on the new line, further distanced from the Commission’s funding requirement on the pre-existing innermost line.

marginal cost u^s and a product-specific fixed cost of F^s . The contribution to institutional cost from the competitive product can then be written as:

$$\pi^s = V^s(P^s, P^c) * (P^s - u^s) - F^s.$$

Suppose that the contribution is initially below its maximum level at some initial pair of rates in period zero (P^{s0}, P^{c0}). The Commission observes the contribution level and decides to set an institutional cost share greater than the actual share to expand competition, under the assumption that the Postal Service will increase rates to comply, and therefore increase competitor pricing flexibility. Therefore if institutional costs are (I) and the initially funding share is set at (f^0), the contribution requirement (If^0) would be set so that:

$$\pi^{s0} - If^0 < 0$$

where:

$$\pi^{s0} = V^s(P^{s0}, P^{c0}) * (P^{s0} - u^s) - F^s.$$

If the Postal Service follows a contribution increasing strategy, it would then evaluate the marginal contribution at the pre-existing rates (P^{s0}, P^{c0}) to determine whether an increase or decrease in P^s is contribution increasing. To keep the description as simple as possible, assume that P^{c0} remains constant at any P^s . Then the Postal Service would evaluate the following marginal condition to determine how it should change its rate:

$$\partial\pi^s/\partial P^s = V^{s0} + (\partial V^s/\partial P^s) * (P^{s0} - u^s)$$

where $V^{s0} = V^s(P^{s0}, P^{c0})$. If the marginal effect of price on contribution is positive ($\partial\pi^s/\partial P^s > 0$), then P^s should be raised from the level P^{s0} to increase the present contribution. If the marginal effect is negative, it should be lowered. However, It is clear that the funding share f^0 does not appear in the expression and therefore has no effect on the Postal Service's pricing decision.

Notice that the first term on the right, the present volume level V^{s0} , explains the increase in contribution if the demand elasticity is zero ($\partial V^s/\partial P^s = 0$). In other words, if price has no effect on volume, then increasing P^s by a dollar would increase contribution by V^{s0} . However the second term is negative by $\partial V^s/\partial P^s < 0$. It captures the volume-related marginal decrease in contribution at the pre-existing piece contribution $P^{s0} - u^s$. Therefore the sign for $\partial \pi^s/\partial P^s$ is unclear without adding more information. To do this, the last can be rewritten as:

$$\partial \pi^s/\partial P^s = V^{s0} * (1 + \epsilon_d * (P^{s0} - u^s)/ P^{s0}),$$

where ϵ_d is the elasticity of demand for the Postal Service product ($\partial V^s/\partial P^s$)* P^{s0}/ V^{s0} evaluated at the current rates. In this form, it is clear that $\partial \pi^s/\partial P^s$ has the same sign as $1 + \epsilon_d * (P^{s0} - u^s)/ P^{s0}$. Note that if demand is inelastic from $-\epsilon_d \leq 1$, then the marginal effect must be positive, since $\epsilon_d * (P^{s0} - u^s)/ P^{s0}$ is fractional. However if $-\epsilon_d > 1$, either case can result.

Now suppose that $1 + \epsilon_d * (P^{s0} - u^s)/ P^{s0} > 0$, so that the Postal Service increases its competitive product price, as the Commission expects, to yield a new price P^{s1} at a higher contribution in the subsequent period. This would be the normal expectation if the Postal Service follows a contribution increasing strategy and the rate in period zero reflects prior regulation to reduce contribution below its maximum level. Then P^{s1} is contribution maximizing if the marginal contribution at that price is zero:

$$\partial \pi^s/\partial P^s = V^{s1} + (\partial V^s/\partial P^s) * (P^{s1} - u^s) = 0,$$

where $V^{s1} = V^s(P^{s1}, P^{c0})$. Thus contribution is at its highest possible level at:

$$\pi^{s1} = V^s(P^{s1}, P^{c0}) * (P^{s1} - u^s) - F^s$$

if $\partial \pi^s/\partial P^s = 0$. Then it is clear that $\pi^{s1} > \pi^{s0}$ but it is uncertain whether $\pi^{s1} \geq I_f^0$ to comply with the institutional share requirement. Moreover if the actual funding share is less than the requirement, the Postal Service would be incapable of increasing contribution further beyond the level given by the rates (P^{s1}, P^{c0}) because it is not affected at the margin by any level for (f) as shown above.

As a last point, it can be noted that the competitor gains at the pre-existing P^c because part of the volume lost by the Postal Service from raising the rate is shifted to the competitor. However, it can also be shown under very reasonable conditions that the competitor has an incentive to increase P^c to maximize its contribution in response to any increase in P^s . If the Postal Service acts as a price leader anticipating these increases in P^c , then it would recognize that its demand function is more inelastic than when P^c is constant, and therefore increase P^s even more than with a constant competitor price. Although a price response by the competitor increases the likelihood of compliance, the uncertainty still remains.

Conclusion

The PAEA provides the Postal Service the flexibility to set competitive product rates within certain restrictions. Sections 3633(a)(1) and 3633(a)(2) include provisions to preclude predatory pricing by the Postal Service that would limit competition, thereby precluding more cost efficient means to provide the same or similar services as provided by the Postal Service. Additionally, Section 3633(a)(3) also allows the Commission to set a higher collective pricing floor than possible under Sections (a)(1) and Sections (a)(2) by requiring the Postal Service to fund some minimum share of institutional costs from its competitive product contribution. In FY 2007, the Commission exercised its authority by instituting a minimum share of 5.5 percent of institutional costs to be funded by Postal Service competitive products.

The Postal Service has been able to exceed this share over the past five years through an apparently deliberate effort to increase competitive product contribution. However, if indeed the Postal Service was seeking to maximize contribution, then it would have done so, regardless of the contribution share set by the Commission. Stated differently, the Commission's share requirement does not act as a minimum restriction on the Postal Service under a profit maximizing strategy, if the Postal Service is capable of exceeding the requirement. It would always do so. In the process, it increases rates and expands competitor volumes and abilities to raise rates.

However if the share requirement has no effect on the Postal Service's profit maximizing decision, then it might not be able to comply if the share requirement is set too high. Market conditions can improve to allow the Postal Service to comply, but these market forces are also outside the Postal Service's control. Yet if conditions improve, the Postal Service would increase its contribution to a new maximum regardless of any minimum established by the Commission.

Under these circumstances, it is difficult to see why the present share should be kept. Therefore, it is recommended that the share requirement be eliminated, or effectively set to zero. As a substitute the Commission should consider conducting its own independent analysis of the maximum contribution possible from the competitive product sector and then set institutional funding shares as goals or objectives rather than requirements to be met.

Respectfully Submitted,

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