USWC's LIS would require that local traffic be measured. USWC presently is not capable of measuring terminating local traffic, but is developing new technology that can generate the necessary call records for such measurement. It proposes interim measurement arrangements whereby each local exchange company would measure the traffic it delivers to another, and the receiving company would rely on those measurements to bill its terminating access charges. USWC presently bases IXC access charges on a delivered-traffic reporting system similar to the interim system it proposes for ALECs.

USWC proposes that local interconnection access charges be reciprocal. The ALECs could charge USWC access charges for traffic that USWC delivers to them for termination to ALEC customers based on the ALECs' access tariffs or price lists. An exception to this position is USWC's proposed I-USC. It would be strictly a one-way charge.

GTE has proposed usage-based mutual compensation for terminating ALECs' "local-like" and "EAS-like" traffic based upon GTE's switched access tariff rates, except for the common carrier line charge and the information surcharge elements.[8] Its proposed contract rate for local termination is $0.0295291 per minute, which is derived from its switched access tariff. In cross-examination, GTE witness Beauvais recommended that the Commission should direct GTE to impose rates for inter-company compensation at a level similar to what is paid currently for local measured service, approximately $0.01 to $0.015/minute. [Beauvais, TR., pp. 1789 and 1802] GTE has not proposed to unbundle transportation from its access charge.

There were several basic issues cited by parties in their support for or opposition to a measured use structure. The major issues were whether: (1) the local access rate structure should be consistent with the existing toll access rate structure; (2) a per-minute charge would send correct economic signals to actual and potential participants in the market; and (3) measured use rates would impose unnecessary costs on market participants.[9]

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[8] GTE does not have a tariff for local interconnection service, either existing or proposed. GTE is a party in this proceeding because of complaints filed against it by TCG and ELI. In negotiations with GTE, TCG and ELI requested that GTE interconnect with them on the same basis it interconnects with incumbent LECs for the exchange of EAS traffic, including employing a bill and keep method of mutual compensation for the exchange of local traffic. GTE refused that request.

[9] The parties also disagree about the amount that would be charged per minute for call termination. USWC contends that interconnection rates should be set above incremental cost to provide a contribution to the common costs of the existing network. Several other parties argue that rates should be set at incremental cost to promote competition. Markups on services provided to competitors would allow the incumbent to block meaningful competition, they argue.

(1) Consistency of local and toll access rate structures.

USWC argues that there is no basis for having a different compensation mechanism for local traffic than the one already in place for interexchange traffic. Local interconnection is no different technically and conceptually from any other kind of interconnection. GTE concurs in this argument, contending that differentiation of traffic "types" will succumb to the proliferation of technologies, service providers, and service packages. A common rate structure would obviate the need to use separate trunking or specialized measuring and billing systems, provide equal treatment to all originating companies, and eliminate the incentive to arbitrage any difference between different rates. In addition, WITA argues that measured use rates for local interconnection build on existing models and are easy and efficient to administer.

In opposition, Public Counsel argues that the historical existence of such a structure for toll access does not make it an appropriate model for local access. DOD/FEA notes that the idea of consistency is superficially attractive but contends that the relationship between an incumbent LEC and a toll carrier is altogether different than the relationship between two incumbent LECs or between an incumbent LEC and a new entrant ALEC.

(2) Economic signals to market participants.

GTE argues that measured use rates for local and EAS traffic send appropriate economic signals to the market. Local exchange companies incur costs to terminate each other's traffic, and this cost should be reflected in rates. The per-minute rate is superior to bill and keep, GTE argues, because bill and keep sends an incorrect economic signal that traffic termination has no cost. USWC also argues that per-minute measured use rates are warranted by the need to send accurate price signals. WITA contends that access-like charges will ensure entry on an economically sound basis and allow rural LECs an opportunity to recover network costs for serving all of the rural service area.

ELI argues that interconnection costs are not sensitive to the number of minutes used but rather are a function of the potential demand for peak network capacity. (Montgomery, Ex. T-84, pp. 47-48)

Public Counsel contends that a measured rate structure has the potential to place irresistible pressure toward provision of retail service on a measured basis. It cites the testimony of GTE witness Beauvais, that "if compensation costs are on a minute of use or per call basis, it is desirable that the end user see a rate structure reflecting those cost characteristics..." (Ex. T-130, p. 12) MCI argues that adopting a per-minute charge, even at cost, would result in a cost floor for local exchange services much higher than the floor that would apply under mutual traffic exchange.

GTE does not accept that usage based charges would result in mandatory local measured service. GTE does not have the goal of imposing mandatory measured service, and its proposed integrated rate structure would accommodate flat rate service offerings.

GTE argues that such concerns should not distract from the real issues of sound economic, forward-looking prices. [Beauvais, TR., p. 1786]

(3) Imposition of unnecessary costs with a per-minute structure.

Finally, the parties disagree on whether the proposed rate structure would unnecessarily raise costs for various firms, either by creating measurement and billing costs or by distorting choices in network architecture and technology. USWC contends that the investment necessary to measure terminating traffic is necessary for companies to manage their networks in a competitive manner and that the additional cost of local measurement capability for companies who already must measure toll traffic is modest and incremental. GTE argues that any factual basis for the claim that measuring costs are high are based only on USWC's costs, citing evidence that it can and is measuring and billing for terminating traffic using existing capabilities at a low cost. WITA suggests that costs could be very low if companies used the Data Distribution Center to exchange billing system records.

Many opponents of USWC's proposed rate structure cite measurement costs as a disadvantage of that proposal. TRACER presented testimony that USWC's assumed costs for measuring, billing, and collecting would account for almost half the costs for terminating local calls. (Zepp, Ex. T-151, 22-23) The technology used to measure local traffic is three times as costly as that used to measure IXC traffic. (Wilson, Ex. T-154, p. 32) Measurement costs will be wasted if traffic is in balance, TCG argues, and even if the traffic is out of balance, the total cost of measurement must be justified by the amount of the imbalance. Sprint, ELI, MCI, and Public Counsel argue that requiring new entrants to adopt technologies that permit measurement of terminating minutes would distort technology and architecture choices and raise entry costs.

**b. Mutual traffic exchange**

Mutual traffic exchange, also known as "bill and keep," is the compensation mechanism supported by most parties other than the incumbent local exchange companies. Under this mechanism, traffic is exchanged among companies on a reciprocal basis. Each company terminates the traffic originating from other companies in exchange for the right to terminate its traffic on that company's network.

Proponents focus primarily on the reciprocal nature of mutual traffic exchange and the "co-carrier" treatment it affords incumbent LECs and new entrant ALECs. Commission Staff argues that it is appropriate to treat ALECs as co-carriers of local traffic, along with USWC and other LEC incumbents. The new entrants will provide the same local exchange services to their customers as does USWC to its customers. Staff cites as an example the independent LECs, which have used a bill and keep arrangement with USWC for several years. This relationship is in contrast to the IXCs, which are customers of USWC and have historically provided profits to USWC through access charges. ELI, MCI, Public Counsel, AT&T, and TRACER also argue that the reciprocal nature of bill and keep is appropriate because it treats incumbents and entrants as equals in the local exchange market. These

parties contend that the reciprocal nature of bill and keep means that companies do not use the networks of another for free. Consideration takes the form of a payment in kind.

A second argument made by proponents of bill and keep is that it is efficient and simple to administer. Commission Staff, TCG, ELI, Public Counsel, and MFS argue that under this mechanism, neither party incurs measurement and billing expenses, and each company has a strong incentive to minimize its costs and improve the efficiency of its network. AT&T notes that cost studies are avoided. MCI cites the use of mutual traffic exchange among non-competing LECs for terminating EAS traffic as evidence of the efficiency of this compensation structure. It argues that in these situations, where competitive advantage is not sought, adjacent incumbent LECs have chosen bill and keep as the most efficient mechanism.

A third argument made by proponents of bill and keep, including MFS, TRACER, and DOD/FEA, is that it eliminates incentives to perpetuate traffic imbalances. This argument holds that an incumbent LEC would have an incentive under a measured use scheme to delay implementation of local number portability since without number portability, customers are less likely to switch their incoming lines to a new service provider. A bill and keep arrangement would give incumbents an incentive to negotiate better long-term solutions and to develop a workable system of number portability.

The incumbent local exchange companies oppose a bill and keep compensation structure, arguing that it would fail to compensate them for use of their networks by competitors. GTE refers to this arrangement as "forced barter" and argues that it does not satisfy the obligation to make just compensation. USWC similarly argues that "every carrier is absolutely entitled to reasonable and sufficient rates for services rendered" and that the bill and keep arrangement does not provide that compensation.

GTE further argues that full and just compensation would not result under bill and keep unless there were an exchange of equal value and that this is unlikely under bill and keep. Exchange of equal value would require that traffic between two companies be perfectly in balance, and there is no evidence that this would be the case, according to GTE.

Another argument raised by opponents is that the bill and keep structure would invite arbitrage of the differences in rate structure between toll and local access. WITA argues that bill and keep would give even small customers an incentive to establish their own local exchange company. Rather than pay the incumbent LEC for PBX trunks, the customer could obtain bill and keep interconnection service.

The bill and keep structure also is criticized for sending price signals that are inconsistent with the development of an efficient competitive telecommunications market. GTE argues that prices should reflect costs. Bill and keep sets a zero price for terminating local traffic, when that service has a cost. (Beauvais, Ex. T-133, p. 10) WITA makes a similar argument, quoting USWC witness Harris that "the central tenet of economics is that

prices pay a critically important role in the allocation and distribution of goods and services in a market economy. Bill and keep violates that principle." (Ex. T-31, p. 9)

c. Flat-rated port charge

Besides mutual traffic exchange, the other alternative to the per-minute regime proposed by USWC and GTE is a "flat-rated port charge" for interconnection.[10] As described by TRACER witness Zepp, companies would pay a charge for each port interconnecting the other. In effect, the total cost of each port would be allocated based upon use of that port during the period of peak demand. The company with the greater number of terminating minutes during the busy hour would pay an amount based on the difference in minutes and the cost of the interconnection.[11] (Ex. T-151, pp. 19-20) Commission Staff witness Wilson also supported this formulation of a port charge as an alternative to "bill and keep." (Ex. T-155, p. 31)

Commission Staff, TRACER, and ELI support mutual traffic exchange as the preferred compensation mechanism but argue for a port charge as the second-best alternative. TCG advocates a hybrid approach using bill and keep for end office interconnections and a port charge for tandem interconnections. However, no party offers a port charge as its preferred method of structuring compensation.

The record in this proceeding is, to put it euphemistically, rich with argument and evidence on the advantages and disadvantages of the per-minute charge and bill and keep alternatives. Very little information has been provided by the parties on the merits and demerits of a port charge. In support of a port charge over a per-minute charge, Commission Staff and ELI contend that a port charge would result in cost-based rates that are more competitively neutral than per-minute charges. Another suggested advantage of

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[10] While this option is styled a "flat-rated charge," it would be more accurate to describe it as a peak use charge. If the charge were truly "flat-rated," it would not vary with a carrier's use of peak capacity. For instance, flat-rated local telephone service in this state means that a customer pays a flat monthly rate whether or not they make local calls. The port charge proposed in this case is a charge based upon use, but only use during the period of peak demand.

[11] The proposed port charge formula is

$$\text{Price/Port} = 9{,}000 \times (F_{ALEC} - F_{USWC}) \times (\text{TSLRIC-X})$$

where:

$F_{ALEC}$ = the fraction of traffic a typical ALEC terminates on USWC during the busy hour, plus or minus 5%,

$F_{USWC}$ = the fraction of traffic that USWC typically terminates on a ALEC during the busy hour, plus or minus 5%, and

(TSLRIC-X) = the TSLRIC (minus an adjustment factor), expressed in dollars per minute. The per-minute rate is multiplied by 9,000 minutes per month to arrive at a monthly rate.

port charges, compared to per-minute charges, is that this mechanism would avoid many of the expenses of metering, billing, and auditing every minute of use. Charges would be based on peak traffic instead.

In addition, contend Commission Staff and ELI, a port charge is economically efficient, in that it recognizes that interconnection costs are determined primarily by demand for peak network capacity and that off-peak use has very little cost. TRACER and ELI argue that port charges also allow new entrant ALECs more flexibility (relative to measured use rates) to experiment with their own pricing plans. Finally, TCG argues that port charges allow each company to obtain compensation for the costs of interconnection on a basis that parallels flat-rated retail pricing.

### 3. Commission Discussion and Decision -- Compensation

The structure of a compensation mechanism, as well as the level of interconnection rates, has been argued and examined in great detail in this proceeding. The Commission finds itself impressed with the weaknesses of both USWC's proposed per-minute charge and the mutual traffic exchange mechanism offered by other parties. The record demonstrates that neither mechanism would provide a long-term compensation structure that meets the policies and objectives discussed earlier in this order. This discussion will explain that conclusion, provide for an interim compensation mechanism, and provide the parties with direction on how a long-term compensation structure should be developed.

#### a. The proposed minutes-of-use structure

The Commission rejects USWC's proposal to impose toll-type access charges on each minute of local interconnection. Neither the structure of the proposed mechanism nor the specific rates proposed can be considered to be fair, just, and reasonable. Adoption of a minutes-of-use scheme would either impose extremely high barriers to entry or substantially increase the retail price of local service. Either result would conflict with state policy goals. Our rejection of the proposed minutes-of-use structure and rate is based on three basic factors:

(1) Attempting to unify rate structures in the toll and local access markets by imposing toll-type charges on local access is misguided and unnecessary.

The incumbent LECs look to their existing relationships with the interexchange carriers as a model for their future relationships with competitive alternative local exchange companies. USWC argues that one of two fundamental principles supporting its usage-based pricing structure is that "local interconnection is no different technically and conceptually from any other kind of interconnection" (USWC brief, p. 29). Since local and toll access are technically similar, it is argued that rates structures should be the same. With the IXC rate structure already in place, the incumbent LECs appear to believe the best strategy is to apply that structure to the new entrant ALECs.

The Commission believes it would be a fundamentally misguided strategy to emulate the toll access structure in local exchange interconnection or to make consistency between toll and local access rates an objective in developing an interconnection compensation structure. It should be recalled that toll access rates were developed in a regulatory setting to provide consistency between retail toll rates and wholesale toll access rates. It remains unclear whether the use of measured toll access rates to recover non-traffic-sensitive costs will be competitively sustainable and economically efficient over the long term.

Since the toll access charge regime reflects retail rate structures in wholesale rates, following the toll example means developing a local interconnection regime that reflects the structure of retail local rates. In concrete terms, this means that local interconnection would be available on a flat-rated basis. It would not preclude a measured service option, but it would preclude mandatory measured service at the wholesale level.

(2) Measured use interconnection rates are not cost-based, because the costs of interconnection generally do not vary with the level of traffic being exchanged.

USWC's second "fundamental principle" underlying its usage-based compensation scheme is that "interconnection rates should be cost based." USWC brief, p. 29. According to the incumbent, "the monopoly era approach of allocating large amounts of revenue requirement to interconnection rates to keep all residential rates below cost is not viable going forward." Id., p. 30.

That argument, whatever its merits, speaks to the *level* of interconnection rates and says nothing about the *structure* of rates. On the issue of rate structure, USWC's brief cites its witness, Mr. Owens, who testifies that one implication of this principle of movement toward economically rational pricing was "the adoption of interconnection rate structures that are reflective of how costs are incurred." (Ex. T-10, p. 5) He then concludes:

> Thus, local switching costs imposed by the termination of traffic on a USWC switch from an alternative exchange carrier are appropriately recovered through usage sensitive charges -- not through bill and keep or flat-rated port charges. (Ex. T-10, p. 5)

Missing from USWC's case is the evidence that shows usage-based rates are "reflective of how costs are incurred." By USWC's reasoning, only if costs are primarily traffic sensitive would USWC's support of usage-based rates be consistent with its principle that rate structures reflect how costs are incurred. The record does not support USWC on this point.

Instead, the record shows that usage-based prices are anything but consistent with the underlying costs. Call termination costs are primarily a function of the capacity required to meet peak demands. Once that level of capacity is installed, costs do not vary significantly with the level of traffic. (Montgomery, Ex. T-84, pp. 47-48; Montgomery, Ex. T-86, p. 23; Wilson, Ex. T-155, p. 33; Andreassi, Ex. T-83, p. 27; Zepp, Ex. T-153; King, Ex. T-104, pp. 27-30) Each firm should be responsible for the costs that it imposes on others; usage-

based rates provide no assurance that this will happen. A company whose outgoing traffic, for instance, is primarily during the busiest hours would contribute much more to costs than it would pay in interconnection charges under a minutes-of-use regime. That would encourage uneconomic entry and be unfair to the terminating company.

(3) A measured use regime would threaten the state's public policy of affordable, flat-rated local service.

The final strike against a mandatory measured-use compensation structure is that it conflicts with and could ultimately undermine the state's policy in favor of providing telephone customers with the option of flat-rated local service. Adopting mandatory measured service at the wholesale level makes it impossible to adopt a retail rate structure that reflects the wholesale price structure without violating the statutory ban on mandatory measured service. (Murray, Ex. T-135, p. 6; Beauvais, Ex. T-130, p. 12; Zepp, Ex. T-153, p. 5)

USWC's proposed minutes of use rate likely would price new entrant ALECs out of the market for flat-rated local service, thereby insulating incumbents from competition for those customers who want flat-rated service -- a group that would appear to include most customers. USWC argues that any of its competitors would be free to sell at retail flat-rated services that it was buying from USWC at wholesale on a measured basis, and we do not disagree. But that does not mean that such a strategy would be competitively viable. (Montgomery, Ex. T-84, p. 48) The costs of USWC's competitors would be higher by the amount of the access charge, thereby reducing pressure on USWC to maintain low rates. Any firm charging flat rates while paying measured rates for access would be vulnerable to a price squeeze as calling volume increased. (Zepp, Ex. T-151, pp. 13-14; Wilson, Ex. T-155, p. 26)

The minutes of use plan would not only raise costs of competitors but also directly place upward pressure on the incumbents' flat-rated local service, both because of the additional expenses associated with measurement and billing, and the potential that retail rates would have to be raised when the access charges are included in an imputation calculation. (Cornell, Ex. T-140, p. 34; Smith, Ex. T-157, p. 20; Smith, TR., pp. 2330-31; Murray, Ex. T-135, p. 6; Murray, TR., p. 1962; Beauvais, Ex. T-130, p. 12)

In summary, USWC has proposed mandatory measured use as the exclusive compensation mechanism and at a rate that is excessive in relation to the service's cost. Adopting that proposal would throttle the nascent competition in the local exchange market, foreclose the potential benefits that consumers might enjoy from being able to choose among local exchange companies competing for business on the basis of price, service, and technology. Even as it restricted access to competitive options, a mandatory measured rate regime for local interconnection could, through imputation requirements, drive up the incumbent's local rates and undermine flat-rated local service at the retail level. Adopting such a compensation structure is not in the public interest.

**b. Bill and keep as an interim measure**

The Commission will adopt, as an interim measure, the mutual traffic exchange or bill and keep mechanism for compensating local exchange companies for terminating traffic from other LECs. Bill and keep is a simple method for companies to interconnect with one another and exchange services in a way that benefits their customers. It is already in use by the industry for exchange of EAS traffic. In those circumstances where companies with similar technologies interconnect and maintain balanced traffic, bill and keep produces the same result, i.e., no exchange of money, as would the alternatives that rely on specific rates.

This decision to rely on mutual traffic exchange as an interim measure is driven in part by the fact that all price-based compensation approaches developed in this record suffer serious deficiencies as a basis for efficient and fair interconnection. Bill and keep is, to put it simply, the least deficient of the alternatives offered. The Commission is persuaded that, while bill and keep lacks the appropriate price signals that are essential to an efficient competitive telecommunications market, incumbents will not be financially harmed by adopting bill and keep on an interim basis. Any potential harm would not occur until current barriers to competition are eliminated and competitors gain more than a de minimus market share. This order explicitly links the transition from bill and keep to a price-based structure to the implementation of true local number portability and the removal of other competitive barriers.

The primary advantage of mutual traffic exchange as a compensation structure is that, in the near term, it provides a simple and reasonable way for two competing companies to interconnect and terminate each other's calls. Adopting a bill and keep compensation mechanism will let the incumbents and the new entrants focus on the technical aspects of efficient interconnection without concerns over costly measurement or accounting procedures and without having to revisit existing interconnection agreements for EAS. Bill and keep offers the best opportunity to get new entrants up and running, with a minimum disruption to customers and existing companies. (Zepp, Ex. T-151, p. 13)

Beyond the inherent simplicity of bill and keep, it has the advantage of avoiding the pricing issue because in many situations it results in little or no money changing hands. Interconnection is a reciprocal relationship; otherwise, it would be "connection" instead of "interconnection." One company is providing call termination to a second who, in turn, is providing call termination to the first. Regardless of the pricing structure or the prices themselves, no net money would change hands in those situations where two companies are

obtaining identical services from one another.[12] (Cornell, Ex. T-140, p. 26; Beauvais, TR., pp. 1805-06)

We would not adopt bill and keep if it appeared that new entrant ALECs would be imposing more costs on the incumbents than they would be incurring by terminating incumbents' traffic.[13] This might happen if all traffic were from the ALECs to the incumbent LECs. Both would incur the cost of establishing an interconnection, but with no traffic going to the new entrant, the cost incurred by the incumbent provides it no benefit. However, the opponents of bill and keep have not demonstrated that this situation is likely to occur, at least in the near term when bill and keep will be in place. To the contrary, the only evidence on the record favors the theory that traffic will be close to balance.[14] (Wilson, Ex. T-155, pp. 23-25; Montgomery, Ex. T-84, p. 44; Montgomery, Ex. T-86, p. 21; Cornell, Ex. T-140, p. 28)

It is impossible to say exactly what will occur once competition ensues, but every indication at this point is that the new entrant ALECs will be seeking to provide full-service telecommunications. Their customers can be expected to receive calls as well as make calls. Incumbent and entrant, each seeking to satisfy the demands of its own customers, will have

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[12] This is not to suggest that prices are irrelevant when traffic is in balance and no money is changing hands. The structure and level of prices would affect companies' incentives and decisions in many areas, including investment in new capacity, retail rate structure, and marketing strategies. We conclude that limiting bill and keep to an interim period minimizes the adverse effects posited by such incentives and long-term decisions.

[13] This condition is frequently referred to in the record as a "traffic balance." However, since the interconnection costs are primarily fixed (non traffic-sensitive), the most relevant measure of balance is not the volume of traffic but capacity to carry traffic.

[14] If ALECs develop more than a de minimus market share, and the incumbent LECs have evidence that this interim "bill and keep" requirement causes the incumbents competitive harm, they, of course, can file appropriate tariff revisions designed to correct that development.

the same need for interconnection.[15] We find little potential harm and much potential gain to having competition begin under an interim bill and keep arrangement.

c. Future structures for compensation

Adopting bill and keep as an interim measure raises the question of what structure compensation should take over the long term. Specifically, what will follow bill and keep? The Commission expects that future interconnection arrangements will be negotiated with mutually acceptable results once the bargaining position between incumbents and new entrants becomes more balanced. As technical problems such as number portability are resolved and competition becomes more pervasive, compensation -- like every other aspect of interconnection -- will usually be negotiated to the mutual satisfaction of the interconnecting companies. We would be very surprised if every negotiation ended with a bill and keep structure. It certainly is not the Commission's intent in this order to require such a result.

As the number and types of interconnection arrangements increase, bill and keep as a standard interconnection framework is likely to become less and less workable as an exclusive structure for compensation. Situations are likely to arise where two competitors do not want or need exactly the same services, measured in either quantity or quality, from one another. One company might desire to terminate all traffic to another on that company's tandem, but the second may prefer to terminate its traffic at each of the first company's end offices. [Owens,TR., p. 355] These decisions will be made by each company based on economics, technology, and the demands of its customers for quality service and low prices. A bill and keep arrangement that presumes mutual exchange of services will not, over the long term, provide the flexibility to accommodate the diversity that is likely to result from competing local exchange companies, though it may well be used in some situations.

Beyond the near term, competitive local exchange markets will require prices such that companies can both obtain the services they need from each other and receive the compensation that they deserve and require. With price tags attached to various interconnection services, LECs can choose and pay for the services that they need to satisfy

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[15] This prospect of balanced demand for interconnection may not be realized if companies are unable to develop a way to make telephone numbers portable among companies, so that a customer can switch companies without changing telephone numbers. The primary concern about a lack of number portability is its effect on competition. The costs of switching numbers would discourage customers from changing companies and thereby allow the incumbent to maintain above-market prices. However, a secondary concern is that, to the extent new ALEC entrants do attract customers, the traffic might be out of balance. A customer might keep its USWC line (and number) for incoming calls and use an ALEC's line for outgoing calls. The result would be an imbalance of traffic on the ALEC-USWC interconnection, even though the customer's total traffic is in balance. In this example the interconnection imbalance exists only because of a lack of number portability and likely would not continue once numbers become portable.

their own customers. The services that competing companies seek to offer, the markets that they seek to serve, and the technologies they use in the process are all likely to vary among companies.

Price-based mechanisms were proposed in this case, but we are not satisfied that the record here provides a basis to adopt any cost-based interconnection rate. For instance, the costs underlying interconnection are primarily fixed in nature, yet the prices proposed by various parties included usage elements. The USWC proposal departs most from cost in this regard, since it would recover costs through a charge on every minute of use. Even the so-called flat-rated port charge offered as an alternative to bill and keep falls short, in that the charges depend upon a company's use during peak hours. If interconnection costs are fixed, they do not go away if a company does not use the capacity made available by the interconnecting company.

We expect that the telecommunications industry will develop other compensation mechanisms that fit in circumstances where bill and keep does not. To do so, incumbent LECs and new entrant ALECs need to develop further the cost basis for specific rates. Each company has the responsibility to demonstrate that the interconnection rate it would charge is fair, just, and reasonable. At a minimum, the rate should cover the total service long-run incremental cost, or TSLRIC, of the service. The estimates of TSLRIC in this case, however, have been insufficient (see the Cost Studies section of this order). If rates are to be set by the Commission (rather than through good-faith negotiations of market participants, as we would prefer), complete and accurate cost data must be provided. Our lack of confidence in the calculations of USWC's TSLRIC in this case is one factor in our decision to adopt, at least for an interim period, the mutual traffic exchange compensation mechanism.

Any interconnection rates proposed as a replacement for bill and keep also need to reflect the cost structure of the service being provided and in particular the cost structure that is likely to obtain in the future:

> The new technologies are less sensitive to call distances and to call usage. Whereas usage rate structures measure <u>only</u> these factors, the underlying costs are becoming relatively more sensitive to the capacity demanded, rather like the "demand charge" in kilowatts in an electric service pricing structure compared to the usage sensitive kilowatt-hours. (Montgomery, Ex. T-84, p. 48)

Charging a use-based rate to recover costs that are primarily fixed in nature is likely to discriminate against certain groups of customers, distort incentives to enter the competitive market, discourage economic efficiency in the design of networks, and prove unsustainable under competition. Use-based rates may be reasonable when customers also have the option of a flat rate, but nothing in this record suggests a circumstance where mandatory measured service interconnection rates would serve the public interest.

In addition, further exploration is required whether TSLRIC is appropriate as a price for interconnection services. It has been argued that interconnection rates should be set at TSLRIC because an incumbent LEC should not be permitted to earn profits from services it provides its competitors. We are not prepared to accept that argument, though we do not reject it at this point. To illustrate that it may be appropriate for rates to exceed TSLRIC, consider the extreme case where every customer is served by an ALEC: Would the backbone network still be provided by the incumbent LEC? Would rates based on the TSLRIC of interconnection be sufficient to pay the costs of that network?[16] These questions are not resolved by the record in this case, and they need to be before reasonable, cost-based interconnection rates can be established.

Elsewhere in this order, we direct both the incumbent and entrant local exchange companies to develop a plan for implementation of local number portability and present that plan to the Commission within nine months of the date of this order. The Commission believes that is an appropriate time to revisit the interim compensation mechanism adopted in this order. We expect that by that time the industry will have negotiated a replacement for the bill and keep mechanism, a replacement that sets prices for services based on the costs of those services. Failing such an agreement, we expect the incumbent LECs to propose a capacity charge that is cost-based, that is supported by reasonable cost studies, and, if proposed interconnection rates provide a contribution above TSLRIC, that justify the existence and magnitude of that contribution.

### 4. Legal Arguments Raised by Incumbent LECs on Compensation Issues

As noted in the above discussion of the Commission's authority, the incumbent LECs have taken a very legalistic approach in arguments supporting their interconnection proposals. With regard to compensation for the termination of another LEC's local traffic, they argue that the Commission's authority to set rates is extremely limited. They take the position that the Commission cannot order bill and keep, for either intraexchange traffic or ALECs' EAS traffic. They argue that the Commission must approve their proposed interconnection compensation mechanism, and that the Commission's authority is limited to regulating the fairness and sufficiency of the rates of the services they choose to offer. USWC argues that the Commission has no choice but to approve local interconnection access charges which include an interim universal service charge element, because failure to do so will result in a deprivation of USWC's right to an opportunity to earn a fair rate of return.

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[16] The question, viewed from another perspective, is: Would the new entrant ALECs compete with the incumbent LEC in every aspect and component of its service? Or, does there exist a core network integration function that new entrants cannot be expected to provide? If so, the cost of that function would appear to be one that should be recovered in an interconnection rate that exceeds TSLRIC.

The Commission has thoroughly considered the incumbents' legal arguments related to compensation. It concludes that it has the authority to order bill and keep as an interim compensation mechanism. It concludes that it has the authority to order all companies to adopt the same compensation mechanism for all local interconnection, including EAS traffic. It concludes that USWC has not demonstrated a need for, or the amount of, an interim universal service charge. The parties' positions, and the Commission's discussion and decisions on these issues, follow.

### a. The Commission's legal authority to order bill and keep.

#### (1) Positions of parties

USWC argues the Commission's statutory authority contemplates that sufficient and remunerative rates will be charged for services, and that no statute gives the Commission authority to prescribe *no* rates for a proffered telecommunications service, that is "bill and keep." Specifically,

- RCW 80.36.080 gives the Commission the power to regulate rates for telecommunications services for fairness, reasonableness, and sufficiency. This is not authority to charge "no rates."

- RCW 80.36.160 and 80.36.855 are the Commission's only specific authority over interconnection, and, read together with 80.36.080, give the Commission authority only to review intercompany interconnection service rates for reasonableness and sufficiency.

- RCW 80.04.110 gives the Commission jurisdiction over complaints by competing telecommunications companies against the rates or regulations of another if they are "unreasonable, unremunerative, discriminatory, illegal, unfair or intending or tending to oppress the complainant, to stifle competition or to create or encourage the creation of a monopoly." [Emphasis supplied.] The Commission's remedy is limited to establishing remunerative rates to be observed by all companies. "Thus, once again it is seen that rates must be charged that are remunerative, or in excess of costs, in order to be competitively fair, and all competing carriers must charge such rates."

- RCW 80.36.330(3) provides: "Prices or rates charged for competitive telecommunications services shall cover their costs." That sufficient rates for services are rates that are above costs, unless the Commission has a compelling record to require higher than otherwise necessary rates to some class of customer in order to subsidize the rates of others, in the furtherance of a mandated public policy, like universal service.

- RCW 80.36.180, which allows the Commission to find that rates charged for or access to a noncompetitive service, such as carrier access service, grants an "undue or unreasonable preference or advantage" to the offering company or another vis-a-vis

the complaining company, at most would permit the Commission to utilize an imputation test for local exchange service.

USWC argues that every company is absolutely entitled to reasonable and sufficient rates for services rendered; otherwise its property is being confiscated for the benefit of another, contrary to fundamental constitutional and public utility law.

GTE echoes the argument that if the Commission orders a compensation mechanism that does not provide full and just compensation for the service provided, there will be an "unconstitutional taking" of the incumbents' property. It cites State Ex Rel. Pub. Serv. Co. v. Skagit River Tel. & Tel. Co., 85 Wash. 29, 49 (1915).

To other parties' arguments that there is compensation with bill and keep, "in-kind" rather than "in cash," GTE responds that "neither the state nor federal constitution provides that the obligation to make just compensation may be satisfied by "in kind" compensation, i.e., "forced barter."

GTE argues that compensation must be full and just, that this would not occur under bill and keep unless the exchange of value were equal, that for bill and keep to result in exchange of equal value traffic must be perfectly in balance, and that there is no evidence that this would be the case under the ALECs' proposal.

### (2) Commission discussion

The Commission rejects the argument that it lacks authority to order bill and keep. Bill and keep is not a system of interconnection "for free." Bill and keep is compensatory. There is a reciprocal exchange of traffic in which each company receives something of value. As Dr. Cornell persuasively testified:

> It is important to remember that rival local exchange carriers are not customers, but co-carriers. That means, whenever the rival has acquired a single customer, traffic will flow both ways. Mutual traffic exchange simply involves each carrier "paying" for the other to terminate local calls originated by its subscribers by mutually terminating local calls originated by the customers of the other carrier. That is why I referred to it as payment "in kind" rather than "in cash." (Ex. T-140, p. 26)

Moreover, as DOD/FEA argues, bill and keep is more consistent with the structure of cost occurrence than are the access charges that the incumbents propose. The reason that local exchange services are flat rated is that most of the cost of local service is not sensitive with traffic volume but is related to access to the public switched network. The principal cost of terminating calls relates to the provision of the line to the subscriber's premise. The cost of this line is largely insensitive to the volume and duration of calling. Even end-office switching costs have a large non-traffic sensitive component. It is thus simply wrong to suggest that the bill and keep procedure means that calls are being terminated "for free." The termination function is paid for, not by the originating company, but by the end-use

customer in his flat monthly charge. That charge covers all access to and from the public switched network. Under bill and keep, a company is fully compensated for most call terminations by its own customer.

It also should be kept in mind that confiscation in this context is measured not by any particular element of a rate structure, but by whether the end result of the entire process results in sufficient rates overall. FPC v. Hope Natural Gas Co., 320 U.S. 591, 64 S.Ct. 281, 88 L.Ed. 333 (1944); POWER, supra, 104 Wn.2d at 811.

The record does not support the incumbents' argument that they would not be fairly compensated because traffic may not be "in balance." USWC concedes that it has no traffic studies indicating the likelihood of any traffic imbalance. (Owens, TR., p. 212; Montgomery, Ex. T-84, p. 44) To the extent Washington traffic patterns could be analyzed by Commission Staff, their analysis of EAS traffic supports the position that traffic will be in balance, within ten percent. (Wilson, Ex. T-155, p. 24) The only evidence in the record on local traffic balance between incumbents and ALECs relates to MFS's experience in New York, in which traffic between MFS and NYNEX has been in balance or has favored NYNEX. (Schultz, Ex. T-126, p. 16)

Moreover, as ELI witness Montgomery persuasively testified, in a competitive co-carrier environment, traffic imbalances are unlikely because the ALEC serves the same community of interest area. Thus, unless the ALEC's incentives concerning which customers to serve are artificially distorted by discriminatory compensation rules and the absence of full local interconnection including number portability, the ALEC should see calling characteristics that are highly similar to the dominant incumbent LEC serving the same area. Thus, traffic flows for the ALEC are likely to be in balance. (Ex. T-84, pp. 44-45)

To the argument that bill and keep is not fair or compensatory unless traffic is perfectly in balance, the Commission notes that the parties cannot even agree on whether "balance" should be measured in terms of amount of traffic delivered for termination or costs to the companies of handling the traffic that is delivered for termination. Also, no compensation mechanism guarantees "perfect" compensation, as the extensive testimony regarding USWC billing errors and auditing difficulties related to minutes of use compensation attests.

That bill and keep is a fair compensation method is evident from the fact that it is the dominant current practice between adjacent LECs around the country, including the state of Washington, for terminating local (EAS) traffic between adjacent exchanges. Where there is no gain to be achieved from anticompetitive or inefficient behavior, companies have elected bill and keep because of its inherent simplicity and efficiencies. As Dr. Zepp stated: "This intercompany compensation method has been used . . . to establish intercompany compensation between local co-carriers who are neighbors. It is just as appropriate for local co-carriers who are competitors." (Ex. T-151, p. 11 (emphasis in original))

Finally, the Commission notes that several other Commissions have ordered bill and keep on an interim basis. In a decision adopted July 24, 1995, the California Public Utilities Commission ordered bill and keep to be implemented for one year, for the termination of calls between ALECs and the incumbent LECs. Orders Instituting Rulemaking and Investigation on the Commission's Own Motion into Competition for Local Exchange Service, Docket Nos. R. 95-04-043 and I. 95-04-044, at p. 47 (1995). An initial decision of the administrative law judge for the Pennsylvania Public Utility Commission likewise ordered the use of bill and keep, for an undetermined period, for the termination of local calls between the ALEC and the incumbent LEC. Application of MFS Intelenet of Pennsylvania, Initial Decision, Docket No. A-310203F0002, at p. 67 (June 6, 1995). The Michigan Public Utilities Commission adopted a modified bill and keep methodology, authorizing assessment of a per-minute charge for local interconnection only if there is a traffic imbalance of greater than plus or minus five percent. Otherwise, bill and keep will apply. Re City Signal, Inc., 159 PUR 4th 532, 543-48, 577 (February 23, 1995).

b. **The Commission's ability to defer a decision on funding universal service.**

(1) **Positions of parties**

USWC argues that an I-USC is needed now, and cannot be put off, for both policy and legal reasons. It argues that there is every expectation that USWC's large, powerful competitors will quickly gain significant market share in the Seattle business market, where USWC's business revenues are concentrated, which will imperil USWC's ability to maintain its responsibilities for customers and areas of the state which competitors choose not to serve.

USWC argues that it is important to realize that this Commission has no authority to fund universal service except through access charges to interconnecting carriers. It cannot fund universal service by forcing USWC to maintain a rate structure that does not allow it to earn a fair rate of return on its investment. It argues that this is exactly what will happen if the Commission defers consideration of universal service. Competitors with no responsibilities will steal off large portions of USWC's revenues, while USWC is not allowed to withdraw from residential or rural service or otherwise take steps to protect its earnings.

USWC argues that because USWC's business and residential service rates are not at issue in this proceeding, USWC cannot protect itself from the loss of revenue that will result from the imbalance in those rates by rebalancing them. The Commission will be denying USWC the right to a fair return on its investment if it fails to order an I-USC to make up for the revenue loss caused by the imbalance.

USWC argues that until the Legislature approves a competitively neutral funding mechanism to make rates affordable in low density and low income market segments, the

industry and the Commission presently must use the interconnection charges as needed to preserve universal service.

(2) Commission discussion and decision

The Commission is not persuaded that there is an immediate need to deal with the universal service issue, or to grant USWC some sort of interim universal service charge. As Dr. Cornell demonstrated, it will be some time before new entrants have any genuine effect on the revenues of incumbent LECs. She described how previous experiences with telecommunications competition have shown that market shares change slowly even when changing providers is relatively easy for consumers, as is the case in the long distance services market. Moreover, it will be difficult for customers to change local exchange providers in the near future. Most will not even have the option, because networks take time to construct.

Public Counsel witness Murray also testified persuasively that no harm is likely to result to universal service from deferring this issue, because competition is so new and the financial impact of competition on incumbent LECs is likely to be small. (Ex. T-135, p. 3) Her position was unshaken on cross-examination.

Universal service presently is under review in a Washington Exchange Carriers Association investigation, Docket 95-01. We believe that proceeding, and USWC's pending general rate case, are appropriate forums for addressing universal service issues.

We also agree with Public Counsel's argument that a difference in obligation to serve between USWC and ALECs, to the extent it exists, is no reason to adopt the I-USC. Being the ubiquitous provider confers substantial benefits on USWC. As Dr. Montgomery pointed out, even if access revenues from some residential customers may be below the incremental cost as calculated by USWC, that does not correlate to an overall below cost of service, when one considers the entire residential class, including all the intraLATA toll usage, CLASS services (e.g., call waiting, call forwarding, etc.), and other services. (Ex. T-84, pp. 16-19) As ELI and TRACER argue, the market shows that being the ubiquitous provider of telephone network access is an asset rather than a liability. Access lines are what provide economies of scope; many services can be provided once access is available but not without it. (Zepp, Ex. T-151, p. 28)

Moreover, USWC's proposed I-USC is an entirely arbitrary, non-cost-based assessment. [See, Owens, TR., pp. 236-237] The company has not quantified any "interim" losses that may occur as a result of interconnection, has not quantified what support is needed to protect universal service, has not tried to prove the revenue effects of its being a "carrier of last resort", has not quantified the costs of its carrier of last resort status, and has not quantified the amount of any "subsidy" to residential service. (E.g., Murray, Ex. T-134, p. 8; Murray, TR., p. 1901; Wilson, TR. p. 2176; Cornell, Ex. T-140, pp. 32-33; Montgomery, Ex. T-84, pp. 16-19) USWC has not provided any guarantee that the funds would be used to protect universal service. [Owens, TR., pp. 239-240] The I-USC

merely compensates one competitor for lost revenues -- both current and future -- resulting from a former or potential customer's decision to obtain service from another provider. It is simply a device to protect USWC from revenue losses and provide it with an opportunity to impose a price squeeze on ALECs.

Commission Staff's analysis of USWC's justification for the $0.0228/minute shows that the amount is entirely arbitrary. It mimics the carrier common line charge while having nothing in common with it. As Staff notes, USWC witness Owens admitted on cross that the company's figure was arbitrary. [TR., pp. 221-225] As Staff argues, the only certainty about this charge is that, if approved, it will effectively prevent any competition for local exchange services from occurring at all.

As Public Counsel points out, cost studies upon which Mr. Farrow relies for his "subsidy" argument, which were not even filed in this proceeding, do not reflect the Commission-prescribed fill factors, depreciation rates, or cost of capital (Farrow, TR., pp. 705-707), inconsistent with the policy established in the recent "terminal loops case."[17] The studies are inconsistent with USWC's own testimony [Harris, TR. 173] on what is "forward-looking" technology. Finally, the residential cost study contains a basic flaw: USWC improperly allocates 100% of the local loop to residential service, and 0% to services that rely and depend on the use of that facility. The Commission in the past has addressed this issue and found it appropriate to allocate a portion of the loop costs to toll and other services. See, Eighteenth Supplemental Order, Cause No. U-85-23, et al (December 1986). Vertical services such as call waiting, or any other services that use the loop, should receive an allocation of the loop's costs.

We also agree with Public Counsel's argument that the I-USC is likely to vastly overcompensate USWC for whatever problem USWC is trying to solve. It would apply to every line the ALEC installs, if USWC terminating access is provided, including residential lines served by the ALEC which are not imposing a burden on USWC at all. (Owens, Ex. T-32, p. 11; Owens, TR., p. 461) Also, the I-USC would apply even to ALEC lines that a customer wants for purposes of service redundancy, and apply to new lines obtained when a customer opens a new location. [Owens, TR., p. 461; Owens, TR., pp. 461-462]

Finally, as Public Counsel points out, USWC has not and is not being forced by this Commission to serve areas it does not wish to serve. It recently sold approximately 28 rural exchanges to Telephone Utilities of Washington, Inc. d/b/a Pacific Telecom.[18]

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[17] WUTC v. U S WEST Communications, Inc., Docket Nos. UT-930957, UT-931055, and UT-931058, Fourth Supplemental Order (September 1994).

[18] See, Third Supplemental Order Accepting Settlement, Docket Nos. UT-940700,-940701 (June 1995).

c. **Whether all companies must adopt the same compensation mechanism for all local interconnection, including EAS traffic.**

(1) **Positions of parties**

The complaints of TCG and ELI essentially allege that any compensation arrangement other than bill and keep subjects the complainants to unreasonable prejudice or disadvantage and is discriminatory. The complaints allege that the incumbents employ a bill and keep method of mutual compensation with one another for the exchange of local traffic (i.e., EAS traffic), and that their refusal to offer a bill and keep mechanism to the complainants for the exchange of local traffic subjects the complainants to unreasonable prejudice or disadvantage and is discriminatory.

The ALECs argue that the Commission should order that all companies must adopt the same compensation mechanism for all local interconnection, including EAS traffic.

The incumbent LECs contend that the compensation mechanism that they have adopted for the exchange of EAS traffic has no bearing on the question of what is the appropriate compensation mechanism for their exchange of either "local-like" or "EAS-like" traffic with ALECs.

GTE argues that it currently provides no interconnection service to incumbent LECs for local traffic, because EAS traffic is not "local" traffic, despite its similarity from an end user billing point of view. It argues that therefore the contract rate at which it has offered to terminate ALECs' local traffic cannot be discriminatory, because there is no intercompany local traffic among incumbent LECs. GTE further argues that while its proposed interconnection rate "treats" ALECs' "local-like" and "EAS-like" traffic the same, the Commission has no authority to order it to do so in this proceeding.

GTE argues that the complainants' claim that denying them bill and keep for their traffic on existing EAS routes would be discriminatory has no merit. It argues that undue discrimination can exist only as to "like and contemporaneous service . . . under the same or substantially the same circumstances and conditions" (quoting from RCW 80.36.180), and that there is significant uncontroverted evidence on the record that the existing intercompany EAS compensation situation is substantially different from complainants' situation: 1) the participants in the current arrangement are LECs which do not have overlapping territories and which were not in competition for the provision of local exchange and other services when the arrangement was implemented; and 2) the EAS compensation mechanisms are based on cost studies specific to each EAS route.

GTE argues that the Commission does not have the authority in this proceeding to prescribe the compensation arrangements between incumbent LECs and new entrant ALECs for the exchange of traffic on existing EAS routes. It argues that the EAS designations apply only to companies that are parties to an EAS proceeding under the Commission's EAS rules.

The statute clearly requires a specific EAS hearing procedure. Thus, if complainants wish to be formally integrated into the current intercompany EAS compensation arrangement, they must proceed through that statutory procedure.

WITA argues that EAS does not represent an industry standard for local interconnection. First, local interconnection is not EAS, which is a toll substitute. Second, as described by WITA witness Smith, bill and keep in the EAS environment is a recent phenomenon; it is a compromise involving an entire package of EAS rules. WITA argues that the ALECs grudgingly admitted on cross-examination their mischaracterization of bill and keep as the industry standard for EAS.

ELI argues that the entire purpose of the Commission's EAS rules is to establish rational "local" calling routes between "communities of interest." The specific identity of the companies involved is irrelevant. To avoid getting bogged down in legal distinctions about which companies are "privy" to existing contracts or covered by existing rules, the Commission, as a matter of competitive policy, should declare that existing local calling areas (i.e., EAS routes) apply to ALECs for purpose of distinguishing between local and toll calling.

TCG argues that EAS should be treated the same for all companies. It argues that EAS areas are established for the benefit of consumers within a community of interest that does not correspond to the LEC-established exchange boundaries. Customers who make calls within that area should be treated the same, not subject to higher charges simply because they choose service from a company other than one of the original EAS companies. TCG recommends that the Commission adopt the same compensation mechanism for all local interconnection, including EAS traffic.

Public Counsel argues that the discrimination complaints of the ALECs present a close legal and factual question. "Their claims are likely meritorious, providing further justification for a bill and keep compensation arrangement." Public Counsel's argument is more fully set out below in the discussion of the TCG and ELI complaints.

Public Counsel argues that:

> It is true that significant public policies are at work in creation of EAS routes, and such routes are set as between specific companies. It is also true that "obligation to serve" may be somewhat different between new LECs and incumbents. But the public policy is to respond to customer needs and demands for local, flat-rated calling within their community of interest. The focus for discrimination should likewise be placed on the customer interest in the situation. The new entrant must attempt to attract the same customers as the incumbents, yet without the same compensation system. As WITA's witness concluded, an access, or usage based cost compensation "will lead to a shift from flat rate to measured service." (Smith, Ex. T-157, p. 17).

Incumbent LECs do not face this pressure in the bill and keep environment they enjoy.

MFS argues that if ALECs are required to pay rates higher than EAS rates, incumbent LECs would be engaging in blatant discrimination against the new entrants. It contends that USWC's proposal to migrate its present EAS bill and keep compensation to new charges based upon "costs" is a transparent attempt to support the LECs' efforts to impose high switched access rates which will serve as barriers to entry on the ALECs.

MCI argues that there is no justification for WITA's argument that the Commission should leave the incumbents' EAS routes intact, but that such routes should not be available to new entrants who are not privy to the routes created under Commission rules. EAS routes are established to reflect the community of interest between two areas. A change of provider serving the involved areas does not change their community of interest.

AT&T urges the Commission to reject out of hand the contention by the incumbents that EAS calls will constitute toll traffic when originated by a new entrant and, as such, incur switched access charges. It argues that customers will expect the new entrants to offer the same local calling areas as the incumbents. AT&T supports the suggestion of Public Counsel's witness that, for the interim period, the ALECs should adopt the existing EAS boundaries but that the Commission should re-examine this issue.

TRACER agrees with ELI witness Montgomery. Dr. Zepp also testified that the Commission should allow all providers to participate in EAS routes on equal terms and conditions. EAS routes are established for the benefit of residents of the various communities, not telephone companies. The Commission's order should recognize that a local calling area's "community of interest" will remain a community of interest regardless of the number or identities of firms providing service.

### (2) Commission discussion and decision -- EAS

The Commission rejects the incumbents' analysis. It adopts the ALECs' position that it should order that all companies must adopt the same compensation mechanism for all local interconnection, including EAS traffic.

Existing exchange and most EAS boundaries were adopted during an era of monopoly local service. Establishing them required a proceeding to determine whether there was a community of interest in the proposed territory, and to determine the engineering costs and lost toll revenues that would result from converting the multiple exchanges into a single local calling area with flat rates. That the determinations involved specific LECs is merely an historical circumstance. Those were the only local service providers at the time.

In established EAS territories, the old exchange boundaries no longer define what is "local service." The "local calling area" now is defined by the EAS boundaries. One has only to open a USWC directory to see that USWC defines its customer's "local calling area" as its EAS territory, not in relation to old exchange boundaries.

The ALECs have stated that they will establish local calling areas and rate centers conforming to existing LEC EAS and exchanges boundaries. So long as that is the case, no possible purpose would be served by requiring ALECs to go through an EAS procedure to establish the local calling areas for their customers. That the existing EAS boundaries define a community of interest is already established. The ALECs do not have to re-engineer existing systems in order to adopt the present EAS territories. The ALECs also have no need to study the effect of the present boundaries on their toll revenues, because they have never had toll revenues from calls between points within the EAS territories.

The Commission finds persuasive on this issue the testimony of TRACER witness Zepp (Ex. T-153, pp. 9-11); the testimony of ELI witness Montgomery (Ex. T-87, p. 7); the testimony of Commission Staff witness Wilson (Ex. T-155, p. 34-36); and the analysis and the arguments of Public Counsel, ELI, TCG, MFS, MCI, AT&T, and TRACER, summarized above. The Commission concludes that EAS traffic is local traffic for purposes of compensation for local interconnection, and orders all parties to enter into compensation arrangements for local interconnection consistent with this conclusion.

The Commission recognizes that as companies transition from bill and keep to other compensation mechanisms for local interconnection, the new mechanisms may also apply to existing EAS traffic.

An issue that will have to await future resolution is what compensation arrangements are appropriate when, as is likely to happen, LECs, including the both incumbents and new entrants, seek to establish different local calling areas than those that presently exist, as a means of attracting customers.

## C. TERMS OF PHYSICAL INTERCONNECTION

### 1. USWC's Proposal

USWC proposes to allow ALECs to interconnect with USWC's network only at three points, using USWC-specified facilities. ALECs could interconnect inside or just outside their own central offices, using USWC entrance facilities. In that case, they would have to use USWC transport to USWC end offices. The ALEC also may interconnect at a USWC central office, using USWC's expanded interconnection service. In that case, it may provision its own transport. USWC is not willing to interconnect ALECs at something comparable to a "meet point" as it does with other incumbent LECs. [Owens, TR., pp. 351-2]

### 2. The Complaints Against GTE

The complaints against GTE do not address the terms of physical connection that GTE has offered, other than GTE's requirement that interconnecting ALECs use separate trunk groups for toll and local/EAS traffic. The complaints allege that this requirement is inefficient and discriminatory. They allege that GTE and other LECs do not require such arrangements of each other for the termination of local traffic.

### 3. Positions of Parties

USWC contends that the company on whose network the traffic originates should define the point of interconnection, and that the originating company should compensate the terminating company for transport if the point of interconnection is near the originating switch, or pay virtual collocation charges if the originating company chooses to provide its own transport to the terminating end office.

USWC states that its preference is to minimize the number of interconnection points with ALECS. [Owens, TR., p. 511, ll. 10-12] In its brief, USWC contends that there are no major disputes between the parties in arranging physical interconnection.

GTE contends that there is no dispute as to whether GTE will directly interconnect with ALECs. GTE witness Beauvais testified that GTE would be willing to have meet points at mutually agreeable locations. [Beauvais, TR., p. 1822]

GTE argues that while some parties expressed concern about two-trunk interconnection, only TCG specifically had concerns about separating toll and local. Dr. Beauvais testified that GTE needs separate trunk groups for local and toll because it needs to distinguish between toll and local traffic. The practice is necessary given the different rates and compensation arrangements applied to toll and EAS. WITA also recommends that toll and local traffic be exchanged on separate trunks. WITA and GTE state that currently incumbent LECs use separate trunks for exchanging local and toll traffic. Toll traffic is handled through a toll trunk group that goes to a toll tandem switch. EAS traffic is handled on an EAS trunk group.

WITA argues that independent telephone companies presently cannot unilaterally designate interconnection points. Rather, the points of interconnection are negotiated between the interconnecting companies. WITA also argues that there is nothing in this record that demonstrates the need for multiple points of interconnection. WITA further contends that the Commission has no authority to prescribe the points of interconnection for local traffic -- RCW 80.36.200 allows the Commission to order that messages be delivered, not to specify the manner in which they must be delivered, and RCW 80.36.160 gives the Commission the authority to prescribe the routing of toll messages only, not local service.

WITA recommends that ALECs connect to the incumbents at mutually agreed meet points. Public Counsel makes a similar recommendation.

TCG, ELI, and MCI argue for interconnection at any technically feasible meet points similar to meet points established between incumbent LECs. Such meet points are usually at or near the traditional boundary separating incumbent LECs. The LEC and ALEC would share the physical cost of interconnection.

TCG recommends that meet points be determined through good faith negotiations, and that all costs associated with construction of facilities to the meet point be shared equally. TCG requests interconnection using two-way DS1 trunks.

MFS argues that the new ALECs should determine the interconnection point. TRACER agrees, contending that the new entrant is motivated solely by desire to minimize costs whereas the incumbent has an incentive to insist on more costly means of interconnection. TRACER argues further that USWC is not suggesting that existing meet points with incumbent companies be abolished.

MCI argues the USWC proposal is unfair, because the result is that ALECs bear most of the cost of interconnection and transport to the incumbent's switch. In addition, by having the originating company select the point of interconnection, there might be two different points of interconnection for the same route, resulting in the inefficient use of trunks. MCI argues that inefficient interconnection harms new entrants more than it does incumbents since interconnection costs represent a more substantial part of a new entrant's cost of doing business.

### 4. Commission Discussion and Decision

Technically and economically efficient interconnection of the incumbent LEC and new entrant ALEC networks is essential to the emergence of a competitive local exchange market. Denial of technically and economically efficient interconnection arrangements creates a barrier to entry. The Commission is persuaded that ALECs should have considerable flexibility to configure their networks in a manner they deem suitable.

Based upon the record, it does not appear that physical interconnection between incumbent LECs and ALECs involves any unique technological problems that the incumbents do not already face when interconnecting among themselves. The unresolved issues of physical interconnection concern how interconnection meet points shall be established, how interconnection disputes will be settled efficiently and fairly, and whether separate trunks are required for toll and local.

During cross-examination, witnesses for two ALECs (TCG and ELI) testified that they have achieved interconnection with USWC and that USWC has provided the interconnection facilities that they requested. [TR., p. 988; TR., p. 1260] In direct testimony, ELI indicated that the fact it had trunk-side interconnection with GTE was evidence that there were no technical barriers to overcome. (Cook, Ex. T-88, pp. 2-3) AT&T witness Waddell, however, testified that the process of getting interconnected with USWC was not free of some frustrations and setbacks.