

COMSAT HISTORY PROJECT

Interview with Lawrence Devore

Interview conducted by Thomas Maxwell Safely

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COMSAT Headquarters  
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10:00am

LD: My name is Larry Devore. I came to COMSAT in December of 1964. I was hired as an attorney to work on regulatory matters in the General Counsel's Office. At that time, Allen Throop was the General Counsel and I had been put in touch with COMSAT through a friend of mine, Rich Colino, who at that time was also working at the FCC; which is where I was working at the time. Rich knew that the company was looking for somebody particularly with FCC background as well as rate-making background; general public utility experience. I had been with the Federal Communications Commission for about four and a half years before I came to work for COMSAT and before going to work for the FCC, I had worked for the New York Public Service Commission for seven years; starting with them just after I had graduated from law school. My background had been primarily in trial work, involving all aspects of utility regulation both with the New York Commission and also with the FCC. At the FCC, my primary responsibilities were related to the investigation of new rate filings by AT&T. New services like wide-area telephone service, wide-area data service were my responsibility. We not only tried the cases but participated in the decision-making process. Anyway, at the end of 1964,

COMSAT was a fledgling company that had begun to develop the system that would ultimately be used to provide service. We had any number of proceedings at [that time involving] the FCC concerning the construction of the initial earth stations, establishment of tariffs for our new services [and] the acquisition of satellites from manufacturers. We had proceedings involving the establishment of rules and regulations concerning procurement of facilities and services and on and on.

TMS: Just about all aspects of the business subject to regulation.

LD: Yes, we obviously were a regulated company. We couldn't build any facilities without prior authorization of the Commission. We couldn't provide service without prior authorization of the Commission and even, at that time, we were faced with the need to have authorization from the Commission in order to borrow money. We were in the early stages of the development of the INTELSAT organization and there necessarily were any number of meetings with the government concerning our

participation in that organization. We also, necessarily<sup>1/</sup> in developing our rates, had a variety of discussions with foreign PTTs [Post, Telephone & Telegraph] as well as potential customers in order to come up with expected usage of the system and an understanding of what the rates might be charged by foreign entities as well as ourselves. Because, of course, the satellites circuits were being provided jointly by COMSAT, on the US side, and a foreign administration like the British Post Office or the French PTT, on the other side.

Of course, we started off with the Early Bird satellite being launched in the early part of 1985 [sic-1965]. We filed our first tariffs for service sometime I believe in May of 85 [sic - '65] and went into service around June or July. The Commission immediately instituted a rate proceeding in respect to our first tariff filing.

TMS: Was this a matter of course that the Commission should do such a thing or did they have specific questions about the rate that you had... I'm not familiar with the Commission's process of review so....

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<sup>1/</sup> delete: necessarily

LD: It seemed a little unusual to us because normally rates are analyzed in terms of historical experience and we had no historical experience. We were exercising our best judgments about the future where no one really had any information as to what was going to happen. First of all, we were launching a satellite into geosynchronous orbit. We did not know whether communications via satellite at that altitude would be commercially acceptable because there were problems involving time-delay and echo. So, while we had some preliminary indications from the largest expected user, AT&T, that it would be prepared to use satellite circuits if they were commercially acceptable, we had no real basis for making projections of future use until we had a better handle on how good the circuits were. Of course, the other carriers were very small users and it was hard to predict how much traffic we would get from them. We also had no idea whether our estimate of the number of launch failures that might be involved in putting a system together [were correct], or what the cost of operation would be, or how earth stations would be operated in an efficient manner. All of these were factors that we were dealing with for the first time and as a result, as I say, we exercised quite a bit of judgment in developing rates. We did

not attempt to set rates, to begin with, that would have recouped our costs from day one; because the cost of providing service on that basis would have required the rates to be astronomical. So, we tried to take a forward-looking approach and project what costs might have been over the next three to five years. The Commission, however, I believe, felt that they had a responsibility with respect to this nascent organization to make sure that it carried out its statutory responsibilities, primarily in terms of providing quality service and service at a reasonable cost. We were also a very small organization. Therefore, it was very easy for the Commission to monitor our activities and keep very close track -- as opposed to the kinds of problems they generally encountered with larger utilities like AT&T. I think the Commission, obviously, ultimately, recognized that there wasn't much you could do about setting rates for our services because of the factors that I just mentioned to you. As a result, we did start the proceeding but we dealt with mainly more technical matters: the terms and conditions under which service would be provided, we modified some of the tariff provisions but essentially the issue of whether our rates were reasonable was put on hold. We operated from 1964 through 1971

without the rate case ever being activated. And it wasn't until 1971, that a rate investigation actually got under way as to the rates that we had established initially; as well as any changes that we had made along the way.

TMS: Why at that point? Why the long delay and then why, particularly in 1971, should the FCC pick the business up again?

LD: I think a number of factors affected that: first of all, we now had a base of historical data which could be used in evaluating our results against our projections; secondly, we essentially had the global system in place. By 1969, the system had reached the point where there were satellites in<sup>2/</sup> all ocean areas and we were also now reaching a point where our earnings were beginning to materialize. Up until this point, for a good portion of our operation, we had been experiencing losses in the provision of service and as the service grew and we got more revenues, the company's earnings began to increase. Without going back and looking at the order which set forth, or

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2/ change: "in" to "serving"

rather reinstated, the proceeding, I can't dredge up specifically what the Commission said about it. Of course, I haven't looked at these things for almost twenty years. So you are asking me to just off the cuff recall all these things, it's pretty hard to do. Where else do you want to go in this discussion?

TMS: Let's kind of step back for a moment and see if you can characterize, in a general manner, the regulatory environment in which COMSAT has functioned since you came on in '64. Does it strike you as more adversial than other communications entities have experienced (perhaps adversial is an unfair word under the circumstances)? How do you see the FCC's impact on COMSAT's growth as a company, its ability to compete in the marketplace? Its ability to be as profitable as it might be over a period of time?

LD: First of all, COMSAT, as a regulated company, necessarily had constraints on what it can do.<sup>3/</sup> First of all, its earnings are constrained to be reasonable in the context of

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<sup>3/</sup> change to: First of all, COMSAT, as a regulated company, necessarily has constraints on what it still can do.

providing a utility service. It was not in a competitive situation. It was considered to have a monopoly with the respect to the furnishing of international satellite service. The Commission's primary restraint was on the jurisdictional earnings that we were entitled to. In that connection, of course, the company believed that it should have been allowed to earn sufficient amounts [of money], once it became profitable, to offset the early lean years. We ultimately made a pitch to the Commission that we be allowed something called, "returned deficiencies" which would have compensated us for the early period. The Commission ultimately rejected that approach and that approach was sustained in court and we were required to reduce our rates by the Commission in 1975.<sup>4/</sup> Backing up a little bit, the Commission's initial decision came out in 1975 requiring us to reduce rates, making adjustments in a variety of items. The case went to court and the court upheld pretty much what the Commission had said. It remanded it with respect to certain items, including the way in which the Commission had imputed debt into our capital structure and also

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<sup>4/</sup> change to: The Commission ultimately rejected that approach and was sustained by the court and we were required to reduce our rates by the Commission in 1975.

on the treatment of the Laboratories. We ultimately entered into a settlement agreement with the Commission which became effective in 1978. At that time, we were required to reduce our rates by approximately 48 percent; that was a very substantial decrease but that was the way in which this rate case was ultimately resolved.

Let's leave the rates aside. We were faced with a number of other decisions which had an affect on how the company ultimately developed. As early as, I'd say, 1965-66 there was a proposal to establish a domestic satellite system by the ABC Network. At that time, we thought that COMSAT, having been established as the entity responsible for bringing a satellite system into being internationally, also had the responsibility for making its expertise available in all areas where the US might be involved. Consequently, we also proposed to put in place a domestic satellite system which would have been (if my recollection is correct) primarily geared to meeting the needs of the television networks. That resulted in a very long proceeding with an ultimate decision in the early 70's by the Commission that there ought to be an open-skies policy; that while COMSAT was entitled to enter the field (that of domestic satellite communications), that it did not have a monopoly in

that area as it did internationally and that anyone could propose to put up a domestic satellite system that chose to, under certain conditions that had been spelled out by the Commission. This obviously affected the direction in which the company could go. Further, the Commission, in allowing COMSAT to enter the domestic satellite arena, indicated that it had to make a choice: that we could either go into the business of providing the satellites required by AT&T for its use domestically or we could enter the field and provide a satellite system that would provide service to everybody -- a multipurpose system. COMSAT chose to provide service to AT&T. It also decided that, to the extent it could get the Commission to reconsider its decision, it would try to get into the domestic arena by entering into a joint ownership arrangement with a couple of organizations that had also filed applications for domestic satellite systems. That resulted in an organization known as CML.

TMS: Forerunner to SBS.

LD: Forerunner to SBS. The other two organizations that were involved were MCI and Lockheed. The combination of our

proposing to go into business with MCI and Lockheed was approved. Ultimately, both MCI and Lockheed sold out their interest. As you mentioned, we ultimately developed the SBS approach to providing domestic satellite communications. So, one could say [that] there was a direction in which the company wanted to go. It didn't achieve acceptance of its initial proposal. It was allowed to go into the business, but so was everybody else.

We also embarked on another activity known as INMARSAT. INMARSAT.... I am sorry, let me back up. We embarked on another activity that ultimately became known as MARISAT and that was designed to provide an international maritime communications capability. It was an undertaking that was initiated by COMSAT and ultimately became the responsibility of COMSAT GENERAL. As you know, COMSAT GENERAL was formed initially to take over the responsibility for COMSAT's activities in the domestic satellite arena. Ultimately, the MARISAT program also went into the COMSAT GENERAL corporate activities. In that situation, we had generated the idea and the proposals and ultimately ended up in a joint arrangement with other carriers -- other international carriers -- who had indicated an interest in participating in that field as well.

Of course, ultimately, Congress passed an act in 1978, I believe, which provided for COMSAT to take on the role as signatory to the new international organization called INMARSAT; and the MARISAT organization went out of business. Essentially, the satellites that were owned by the MARISAT organization were leased to INMARSAT so that INMARSAT could get into business without having to buy their own satellites; which would have not been an economically viable alternative.

Let me get back into the jurisdictional arena. In addition to rate-making, the Commission, of course, had proceedings concerning who should own earth stations. Initially, COMSAT had been authorized to own and construct, where necessary, the first three earth stations. That involved a purchase of the Andover earth station from AT&T and the construction of an earth station, in Brewster, Washington and I believe an earth station in Paumalu, Hawaii. There were issues raised, at that time, as to where COMSAT should establish the interface with the international carriers who would be using the satellite system and that proceeding resulted in a determination that the interface should be at the earth stations rather than at the gateway city locations.

Two other things happened. As the system developed, we needed more earth stations and there were proposals put forth to build earth stations in [West] Virginia, California, and Puerto Rico. We also, ultimately, built an earth station in Alaska. I will come back to that. These other earth stations were required, in order to enable COMSAT and the US to participate in the global system as it came into being with satellites in<sup>5/</sup> different ocean areas. At that time, and that was in probably about the 1967 time-frame, '66 time-frame, other carriers indicated that they also wanted to build earth stations and we ultimately ended up with competing applications. In order to enable the construction of the needed earth stations to go forward, a proposal was developed -- a compromise proposal -- which looked towards the other carriers becoming owners of the existing stations and a joint ownership arrangement for the new stations as well. That compromise produced what we called ESOC (Earth Station Ownership Consortium), in which the first three earth stations that were already in existence, as well as plans for three new stations, were placed. It was agreed that COMSAT would own

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5/ change: "in" to "serving"

fifty percent of all six stations and the other carriers would own the other fifty percent. That eliminated the controversy and allowed the new stations to be built in timely manner. The expectation was that that decision would be reviewed sometime in the future, probably in 1969. Although there were attempts made from time to time to get the Commission to address the matter of the future ownership of earth stations on some permanent basis, the Commission never addressed the matter again until the earth station ownership proceeding of recent vintage was put out.

TMS: Why did they delay the business?

LD: I think it's fair to say that ESOC worked very well. The stations were well run. There didn't seem to be any great number of problems and probably very few problems emanating from the joint arrangement. As a result, there really wasn't any great pressure on the Commission to revise the arrangement.

Another matter which occupied the Commission and COMSAT during those early years was the question of "authorized user." The question arose whether COMSAT should be allowed to serve what we called "end-user customers" directly or whether COMSAT

should continue to function in its role as a carrier's carrier. As you know, we started off on the basis of selling service only to the international carriers: AT&T, ITT Worldcom, RCA Globecom, Western Union International, TRT, and French Cable. At one point, early on in fact, it was started in 1965, but it actually came into practice in 1966, we did furnish service directly to the U.S. Government. We put up an interim system called the NASCOM System. NASA needed a communications capability to operate with the Apollo program and required service in areas which were not then being provided by INTELSAT. INTELSAT was only providing service through the Early Bird satellite (which had a very limited capability), it was all concentrated on the Northern hemisphere in order to increase the number of channels that could be obtained through the satellite, and it was being operated on a rotational basis as far as the European end was concerned -- there was something called the iron triangle. It was not a multipoint satellite. It could only operate point-to-point. In Europe, because there existed quite a number of countries that wanted to have satellite communications, the way in which they operated was to rotate the earth station that would operate

with the satellite.<sup>6/</sup> On the U.S. side, of course, we had one earth station: the Andover earth station that was operating with that satellite. We did not have the same problem. But NASA needed service in other ocean areas and it needed it quickly and could not wait until 1969, which was the date when the INTELSAT system was expected to have a global system in place. INTELSAT contracted with NASA to put up the INTELSAT II satellites; Intelsat I being the Early Bird, Intelsat II being the Apollo Satellites. That accelerated, in a sense, the availability of a global satellite system because it provided for satellites in different ocean regions; but they had limited capacity. They were designed primarily to meet NASA's requirements and the excess capacity was made available or was retained by INTELSAT for commercial purposes. That partly accelerated the need for earth stations, as well as the ultimate availability of the global system in 1969. At that

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<sup>6/</sup> change: "In Europe, because there existed quite a number of countries that wanted to have satellite communications, the way in which they worked was to rotate the earth station that would operate with the satellite." to "In Europe there existed a number of countries that wanted to have satellite communications. The way in which they worked was to rotate on a weekly basis the earth station from one country to another that would operate with the satellite."

point, there was no question about COMSAT being able to serve the U.S. Government directly and, in fact, we did enter into a contract with NASA to provide that service. However, that's as far as it went. The question of who COMSAT should be able to serve became a subject of a Commission proceeding and at the end of that proceeding, COMSAT was constrained to continue in its role as a carrier's carrier except that it could provide service to so-called "authorized users:" users other than carriers, under certain circumstances. If there were unique and exceptional circumstances and the service couldn't be provided by the carriers, a case could be made out for COMSAT to serve them directly. If there was a requirement that the national interest required that service be provided directly to the U.S. Government, that was another basis for COMSAT providing the service directly. Effectively, it meant that COMSAT would continue in the role of the carrier's carrier and provide service only to other carriers. The proceeding resulted, in part, because the government was looking for a way of reducing its cost of service and satellite circuits were substantially cheaper than cable circuits; which were the main source of communications capacity for the government. COMSAT entered into an arrangement with the U.S. Government which

would have enabled COMSAT to provide 30 circuits directly to the U.S. Government. They were all located in various areas in the Pacific. Ten circuits were to go, I believe, to the Philippines, and ten circuits to Japan, and ten to somewhere else -- don't hold me to the locations -- but, essentially, there were three packages of ten circuits to foreign locations. The carriers came in and objected and at the same time they proposed to reduce their charges for communications to the government. In the carrier's case, they did what we call, "compositing." They composited their cable costs with their satellite costs and they provided unified rate. They proposed to the the government to reduce their composite rate; which meant that the government would get a lower rate for all services, not just for the 30 circuits that they were proposing to buy from COMSAT directly. As a result, the government decided to essentially abandon the contract with COMSAT for the 30 circuits and allowed those circuits to be transferred to other carriers. Consequently, COMSAT never did get into the furnishing of direct service to the government except through the Apollo program, which I mentioned earlier. The carriers were successful in convincing the Commission that COMSAT should

not provide service directly except under the tests that I also previously mentioned.

That was the end of it until sometime, I think in the early '70s, when objections were raised to the fact that the various networks -- ABC, CBS and NBC -- were getting television service on what was known as the "carrier of the week" basis. We had limited capacity in the satellites available for television service. In fact, there was only one transponder, which meant that whoever got the order could have tied up the transponder; nobody else could have gotten the right to provide service. A procedure was developed where the carriers took turns and during one week a carrier would be responsible for providing service to any customer who wanted service and the next week another carrier had that responsibility. [The] networks got tired with it and there was a lot of controversy. Ultimately, there was a decision made in what we've come to know as the "SIN Television Proceeding." The Commission in that proceeding decided that it was appropriate to do away with this "carrier of the week" arrangement and decided that the networks, and any other television broadcasters, should be entitled to come to COMSAT directly and get service. That was the first time that we had a decision in which COMSAT was allowed to provide

service directly; leaving aside the Apollo situation where there was never any question raised. After the 30 Circuits Case, we were constrained to be a carrier's carrier, then finally the Commission opened the door a little bit and allowed COMSAT to provide television service directly. We were then confronted, as you know, in recent vintage with the Commission deciding that it was time to address authorized user again. Now, being on a bent of deregulation and competition, [the Commission] decided that COMSAT should be allowed to provide service directly to end-users at the existing earth stations and that COMSAT, if it wanted to, through a separate subsidiary, could provide service directly to end-users.<sup>7/</sup> Now both the SIN Case and the Authorized User Case went to court on appeal by the carriers. The court, after a couple of years, decided those cases and remanded the case to the Commission -- the Authorized User Decision, which dealt with COMSAT serving end-users directly. It [the Court], however,

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<sup>7/</sup> change to: Now, being on a bent of deregulation and competition, [the Commission] decided that COMSAT should be allowed to provide the service directly to end-users at the existing earth stations as was provided to COMSAT's carrier customers, and that COMSAT, if it wanted to, could through a separate subsidiary, provide the same kind of service the other carriers provided directly to end-users.

affirmed the case that involved COMSAT providing television service to the network television entities. The Commission is now engaged in dealing with that remanded proceeding and it has proposed that COMSAT...that it's original decision be continued in effect; taking into account the observations that the court had made about the Commission having failed to consider other Proceedings that were also under consideration at the time -- earth station ownership and direct access. Direct access, being another proceeding which was instituted by the Commission, as a result of its Authorized-User Proceeding. I know I didn't make this clear before, but I guess what led to the Earth Station Ownership Proceeding and a relook at the ESOC, as well as the Direct Access Proceeding, was a position taken by the carriers that if the Commission were going to go down this path of authorized-user (allowing COMSAT to compete directly), then the carriers couldn't compete with COMSAT unless they also were allowed to own their own earth stations and were also given the right to have direct access to the INTELSAT space segment. Those are rather current matters. Do you want to stop here and see if we've covered all the things that you are interested in? Do you want to go back and talk about some of the other matters?

TMS: Well, I'd like to just raise one question. We were talking earlier about this idea of a niche being set up for COMSAT. It seems in some respects, especially the more current respects or the more current cases before the FCC and their decisions that have been made, are in some ways, if there ever was a niche (that in itself is a problematic idea), that the Commission is kind of disassembling it at this point and opening new doors to COMSAT. Do you think that's a fair characterization even a limited way? The idea of providing television directly, the idea of direct access itself seems to opening some more doors to COMSAT and this had always been one of the Corporations goals; that is to say, to interpret the Act as broadly as possible and open as many doors for itself as it possibly could. Would you agree with that, that this is something that the Commission seems to be doing for one reason or another at this point?

LD: Let's go back to basics. COMSAT was created because the U.S. Government believed that there was a need for the U.S. to establish its superiority in the area of space activities. Before the creation of COMSAT, there had been any number of remarkable space activities by the Russians. The U.S.

concluded that one way of establishing its superiority in the same area was ...[TAPE ENDS].

It was in this connection that then-President Kennedy offered a compromise to Congress that a private corporation be established to carry out the foreign policy objectives of the U.S. -- mainly to provide us with a high degree of visibility in the scientific world involving space and telecommunications. At the time, there were several alternatives proposed. One was an approach that would have allowed the existing carriers to jointly own any new satellite communications system. Another approach was to establish a governmental agency, like TVA, to own such a system. President Kennedy, and ultimately, Congress decided that it would be better to create a new corporation which would<sup>8/</sup> place the responsibility on private enterprise to accomplish the public interest objectives of putting us out front in the space race; also establishing a new communications network that would bring to developing countries the opportunity to make a leap forward economically and socially through improved communications. Because of the concern about the disadvantages of giving entrenched carriers the

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8/ change: "which would" to "and"

responsibility for this and [because of] the desire to avoid the appearance of superimposing the U.S. Government on international telecommunications (which traditionally required agreement of both U.S. and foreign entities), the decision was made to provide for the creation of a new organization which would not be constrained to do things the same way as the existing organizations would have done them and also wouldn't have had the disadvantages of being a government-owned organization. This led to the creation of COMSAT and the providing of COMSAT with a monopoly over international satellite communications.

COMSAT was responsible for getting the INTELSAT organization started. It started with 11 countries participating and it has now developed into 108 nations participating. COMSAT was also the manager of the first [INTELSAT] organization and carried that responsibility until the early '70s when the permanent arrangements were put into place and many of COMSAT's responsibilities were transferred from it to the INTELSAT organization; which then undertook to perform them.

What's happened though, is that we have seen a vast change in the philosophy concerning the provision of what would

otherwise be called "monopoly utility services." It stemmed out of a number of concerns: the emphasis on competition and deregulation, I think, has been generated because there was a view that the FCC (particularly in the communications area) was unable, with its resources, to control organizations, like AT&T, which had resources and personnel far greater than the Commission. COMSAT in turn, however, was a very small company. It was easily regulated by the Commission. Yet, the perception was the the Commission was not up to the task. As a result, the Commission itself decided that it would prefer to see marketplace regulation rather than Commission regulation Authorized-user (that is allowing COMSAT to deal the end user directly), was perceived as a way in which the Commission could get out of regulation. It perceived the creation of two fairly substantial organizations which would go head-to-head in the marketplace -- namely AT&T and COMSAT. COMSAT, of course, was in a difficult position because its major customer, AT&T, provides it with 80-85% of its revenues, and COMSAT did not have the kind of business which necessarily dealt with end-users; which is quite different from that of dealing with carriers. So, COMSAT didn't jump at the opportunity to get into the end-user business and the Commission decided that

there were other ways of trying to spur COMSAT on -- namely through the Direct Access Proceedings and the Earth Station Ownership Proceeding. You can perceive here, an attempt to change the structure of the industry so that COMSAT would be motivated to go out and compete with AT&T. The belief being, that if there were intermodal competition between satellites and cable that the marketplace could then make the choice as to whether they wanted to use satellites or cable, part of the Authorized User Proceeding provided for the decompositing of the carrier's rates so that separate rates could be established for satellite services and cable services.

There also, has come on to the scene, proposals to build new satellite systems. Again, there presents itself a means by which marketplace forces could take hold -- leading towards less regulation. I think the Commission and others perceive that the INTELSAT organization is in place, that that organization now does not depend upon COMSAT or the U.S. for its continued well-being. The Commission believes that it can change the institutional structure in ways in which marketplace forces can be brought into play -- eliminating the need for regulation -- without doing any great damage to INTELSAT. I am not sure that the Commission is particularly concerned about

the damage that might be done to COMSAT in the process. Although, if they perceive that damage causing higher rates for the public and poorer quality service, I think they would necessarily have to be concerned about it. I think the perception is that COMSAT is fully capable of providing service to end-users in the marketplace and that, if it were aggressive, it could maintain its financial viability -- even though its position with respect to its role as a carrier's carrier, or its monopoly role with respect to providing satellite service, were altered in any number of ways. So, I think we have seen an evolution from what was basically traditional public utility theories that economies of scale, single entry rate regulation, facility regulation, were the primary ways of ensuring that the public would get the best quality and least cost service to one of trying to rely on the marketplace instead of regulation.<sup>9/</sup>

TMS: Great. Thank you very much.

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<sup>9/</sup> change to: So, I think we have seen an evolution from using what were basically traditional public utility theories--economies of scale, single entry, rate regulation, facility regulation--as the primary ways of ensuring that the public would get the best quality and  
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9/ least cost service to one of trying to rely on the marketplace instead of regulation. (Continued from page 27)