

111 FERC ¶61,501
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Pat Wood, III, Chairman;
Nora Mead Brownell, Joseph T. Kelliher,
and Suedeen G. Kelly.

Jurisdictional Public Utilities and Licensees Docket No. AI05-1-000
Natural Gas Companies
Oil Pipeline Companies

ORDER ON ACCOUNTING FOR PIPELINE ASSESSMENT COSTS

(Issued June 30, 2005)

I. Introduction

1. The Office of Pipeline Safety (OPS) of the U.S. Department of Transportation has developed regulations that require natural gas pipeline and hazardous liquid pipeline operators to develop, implement and follow an integrity management program for segments of pipeline in high consequence areas (IM Regulations).¹ On November 5, 2004, the Federal Energy Regulatory Commission (Commission) published a notice of a proposed accounting release, which would require that an entity recognize costs incurred in performing pipeline assessments that are part of a pipeline integrity management program as maintenance expense and would apply to all entities under the jurisdiction of the Commission.² This order expands on the accounting guidance in the proposed

¹ See 49 C.F.R. § 192 (2004), Pipeline Safety: Pipeline Integrity Management in High Consequence Areas (Gas Pipelines), Final Rule effective January 14, 2004; and 49 C.F.R. § 195 (2004), Pipeline Safety: Pipeline Integrity Management in High Consequence Areas (Hazardous Liquid Operators with 500 or more miles of Pipeline), Final Rule effective February 15, 2002. In general, “high consequence areas” are locations surrounding a pipeline where a leak or rupture could do the most harm to humans or the environment. See definition contained in 49 C.F.R. § 192.903 and 49 C.F.R. § 195.450 (2004).

² *Accounting for Pipeline Assessment Costs*, Notice of Proposed Accounting Release, Docket No. AI05-1-000 (Nov. 5, 2004), 69 Fed. Reg. 67,727 (Nov. 19, 2004), referred to herein as the November 5 notice. The proposed accounting release only provided accounting guidance on the costs of performing pipeline assessment techniques like smart pigging, hydrostatic testing, and direct assessment. It did not provide guidance on other actions to be taken as part of an integrity management program.

accounting release and addresses the proper accounting for costs that pipeline operators will incur in implementing all aspects of a pipeline integrity management program, not just pipeline assessment activities. This order concludes that certain costs incurred related to a pipeline integrity management program should be capitalized, while others should be expensed, as discussed below. This order benefits the public because it interprets the Commission's existing accounting rules and standardizes and properly classifies expenditures made by pipelines in connection with an integrity management program.

II. Background

A. Integrity Management Programs Required by the OPS

2. The IM Regulations require natural gas and hazardous liquid pipeline operators to assess, evaluate, repair and validate, through a comprehensive analysis, the integrity of pipeline segments that could affect high consequence areas in the event of a leak or failure. This process requires pipeline operators to incur costs to develop integrity management plans, prepare pipelines for inspection, conduct pipeline assessments, make subsequent repairs, and perform other ongoing activities of an integrity management program.

3. To develop an integrity management plan, pipeline operators must first identify pipeline segments that are located in high consequence areas and prepare a written plan for an initial assessment of the identified pipeline segments. Documents must also be prepared to detail the testing methods to be used, risk factors considered in selecting the appropriate testing method, and the schedule of testing and inspecting. In support of these activities, operators must integrate into a recordkeeping system all information relevant to the integrity management plans related to each high consequence area.

4. Next, pipeline operators must make necessary additions, modifications, and replacements to segments of pipeline that require inline inspection tools, like a smart pig, that are not currently designed for inline inspections. These activities may include, for example, installing pig launchers and receivers and replacing portions of pipe that cannot currently accommodate inline inspection tools.

5. Pipeline operators must then assess the identified pipeline segments to locate anomalies such as cracks, dents, and leaks using hydrostatic tests, smart pigs, or direct assessment activities. The IM Regulations require gas pipeline operators to complete an initial assessment of 50 percent of all pipe located in a high consequence area by

December 2007, complete the remaining 50 percent by December 2012, and conduct re-assessments every 7 to 10 years.³ Oil pipeline operators will be required to complete a baseline assessment of 50 percent of all pipe located in a high consequence area by February 2005, complete the remaining 50 percent by August 2009, and conduct re-assessments every 5 years.

6. Any major defect identified through pipeline assessments must be investigated and remedied within prescribed time limits. The required remedial action will depend upon the nature of the discovered defects. Accordingly, a pipeline may be required to incur minor repairs, like recoating, or a pipeline may need to replace large segments of pipe. Pipeline operators must also evaluate the need for additional preventative and mitigative measures to protect high consequence areas and enhance public safety. This evaluation may result in installing automatic shut-off valves or remote control valves and installing computerized monitoring and leak detection systems.

7. Pipeline operators will also be required to incur ongoing program costs to conduct training and drills, enhance damage prevention programs, and meet periodic reporting requirements to comply with the IM Regulations.

B. Proposed Accounting Release

8. The Commission issued the November 5 proposed accounting release to clarify the proper accounting for pipeline assessment activities in an integrity management program. The proposed accounting release noted that many jurisdictional entities have accounting policies that recognize pipeline assessment activities as a maintenance activity when performed specifically for the purpose of testing and reporting on the condition and integrity of existing pipe to prevent failure. The proposed accounting release also noted that other entities have accounting policies that recognize the same costs as capital expenditures. Accordingly, the Commission was concerned that the increase in pipeline assessment costs as a result of the new IM Regulations, coupled with the diverse accounting practices in the industry, could severely reduce the comparability of financial statements among jurisdictional entities and make review of existing rates more difficult.

9. The Commission proposed that pipeline assessment activities related to an integrity management program be accounted for as maintenance and charged to expense in the period incurred. The Commission allowed all interested parties an opportunity to comment on the proposed accounting for pipeline assessment cost.

³ The re-assessment intervals relate to pipelines operating at or above 50 percent of the specified minimum yield strength of the pipe.

C. Comments on the Proposed Accounting Release

10. The proposed accounting release was noticed on November 5, 2004, and comments were due as provided in the notice. The Commission received fourteen comments concerning various aspects of the proposed accounting release. The majority of commenters were supportive of the Commission's effort to provide guidance on the proper treatment of pipeline assessment costs.⁴ Two general areas of concern were raised: whether the costs of pipeline assessment activities should be expensed or capitalized, and the proposed effective date of any new accounting regulations.

1. Should the Costs of Pipeline Assessment Activities be Expensed or Capitalized?

11. Several commenters agreed that the costs of pipeline assessment activities performed as part of a pipeline integrity management program should be accounted for as maintenance expense. Other commenters argued that there are certain instances when capitalization of such costs is appropriate. Several commenters stated it was appropriate to capitalize the initial assessment costs of a new or a newly repaired pipeline being converted to a new service. One commenter thought that the costs of pipeline assessments performed as part of an integrity management program should be expensed except when the activity results in substantial amounts of pipeline being replaced or recoated. Commenters also stated that technologically advanced pipeline assessment costs should be capitalized if the assessment could detect original construction defects and the subsequent rehabilitation improves the pipeline beyond its original construction. Finally, several commenters stated that any assessment which leads to a capital expenditure should be capitalized.

12. Other commenters disagreed with the proposal to expense the costs of assessment activities in an integrity management program. These commenters generally viewed that all integrity management work, including assessments, consists of a series of activities that directly and immediately enhance pipeline facilities. As such, they argued that all pipeline assessment costs should be capitalized. The majority of these commenters

⁴ Comments were received from Association of Oil Pipelines, Interstate Natural Gas Association of America, Texas Pipeline Association, Kinder Morgan Interstate Pipelines, Williston Basin Interstate Pipeline Company, Embridge Energy Partners LP, El Paso Corp., NiSource Inc., Northern Natural Gas Company, Duke Energy Gas Transmission, Alliance Pipeline LP, Colonial Pipeline Company, Magellan Pipeline Company, LP, and Southern California Gas Company & San Diego Gas and Electric Company.

claimed that capitalizing pipeline assessment costs is consistent with generally accepted accounting principles (GAAP) under Emerging Issues Task Force Issue 90-8, Capitalization of Costs to Treat Environmental Contamination (EITF 90-8). The commenters explained that EITF 90-8 concludes that environmental contamination treatment costs should be charged to expense except when the costs extend the life, increase the capacity, or improve the safety or efficiency of property. These commenters stated that pipeline assessment activities are directly related to the subsequent repairs of a pipeline which will extend the life, increase the capacity, and improve the safety or efficiency of the pipeline.

13. These commenters stated that capitalizing pipeline assessment costs is consistent with GAAP because they claim an assessment has a lasting value that remains long after the integrity assessment has been completed. One commenter explained that under Financial Accounting Standards Board Concepts Statement No. 6, Elements of Financial Statements, assets are defined as probable future economic benefits obtained or controlled by a particular entity as a result of past transactions or events. The commenter also explained that expenses are outflows or “using up” of an asset from carrying on business activities. These commenters stated that pipeline assessments have the characteristics of an asset, rather than normal operating expenses that are of no particular value after the expenditure has been made. Commenters also explained that pipeline assessments create a quantifiable knowledge base on which safety remediation will be based which has value. Commenters claimed that pipeline integrity information is vital, and that not having this information would make them willing to pay less for a pipeline system. Commenters also argued that GAAP permits the size of an expenditure as a consideration for capitalization.⁵

14. These commenters also stated that Operating Expense Instructions No. 2 could not have been intended to include pipeline assessment costs. The commenters stated this Instruction was established long before the Pipeline Safety Improvement Act of 2002 and could not have envisioned the extent and magnitude of expenditures now to be required by the IM Regulations.

⁵ The commenters’ argument is based on the Commerce Clearing House *Accounting Research Manager*, Interpretations and Examples\08. Property, Plant, Equipment and Natural Resources, Measurement - Capitalization of Costs Incurred During Ownership (2005).

15. Several of these commenters cited past orders by the Chief Accountant which permitted the capitalization of pipeline assessment costs when it was a part of a major rehabilitation project. They assert that the pipeline integrity management program required by the IM Regulations represents a major rehabilitation project. Additionally, the commenters stated that the baseline assessments required by the IM Regulations are properly characterized as one-time events rather than ongoing inspections, tests, or maintenance and the costs meet the Chief Accountant's standards for capitalization.

2. Effective Date

16. The majority of commenters opposed the proposed effective date of January 1, 2005. Alternatively, most of the commenters suggested the Commission have a January 1, 2006 effective date. The commenters stated that more time is needed to develop controls and procedures to separately identify and properly account for components of projects. The commenters also stated that more time is needed to allow for more discussion and consideration of the complexities of all the issues and allow for petitions for rehearing.

17. The commenters noted that retroactive accounting treatment would have unfair rate consequences. Commenters also state that in determining whether retroactive application of a new rule is appropriate, a key consideration is whether retroactive application would produce substantial inequitable results, with particular reference to whether parties relied on the old standard. Additionally, commenters note that a prospective approach is consistent with the approach employed by other accounting standard bodies to ensure orderly dissemination of new information in the capital markets.

IV. Discussion

18. As a result of pipeline integrity management programs mandated by the IM Regulations, pipeline operators will incur costs to: (1) prepare a plan to implement the program; (2) identify high consequence areas; (3) develop and maintain a recordkeeping system to document program implementation and actions; (4) prepare affected pipeline segments for inspection; (5) inspect affected pipeline segments; and (6) develop and perform remediation actions to correct an identified condition which could threaten a pipeline's integrity.

19. The proposed accounting release addressed the proper accounting for only the assessment or inspection part of the integrity management program under the Uniform System of Accounts (USofA). However, based on the comments received in response to the proposed accounting release, it became apparent that there is different accounting

taking place regarding the costs related to the various other activities pipelines are performing to implement their integrity management programs. Consequently, the Commission will take this opportunity to provide specific guidance on how jurisdictional entities shall account for all activities related to developing and implementing an integrity management program.

20. Before addressing how entities must account for costs incurred as part of an integrity management program, we want to first address the claim raised by commenters that all costs related to integrity management programs should be capitalized because they extend the useful lives and improve the efficiency and safety of the pipeline assets. These commenters also contend that all costs should be capitalized since they in effect are part of a major rehabilitation effort, and the Commission has permitted similar costs that are part of a rehabilitation project to be capitalized in the past.

21. The Commission's accounting rules provide that costs incurred to inspect, test and report on the condition of plant to determine the need for repairs or replacements are to be charged to maintenance expense in the period the costs are incurred.⁶ The pipeline integrity management program as implemented by the IM Regulations incorporates a process for continual evaluation and assessment or inspection, along with remediation, so as to maintain the integrity of the pipeline. Its primary aim is not to increase the capacity or efficiency of the pipeline. Broadly speaking, pipeline assessment activities provide information about the condition of existing facilities to ensure that operation of the pipeline remains within established safety parameters. The act of inspecting or assessing a pipeline segment does not by itself increase the useful life of a pipeline asset or improve its efficiency.

22. Additionally, since the integrity management program provides for a process of continual evaluation and assessment it can not be considered analogous to those one-time major rehabilitation projects where we have allowed capitalization of assessment costs in the past. Accordingly, we clarify that entities may not capitalize all integrity management costs, but must either capitalize or expense those costs as discussed below.

⁶ See Operating Expense Instructions No. 2, Maintenance, Item 2 of 18 C.F.R. Parts 101 and 201 (2004) and Instructions for Operating Revenues and Operating Expenses 4-4, paragraph A of Part 352 (2004).

23. As to the treatment to be afforded specific categories of actions under the integrity management program requirements, we will first clarify how entities should account for: (1) the costs that pipeline operators incur to prepare a plan to implement the program; (2) the costs that pipeline operators incur to identify high consequence areas; and (3) the costs that pipeline operators incur to develop and maintain a recordkeeping system to document program implementation and actions.

24. Under the requirements of the USofA, costs incurred in preparing instructions for operations and maintenance activities are required to be expensed.⁷ Consequently, costs incurred in preparing a plan to implement an integrity management program should be charged to the appropriate operation and maintenance account in the period incurred. Costs incurred to identify high consequence areas must also be charged to maintenance expense as they are part of the process for determining what segments to inspect or test, which, as discussed above, is a maintenance activity.

25. With certain exceptions discussed below in footnote 8, the costs incurred to develop and maintain a recordkeeping system to document integrity management program implementation and actions must also be charged to the appropriate operation and maintenance expense account in the period incurred, since these costs relate to maintaining the integrity of the pipeline, a maintenance activity.⁸ Also, the incurrence of these costs does not provide any measurable benefits for future accounting periods and, as such, capitalization of these types of costs is improper.

⁷ See Operating Expense Instructions No. 1, Supervision and Engineering, Item 3 of 18 C.F.R. Parts 101 and 201 (2004) and Instructions for Operating Revenues and Operating Expenses 4-4, paragraph A of 18 C.F.R. Part 352 (2004).

⁸ Internal and external costs, if any, incurred to develop internal-use computer software during the application development stage should be capitalized. In addition, costs for upgrades and enhancements to existing internal-use software that result in additional functionality should be capitalized. See the American Institute of Certified Public Accountants' Statement of Position Number 98-1, Accounting for Costs of Computer Software Developed or Obtained for Internal Use.

26. Next, we clarify that pipeline additions or modifications undertaken to prepare for a pipeline assessment should be accounted for in accordance with applicable USofA requirements related to the addition and replacement of plant.⁹ For example, pig launchers or receivers installed or pipe modified to accommodate pigging can be capitalized if they are considered retirement units or result in a substantial addition.

27. Further, as noted above, the Commission's accounting rules provide that costs incurred to inspect, test and report on the condition of plant to determine the need for repairs or replacements are to be charged to maintenance expense. Accordingly, costs to inspect affected pipeline segments under an IM program must be charged to maintenance expense in the period the costs are incurred.

28. Finally, remedial and mitigation actions to correct an identified condition which could threaten a pipeline's integrity should also be accounted for in accordance with applicable USofA requirements related to the addition and replacement of plant.¹⁰ These actions may include replacing identified segments of pipe or installing automatic shut-off valves and computerized monitoring and leak detection systems. If an entity replaces a retirement unit as part of a remedial action, then those costs should be capitalized to the appropriate plant account. However, minor items of property replaced as part of a remedial action should be expensed to the appropriate maintenance account.

29. The PAR included an effective date of implementation of January 1, 2005. In order to allow companies sufficient time to develop controls and procedures to implement any necessary changes to their accounting and reporting systems, we will make this guidance effective January 1, 2006 and prospective in application. Amounts capitalized in periods prior to January 1, 2006 will be permitted to remain as recorded.

⁹ See Electric Plant Instruction No. 10, Additions and Retirements of Electric Plant, 18 C.F.R. Part 101 (2004); Gas Plant Instruction No. 10, Additions and Retirements of Gas Plant, 18 C.F.R. Part 201 (2004); and Carrier Property Instruction No. 3-6, Replacements, 18 C.F.R. Part 352 (2004).

¹⁰*Id.*

30. In reaching the foregoing accounting determinations the Commission is aware that implementing pipeline integrity management programs will involve significant costs. In the OPS' Final Regulatory Evaluation (FRE), it estimates that the total cost of complying with its IM Regulations over a twenty year period will be \$4,701.38 million.¹¹ Part of this cost is attributable to entities that are jurisdictional to the Commission such as interstate natural gas pipelines and part is attributable to non-jurisdictional entities such as local distribution companies. The Interstate Natural Gas Association of America estimates that 58 percent, or approximately \$2,730 million of the overall \$4,701.38 million cost of the rule, will be incurred by entities that are jurisdictional to the Commission.¹² The first year cost of complying with the IM Regulations for all entities is estimated to be \$793.77 million, of which \$262.12 million is estimated to be the cost of baseline testing. Since the integrity management programs are in their second year, these costs have already been incurred. For years two through seven, the total annual cost of complying with the IM Regulations by all entities is estimated to be \$309.78 million. In years eight through ten, the total annual cost of complying with the IM Regulations is estimated to be \$345.87 million. For years two through ten, the baseline testing component of this cost is \$262.12 million, or 79 percent of the overall cost for that period. Baseline testing includes both the estimated cost of testing the pipelines and the cost of required piping modifications to accommodate testing.¹³ Assuming the pipeline inspection costs incurred during years one through ten are approximately the same as those estimated to be incurred in years eleven through twenty, approximately \$208 million of the \$262.12 million annual figure for baseline testing will be capitalized as it will consist of costs such as the addition of pig launchers and receivers, and the replacement of portions of pipe to allow the use of inline testing techniques as discussed above. Thus, a significant portion of the cost of integrity management programs can be expected to be capitalized as a result of the guidance provided in this order.

¹¹ See Final Regulatory Evaluation, Pipeline Integrity Management in High Consequence Areas (Gas Transmission Pipelines), U.S. Department of Transportation, Research and Special Programs Administration, Docket RSPA-00-7666-356, at 42-58 and Exhibit 8. Exhibit 8 of the FRE is attached to this order.

¹² Interstate Natural Gas Association of America's comments, filed January 19, 2005, at 16.

¹³ See FRE at 52.

31. Pipeline operators have also implemented other integrity management programs in non-high consequence areas to prevent the negative social, economic, and legal impacts of a major pipeline incident. While our guidance here focuses on the accounting treatment of costs incurred in compliance with the Pipeline Safety Act and OPS implementing regulations, the same principles would apply for accounting for similar costs incurred in pipeline integrity programs that fall outside the Pipeline Safety Act and those specific OPS regulations.

The Commission orders:

(A) Pipelines shall account for expenditures in furtherance of pipeline integrity management systems in accordance with the requirements of this order.

(B) This order shall be effective for all IM expenditures incurred on or after January 1, 2006.

By the Commission. Commissioner Brownell dissenting in part with a separate statement attached.

(S E A L)

Magalie R. Salas,
Secretary.

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Accounting For Pipeline Assessment Costs

Docket No. AI05-1-000

(Issued June 30, 2005)

BROWNELL, Commissioner, dissent in part:

The Office of Pipeline Safety (OPS) issued regulations in December 2003 to establish new integrity management requirements (IM Regulations). OPS estimates the cost of compliance for both jurisdictional and non-jurisdictional pipelines to be \$4.7 billion over twenty years. Our Notice of Proposed Accounting Release (PAR) raised two issues: whether these costs should be expensed or capitalized, and the proposed effective date of any new regulations.

The order finds that the accounting guidance provided herein should be effective January 1, 2006 and amounts capitalized prior to January 1, 2006 will be permitted to remain as recorded. I agree. The order also finds that the costs incurred after January 1, 2006 should generally be expensed. The basis for this finding is the conclusion that the primary aim of the IM Regulations is not to increase the capacity or efficiency of the pipeline. As such, the order treats the costs of implementing the IM Regulations as ordinary maintenance costs which must be expensed pursuant to our accounting instructions. The order makes two notable exceptions. First, the order expressly directs that all internal and external costs computer enhancements should be capitalized.¹ Second, the order states that costs initially incurred to modify a pipeline to permit the use of in-line inspection tools will be capitalized.² Since the net effect of these findings is that most of the costs necessary to set up the new safety program are capitalized and the on-going costs incurred to maintain the program are expensed, I do not disagree with the outcome.

However, I do not view these costs solely as costs to perform routine or ordinary maintenance activities. OPS pointed out that Congress directed additional safety measures that would impose a change and require activities not previously performed.³ OPS determined that one benefit from the new safety program would be increased capacity (and efficiency) because pipelines may be allowed to operate at higher pressures. From a short term perspective, increases in operating pressures could make additional gas available in rapid order to alleviate an emergency, like that experienced in

¹ Order at fn 8.

² Order at paragraph 30.

³ OPS's Final Regulatory Evaluation at 2 and 8.

California in 2000. From a long term perspective, increases in pressures could obviate or delay the need for new pipelines.⁴ OPS also stated that one of the principle benefits of the IM Regulations is the reduction in the number of accidents that result in deaths, serious injury and property damage.⁵

Specifically, OPS identified 9 cost items that will be incurred to implement its IM Regulations. Based on OPS' explanations, those cost items fall into two categories: costs necessary to set up the new safety program and the costs of maintaining on-going compliance. Some examples are instructive. Data Integration involves first year costs to retrieve old data, prepare it for use in future integrity information, and to realign data management systems to facilitate integration. OPS characterizes retrieval of old data as a "one-time" cost for "set up".⁶ Subsequently, OPS estimates annual expenditures for years two through twenty. Integrity Plans involves first year costs to create the plans, which OPS again describes as a "one-time" cost and annual expenses for years 2 through 20 to "review the plans, makes changes as needed, and to prepare routine reports."⁷ OPS differentiates assessment activity as either Baseline Testing or Subsequent Testing. Baseline Testing involves setting up the new safety program and the initial inspections and evaluations, including all modifications to the pipeline infrastructure to permit the use of in-line inspection tools. The costs for Baseline Testing extend beyond the first year because the IM Regulations allow ten years to complete the initial assessment. Once the initial testing is completed on a segment of pipe, Subsequent Testing involves the on-going, periodic reassessments and reevaluations of those pipeline segments.⁸ The costs necessary to set up a new safety program are not the routine maintenance expenditures addressed by our accounting instructions.

⁴ Id. at 30.

⁵ Id. at 17.

⁶ Id. at 56 and 60 and Exhibit 8.

⁷ Id. at 40 and 60 and Exhibit 8.

⁸ Id. at 52 and 60 and Exhibit 8.

In sum, the IM Regulations encompass more than standard maintenance. The IM Regulations require both an initial rehabilitation of the pipeline infrastructure by setting up a new safety program and the subsequent on-going compliance with that new safety program. The new safety program will extend the life, increase the capacity and improve the safety of the pipeline infrastructure. Therefore, consistent with GAAP accounting and Commission precedent, I would permit pipelines to capitalize all first year costs and all Baseline Testing costs after the first year.⁹

For these reasons, I dissent in part with today's order.

Nora Mead Brownell
Commissioner

⁹ The order permits 79 percent of Baseline Testing costs after the first year to be capitalized on the assumption that those expenditures are pipeline modifications costs. See Order at paragraph 30.

EXHIBIT 8. THE ESTIMATED COST OF THE FINAL RULE
(Costs in millions of 2001 dollars)

Year	Segment ID	Integrity Plans	Valve Analysis	Annual Reports	Baseline Testing	Subsequent Testing	Data Integration	Prevention & Mitigation	Total
1	15.05	104.13	11.53	11.08	262.12	-	387.32	2.55	793.77
2	-	11.53	-	1.38	262.12	-	32.21	2.55	309.78
3	-	11.53	-	1.38	262.12	-	32.21	2.55	309.78
4	-	11.53	-	1.38	262.12	-	32.21	2.55	309.78
5	-	11.53	-	1.38	262.12	-	32.21	2.55	309.78
6	-	11.53	-	1.38	262.12	-	32.21	2.55	309.78
7	-	11.53	-	1.38	262.12	-	32.21	2.55	309.78
8	-	11.53	-	1.38	262.12	35.84	32.21	2.81	345.87
9	-	11.53	-	1.38	262.12	35.84	32.21	2.81	345.87
10	-	11.53	-	1.38	262.12	35.84	32.21	2.81	345.87
11	-	11.53	-	1.38	-	51.91	32.21	2.81	99.82
12	-	11.53	-	1.38	-	51.91	32.21	2.81	99.82
13	-	11.53	-	1.38	-	51.91	32.21	2.81	99.82
14	-	11.53	-	1.38	-	51.91	32.21	2.81	99.82
15	-	11.53	-	1.38	-	57.31	32.21	2.81	105.22
16	-	11.53	-	1.38	-	57.31	32.21	2.81	105.22
17	-	11.53	-	1.38	-	57.31	32.21	2.81	105.22
18	-	11.53	-	1.38	-	50.89	32.21	2.81	98.81
19	-	11.53	-	1.38	-	50.89	32.21	2.81	98.81
20	-	11.53	-	1.38	-	50.89	32.21	2.81	98.81
								20-yr Total	4,701.38