

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Pat Wood, III, Chairman;
William L. Massey, and Nora Mead Brownell.

Columbia Gas Transmission Corporation	Docket Nos. RP00-327-003
	RP00-327-002
	RP00-327-004
	RP00-604-001
	RP00-604-002
	RP00-604-004

ORDER ON REHEARING, CLARIFICATION, AND COMPLIANCE FILING

(Issued July 30, 2003)

1. On August 19, 2002, Columbia Gas Transmission Corporation (Columbia) filed the tariff sheets listed in the Appendix to comply with the Commission's July 19, 2002 order¹ on Columbia's compliance with Order Nos. 637, 587-G and 587-L.
2. The revised sheets generally comply with the requirements of the July 19, 2002 order, and are accepted effective September 1, 2003, subject to Columbia filing revised tariff sheets within 15 days of the date of this order to reflect further compliance obligations imposed by this order. This order is in the public interest because it implements compliance with Commission policies that encourage competitive conditions on the pipeline grid, create greater flexibility for shippers, and enhance pipeline transportation services.
3. Several parties filed requests for rehearing or clarification of the July 19, 2002 order or filed protests or comments to the compliance filing. The requests for rehearing, protests or comments are addressed below.

Background

4. The Commission accepted Columbia's proposed segmentation pooling approach, locating its segmentation pool on the western part of its system and directed Columbia to make several changes to its segmentation proposal. These changes include (1) permitting

¹Columbia Gas Transmission Corp., 100 FERC ¶ 61,084 (2002).

Rate Schedule ISS inventory and transportation imbalance quantities to be transferred under Rate Schedules IPP, AS, ISS, and PAL services; and (2) submitting a report on the actual operation of segmentation within 60 days after its first year of operation, proposing any modifications and justifying the continuation of any restrictions on segmentation. Further, Columbia was required to amend its tariff to clarify that a replacement shipper in a non-segmented release will be able to choose primary points.

5. The Commission accepted Columbia's secondary point allocation proposal but rejected the present value calculation for allocating capacity. Further, Columbia was required to include information regarding the operation of its secondary point allocation method as part of its report on segmentation, with the Commission provided an opportunity for parties to comment on the report. In accepting Columbia's proposed FBS Rate Schedule, Columbia was required to provide an annual report detailing the specifics of its FBS service.

6. Concerning the penalty and crediting of penalty revenues, the Commission directed Columbia to revise its tariff to: (1) clearly state that it will not assess multiple penalties for the same infraction; (2) revise its penalty crediting mechanism to provide that only overrun transportation and storage revenues (and not overrun penalties) will be excluded from the definition of penalty revenues; (3) credit penalties to both firm and interruptible shippers; (4) include interest on the penalty amounts to be credited consistent with Section 154.201(d) of the regulations; and (5) provide that forfeited gas is considered a penalty and any revenue less costs attributable to the forfeited gas must be credited to its shippers. The Commission further rejected Columbia's proposal to increase existing penalty levels by adding the index price component to penalties and directed Columbia to revise its tariff to provide information on its EBB within two weeks of a critical day event, describing the events that lead up to the declaration of a critical day.

Public Notice, Intervention and Protest

7. Public notice of Columbia's August 19, 2002 compliance filing was issued on August 23, 2002, with comments and protests due in accordance with Sections 154.210 and 385.211 of the Commission's Rules and Regulations. Protests or comments were filed by Cities of Charlottesville and Richmond, Virginia (Cities), Indicated Shippers, NEG Shippers, Virginia Power Energy Marketing, Inc. (VEPM), and Washington Gas Light Company (Washington Gas). Answers were filed by Columbia, the Cities, and NEG Shippers. While Rule 213 of the Commission's Rules of Practice and Procedure (18 C.F.R. 385.213) does not permit answers to protests, the Commission will accept the answers here to provide a better understanding of the issues in the proceeding.

Discussion

Compliance With the July 19, 2002 Order

8. The Commission finds that Columbia has generally complied with the directives of the July 19, 2002 order. The Commission accepts Columbia's revised tariff sheets subject to the modifications discussed below.

Segmentation

9. In compliance with the Commission's July 19, 2002 order, Columbia has modified its tariff language to (1) allow Rate Schedule SST to be segmented but treated similar to a Rate Schedule FTS service agreement; and (2) permit Rate Schedule ISS inventory and transportation imbalance quantities to be transferred to the Segmentation Pool. As discussed in detail below, on May 30, 2003, Columbia requested an extension of time until April 1, 2004, to implement segmentation on its system, due to delays in the final programming of its computer system. Columbia, as required by the July 19, 2002 order, must file a report on segmentation within 60 days after it has implemented segmentation for one year.

10. VPEM argues that Columbia should be required to implement segmentation on a manual basis at the same time it implements the other aspects of its Order No. 637 compliance filing, unless Columbia can demonstrate that it is incapable of so doing. VPEM states that Columbia personnel have historically handled complex allocation and scheduling problems on a manual basis. For example, VPEM states that Columbia has long performed the complicated process of daily allocations on its system manually. VPEM avers that the form of segmentation that Columbia will implement is simpler than a more traditional form of segmentation and is less complicated than the daily allocation process.

11. In its answer, Columbia asserts that manual implementation is simply not feasible and, if required, would lead to serious threats to Columbia's system integrity. Columbia states that it has approximately 790 active contracts now subject to segmentation. Through further segmentation, Columbia states that it could have at least double the total contracts to administer (more if multiple receipt/delivery point combinations are administered). Columbia asserts that unlike the manual allocation process noted by VPEM, implementation of segmentation would be extremely time consuming. Manual tracking of segmentation transactions in addition to the current manual allocation processes, Columbia replied, would leave its personnel unable to meet gas confirmation deadlines, resulting in non-confirmations of receipts and deliveries with interconnected

pipelines and significant degradation of all transportation services. Columbia also indicates that there are other operational (capacity releases), billing and reporting complications.

12. Therefore, as discussed below, we will grant Columbia an extension of time until April 1, 2004, to implement segmentation on its system when its computer system will become operational. Therefore, we will deny VPEM's request to manually implement segmentation. However, we will reconsider VPEM's request if Columbia does not follow through with its plan to implement segmentation on April 1, 2004.

13. VPEM states that it is unclear how nomination of non-FSS service agreements at Section 18.2(f) of the GT&C of Columbia's tariff are to be accomplished or whether Columbia will charge transportation fees for such transfers. In its answer, Columbia states that it will permit no-cost transfers of imbalance quantities to the segmentation pool prior to utilizing other imbalance management services. The Commission accepts Columbia's response and requires Columbia to clarify in its tariff that there is no charge for transferring imbalance quantities to the segmentation pool.

14. VPEM also requests clarification that a shipper may nominate storage balances under its Rate Schedules FSS, FBS or ISS to the Supply Segment of Columbia's segmentation pool pursuant to Section 40.1(a) of its GT&C without charge. In its answer, Columbia clarifies that if gas is transferred from Rate Schedule FSS, FBS or ISS Service Agreements into the segmentation pool, Columbia will not assess commodity charges or retainage on the transportation into the pool. Columbia states that it will, however, charge storage withdrawal fees when gas is removed from storage for transfer to the pool in order to ensure that the pipeline is kept whole. Columbia states that inventory transfers are permissible, but shippers cannot use such transfers to avoid appropriate storage related charges, including appropriate storage withdrawal fees. The Commission clarifies that inventory charges are permissible free of commodity charges, but should include any applicable storage withdrawal fees and requires that Columbia revise its tariff to include such a provision.

15. In Interstate Natural Gas Association of America v. FERC, 285 F.3d 18 (D.C. Cir. 2002)(INGAA), the United States Court of Appeals for the District of Columbia Circuit remanded aspects of Order No. 637 to the Commission. On October 31, 2002 the Commission responded to the Court's remand and, in ordering paragraph B directed that, pipelines that the Commission has found must permit segmentation on their systems, file revised tariff sheets to expressly permit segmented transactions consisting of forward

hauls up to contract demand and back hauls up to contract demand to the same point at the same time.²

16. Since Columbia's compliance filing was submitted prior to the remand order, Columbia is therefore required to submit revised tariff sheets to comply with the remand order.

Mainline Priority at Secondary Points

17. In the July 19, 2002 order the Commission accepted Columbia's proposed allocation procedures but required that Columbia include the description and method of operation of the four levels of market restrictions in its tariff.³ Columbia included this information in its tariff.

18. The Commission also required that Columbia clarify an inconsistency between the tariff language in GT&C Section 7.3(b) and the discussion of priorities in the transmittal letter to the July 31, 2001 filing. This inconsistency "involves whether a secondary delivery point that is in the same Market Area as a nominated receipt point loses priority status when Columbia has zero Non-Firm Capacity in the Market Area." Columbia clarifies that its as-filed tariff language in GT&C Section 7.3(b) will control this matter, that is, there will be a priority for a secondary delivery point that is in the same Market Area as a nominated receipt point when Columbia has zero Non-Firm Capacity in a Market Area. There will also be a priority for secondary delivery points located within the same Market Area as their primary delivery points.

19. NEG Shippers assert that Columbia should be required to provide priority access not just to secondary delivery points within the same Market Area as a primary delivery

²Regulation of Short-Term Natural Gas Transportation Services, and Regulation of Interstate Natural Gas Transportation Services, Docket No. RM98-10-011, 101 FERC ¶ 61,127 (2002).

³The July 19, 2001 order at P 51 required Columbia to include in the report: (1) identification of all segmentation requests; (2) the amount of time Columbia required to grant or deny each request; (3) the reason(s) for any denial; (4) the reason(s) of such changes; and (5) the amount of interruptible volumes transported by Columbia to these upstream delivery Market Areas. Further, Columbia was required to propose any modifications and justifying the continuation of any restrictions on segmentation and explore the development of a second segmentation pooling point and whether segmentation could be offered on a primary firm basis.

point but also to secondary delivery points with the same Operating Area as a primary delivery point. In its answer, Columbia asserts that the Commission should reject NEG Shippers request. Columbia states that its Operating Areas do not reflect the location of internal constraint points. Thus, Columbia asserts that requiring a secondary priority to secondary delivery points located within the same Operating Area as a primary delivery point would afford a secondary priority where such priority is not justified, and would impose significant hardships on Columbia because it would require constant allocation cuts based on true internal constraint point limitations at that operational level.

20. NEG Shippers also state that Columbia failed to provide any justification for its proposal to provide secondary priority to shippers whose receipt and delivery points are located in the same Market Area. Columbia states that it previously explained in its September 19, 2001 Reply to Protests, that if a shipper has a primary receipt point or delivery point in a Market Area, it has already bypassed the internal constraint that typically limits access to the Market Area in which those points are located and thus faces no additional internal constraints that would prohibit the shipper from accessing on a secondary basis other points located in that same Market Area. Columbia also states that it is possible that operational conditions may occur such that it is not able to allow secondary priority to intra-Market Area transactions, and when this occurs, Columbia will impose the next level of restriction, limiting to Primary MLI only.

21. Finally, NEG Shippers assert that Columbia should clarify how it will use its discretion "to determine which points are upstream and downstream of internal constraint points, if it is not possible to determine paths on its system." Columbia states that it previously explained in its September 19, 2001 Reply to Protests that, although flow paths cannot be defined on its system, Columbia is able to identify areas of its system where normally there are no operational constraints that restrict shippers from moving from primary to secondary points. These secondary priorities are not based on a definition of a path but are based on the lack of operational constraints in moving from the primary point to the secondary point via the multitudinous routes through which gas flows on Columbia's system.

Commission Ruling

22. We will accept Columbia's proposed allocation procedures, including its proposal to provide a higher priority to certain secondary point transactions for the reasons discussed below. In compliance with the July 19, 2002 order, Columbia included the description and method of operation of the four levels of market restrictions in its tariff, as it has agreed to do. These revisions to Columbia's tariff will provide additional transparency in the allocation process on its system.

23. Based on Columbia's explanation of the operational characteristics of its system, we will approve Columbia's proposal to give a priority to certain secondary point transactions. First, Columbia's proposal does not appear to be a significant change to the manner in which it currently allocates capacity to secondary points. As explained by Columbia, under Section 7 of its currently effective GT&C, Columbia provides shippers with priority access to secondary points in certain Market Areas based on the location of those Market Areas in conjunction with the Market Areas containing the shippers' primary delivery points and on the location of internal constraint points on its system. However, its proposal here improves upon the existing mechanism by requiring the posting of the secondary points that will be given priority. Additionally, we find that Columbia's proposal strikes an appropriate balance between providing its customers with increased flexibility and certainty as compared to the pro-rata method advocated by certain parties, while providing Columbia the necessary operational control of its system. As such, it reasonably complies with Order No. 637's goal of promoting efficient allocation of capacity and improving competition.

24. While NEG Shippers' is concerned that Columbia's proposal grants a large degree of discretion to determine which secondary points receive priority, such discretion appears reasonable in light of the operational complexity of Columbia's system. As Columbia explained in its September 19, 2001, reply comments, operational gas flows on its system change often, which can cause a Market Area that was previously upstream of a specific point to no longer be upstream. However, because Columbia will post on its EBB the upstream secondary delivery points by Market Area to which a shipper will have priority and any changes including the basis for the change, its customers will be provided with the necessary information to question any designation or change. In light of the foregoing, NEG Shippers' protests are denied.

Critical Day/OFO

25. The Commission in the July 19, 2002 order found that Columbia failed to fully explain how its Critical Day and OFO mechanisms work together. The Commission also found the definition of a critical day vague and that it would be useful for parties to understand the events that lead up to a critical day. Columbia was required to explain how the critical day works in conjunction with the OFO. We also required Columbia to post information on its EBB within two weeks of a critical day event, describing the events leading up to the declaration of the critical day.

26. The July 19, 2002 order also required Columbia to revise its tariff to include the clarification that there are no hourly flow restrictions in its tariff beyond those identified

in Sections 6, 9, and 12 and that to the extent Columbia seeks to impose hourly flow restrictions beyond those provided for in its tariff, Columbia will issue an OFO.

27. Columbia complied with the July 19, 2002, explaining that Critical Day notices are issued when it is imperative that penalties be in place to deter unwanted behavior while OFOs are issued when Columbia needs a shipper(s) to take or to refrain from taking certain specific actions designed to enable Columbia to meet primary firm service obligations and/or to protect system integrity. Columbia further explains that a Critical Day notice is designed to implement penalties to discourage overruns of firm entitlements and thereby avoid the need for issuing an OFO. A Critical Day could likely occur on days when Columbia forecasts heavy demand for storage withdrawals, which typically occurs during cold weather periods. Columbia indicates that an OFO would be utilized when system conditions are at a point where Columbia needs to impose restrictions that go beyond limited customers to their firm contractual entitlements.

28. Several parties filed comments concerning the Critical Day/OFO issue. Cities and Indicated Shippers generally object to what they view as the vagueness of Columbia's tariff language regarding the conditions causing the imposition of a Critical Day or OFO and the amount of discretion Columbia gives itself to alleviate system aberrations once a Critical Day or OFO has been declared. Cities specifically requests that the Commission direct Columbia to file specific instances of when it intends to impose Critical Day limits and penalties on a "not uncommon" basis, providing the opportunity for its customers to review, comment, and protest, and obtain Commission approval for a list of those circumstances in which the invocation of a Critical Day designation is appropriate. Indicated Shippers assert that Columbia's Critical Day and OFO definitions remain unclear, and thus give rise to the potential for arbitrary and possibly discriminatory implementation. Washington Gas maintains that any OFO remedial action undertaken by Columbia must be limited to the terms of the shipper's service agreement and should not exceed the shipper's nomination at the time of the OFO. Washington Gas further submits that Columbia should provide an explanation of the events leading up to a Critical Day. VPEM requests clarification that the provision at GT&C Section 12.2 is not intended to allow Columbia to use OFO's to undermine or alter firm hourly flow obligations at primary points.

Commission Ruling

29. The Commission again finds that due to the operational constraints, Columbia must have reasonable discretion to maintain system integrity. The Commission finds that the explanation provided by Columbia in its August 19 Filing in conjunction with the standards for issuance of OFO's in revised Sections 17.1 and 17.2 of Columbia's tariff

comply with the requirements of the July 19 Order regarding OFO's.⁴ Accordingly, the Commission will not require further modifications to Columbia's tariff concerning a Critical Day event or OFO as requested by Indicated Shippers and Washington Gas. If the parties feel that Columbia is implementing its Critical Day and OFO procedures in an arbitrary and discriminatory manner, they can file a complaint with the Commission. Further, the Commission agrees with Columbia that it is unnecessary for the Commission to require Columbia to clarify its tariff language concerning hourly flow restrictions as requested by VPEM. Revised Section 17.2(f) also fully complies with the July 19, 2002 order's directive regarding hourly flow restrictions because that particular tariff provision specifies that to the extent that Columbia seeks to implement hourly flow restrictions beyond those provided for in its tariff and/or service agreements, Columbia shall issue an operational flow order.

Penalty/Penalty Crediting

30. The July 19, 2002 order required Columbia to revise its tariff to clearly state that it will not assess multiple penalties for a critical day infraction and then add an OFO or failure to interrupt penalty for the same infraction. The July 19, 2002 order also required Columbia to remove all references to its proposed index price component to its existing penalty structure from its tariff. Regarding Penalty Crediting, the Commission directed Columbia to modify Section 19.6 of its tariff to provide that it will include interest on the penalty amounts to be credited based on the rate set forth in Section 154.201(d) of the regulations. The Commission further directed Columbia to credit penalties to both firm and interruptible shippers. Columbia was also directed to provide that forfeited gas is considered a penalty and any revenue less costs attributable to the forfeited gas must be credited to the shippers. In addition, the Commission directed Columbia to revise its tariff to allow delivery point operators to share in penalty crediting and to retain the word penalty on its tariff sheets instead of referring to the confiscation of gas as a reimbursement. Columbia agreed to modify its tariff to provide that any replenishment amount above 100 percent of the spot market price will be treated as a penalty revenue to be credited back to the non-penalized shippers, net of actual costs incurred. Further, Columbia was required to revise its penalty crediting mechanism to provide that only overrun transportation and storage revenues will be excluded from the definition of penalty revenues. Moreover, the Commission directed Columbia to revise Section 19.6 of its tariff to provide that it will file a report within 60 days of the close of the contract year

⁴Sections 17.1 and 17.2 provide among other things, what information must be contained in an OFO, the operational remedies, and the specific operational standards for issuance of OFOs.

showing the penalty revenues, the costs netted against the penalty revenues, and the resulting penalty revenue credits for each month of the contract year. The Commission found that Columbia will have the burden to support any costs included in the penalty revenue report and that Columbia's customers may challenge the revenues, costs, and the methods of identifying and accounting for these amounts when the report is filed.⁵

31. Cities contend that Columbia has not fully complied with the entirety of the July 19, 2002 order regarding Penalties and Penalty Revenue Crediting by, for example, failing to include in its tariff [i.e., revised Section 19.6(d)] a provision stating that Columbia will have the burden of justifying any offsetting costs to penalty revenues and a provision for an annual filing with an opportunity for shippers to challenge proposed credits.

Commission Ruling

32. The Commission finds that Columbia has generally complied with the requirements of the July 19, 2002 order regarding Penalties and Penalty Revenue Crediting and will not require any modification to revised Section 19.6, except as noted below. The Commission notes, however, that the burden of justifying any offsetting costs to penalty revenues, as set forth in the July 19, 2002 order, remains with Columbia. Further, as directed by the July 19, 2002 order, Columbia's customers will have the opportunity to challenge all the components underlying the penalty revenue crediting.

33. Columbia has revised its tariff to clearly state that it will not assess multiple penalties for a critical day infraction and then add an OFO or failure to interrupt penalty for the same infraction as required by the July 19, 2002 order in revised GT&C Section 19.8. Columbia has also complied with the July 19, 2002 order regarding the treatment of forfeited gas.

34. The July 19, 2002 order also required Columbia to revise its tariff to provide that any replenishment amount above 100 percent of the spot market price will be treated as a penalty revenue to be credited back to non-offending shippers, net of actual costs incurred.⁶ Revised Sections 6(c) of Rate Schedule NTS, Section 5(b) of Rate Schedule PAL, and Section 3(e) of revised Rate Schedule SIT do not comply with this specification of the July 19, 2002 order. In those sections, Columbia indicates that 100 percent of the Sport Market Price will be retained by Transporter with 20 percent of Spot Market Price

⁵July 19, 2002 order at P 237.

⁶July 19, 2002 order at P 235.

treated as Penalty Revenue. Accordingly, the Commission directs Columbia to revise these tariff sheets to fully comply with the July 19, 2002 order on the treatment of penalty revenue credited back to non-offending shippers.

Discounting

35. The July 19, 2002 order required Columbia to file actual tariff sheets implementing the refutable presumption policy, as set forth in CIG/Granite State,⁷ along with a procedure for processing requests to retain discounts at each scheduling opportunity provided by the pipeline.

36. No party protested the compliance filing regarding this issue. However, Indicated Shippers raised a concern regarding a potential timing ambiguity in Columbia's proposed tariff language regarding discounts. Specifically, Indicated Shippers asserts that GT&C Section 20.5(b) states that Columbia will process requests to retain discounts within two hours of the request where such request is made more than two hours prior to the 6:00 Evening Nomination. Indicated Shippers further note that the Commission has required pipelines to "act" on discount requests not later than 8:30 a.m. the following business day, to permit a releasing shipper submitting a discount request at 6:30 a.m. or earlier to have at least half an hour to consider the pipeline's determination and still inform the pipeline by 9:00 a.m. so that the replacement shipper may nominate at the Intraday I nomination at 10:00 a.m. Indicated Shippers believes that to remedy this potential timing ambiguity, the Commission should direct Columbia to revise its tariff language to clarify that it will complete the processing of after-hours discount requests and respond to the requesting shipper by 8:30 a.m. CT on the following day.

Commission Ruling

37. The Commission agrees with the concern raised by Indicated Shippers regarding processing discount requests, therefore the Commission directs Columbia to substitute the word "complete" for the word "process" in GTC Section 20.5(b) as requested by Indicated Shippers.

⁷Colorado Interstate Gas Company, 95 FERC ¶ 61,321 (2001); Granite State Gas Transmission, Inc., 96 FERC ¶ 61,273 (2001) reh'g denied, 98 FERC ¶ 61,019 (2002).

Rate Schedule FBS, PAL, and Pooling

38. The Commission accepted an offer by Columbia to provide an annual report to the Commission detailing the specifics of its FBS service. Further, the Commission directed Columbia to clarify that under Rate Schedule FBS, the withdrawal of gas cannot occur before it is injected and that injection and withdrawal rates will be specified and established in advance. The July 19, 2002 order also found that should Columbia seek to utilize new storage capacity to retain service under Rate Schedule FBS, the Commission's regulations require that Columbia request Commission certificate approval.

39. Columbia complied with the July 19, 2002 order by clarifying that withdrawal of gas will not occur before gas is injected under FBS service, providing injection and withdrawal rates for FBS service, and stating that it will provide an annual report detailing the specifics of its FBS service. Further, Columbia has revised Section 2(b) of the PAL Rate Schedule to suspend its FBS fee during any period of interruption for quantity of gas Columbia is unable to deliver in response to a shipper's nomination.

40. Cities assert that the Commission should require Columbia to explicitly state in its tariff that certificate approval would be required should Columbia choose to utilize new storage capacity to retain service under Rate Schedule FBS. VPEM suggests clarifying Section 2(g) of Rate Schedule FBS. It suggests modifying Section 2(g) by adding the phrase "that is otherwise unsubscribed" to the sentence at the end of the section, which reads "The source of capacity for this service shall be expiring service agreements under Rate Schedules FSS and/or GTS, as well as newly constructed or acquired storage capacity." Cities assert in its Answer to Columbia's Answer, that the Commission should require Columbia to explicitly state in its tariff that certificate approval would be required should Columbia choose to utilize new storage capacity to retain service under Rate Schedule FBS.

41. NEG Shippers assert that the Commission should require Columbia to modify its proposed tariff language regarding pooling to allow shippers to use third-party transportation systems to access the proposed balancing pools. VPEM objects to Columbia's proposal to limit this provision to new contracts only and believes that the Commission should clarify that the suspension of fees will apply to both new and existing contracts for PAL service. In its Answer, Columbia argues that the Commission should reject VPEM's objection. Specifically, Columbia submits that it and those shippers with which Columbia has current PAL contracts negotiated and entered into those contracts and agreed to rates premised on the existing provisions in Columbia's PAL Rate Schedule. Further, Columbia maintains that the Commission would upset these settled expectations and deliver existing PAL shippers an unexpected windfall by requiring that

Columbia change in midstream the method by which the rate for those contracts is derived. Columbia asserts that the Commission has repeatedly permitted existing contracts to remain in existence with full force and effect until a subsequent amendment, modification or re-execution in order to protect the settled expectations of the parties.

Commission Ruling

42. The Commission will not require Columbia to modify or clarify its proposed Rate Schedule FBS. If Columbia constructs or acquires new storage capacity, it will be required to comply with the Section 7(c) certificate approval requirements. It is unnecessary for Columbia to include these regulations in its tariff. The Commission believes that Columbia's compliance with the Section 7(c) regulations addresses the concern raised by Cities regarding the tariff language used by Columbia in revised Rate Schedule FBS. Moreover, the Commission will not grant the clarification sought by VPEM, regarding Columbia's PAL Rate Schedule. Columbia's contracts incorporate by reference, Columbia's tariff provisions. Accordingly, the contracts the parties entered into automatically incorporate the tariff changes herein accepted. However, the Commission agrees with VPEM, that the tariff language noted above in Section 2(g) of Rate Schedule FBS is unclear. Therefore, the Commission directs Columbia to add the phrase, "that is otherwise unsubscribed" to the end of Section 2(g) of Rate Schedule FBS.

43. The Commission will also not require Columbia to modify its proposed tariff language regarding balancing pools for the same reasons the Commission rejected those arguments in the July 19, 2002 order.⁸ Further, the Commission notes that such modification was not required by the July 19, 2002 order.

Implementation Schedule

44. The Commission directed Columbia to file a proposed implementation schedule within 30 days of the July 19, 2002 order. On August 19, 2002, Columbia filed its proposed implementation schedule. On May 30, 2003, Columbia filed a revised implementation plan. In its May 30, 2003 filing, Columbia states that implementation of all phases of its Order No. 637 compliance, with the exception of segmentation, will be implemented when the Commission approves the tariff sheets included with the instant filing. However, Columbia proposes that implementation of segmentation be delayed until April 1, 2004. Columbia states that it owns a common computer system with Columbia Gulf Transmission Company (Columbia Gulf) and Crossroads Pipeline

⁸July order at P 149.

Company. Implementation of segmentation on the three pipelines involves changes to common computer systems. Columbia states that the companies have been delayed in making final programming to the segmentation aspects of the computer system because there are rehearing issues on its segmentation proposal pending before the Commission, and to reprogram piecemeal for the three companies is very costly. Columbia states that, assuming the Commission issues an order on rehearing on its outstanding issues this summer, necessary computer changes can be made, tested, and customers trained in time to implement segmentation by April 1, 2004. Columbia states that, given the major changes to customer commercial practices that will take place, it is not wise to implement these changes during the winter heating season.

45. The Commission grants Columbia an extension of its implementation schedule so that necessary computer changes, testing, and customer training can be accomplished in time to implement segmentation effective April 1, 2004.⁹ This should permit enough time to make the necessary changes and avoid disruption of service during the winter heating season. Columbia must, within 15 days, revise the tariff sheets accepted by this order effective September 1, 2003, to eliminate the provisions we are not permitting it to implement until April 1, 2004. To ensure compliance, we direct Columbia to file a monthly report of its progress toward meeting the April 1, 2004 implementation date.

Requests for Rehearing

46. Requests for rehearing and/or clarification were filed by Cincinnati Gas & Electric Company and the Union Light, Heat and Power Company (Cincinnati and Union); Cities; Columbia Gas of Ohio, Inc., Columbia Gas of Kentucky, Inc., Columbia Gas of Maryland, Inc., Columbia Gas of Pennsylvania, Inc., and Columbia Gas of Virginia, Inc. (collectively, Distribution Companies); Columbia; NEG Shippers; Process Gas Consumers Group (PGC); ProLiance Energy, LLC (ProLiance); UGI Utilities, Inc. (UGI); VPEM; and Washington Gas.

Segmentation

Opposition to Columbia's One Pool Segmentation Approach

47. ProLiance believes that the Commission should not accept Columbia's segmentation proposal because it did not come within the concepts outlined in Order No.

⁹A similar extension of time was granted to Columbia Gulf at 104 FERC ¶ 61,035 at P 57 (2003).

637 and Order No. 637-A, and it could result in degradation of economic value to certain shippers. ProLiance believes that, by establishing only one segmentation pool at an extreme end of Columbia's system and allowing only secondary firm basis, the segmentation procedure could provide a degradation of economic rights of certain parties. ProLiance indicates that Columbia's proposal appears to restrict prior firm rights. Since the pool would only be accessible on a secondary firm basis, it may intensify the discrimination between individual shippers mainly because of their location on the system.

Commission Ruling

48. ProLiance failed to support its assertions that Columbia's proposed one segmentation pool would degrade the economic rights of certain parties or by allowing the access on a secondary firm basis would intensify the discrimination between individual shippers. ProLiance provided no studies or work-papers to reach its conclusions. As noted in the July 19, 2002 order, Columbia was directed to explore, within a one year period, the development of a second segmentation pooling point and to include its findings in the report as well as its findings on whether segmentation could be offered on a primary firm basis.¹⁰ ProLiance will have an opportunity to comment on Columbia's study of a second segmentation pool as well as whether segmentation could be offered on a primary firm basis when Columbia provides the report to the Commission.

Information to be Included in Segmentation Report

49. Distribution Companies request that the Commission clarify that Columbia's one year segmentation report should include within the discussion of the segmentation and secondary point allocation processes a detailed narrative describing how the segmentation process operated in conjunction with the secondary priority allocation process.

50. ProLiance states that Columbia should be required to support any segmentation proposal after one year as if it is a new proposal using the first year only as an experimental basis. ProLiance believes that the Commission has failed to meet its responsibility under the NGA and Order No. 637 by allowing Columbia to only file a report after one year. ProLiance contends that a parties' right to comment will be worthless without the right to seek operational information, data requests and the ability to cross examine witnesses supporting Columbia's annual report.

¹⁰July 19, 2002 order at P 51.

51. UGI asks the Commission to clarify that it will undertake a meaningful review of Columbia's segmentation and secondary point allocation methodology after one year of operational experience is attained and make such further changes to these programs as are necessary to enhance the service flexibility of firm customers. UGI seeks Commission clarification that the reporting process will not strictly be limited to an exchange of pleadings, but rather will provide for a fact-specific and interactive review of Columbia's 637 compliance in the identified reporting areas. Also, UGI states that the Commission should convene a technical conference to evaluate Columbia's reporting data and conclusions, and the proposed alternatives of parties.

Commission Ruling

52. Distribution Companies', ProLiance's, and UGI's requests for clarifications and modifications of the report and reporting requirements and request for technical conference are premature. We will evaluate Columbia's report on segmentation when that report is filed with the Commission.¹¹ Parties will have an opportunity to analyze and comment on Columbia's report at that time. Until such report is filed, we will reserve our judgment on whether further procedures should be established regarding segmentation on Columbia's system.

Clarification and/or Modification to Columbia's Segmentation Pooling Approach

53. The Distribution Companies request clarification that within the segmentation pool, segmented Rate Schedule SST capacity would have no different priority than FTS capacity. Stated another way, the fact that SST once segmented would not continue to have the no-notice capability otherwise incorporated into SST should not create any distinction between how segmented SST is treated vis-a-vis other segmented firm capacity. The Distribution Companies request that the Commission clarify the equal status of Rate Schedules SST and FTS to preclude any possible unfair competitive impact on the implementation of priority allocation or valuation in the capacity market. The restrictions that Columbia has placed on SST capacity that it cannot retain its no-notice capability if utilized into the segmentation pool, simply places SST on the same operational basis as FTS. Since all receipts into the pool and deliveries from the pool are to be made on a secondary basis, there is no basis for distinguishing SST from FTS.

¹¹As provided above and in the July 19, 2002 order at P 51, Columbia is required to provide extensive information on its segmentation pooling mechanism.

54. The Distribution Companies submit that the issue of Columbia declining to permit shippers to make inventory transfers from Rate Schedule FSS to Rate Schedule IPP or Rate Schedule AS should be evaluated and addressed based upon a year of experience with the unique segmentation pool. Whether Columbia should offer the ability to transfer inventory from FSS to IPP on a conditional basis similarly, can be better addressed in light of experience on the system with the operation of the segmentation pool.

Specifically, Distribution Companies is concerned that if the segmentation pool does not prove to have much liquidity, then the customers' ability to transfer FSS to the proven liquid IPP should be reconsidered.

55. The Distribution Companies request clarification that the secondary point allocation shall not impact the ability of all shippers to access, i.e., deliver into, the segmentation pool. Although the pool is a virtual delivery and receipt point, it is determined to be located upstream of any constraint point, and therefore, no firm shipper's access to the pool should be restricted relative to other firm shippers. A shipper should not be constrained from delivering gas into the pool on the basis that the shipper might have a lower priority than others to deliver gas further "downstream" as a result of the proposed secondary point priority allocation mechanism.

56. The Distribution Companies seek clarification that non-priority secondary capacity has a higher priority than interruptible. Specifically, Distribution Companies requests clarification that for purposes of nominating and scheduling, as opposed to curtailment, that secondary non-firm has priority over interruptible. Columbia's secondary point allocation proposal introduces a new term "Non-Firm Capacity" to refer collectively to interruptible and secondary firm capacity. Distribution Companies contend that Columbia's proposal appears to reduce secondary firm capacity to the same priority as interruptible. Distribution Companies further assert that this concept could restrict the ability to release capacity on a secondary firm basis, because of "non-firm" allocation restrictions but thereafter permit the pipeline to sell interruptible capacity.

57. VPEM believes the Commission erred in approving Columbia's proposal to not allow PAL imbalances to be transferred to the segmentation pool. VPEM argues that Columbia should be required to modify its tariff to allow (subject to operational conditions) the transfer of ISS and PAL balances, as well as shipper transportation imbalances, to the segmentation pool using interruptible transportation (IT) at no charge. VPEM contends that this would resolve issues regarding segmentation of Columbia's system and would make segmentation an integral and valuable part of Columbia's imbalance management program.

58. NEG Shippers requests rehearing to require Columbia to allow some form of segmentation that will protect the quality of service on Columbia's system while also maximizing flexibility and value for shippers. NEG Shippers believes that the July 19, 2002 order incorrectly placed the burden of proof on the shippers rather than Columbia to prove that segmentation on Columbia's system is infeasible and not supported by predictable and sustainable flow patterns that would support physical pathed segmentation. NEG Shippers again raised the issue of assigning shippers hypothetical path for segmentation purposes, first mentioned in NEG Shippers' protest to this proceeding.

59. ProLiance states that Columbia's pooling segmentation pooling proposal does not specifically address fuel issues and requests clarification of the Commission's treatment of fuel retainage for purposes of Columbia's proposal. It is unclear which leg of the segmentation transportation path will be subject to fuel retainage.

Commission Ruling

60. Distribution Companies request clarification that within the segmentation pool, segmented SST capacity would have no different priority than FTS capacity. As stated in National Fuel Gas Supply Corp.,¹² a holder of segmented Rate Schedules FT or FT-S capacity with secondary points will not be treated any differently than any other prospective Rate Schedule FT or FT-S shipper requesting primary point service. If an increase in Rate Schedules FT or FT-S contracts with primary points will degrade no-notice service, then the pipeline is not required to agree to such requests.

61. The Distribution Companies submit that the issue of Columbia declining to permit shippers to make inventory transfers from Rate Schedule FSS to Rate Schedule IPP or AS should be evaluated and addressed based upon a year of experience with the unique segmentation pool. VPEM also believes the Commission erred in approving Columbia's proposal not to allow PAL imbalances to be transferred to the segmentation pool. The July 19, 2002 order rejected such requests because we believed that inclusion of these other inventory transfers to the segmentation pool would adversely impact Columbia's ability to serve existing firm services.¹³ Distribution Companies and VPEM have presented no new evidence to support a change in this finding.

¹²National Fuel Gas Supply Corp., 97 FERC ¶ 61,104 (2001).

¹³July 19, 2002 order at P 48.

62. Distribution Companies requested clarification that the secondary point allocation would not impact the ability of all shippers to access, *i.e.*, deliver into the segmentation pool. Further, Distribution Companies requested clarification that non-priority secondary capacity will have a higher priority than interruptible. In the July 19, 2002 order, we determined that, based on Columbia's explanation of the operational characteristics of its system, we approved Columbia's proposal to give a priority to certain secondary point transactions.¹⁴ Further, under Section 7.3(b)(5) of Columbia's proposed tariff, to the extent that nominations exceed the amount of capacity that is available, Columbia will allocate capacity pro-rata. Columbia has allocated capacity pro-rata in the past, and we will approve its pro-rate allocation under Section 7.3(b)(5).

63. The Commission in the July 19, 2002 order examined NEG Shippers' hypothetical flow proposal and found that NEG Shippers' proposal did not support deviating from Columbia's segmentation pooling mechanism. The July 19, 2002 order found that because there is no evidence that there are predictable and sustainable paths on Columbia's system, physical path-specific segmentation is not supported.¹⁵ The Commission again finds that pathing is not feasible on Columbia's reticulated pipeline system. The Commission approved Columbia's segmentation pooling mechanism on an interim basis to be reexamined after a one year period. At that time we will reevaluate Columbia segmentation pooling mechanism to determine if any modifications are necessary. NEG Shippers' rehearing request is denied.

64. ProLiance stated that Columbia's segmentation pooling mechanism did not specifically address fuel issues and requested clarification of the Commission's treatment of fuel retainage for purposes of Columbia's proposal. We will clarify that Columbia does not need to specify specific fuel retainage because each segment is used for transportation service and the shippers will be charged accordingly, therefore, ProLiance's request for rehearing on this issue is denied.

Secondary Point Allocation

65. Cincinnati and Union contend the approved method for allocating capacity at secondary receipt points is inequitable and discriminatory and fails to reflect customer contributions to system-wide costs. Cincinnati and Union argue that a *pro rata* allocation method would be a more equitable method of allocating secondary delivery point capacity because it would provide potential access to all shippers and provide nondiscriminatory

¹⁴July 19, 2002 order at P 86.

¹⁵July 19 order at P 46.

access for all customers on Columbia's system. Cincinnati and Union counter Columbia's claims that a customer from a downstream Market Area might use an intra-day nomination to move back to its primary delivery point, indicating that the tariff could be amended to either prohibit such a move, limit the move to the customer's *pro rata* share of capacity at the secondary point, or make the use of the secondary point by other firm customers subject to the contingency. Cincinnati and Union conclude that the Commission should withdraw its approval of Columbia's approach to allocate capacity at secondary delivery points and require Columbia to adopt instead an approach, such as *pro rata* allocation, that affords secondary point access to all shippers on a nondiscriminatory basis.

66. UGI in its rehearing request contends that the Commission erred in finding that the contract term is irrelevant in the allocation of secondary receipt and delivery point capacity. UGI argues that the Commission went further than necessary in completely rejecting Columbia's present value allocation proposal, and in so doing misinterpreted its own policy and precedent on the relevance of contract term length in efficiently allocating pipeline capacity to parties that desire it most. UGI contends that on rehearing the Commission should find that Columbia may utilize a present value calculation for awarding secondary point capacity, provided that the contract term will be a total contract term from the original effective date to the expiration date and not the remaining contract term at the time of Commission approval. UGI asserts that the present value mechanism gives recognition to the position that shippers paying the highest value for capacity should have the greatest flexibility in its utilization.

67. VPEM raises several issues in its rehearing request concerning secondary point allocation. First, VPEM contends that the Commission erred in failing to qualify Columbia's discretion to revise the secondary delivery point priority list. VPEM argues that since Columbia reserves the right in its "reasonable judgement" to revise the secondary point priority list to protect system integrity and primary firm obligations which could potentially change the "path" of a shipper and thus the ability of a shipper to access points formerly afforded secondary point priority. VPEM asserts that the broad discretion is unnecessary, duplicative and Columbia should be required to discuss with shippers the need and scope of any proposed changes to the secondary point priority list. VPEM further contends that the Commission should require Columbia to make the secondary point priority list a part of its tariff, subject to change only upon a filing, due notice and the other procedural protections afforded shippers by the Natural Gas Act. Second, VPEM asserts that the Commission erred in rejecting the present value tie-breaker method proposed by Columbia to allocate secondary delivery nominations. VPEM contends that the Commission has recognized that both rate and term of a contract bear on the value a shipper places on capacity, that capacity should be allocated

to shippers that value it the most, and that the Commission cannot now, without elaboration, find this premise unreasonable. Third, VPEM requests clarification that secondary delivery point priority under Rate Schedule OPT is equivalent to that under Rate Schedules FTS, NTS, SST, and GTS during any time when OPT service is firm or not interrupted by Columbia pursuant to an OPT service agreement. VPEM contends that such a clarification would ensure that the firm nature of OPT service is recognized for purposes of allocating secondary point rights.

Commission Ruling

68. The Commission will again reject Cincinnati and Union's proposal to use the *pro rata* allocation method for allocating secondary point capacity. The Commission found in the July 19, 2002 order that Columbia's proposed allocation method struck an appropriate balance between providing Columbia's customers with increased flexibility and certainty as compared to the *pro rata* method, while providing Columbia with the necessary operational control of its system. The Commission further stated that Columbia's proposal does not appear to be a significant change to the manner in which it allocates capacity to secondary points.¹⁶ The Commission determined that Columbia operates a reticulated system with certain operational constraints. Cincinnati and Union has failed to justify why the Commission should change its position in regard to *pro rata* allocation. Cincinnati and Union's request for rehearing on this issue is denied.

69. The Commission will again reject the use of the present value mechanism for allocating secondary point capacity. Order No. 637 was a Section 5 of the NGA proceeding in which the Commission, among other things, required pipelines to propose a priority allocation for transportation within the path. The Commission did not envision nor did it require a complicated allocation plan such as the present value calculation proposed by Columbia and endorsed by UGI and VPEM. While the Commission has permitted capacity allocation plans based upon price, it is certainly not the only allocation method approved by the Commission. Columbia can certainly propose in a separate Section 4 proceeding, the present value allocation method, but this Order No. 637 proceeding is not the appropriate forum to propose such an allocation methodology. VPEM and UGI's request for rehearing on this issue are denied.

70. VPEM's request that the Columbia's secondary priority list be made part of its tariff is also denied. The July 19, 2002 order anticipated changes to the secondary point allocation, requiring Columbia to post on its EBB, the upstream secondary delivery points

¹⁶July 19, 2002 order at P 86.

by Market Area to which a shipper will have priority and any changes, including the basis for the change, so that customers will be provided with the necessary information to question any designation or change.¹⁷ Since VPEM will have the information and opportunity to question any designation or change in Columbia's secondary point allocation method, it is premature at this time to find that Columbia has unreasonably broad discretion for a program which has not yet been implemented. When the secondary point allocation method is implemented, if VPEM or any other customer contends that Columbia has arbitrarily changed the delivery points, they can file a complaint at that time. Further, parties can comment on Columbia's secondary point allocation method when Columbia files its annual report. VPEM's request for rehearing on this issue is denied.

71. The Commission will grant VPEM's request for clarification that secondary delivery point priority under Rate Schedule OPT is equivalent to that under Rate Schedules FTS, NTS, SST, and GTS during any time when OPT service is firm or not interrupted by Columbia pursuant to an OPT service agreement. The OPT rate schedule provides for off-peak firm transportation service and follows the same service agreement as provided for Rate Schedules FTS, NTS, SST, ITS and GTS. To the extent that Columbia provides OPT service as firm transportation service, such service will be recognized for purposes of allocating secondary point rights. Columbia is required to revise its tariff accordingly.

Penalties and Penalty Revenue

Use of Index Price

72. In its original compliance filing, Columbia proposed to add to the existing fixed penalty amounts in its tariff a variable component based on an index price. In the July 19, 2002 order the Commission rejected Columbia proposed index price component as being beyond the scope of Order No. 637. Columbia seeks rehearing of this ruling. Columbia states that the index price component was designed to prevent shippers from gaming Columbia's system. Columbia states that the index price component was designed to ensure that shippers would not be able to ignore Columbia penalties when it was to their financial benefit to do so because they would always be penalized in an amount that exceeds the gas price they could receive in other markets. Columbia asserts this decision is inconsistent with recent Order No. 637 precedent in which the Commission approved the addition of an index price component to existing penalties for one pipeline (citing

¹⁷July 19, 2002 order at P 87.

East Tennessee Natural Gas Co., 98 FERC ¶ 61,060 (2002) (East Tennessee) and approved an index price with a premium in place of a fixed penalty for another pipeline (citing Gulf South Pipeline Co., LP 98 FERC ¶ 61,278 (2002) (Gulf South)). Columbia asserts that the Commission has failed to follow its precedent in two recent decisions implementing Order No. 637 in which it permitted pipelines to utilize an index price plus a premium as the appropriate penalty level in their tariffs. To correct this error, Columbia argues that the Commission should grant rehearing and permit Columbia to likewise include an index price component to its existing penalty levels

Commission Ruling

73. As a general matter, the only action pipelines were required to take with respect to their penalty provisions in order to comply with Order No. 637 was to justify that their existing penalties were no more restrictive than necessary under Section 284.12 (c)(2)(v). Compliance with Order No. 637 meant to reduce or maintain existing penalties, not to increase or tighten penalties.¹⁸ Although the Commission has permitted an index price component to be included in some pipelines' Order No. 637 proposals, we did not consider that those particular pipelines (e.g., Gulf South) were using their Order No. 637 filings as an opportunity to increase their penalties or make them more stringent.

74. We find that Columbia's proposal and circumstances are not similar to that of Gulf South. In Gulf South, the pipeline proposed to replace all of its fixed penalties with variable penalties based upon the market price of natural gas at the Henry Hub on the date the shipper incurred the penalty. For example, Gulf South proposed to change its penalty for System Management Plan (SMP) violations from \$10 per Dth for volumes exceeding a 10 percent variance to five times the Henry Hub Midpoint price. The Commission, however, found that unless Gulf South could demonstrate the need for a "five times" penalty, a more appropriate SMP penalty was two times the Henry Hub Midpoint price.¹⁹ As such, recognizing that the midpoint price of natural gas at Henry Hub typically ranges between \$2 and \$5 per Dth, the Commission found that a penalty of two times the Henry Hub Midpoint price would, in many cases, actually result in lower penalties when compared to Gulf South's then-existing fixed penalty of \$10 per Dth.

75. In contrast to Gulf South, Columbia did not propose to replace its fixed penalties with a variable penalty that has the potential to result in a lesser penalty than its current fixed penalties. Instead, Columbia proposed to increase its penalties by adding a variable

¹⁸Texas Eastern Transmission, LP, 102 FERC ¶ 61,198 at P 97-106 (2003).

¹⁹98 FERC ¶ 61,278 at 62,177 (2002).

penalty amount, based on a gas index price, on top of its existing fixed penalty amount. Therefore, the Commission properly rejected Columbia's proposal. Again, we reiterate our policy of not allowing pipelines to use their proceedings to comply with the Section 5 requirements of Order No. 637 as an opportunity to increase their penalties or make the tolerances more stringent.

76. With respect to our decision in East Tennessee, in a May 23, 2003 order, we reversed our decision in East Tennessee and directed the pipeline to remove the index price component that was previously approved.²⁰ For these reasons, Columbia's request for rehearing is denied. Columbia, of course, has the opportunity to justify any increased penalties in the context of a Section 4 filing.

Delivery Point Operators

77. The Commission directed Columbia to revise its tariff to provide that delivery point operators will share in the crediting of penalty revenues if they are subject to penalties but have not incurred any.

78. Columbia requests that the Commission grant clarification of this requirement. Columbia asserts that it has no way of knowing whether a city gate meter operator is providing accurate information about whether the city gate meter operator, or shippers behind that meter operator's gate, caused the penalty to be incurred. Columbia requests that the Commission permit it to include tariff language in Section 19 of its GT&C requiring (1) that the city gate meter operator certify the truthfulness of its claim that it did not cause the incurrence of penalty revenues for a month in which it is penalized; and (2) that the city gate meter operator indemnify and hold Columbia harmless from any damages of any kind whatsoever related in any way to the certification. In its compliance filing Columbia proposed the following tariff language based on its rehearing request:

To the extent that a meter operator at a pipeline interconnect incurs a penalty during a month, and that meter operator certifies in writing to Transporter that it did not cause the penalty to be incurred, Transporter will treat the meter operator for that month as a Non-Penalized Shipper. The meter operator will indemnify Transporter and save it harmless from all suits, actions, regulatory proceedings, debts, damages, costs, losses and expenses (including reasonable attorney's fees) arising from or out of this certification by the meter operator.

²⁰East Tennessee Natural Gas Company, 103 FERC ¶ 61,237 at P 77 (2003).

79. If the Commission rejects this request, Columbia requests that the Commission grant rehearing and reverse its decision to permit city gate meter operators to participate in penalty revenue crediting in a month in which the meter operator is assessed a penalty for the actions of the shippers behind the meter operator's city gate. Columbia asserts that it has no way of verifying the accuracy of a city gate meter operator's claim that the meter operator is not responsible for penalties that it is assessed during a particular month. Columbia submits that if the city gate meter operator advises Columbia that it did not cause the penalties assessed against it during a particular month such that the meter operator is entitled to participate in penalty revenue sharing for that month, other non-penalized shippers will suffer a reduction in the amount of penalty revenues they are entitled to receive for that month. Columbia argues that these other non-penalized shippers may claim that the city gate meter operator improperly claimed a right to participate in the sharing of penalty revenues for a month and assert a claim against Columbia for including the city gate meter operator in the penalty sharing for that month.

80. In its protest to Columbia's compliance filing, the Cities assert the indemnification requirement proposed by Columbia is inappropriate.²¹ The Cities state that the reason offered in support of it by the pipeline is that Columbia should be protected in the event that there is a misallocation of penalty revenue credits as a result of the certification. The Cities assert that corrections to allocations of any credits or debits occur as a matter of course in pipeline filings with the Commission. The Cities argue that the requested indemnification would be superfluous to protect the legitimate interests of the pipeline and bad precedent, as it would lead to other indemnification requests to be included in many tariff provisions dealing with debits, credits, charges, and surcharges, of virtually all pipeline tariffs.

81. In its answer to the Cities, Columbia states that without a financial consequence, delivery point operators will be at liberty to submit inaccurate certifications to Columbia with impunity. Columbia is also concerned that there may be circumstances in which it may not be able to recoup penalty revenues that were misallocated, for example, where the party receiving the penalty revenue in error may be in bankruptcy or may no longer be a shipper on Columbia's system. The Cities responds that indemnification provides no greater protection against bankruptcy than a Commission-imposed payment arising from the reallocation of revenues. The Cities assert that the issue of how a pipeline is to recoup monies reallocated to a departing customer is the same issue the Commission faces in implementing any reallocation of costs or credits.

²¹The Cities indicate that they do not challenge the certification requirement.

82. PGC request clarification of the July 19 order as it relates to penalty revenue crediting and whether penalty revenue should be allocated to non-offending delivery point operators. Although PGC takes no position as to whether non-offending delivery point operators should share in the penalty revenues collected by the pipeline, PGC seeks clarification that the Commission did not intend to predetermine that LDCs may keep credit funds received. Without such clarification from the Commission, PGC believes that some delivery point operators (or LDCs) may argue that the July 19 order allows them to retain penalty revenue credits and not flow them through to customers. However, PGC argues that any such issues should be a matter of state law and not implicated by the Commission's decision to credit penalty revenues to non-offending delivery point operators. PGC submits that this outcome is consistent with Commission precedent that concludes that the flow through of penalty revenue credits "is a matter of state concern."²²

Commission Ruling

83. The Commission finds that further information is needed with respect to how delivery point operators are assessed penalties and what their responsibility is for distributing penalty revenues. Accordingly, the Commission will defer action on Columbia's request for rehearing at that time. In addition, since the Commission did not direct Columbia to file its certification and indemnification provision in its compliance filing, Columbia must remove that provision pending a further Commission order. In its compliance filing to this order Columbia is directed to explain the role of point operators on its system and how they are assessed penalties. It is unclear how point operators are eligible for penalty revenue credits since the penalty revenue crediting mechanism calculates penalty revenue credits to shippers based upon their throughput under the respective rate schedules. A full explanation of the role of point operators will enable the Commission to determine whether the proposed certification and indemnification provision should be accepted. The Commission also request the Cities to explain their role as a point operator on Columbia's system, since it is unclear why the issue of the flow through of penalties and penalty revenue credits is not a matter of contract between the point operator (or LDC) and the shippers or customers behind the point.

84. The Commission grants PGC's request for clarification that the Commission did not intend to predetermine that LDCs or delivery point operators may keep penalty credit funds received.

²²Citing, Dominion Transmission, Inc., 95 FERC ¶ 61,316 at 62,086 (2001).

Penalty Crediting to Firm Shippers

85. The July 19, 2002 order required Columbia to credit penalty revenues, net of costs, to all shippers, interruptible and firm shippers and point operators. The Cities assert that the July 19, 2002 order erred in failing to limit penalty revenue crediting to firm shippers. The Cities assert that there are consistent Commission precedents for the proposition that revenues should be credited only to firm shippers. The Cities contend that in implementing Order No. 636, the Commission required pipelines, in certain instances, to credit revenues received from interruptible services and, in doing so, directed that all such credits be allocated to firm customers.²³ The Cities argue that these rulings reflect the basic principle that revenues the pipeline receives from service for which there has been no allocation of fixed costs should be used to offset the rates for firm customers for whom the pipeline was built. The Cities contend that the same principle applies equally here to require that Columbia credit penalty revenues exclusively to firm shippers. The Cities assert that the July 19, 2002 order has not provided any substantial basis for its rejection of the proposal to allocate penalty revenues only to firm customers. Accordingly, the Cities argue that on rehearing the Commission should reverse the July 19, 2002 order and adopt the proposal to allocate penalty revenue credits only to firm shippers.

Commission Ruling

86. The Commission denies the Cities' request for rehearing. Commission policy requires that both firm and interruptible shippers share in crediting penalty revenues, since they are both subject to the penalties that generate the revenue to be credited.²⁴ Moreover, this policy provides all shippers, including interruptible shippers, an incentive to adhere to the tariff provisions. The crediting of revenues from services to firm shippers, which the Cities rely on to limit the crediting to firm shippers, is a different issue than who should share in penalty credits.²⁵ Section 284.12(b)(2)(v) provides that pipelines "must credit [net penalty revenue] to shippers," and is not limited to firm

²³Citing, Paiute Pipeline Co., 63 FERC ¶ 61,189 at 62,401 (1993); Arkla Energy Resources, 62 FERC ¶ 61,076 at 61,461 (1992); and Transwestern Pipeline Co., 65 FERC ¶ 61,133 (1993).

²⁴Equitrans, L. P., 101 FERC ¶ 61,018 (2002).

²⁵The Commission also notes that in Transcontinental Gas Pipe Line Corporation, 79 FERC ¶ 61,325 (1997), the Commission, in an order on remand, rescinded its finding that only firm shippers are eligible to receive the IT revenue credits required in Order No. 636 restructuring proceedings.

shippers. Thus, the Commission has consistently held that all shippers are to share in the crediting of net penalty revenue.²⁶

Critical Day Penalties

87. Washington Gas supports the Commission's requirement to limit penalties to critical days. However, Washington Gas asks the Commission to clarify that FTS shippers with FSS storage rights can only be assessed a penalty on a critical day for storage imbalances and not also for transportation imbalances that do not exceed the shipper's combined total firm entitlements of all firm services under contract. If the Commission's order permits Columbia to assess more than a single penalty for a storage service overrun (e.g., a storage withdrawal penalty and a storage transportation penalty when deliverability under FTS is not fully utilized), Washington Gas seeks rehearing.

Commission Ruling

88. The Commission grants Washington Gas' request for clarification. Based upon the limited circumstances described by Washington Gas, it appears that its request is consistent with the Commission's policy that prohibits multiple penalties for the same infraction.

Imbalance Netting and Trading

89. Distribution Companies state that various parties pointed out in comments and protests certain significant inequities that result from "forced balancing" required of FSS shippers that does not apply to FTS shippers. Distribution Companies state that by assessing injection, withdrawal and retainage charges to forced balancing of FSS customers, the FSS customer imbalance activity is assumed to be gaming, while no such charges are assessed to FTS-only customers whose actions are very likely deliberate, strategic cost-avoidance activities that could well be considered gaming. Distribution Companies assert that the charges diminish the value of netting and trading for any Columbia FSS customer without an operational or cost basis. Distribution Companies argues that the provisions provide an additional unfair advantage to the FTS-only shipper who is already allowed to accumulate significant monthly imbalances without any cost. Distribution Companies state that the Commission recognized the need for comparability of charges for transportation (FTS-only) and FSS/FTS shippers in the context of penalties. Distribution Companies state that the July 19, 2002 order requires Columbia to

²⁶See East Tennessee Natural Gas Co., 98 FERC ¶ 61,060 at P 126 (2002).

revise the penalties that could result from operation of the forced FSS balancing provision to ensure that the limit on imposing transportation penalties only on "critical days" similarly protects imbalance shippers so that storage penalties resulting from imbalances being considered injections into storage will only be incurred during critical periods. Distribution Companies assert that the Commission should ensure that FTS-only and FSS/FTS shippers are treated similarly with regard to charges assessed imbalances, forced or not, and on netting and trading activity.

Commission Ruling

90. The Commission denies the Distribution Companies' request for rehearing. The Commission found that it was reasonable for Columbia to apply injection, withdrawal and retainage charges to imbalance trading between a storage and transportation account because such charges would have applied even in the absence of the imbalance transfer and it ensures that shippers pay their fair share of cost responsibility for the system. When shippers trade imbalances between transportation accounts or storage accounts the applicable transportation or storage charges have already been paid by one shipper. However, if an imbalance trade occurs between a storage account and a transportation account certain charges would not have been paid, *i.e.*, injection or withdrawal charge and the applicable retainage. The Commission finds that Columbia's tariff is reasonable because it prevents shippers from using imbalance trading as a means to avoid the applicable injection, withdrawal and retainage charges under their storage service agreements.

Rate Schedules FSS and FBS

91. Cincinnati and Union state that on the matter of possible degradation of existing storage services, the Commission accepted Columbia's assurances that it will make FBS service available only if it will not adversely affect existing FSS service. Cincinnati and Union state that the Commission also required Columbia to submit an annual report providing details on, among other things: (1) the amount of FSS and GTS storage capacity turned back during the year; (2) shippers' responses to remarketing the capacity as FSS or GTS capacity; (3) shippers' responses to marketing the capacity as FBS capacity; and (4) the terms of FBS service agreements executed during the year. Cincinnati and Union assert that the report is insufficient standing alone. Cincinnati and Union argue that significant degradation of existing storage services could occur and the causes go undetected and uncorrected until the report is submitted at the end of the year. Cincinnati and Union assert that to safeguard against that eventuality, Columbia should be required to post on its website information concerning its compliance on an ongoing basis, with updates no less frequently than monthly. Cincinnati and Union state that the

posted information should include rolling-base line data on turned back FSS and GTS capacity, with entries for aggregate Storage Contract Quantity (SCQ), Maximum Daily Storage Quantity (MDSQ), Maximum Daily Injection Quantity (MDIQ), and Maximum Daily Withdrawal Quantity (MDWQ). Cincinnati and Union also state that the aggregated amounts of FBS service components that Columbia markets should also be posted and compared against the base-line data.

92. UGI asserts that the Commission should require Columbia to afford greater balancing flexibility to existing FSS customers. UGI states that the majority of Columbia's customers have essentially no flexibility in managing transportation imbalances. UGI states that Columbia maintains stringent daily balancing restrictions under Rate Schedule FSS. UGI states that any actual imbalance under any service agreement held by an FSS shipper is balanced through a net injection or withdrawal to storage on a daily basis, and subject to the appropriate charges under the FSS Rate Schedule. Moreover, UGI states that third-party transportation imbalances at a city-gate delivery point covered by an FSS agreement are also balanced through FSS injections and withdrawals. UGI states that Columbia has stated that 85 percent of its total deliveries are balanced in this fashion. UGI states that, by contrast, non-storage transportation customers are permitted to balance on a monthly basis within a 10 percent tolerance, without penalty under the existing terms of Columbia's tariff. UGI requests that on rehearing the Commission permit FSS customers to resolve 10 percent of daily imbalances through imbalance trading and adopting majority/minority pricing for storage related charges assessed upon imbalances that are injected to or withdrawn from storage in the opposite direction of Columbia's overall system requirements.

93. Washington Gas states that in its original compliance filing Columbia proposed to implement a Default Balancing Service (DBS) under which FTS shippers would bear cost responsibility for all imbalance volumes above 3 percent of their total entitlement. Washington Gas states that because of protests Columbia later withdrew its proposal. However, Washington Gas states that Columbia later expressed its willingness to comply with a Commission directive to reinstitute Rate Schedule DBS in light of an August 2001 decision in a National Fuel docket implementing a similar service providing more equality between shippers with firms storage service and those without it.²⁷ Washington Gas states that the July 19, 2002 order does not address Columbia's offer. Washington Gas seeks rehearing of the Commission's decision to not require Columbia to refile an imbalance management service similar to that in Rate Schedule DBS. Washington Gas

²⁷Citing, National Fuel Gas Supply Corporation, 96 FERC ¶ 61,182 (2001).

asserts that without a Rate Schedule DBS-type service, FTS-only shippers have little incentive to be in balance.

Commission Ruling

94. The Commission denies Cincinnati and Union's request for rehearing. The Commission finds that the annual report that Columbia is required to file will be sufficient and will allow Columbia and its shippers to gain operating experience with the new FBS rate schedule. After the Commission reviews the annual report and receives input from Columbia's customers, the Commission will determine whether more frequent reporting and monitoring is needed. Moreover, as the Commission recognized in the July 19, 2002 order, all parties will be able to examine any capacity that Columbia determines to offer as FBS capacity because the offer will be posted on its EBB. All parties will be able to monitor the auction and thus will be able to see the terms of the proposed offering. Further, if any party believes that, during the first year of operation of the FBS rate schedule, FSS service is being degraded, that party may bring that matter to the Commission's attention.

95. The Commission denies UGI's request for rehearing. The Commission found that Columbia offered adequate imbalance management services thus fulfilling its obligations under Order No. 637. In the July 19, 2002 order the Commission recognized that a number of features of FSS storage service, such as forced balancing, were due to Order No. 636 restructuring where Columbia divested itself of most of its system storage. The Commission finds that any changes to FSS storage service should involve the input of Columbia and its shippers to determine the effect on system operations. UGI's request would involve a fundamental change to the FSS storage service and is thus beyond the scope of this Order No. 637 compliance proceeding.

96. While the Commission will not grant Washington Gas' request for rehearing and direct Columbia to file a DBS-type service, the Commission does encourage Columbia to consider filing a separate Section 4 filing proposing such a service. Because some time has passed since Columbia initially proposed the DBS service, the Commission believes that it would be more appropriate for Columbia to file a new proposal that is based on how its system operates today rather than refile a proposal that is based on outdated system operations. The Commission believes that a DBS service for FTS-only shippers could address a number of issues raised concerning the stringent balancing requirements imposed on FTS shippers with FSS storage service as compared to the FTS-only shippers whose tolerance and balancing requirements are less strict.

Discounting

97. The July 19, 2002 order required Columbia to comply with the CIG/Granite State discount policy.²⁸ In those orders, the Commission adopted a new policy that permits a shipper to retain a discount when it moves to segmented points or secondary points through a streamlined request process in which the pipeline processes requests for discounts within two hours. The Commission stated in the July 19, 2002 order that under this policy, there is a rebuttable presumption that a shipper holding a discount at a point will retain a discounted rate if it chooses to segment, release capacity, or use its flexible receipt and delivery point rights to move gas to another point at which the pipeline has granted discounts for its firm or interruptible transportation services. The Commission also stated that the shipper seeking to move its point will pay the higher of its contractual rate or the discount rate being offered at the alternate point.²⁹

98. The Cities are concerned that the Commission's CIG/Granite State discount policy could harm captive customers paying the maximum rate. They contend that the CIG/Granite State policy would allow a pipeline to grant discounts without a hint of justification, even to its affiliates, as long as the pipeline itself does not oppose the discounts. The Cities assert that these discounts presumably would automatically qualify for a discount adjustment in a subsequent rate case on the theory that they were mandated by Commission policy. The Cities argue that the Commission cannot justify this change in the fundamental predicate of selective discounting, which imposed the burden on the pipeline to justify discounts that the pipeline wanted to provide based on the Commission's recognition of the potential for undue discrimination. The Cities contend that the Commission's holding in the July 19, 2002 order is also in clear derogation of the Commission's statutory duty under the Natural Gas Act to protect captive customers, which are its prime constituency, and must be reversed.

Commission Ruling

99. The Commission denies the Cities' request for rehearing. The basic purpose of the CIG/Granite State discount policy is to enhance competition by making it easier for firm shippers to compete with the pipeline. The Cities have not shown that this policy will have any significant adverse effect on maximum rate shippers through an increase in the

²⁸Colorado Interstate Gas Company, 95 FERC ¶ 61,321 (2001); Granite State Gas Transmission, Inc., 96 FERC ¶ 61,273 (2001) reh'g denied, 98 FERC ¶ 61,019 (2002).

²⁹100 FERC ¶ 61,344 at 62,565 n. 27 (citing CIG, 95 FERC ¶ 61,321, at 62,121 n.38).

discount adjustment in the next rate case. Under the CIG/Granite State policy, the Commission chose a balanced approach under which shippers only get to keep discounts at alternate points if competition requires the discounts at that point. Thus, in CIG, the Commission did not allow a shipper to retain its discount when it utilizes secondary points when competition does not require discounts to similarly situated shippers. The Commission determined that this could have negative consequences, including exacerbating the impact of a rate case adjustment in future rate cases. Where the shipper does retain its discount the revenue the pipeline receives from the flexed contract remains, at worst, unchanged at the discounted level it already receives, since, as discussed above, the policy does not require the pipeline to reduce the rate below the contract rate. If the shipper were not able to retain its discount when using a different point, it might well not use the different point, so that the pipeline would not earn additional revenue in any event. The Commission concludes that the effect of the CIG/Granite State policy on discount adjustments in future rate case is speculative. On balance, however, the Commission finds that the CIG/Granite State policy is necessary to help competition and avoid discrimination. Any speculative effects on future rate cases is not sufficient reason to reverse the CIG/Granite State policy here.

100. Finally, in any future rate case, the pipeline must meet the burden of justifying its discounts with respect to both affiliates and non-affiliates. With respect to affiliate discounts, which are a source of concern for the Cities, the Commission has found that a pipeline has the burden at a hearing of showing that its discounts to affiliates were required by competition. A pipeline is required to provide information concerning how the level of the discounts to affiliates was determined and why it was necessary to grant those discounts, for example, by identifying the transportation and/or fuel alternatives available to the affiliated customer that gave rise to the decision to discount.³⁰

Pooling Services

101. NEG Shippers state that if the Commission allows Columbia to avoid segmentation and instead permits Columbia to offer only its proposed pooling service, clarification is necessary. NEG Shippers assert that the Commission should clarify that Columbia must allow shippers to access the paper pools using third-party transportation (i.e., other pipelines besides Columbia's), provided that the third-party's system is interconnected to Columbia's system. NEG Shippers argue that because the pools are paper pools, and not physical points on Columbia's system, there is no operational reason for denying customers this flexibility.

³⁰Panhandle Eastern Pipe Line Company, 74 FERC ¶ 61,109 at 61,401-6 (1996).

102. In its September 23, 2002 answer to various protests of its compliance filing, Columbia responds to NEG Shippers' request. Columbia states that NEG Shippers' argument is very misleading and would result in Columbia providing free transportation from its segmentation pool to third party interconnections. According to NEG Shippers, there is no operational reason to deny third-party access to the segmentation pool because the pool is a paper pool. However, Columbia asserts that NEG Shippers' argument incorrectly assumes that the segmentation pool exists at every interconnection point on Columbia's system with third parties when it clearly does not. Columbia states that while the segmentation pool is a virtual point, it does have a designated physical location (on the western portion of Columbia's system) to provide for an orderly allocation of services on Columbia's system. Columbia submits that it is a pool on Columbia's system -- not on all other third party's systems, and accessing the segmentation pool implicates transportation and allocation issues on Columbia.

103. Columbia states that NEG Shippers' argument ignores the fundamental reality regarding transportation of natural gas on Columbia's system: natural gas nominated for delivery into the segmentation pool or for delivery out of the segmentation pool must be nominated and then transported on the Columbia system under an existing transportation service agreement. Columbia states that if a shipper seeks to access the segmentation pool by nominating a delivery off of an interconnected third party pipeline into the segmentation pool and then nominating from the segmentation pool into an interconnected third party pipeline, gas will of necessity be introduced into Columbia's system and will be removed from Columbia's system. Columbia argues that there is no magical way for the gas to get from the receipt point into Columbia's system to the delivery point into the interconnected third party pipeline's system. Columbia states that, to the contrary, the gas must be moved on Columbia's system under an appropriate transportation service agreement.

104. In addition to the physical reality that gas must be transported on Columbia's system, Columbia states that it must also be recognized that Columbia has no ability to track gas movement on its system without utilizing the gas nomination and confirmation process. Columbia states that the nomination and confirmation process enables Columbia to physically track the gas that comes into its system and the gas that moves off of its system. Columbia submits that permitting a shipper to use a third party pipeline to put gas into or take gas out of Columbia's system without also nominating that gas for transportation on Columbia's system would totally eliminate Columbia's ability to monitor gas movement. Columbia states that this inability to monitor gas movement would prevent Columbia from tracking gas movement into and out of the segmentation pool by tracking shipper nominations on segmented transportation service agreements. Columbia states that this tracking ability is critical because it is the basis by which

Columbia will balance the segmentation pool at each nomination cycle and on a daily basis to ensure that the segmentation pool remains in balance, thereby preserving Columbia's ability to meet primary firm service obligations. Columbia concludes that if nominations into the segmentation pool do not match up in each nomination cycle and on a daily basis, Columbia's ability to meet existing firm service obligations could be seriously impaired.

Commission Ruling

105. The Commission finds that Columbia has adequately explained why third party transportation cannot be used to access the segmentation pool on Columbia's system. Accordingly, the NEG Shippers' request for rehearing is denied.³¹

The Commission orders:

- (A) As discussed in the body of this order, the requests for rehearing of the Commission's July 19, 2002 order are denied.
- (B) As discussed in the body of this order the requests for clarification are granted in part and denied in part.
- (C) The tariff sheets so designated in the Appendix are accepted to be effective September 1, 2003, subject to the conditions of this order.
- (D) Columbia is directed to file revised tariff sheets, within 15 days of this order, as discussed in the body of this order to comply with the Commission's directives.
- (E) The Commission approves Columbia proposed change to its implementation schedule.

By the Commission.

(S E A L)

Linda Mitry,
Acting Secretary.

³¹NEG Shippers made the same request concerning third party transportation in its comments to Columbia's compliance filing. That request is also denied for the same reasons given above.

APPENDIX

Columbia Gas Transmission Corporation
Tariff Sheets Conditionally Accepted Effective September 1, 2003

FERC Gas Tariff, Second Revised Volume No. 1

Fourth Revised Sheet No. 1	Second Revised Sheet No. 308
Ninth Revised Sheet No. 2	Fourth Revised Sheet No. 309
Sixth Revised Sheet No. 25A	Fifth Revised Sheet No. 310
Fourth Revised Sheet No. 29A	First Revised Sheet No. 311
Fourth Revised Sheet No. 108	Original Sheet No. 312
Second Revised Sheet No. 124	Original Sheet No. 313
Fifth Revised Sheet No. 147A	Original Sheet No. 314
Second Revised Sheet No. 170	Second Revised Sheet No. 322
Fifth Revised Sheet No. 171	Third Revised Sheet No. 350
Fourth Revised Sheet No. 185	Sixth Revised Sheet No. 351
Second Revised Sheet No. 196	Sixth Revised Sheet No. 352
Fifth Revised Sheet No. 197	Ninth Revised Sheet No. 353
Third Revised Sheet No. 208	Original Sheet No. 353A
Fourth Revised Sheet No. 217	Fifth Revised Sheet No. 355
First Revised Sheet No. 228	Third Revised Sheet No. 370
First Revised Sheet No. 229	Fourth Revised Sheet No. 371
First Revised Sheet No. 230	Second Revised Sheet No. 372
Original Sheet No. 241	Fourth Revised Sheet No. 373
Original Sheet No. 242	Third Revised Sheet No. 380
Original Sheet No. 243	Original Sheet No. 380A
Original Sheet No. 244	Second Revised Sheet No. 381
Original Sheet No. 245	Second Revised Sheet No. 382
Original Sheet No. 246	Fifth Revised Sheet No. 385
Fifth Revised Sheet No. 261	Original Sheet No. 385A
Fourth Revised Sheet No. 268	Third Revised Sheet No. 390
Sixth Revised Sheet No. 295	Third Revised Sheet No. 391
Fourth Revised Sheet No. 296	First Revised Sheet No. 392
First Revised Sheet No. 297B	Original Sheet No. 393
Third Revised Sheet No. 305	Ninth Revised Sheet No. 395
Third Revised Sheet No. 306	Second Revised Sheet No. 399
Third Revised Sheet No. 307	Third Revised Sheet No. 428
Third Revised Sheet No. 307A	Second Revised Sheet No. 435

Third Revised Sheet No. 436
Second Revised Sheet No. 463
Second Revised Sheet No. 485
Original Sheet No. 502B
Original Sheet No. 503A
First Revised Sheet No. 539
Original Sheet No. 541
Original Sheet No. 542
Original Sheet No. 543
Third Revised Sheet No. 551
Second Revised Sheet No. 553
First Revised Sheet No. 557
Second Revised Sheet No. 571
Sixth Revised Sheet No. 575
Sixth Revised Sheet No. 585
Fourth Revised Sheet No. 610
Second Revised Sheet No. 611
Second Revised Sheet No. 612