costs generated by "gold-plating," inefficiency or strategic investments to support broadband or other services should be ineligible for recovery.

Q. WHY SHOULD ONLY EFFICIENT, FORWARD-LOOKING COSTS BE RECOVERED?

A. The reason is the same as in the case of TELRIC-based pricing for UNEs, namely, that only such costs would be recoverable in a competitive market.

Q. COULD YOU PROVIDE A PRACTICAL EXAMPLE OF THE APPLICATION OF THE EFFICIENT, FORWARD-LOOKING INCREMENTAL COST PRINCIPLE OF COST RECOVERY AS IT APPLIES TO NON-RECURRING COSTS?

A. Yes. Consider a monopoly provider that still employs significant manual processes in its operations support functions. In order to meet the Act's requirements, that incumbent must upgrade its systems with new computer functionality <u>and</u> ensure that the upgraded computer systems are multiple-carrier capable. It is only these latter, incremental costs of moving from an efficient monopoly to an efficient multiple-carrier environment that should be eligible for recovery. The "upgrade" costs to reach the efficient monopoly baseline should be wholly ineligible for recovery.[3] Similarly, transaction costs are not properly measured by the incumbent's costs of its outdated manual processes, but by the costs an efficient provider with electronic capabilities would incur.

Q. SHOULD THE COMMISSION GENERALLY BE SKEPTICAL OF NYT'S ESTIMATES OF "NON-RECURRING" COSTS?

A. Yes. There are a number of reasons why the Commission should be exceedingly skeptical of such estimates. First, as already explained, to the extent that these charges are imposed on entrants alone, they create entry barriers and generally impede competition. It is in NYT's interest to create and maintain such barriers, and NYT's proposal must be viewed with that in mind.

Second, before the onset of competition, and particularly during the period of rate-of-return regulation, incumbent LECs did not have sufficient incentives to operate

[3] It should be noted that even if it does not have electronic systems in place, under TELRIC principles an incumbent would already be compensated for electronic operational support systems through its recurring charges for network elements, which, applying TELRIC, assume efficient, forward-looking electronic facilities and functionalities. By the same token, where an incumbent is already multiple-carrier capable because of its prior interconnections with CAPs, for

efficiently. And even under current price-cap regulation, efficiency incentives are generally not as potent as in a well-functioning, competitive market.[4] It cannot be assumed, therefore, that NYT's operations are efficient and that the non-recurring changes do not include any upgrade costs.

Third, because these non-recurring charges are novel, there is little experience in how they should be estimated. As evidenced in this proceeding, NYT itself has a poor idea how to estimate them.

Fourth, there is a danger that NYT may be able to recover these non-recurring costs more than once. First, some of the R&D costs incurred by Bellcore towards the development of forward-looking operations support systems have already been recovered by means of usual charges to existing telecommunications customers. Thus, some of the costs of adapting its network to a competitive environment, which NYT

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example, the incumbent should not be able to recover those costs again from new entrants.

[4] See M. Armstrong, S. Cowan, and John Vickers, Regulatory Reform: Economic Analysis and British Experience, The MIT Press (1994), chap. 6; B. Douglas Bernheim and Robert D. Willig, The Scope of Competition in Telecommunications, American Enterprise Institute (October 25, 1996), chap. 4.

now wants to load on its rivals, may already have been recovered. Second, some of these non-recurring costs can be included as part of the forward-looking recurring costs category, and again as extraordinary "mark-ups" that NYT seeks here. The Commission must guard against such an outcome.

In all events, the combination of the dearth of experience and NYT's anticompetitive incentives to raise its potential rivals' costs counsels careful scrutiny.

Q. ONCE THE COMPETITION ONSET AND TRANSACTION COSTS ELIGIBLE FOR RECOVERY ARE IDENTIFIED, WHAT RECOVERY MECHANISMS SHOULD BE EMPLOYED?

A. Public policy considerations mandate that competition onset and transactions costs should be recovered differently. The recovery mechanisms must obey two overarching principles in order to satisfy the pro-competitive goals of the Act. The first is the general principle of "cost causation"; and the second is the principle of "competitive neutrality."

Q. WHAT DO YOU MEAN BY "COST CAUSATION" PRINCIPLE?

A. The cost causation principle states that costs should be recouped from those who cause them. Application of this principle leads to efficient resource allocation, and the principle is automatically satisfied in a competitive market. In the new telecommunications marketplace, this principle underlies the adoption of TELRIC-based prices for unbundled network elements. As can be readily seen, if revenues from the usage of an unbundled element cover the element's TELRIC, then the social value of the output produced using this unbundled element is no less than the social cost of resources used in providing the unbundled element, an efficient outcome that obtains in a competitive marketplace.

Q. WHAT DO YOU MEAN BY "COMPETITIVE NEUTRALITY?"

A. Here, competitive neutrality in the recovery of non-recurring costs means that the share of these costs borne by any carrier does not affect significantly that carrier's ability to compete with other carriers for customers in the marketplace. Conversely, if any one carrier or group of carriers bears a significantly greater share of these costs than another carrier or group - or as NYT proposes here, one group bears all of those costs - that carrier or group is significantly disadvantaged in competing for customers. If the principle is violated, end users will not necessarily be served by the least cost provider, and, in extreme cases, competition may be stifled altogether.

Q. WHAT IS THE BASIS FOR THE APPLICATION OF THE "COMPETITIVE NEUTRALITY" PRINCIPLE IN THIS PROCEEDING?

A. The competitive neutrality principle follows from the Act's nondiscrimination standard.

Q. PLEASE ILLUSTRATE THE APPLICATION OF THE PRINCIPLE.

A. To illustrate the principle, it is useful to think of NYT as comprising two vertically integrated companies - one that owns the local network and sells access to that network to other carriers (including its retail "affiliate"). The second is the downstream affiliate that retails end user services (and that purchases network elements and services just like unaffiliated competing carriers). Competitive neutrality (and the nondiscrimination standard) is met when NYT's retail division is required to bear the same costs that other retail providers must pay. The principle is violated when NYT's network division assesses unaffiliated carriers with charges its does not assess its affiliated retail provider.

Q. WHAT ARE THE IMPLICATIONS OF THE COMPETITIVE NEUTRALITY PRINCIPLE FOR THE RECOVERY OF "NON-RECURRING" COSTS?

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A. The specific requirement of competitive neutrality for the recovery of non-recurring costs constrains the applicability of the principle of cost causation. In particular, Congress has already determined that the social benefits of undistorted competitive entry outweigh its social costs, including one-time competition onset costs and certain transaction costs that must be incurred by the incumbent and entrants. Consequently, it is not necessary to subject the parties' competition onset costs to a cost causation test, provided that these costs meet the requirement that they are efficient and forward-looking. At the same time, the cost causation principle is important to assure that requesting carriers are willing to pay the full social cost of specific services and facilities that they request. However, one requesting carrier, NYT's retail arm, solely by virtue of its existing vertical integration with the network owner, may be able to obtain certain services and facilities without incurring transactional or competition onset costs. Under these circumstances, application of cost causation principles could, where entrant's "non-recurring" costs are substantial, impede or foreclose entry.

Q. WHAT RECOVERY MECHANISM DO YOU PROPOSE FOR TRANSACTION COSTS THAT ARE ELIGIBLE FOR RECOVERY?

A. By definition, transaction costs are directly caused by a specific carrier's request for services or facilities. These costs should be recovered in accordance with ordinary principles of cost causation, provided that this does not undermine the competitive neutrality principle. So long as these costs are appropriately measured using TELRIC principles, imposing these costs on the cost-causing carrier fosters efficiency by assuring that the social value of the output produced in filling the order is no less than the social cost of resources needed to produce it.

Q. IS THIS METHODOLOGY CONSISTENT WITH THE PRINCIPLE OF COMPETITIVE NEUTRALITY?

A. Yes, at least as far as service order and related costs are concerned. First, NYT may itself incur such transaction costs in filling similar "orders" for services and facilities placed by its "retail" arm. Second, as noted above, these costs are likely to be very small on a unit basis, because the operations can largely be accomplished through electronic means, and thus, even if NYT does not incur similar costs, the resulting cost disparity is unlikely to be particularly distortive.

Q. SHOULD THE SAME COST CAUSATION PRINCIPLE APPLY TO MORE SIGNIFICANT TRANSACTION COSTS - FOR EXAMPLE, THE COSTS RELATING TO THE CONSTRUCTION OF A COLLOCATION CAGE?

A. The appropriate solution is less clear when transaction costs become significant and are of a type that NYT is unlikely to incur. In the physical collocation cage example, application of cost causation principles would assure competitive neutrality <u>among</u> those new entrants who wish to collocate their facilities on the premises of the ILEC. Assessing collocation costs against the cost-causer assures that no one entry strategy is favored. This outcome is generally consistent with the intent of the Act to facilitate and promote competition in general, and not to favor one entrant (or entry strategy) over another.[5]

It must be recognized, however, that assessing potentially significant non-recurring charges, like the cost of the cage, against new entrants raises at least three serious

[5] For example, if collocation cage costs were not defrayed by a cost causer, those entrants with high collocation costs would not be discouraged from entry.

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policy concerns. First, to the extent such charges are built into UNE rates or wholesale discounts, it may prove difficult to remove them, even though the need for them has long passed. Consequently, great care must be exercised not to allow such charges to run indefinitely. Second, NYT will have strong incentives to shift competition onset costs which are not recovered directly from entrants to these transaction cost categories which are recovered from entrants. Doing so disadvantages entrants, stifles competition, and artificially protects NYT's market power. Consequently, great care must be taken to assure that these transaction costs are strictly limited to the efficient, forward-looking incremental costs directly attributable to the activities in question. Third, and most important, such transaction costs are a potential entry barriers merely because of prior vertical integration. These costs are not incurred by NYT's retail "affiliate". Consequently, the performance of significant differential transaction cost confers a competitive advantage on NYT, which already enjoys significant competitive advantages in the local marketplace.

Q. DOES THIS MEAN THAT THERE ARE PUBLIC POLICY REASONS FOR SHIFTING SOME TRANSACTION COSTS INTO THE BROADER CATEGORY OF COMPETITION ONSET COSTS WHICH SHOULD BE RECOVERED IN A COMPETITIVELY NEUTRAL FASHION?

A. Yes. Because NYT does not incur certain transaction costs for its retail activities (and because early entrants may face differential entry barriers as compared to subsequent entrants), it is consistent with the pro-competitive goals of the Act to shift some portion of those costs into the general pool of competition onset costs which are to be recovered through a competitively neutral mechanisms. Doing so would facilitate entry and competition in the provision of local exchange services. All telecommunications consumers -- not only those who actually switch to the new entrant -- benefit from increased competition, as described earlier. Hence, there is a rationale, consistent with the 1996 Act, that all telecommunication consumers should be required to pay some share of transaction costs if that is necessary to ensure effective and undistorted competition. This approach creates the risk that collocation and other transaction costs -- as perceived by the entrant -- are entrant to "overdemand" the most costly services and facilities.

Q. PLEASE DESCRIBE NOW THE RECOVERY OF COMPETITION ONSET COSTS. DOES THE PRINCIPLE OF COST CAUSATION SUPPORT RECOVERY OF COMPETITION ONSET COSTS SOLELY FROM NEW ENTRANTS.

A: No. Competition onset costs are in no sense "caused" by AT&T or any other potential entrant. The most obvious reason is that even if not a single new competitor were ever to enter NYT's service territory, NYT would still have to incur these costs in <u>anticipation</u> of competition materializing at some point in the future. Plainly, if there is no entry, there are also no entrants from whom these costs can be recovered, even though such costs have been incurred. Congress, by passing the Act and for the benefit of end users, ordered NYT and other incumbents to make their networks multiple-carrier capable. One might argue that "Congress" is the "cost causer." Congress did not appropriate funds to defray these costs, so these costs must be defrayed from other sources. Given that Congress mandated local competition for the benefit of end users - who, if the Act is successfully implemented, will see lower prices, better quality and more choices - the principle of cost causation dictates that end users should ultimately bear these competition onset costs.

Further, even if the general principle of cost causation should indicate - which it does not -- that competition onset costs be recovered from new entrants, the competitive neutrality requirements embodied in the 1996 Act bar that approach. Charging all competition onset costs to new entrants would mean that NYT would be the sole carrier exempt from such charges. That method of recovery would differentially advantage NYT, exacerbate existing entry barriers, make entry less profitable -- hence less likely -- and would have the effect of perpetuating the NYT's monopoly and market power. Stated simply, recovery of competition onset costs, exclusively from new entrants, as proposed by NYT, would undermine the fundamental objectives of the Telecommunications Act and would seriously hamper the development of local competition in New York.

Q. PLEASE ELABORATE WHY RECOVERING ONSET COSTS SOLELY FROM ENTRANTS WOULD BE INCONSISTENT WITH THE PROCOMPETITIVE OBJECTIVES OF THE ACT?

A. Yes. As stated above, the principal goal of the Act is to promote effective competition in all telecommunications services, including local exchanges. The resale and unbundling provisions in the Act indicate that the Congress has concluded that the social benefits from fostering competition in local exchange telecommunications markets exceed the pertinent social costs, including the non-recurring, competition onset costs that will have to be incurred by NYT and other incumbents as a result of these provisions. These social benefits from competition in the provision of local exchange services will inure to all telecommunications consumers, not only to those who obtain their local services from new entrants. It would, therefore, undermine the pro-competitive objectives of the 1996 Act to require prospective entrants to bear all of NYT's competitive onset costs, in addition to legitimate <u>recurring</u> costs <u>and</u> the entrants' own competition onset costs, because doing so would discourage the very entry that Congress intended.

Q DOES THAT MEAN THAT COMPETITION ONSET COSTS SHOULD BE DIRECTLY CHARGED TO END USERS?

A That approach would certainly be consistent with the principle of competitive neutrality. However, there need not be an explicit end user charge to accomplish that result. So long as competition onset costs are borne by <u>all</u> carriers in a non-discriminatory manner, no carrier is thereby disadvantaged and the requirement of competitive neutrality is satisfied. It should also be noted that, a competitively neutral recovery need not controvert the general principle of cost causation. This is because even in a competitive market, a provider has the opportunity to pass through costs to its customers if (and only if) its competitors also incur such costs. Hence, as long as all competitors are non-discriminatorily encumbered with these non-recurring costs, all will have the opportunity to recover them.

Q. WOULD DENYING NYT'S REQUEST TO CHARGE ENTRANTS FOR NYT'S COMPETITION ONSET COSTS PLACE NYT AT A COST DISADVANTAGE?

A. Not necessarily. I have been focusing here (as NYT's proposal does) only on the competition onset costs incurred by NYT. But NYT is not the only carrier that has incurred or will incur significant one-time costs to facilitate competition. AT&T and other new entrants must also incur such costs. The very concept of electronic gateways and interfaces, for example, is to create a "neutral" interface that "translates" electronic communications between incumbent and entrant computer systems. Developing, implementing, and testing these translations will obviously require work and expense for <u>both</u> NYT <u>and</u> AT&T and other entrants. If NYT's competition onset costs are apportioned among carriers but AT&T's costs remain with AT&T, NYT could gain a competition-distorting cost advantage over AT&T and other entrants, solely because its retail operations do not have to incur such costs.

Q. COULD YOU ILLUSTRATE THIS POINT WITH AN EXAMPLE?

Yes. Consider NYT as comprising two affiliated entities, one that owns the network and the other that provides the retail services. NYT's retail arm is the one retail provider that does not have to incur any gateway costs, because by virtue of its historical, vertically integrated relationship with the network owner, its computer systems have been designed from the start to "talk" with the network owner's computer systems. Obviously if all retail providers, including NYT's retail arm, had to make similar investments on their end to accomplish the necessary multiple carrier communications and interconnections, the fact that AT&T has to incur such costs would raise no public policy concerns. But that is not the case - AT&T's gateway costs are the result of pre-existing industry structure. Hence, the goals of undistorted and effective entry, as mandated by the Act, can only be accomplished if the gateway and other competition onset costs that new entrants - and only new entrants - must expend in order to offer local service are, to a maximal extent, removed from the entry and expansion calculus that determines who should win the customer. What should matter in the new environment is costs net of onset costs.

Q. WHAT IS A POSSIBLE SOLUTION TO THIS PUBLIC POLICY CONCERN?

A. Efficiency criteria and the 1996 Act might suggest as a solution that all competition onset costs of all carriers - NYT, AT&T and other new entrants - be lumped into a single pool and then recovered from carriers, including NYT in a competitively neutral manner, say on a basis of proportionate share of total customers served. But this, obviously, would be an administrative nightmare with every entrant required to file cost studies to justify its competition onset cost proposals. Other problems would arise, for example, when an entrant whose costs were included in the common pool failed raising the question whether other carriers should continue to pay for the failed carrier's competition onset investments.

Q. IS THERE ANOTHER ALTERNATIVE RECOVERY PLAN?

A. Yes. A much more reasonable solution - and one with the added benefit that it would obviate any need for the Commission to review anybody's competition onset cost proposals - would be for every carrier, including NYT to pay its own competition onset costs. This approach has the virtues of being cheap and easy to administer and efficiency-enhancing (because it reduces incentives to overinvest in competition onset costs). It would also provide NYT with an opportunity to recover its competition onset costs from end users inasmuch as its reail costs would be lower than rivals due to prior vertical integration.

Q: IF THE COMMISSION NONETHELESS DETERMINES THAT NYT SHOULD RECOVER <u>SOME</u> OF ITS COMPETITION ONSET COSTS FROM ITS COMPETITORS, HOW CAN THE COMMISSION BEST ASSURE CONSISTENCY WITH THE COMPETITIVE NEUTRALITY REQUIREMENT?

A: Once the pool of NYT's eligible competition onset costs is determined using appropriate TELRIC principles, there are at least three minimum requirements for competitive neutrality, none of which seem to be present in the NYT proposal.

First, with few, if any, exceptions, competition onset cost recovery should be independent of the choice of entry strategy: there should be competitive neutrality between UNE-based entry vs. resale entry vs. facilities-based entry. This prescription reflects the serious danger that NYT will attempt to allocate onset costs in a manner that advantages some entrants (and entry strategies) and disadvantages others. For example, if NYT perceives that it has less to fear in the marketplace from resellers than from UNE-based competitors, it has a strong anticompetitive motive to load an undue share of the overall onset costs on UNE-based competitors. NYT should not be allowed differentially to disadvantage its competitors. The Act treats all modes of competition as equally desirable. Absent a clear prohibition against such strategic misallocations, however, this strategy would be very easy to implement because, as NYT's submission makes it clear, it cannot estimate any of the pertinent costs with precision. Accordingly, the best course in the real world of imperfect information and NYT incentives to abuse that uncertainty with strategic allocations is for the Commission to place all competition onset costs into a single pool with recovery apportioned on an entry-strategy- neutral metric such as number of retail customers served.

Second, recovery should be maximally independent of entry date - i.e., competitively neutral between early and subsequent entrants. In this regard, it must be recognized that both current and future customers (and carriers) will benefit from the new multiple-carrier competitive regime. The investments in multiple-carrier capabilities are long-term investments similar to an incumbent's long-term investments in loops and switches. Although loop and switch investments are one-time costs, basic accounting and economic principles dictate that those costs be amortized over the useful lives of the facilities so that today's customers are not forced to subsidize tomorrow's customers. Similar concerns dictate that competition onset costs also be amortized to ensure that those costs are maximally recovered from all the beneficiaries of competition, including present and future customers, as guided by economic depreciation criteria. The Commission should therefore determine the portion of the eligible competition onset costs to be recovered in each period. Specifically, once the eligible pool of competition onset costs is determined, an amortization schedule should be established to reflect the fact that the competition onset investments made today will pay dividends for many years to come.

Under NYT's proposal, by contrast, early entrants (and, ultimately, current end users) would bear a disproportionate share of these costs. This front-loading of cost burdens on early entrants is consistent with NYT's objective of delaying the onset of competition, and it is fundamentally inconsistent with the pro-competitive goals of the Act. Early entrants are already disadvantaged relative to the subsequent waves of entrants. For example, early entrants will face the skepticism of local customers regarding their ability to provide quality local exchange services. Early entrants will be the ones that will test whether UNE-based competition is feasible, there being no precedent for such competition and no tested regulatory procedures to protect UNE-based entrants from competitive abuses by the monopoly owner of the bottleneck. It is not in the public interest to disadvantage these early entrants even further by forcing them to bear a disproportionate share of competition onset costs, which is precisely what the NYT proposal does.

Third, and perhaps most fundamentally, recovery must be competitively neutral as between entrants and NYT. In this regard, competition onset costs should be treated no differently than other network costs. Under basic TELRIC principles, unit costs of loops, switches and other network facilities are determined by dividing total forward-looking costs by the total number of units that the incumbent is likely to provide to requesting carriers and to its own retail arm. In this way each carrier, including the incumbent, bears a share of total costs proportionate to its use of the network. Accordingly, each faces the same input cost structure, and each has an equivalent opportunity to recover those costs from retail customers.

The very same logic compels the conclusion that recovery of competition onset costs from all carriers, including NYT, on a proportionate basis is both competitively neutral and allows each carrier, including NYT a reasonable opportunity to recover those costs. It is competitively neutral, because under this proposal - in which each carrier, including NYT, bears a portion of competition onset costs in each period equal to its percentage share of total customers served multiplied by the total competition onset costs to be amortized over that period - each carrier bears the same costs on a per customer basis. Thus, although a carrier that serves more customers will bear more competition onset costs in absolute terms, it will bear the same competition onset "charge" per customer as every other carrier. In this way entry, exit, expansion and contraction decisions are not artificially distorted by a charge that some carriers bear but others do not bear at all (or bear in smaller per unit amounts).

Thus, the proposed approach is also consistent with the cost causation principle, properly understood, insofar as it defrays the onset costs from consumers. As explained above, <u>all</u> retail customers will greatly benefit from the new, multiple carrier, competitive regime and thus all customers, including those that elect to remain customers of NYT or its affiliates, are beneficiaries of competition onset investments made today to make the new regime possible. That is because all telecommunications customers, whether served by resellers, UNE-based providers, CAPs or NYT, will benefit from lower prices and better services engendered by competition. Accordingly, it is appropriate that no carrier should be exempt from paying for these costs.

In sum, a single pool of competition onset costs should be established. Recovery of those costs should be amortized over an appropriate period. And NYT should receive no special exemption from those costs - at a minimum, NYT should bear a share of such costs in each period equal to its proportionate share of total customers served.

Q. WOULD THIS APPROACH REQUIRE NYT OR ITS SHAREHOLDERS TO BEAR MOST COMPETITION ONSET COSTS?

A. No. Although it is true that, so long as it remains the dominant provider serving the vast majority of customers, NYT would bear the largest amount of such costs in absolute dollars. That does not mean that NYT or its shareholders would be stuck with those costs. As I have explained, so long as these costs are borne in a competitively neutral fashion, NYT will have the same opportunity to recover its share of competition onset costs from its customers as every other carrier has - because on a per customer basis each carrier will incur the same share of competition onset costs. My proposal is designed to ensure that NYT should not be able to charge its competitors more than their customer-based proportionate share of these costs. That is very different from saying that NYT should not recover the remaining costs at all. NYT may <u>elect</u> to absorb those charges or it may elect to pass some or all of them on to the ultimate consumers. How carriers deal with these changes is immaterial: what is important is that they be imposed on all carriers in a competitively neutral manner and that each carrier therefore be given an <u>opportunity</u> to recover them. By contrast, under NYT's proposal entrants would be placed at a competitive disadvantage solely because NYT has enjoyed a statutory <u>monopoly</u> in the provision of local exchange services. Giving NYT such a competitive advantage, especially when the new entrants are disadvantaged for so many other reasons, would increase entry barriers and would undermine the most fundamental objectives of the Act.

VI. <u>NYT'S ANTICOMPETITIVE PROPOSAL</u>.

Q. PLEASE SUMMARIZE NYT'S "NON-RECURRING" CHARGE PROPOSAL.

A. Stated briefly, New York Telephone proposed to recover all the onset costs from its competitors. NYT proposes to