HayGroup®

Hay Group Inc
Suite 600
4301 North Fairfax Drive
Arlington VA 22203-1653
USA

tel +1.703.841.3100
fax +1.703.841.3113

www.haygroup.com

February 16, 2007

Mr. Chuck Bowman
State of West Virginia
Purchasing Division
2019 Washington Street, East
P.O. Box 50130
Charleston, WV 25305-0130

RE: REQUEST FOR PROPOSAL DEP13936

Dear Mr. Bowman:

The Hay Group is pleased to present our proposal to provide actuarial consulting services to the State of West Virginia's Department of Environmental Protection.

In the attached sealed package are one (1) original technical and one (1) original cost proposal.

If you should have any questions regarding the materials enclosed, please feel free to call me at (703) 841-3163 or Adam Reese at (703) 841-3119.

We look forward to working with you.

Sincerely,

Edwin C. Hustead
Senior Vice President

State of West Virginia

Cost Proposal For
Department of Environmental Protection
RFP Number DEP13936

Submitted by:
HayGroup
4301 N. Fairfax Drive, Suite 600
Arlington, VA 22203
(703) 841-3100
(703) 841-3108 (fax)

HayGroup

West Virginia Cost Proposal

We are pleased to present an all-inclusive fixed fee quote of $154,000. The following tables provide the requested breakdown of cost by task as well as distribution of work by staff. Due to the complex nature of the work, a large percentage of the work must be performed by fully qualified actuaries.

#DEP 13936 Cost Proposal Format/Bid Sheet

Name of Proposing Firm:
Hay Group, Inc.

Task	**Total Proposed Cost**
Entrance Conference (3.7.a)	$8,720
Actuarial Report (3.7.b 1-7)	$101,680
Physical and Electronic copies of work papers (3.7.c)	$4,360
Three (3) on-site consultations (3.7.d)	$26,160
Exit conference (3.7.e)	$8,720
Monthly status reports (3.7.f)	$4,360
Grand Total	$154,000

*Hourly Rates and Projected Work Distribution Among Assigned Staff

Assigned Staff	**Hourly Rate**	**Projected Distribution**
Partner		
Senior Actuary	$545	85%
Staff Actuary		
Actuary Assistant	$235	15%
Administrative Staff	$60	Less than 1%
Clerical Staff		
Total		100%

The hourly rates listed are considered firm for Fiscal Year 2007, and are for the purposes of submitting progress payment requests only. Ancillary expenses (travel, meals, lodging, etc.) are included in the Total Proposed Cost and proposed hourly rates.

State of West Virginia
Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

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ADDRESS CORRESPONDENCE TO ATTENTION OF:

CHUCK BOWMAN
304-558-2157

VENDOR:

*709033021 703 841 3166
HAY GROUP INC
4301 N FAIRFAX DRIVE SUITE 600

ARLINGTON VA 22203

SHIP TO:

ENVIRONMENTAL PROTECTION
DEPARTMENT OF
OFFICE OF ADMINISTRATION
601 57TH STREET SE
CHARLESTON, WV
25304 304-926-0499

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01/31/2007				

BID OPENING DATE: 02/21/2007 BID OPENING TIME 01:30PM

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0001	1	JB		946-12		

ACTUARIAL SERVICES

* REBID OF DEP13887, SOME MANDATORIES HAVE CHANGED. *
****
THE WEST VIRGINIA PURCHASING DIVISION, ON BEHALF OF THE AGENCY, THE WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION'S DIVISION OF LAND RESTORATION SPECIAL RECLAMATION FUND, IS SOLICITING BIDS FOR AN ACTUARIAL SERVICES CONTRACT PER THE FOLLOWING SPECIFICATIONS, SCOPE OF WORK, TERMS AND CONDITIONS AND THE LIST OF MANDATORY REQUIREMENTS AS ATTACHED.

THE CONTRACT WILL BE AWARDED TO THE RESPONSIBLE VENDOR WITH THE LOWEST PROPOSED TOTAL COST AS SUBMITTED ON TH ATTACHED BID PROPOSAL FORM.

IT IS PREFERED THAT THE MANDATORY REQUIRED SPECIFIED ITEMS BE NOTED WITH THE VENDOR'S BID PROPOSAL AT THE TIME OF BID SUBMISSION. HOWEVER; THE AGENCY RESERVES THE RIGHT TO REQUEST THE SUMBISSION OF THESE REQUIRE-MENTS OR ANY OTHER INFORMATION AT ANY TIME DURING THE BID EVALUATION PROCESS PRIOR TO MAKING A RECOMMENDATION TO AWARD TO THE PURCHASING DIVISION. FAILURE ON THE VENDOR'S PART TO COMPLY WITH SUCH A REQUEST FOR ADDI-TIONAL INFORMATION WITHIN THE TIME FRAME STATED IN SAID REQUEST, MAY RESULT IN THE DISQUALIFICATION OF VENDOR'S BID SUBMISSION AND RECOMMENDATION FOR AWARD.

EXHIBIT 3

LIFE OF CONTRACT: THIS CONTRACT BECOMES EFFECTIVE UPON AWARD AND EXTENDS FOR A PERIOD OF TWO (2)

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE	TELEPHONE	DATE

TITLE	FEIN	ADDRESS CHANGES TO BE NOTED ABOVE

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YEARS OR UNTIL SUCH "REASONABLE TIME" THEREAFTER AS IS NECESSARY TO OBTAIN A NEW CONTRACT OR RENEW THE ORIGINAL CONTRACT. THE "REASONABLE TIME" PERIOD SHALL NOT EXCEED TWELVE (12) MONTHS. DURING THIS "REASONABLE TIME" THE VENDOR MAY TERMINATE THIS CONTRACT FOR ANY REASON UPON GIVING THE DIRECTOR OF PURCHASING 90 DAYS WRITTEN NOTICE. NOTICE BY VENDOR OF INTENT TO TERMINATE WILL NOT RELIEVE VENDOR OF THE OBLIGATION TO CONTINUE TO PROVIDE SERVICES PURSUANT TO TERMS OF CONTRACT

UNLESS SPECIFIC PROVISIONS ARE STIPULATED ELSEWHERE IN THIS CONTRACT DOCUMENT, THE TERMS, CONDITIONS AND PRICING SET HEREIN ARE FIRM FOR THE LIFE OF THE CONTRACT.

RENEWAL: THIS CONTRACT MAY BE RENEWED UPON THE MUTUAL WRITTEN CONSENT OF THE SPENDING UNIT AND VENDOR, SUBMITTED TO THE DIRECTOR OF PURCHASING THIRTY (30) DAYS PRIOR TO THE EXPIRATION DATE. SUCH RENEWAL SHALL BE IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THE ORIGINAL CONTRACT AND SHALL BE LIMITED TO TWO (2) ONE (1) YEAR PERIODS.

CANCELLATION: THE DIRECTOR OF PURCHASING RESERVES THE RIGHT TO CANCEL THIS CONTRACT IMMEDIATELY UPON WRITTEN NOTICE TO THE VENDOR IF THE COMMODITIES AND/OR SERVICES SUPPLIED ARE OF AN INFERIOR QUALITY OR DO NOT CONFORM TO THE SPECIFICATIONS OF THE BID & CONTRACT HEREIN. SEE SPECIFICATIONS FOR ADDITIONAL CANCELLATION SCENARIOS.

BANKRUPTCY: IN THE EVENT THE VENDOR/CONTRACTOR FILES FOR BANKRUPTCY PROTECTION, THIS CONTRACT IS AUTOMATICALLY NULL AND VOID, AND IS TERMINATED WITHOUT FURTHER ORDER.

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

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THE TERMS AND CONDITIONS CONTAINED IN THIS CONTRACT SHALL SUPERSEDE ANY AND ALL SUBSEQUENT TERMS AND CONDITIONS WHICH MAY APPEAR ON ANY ATTACHED PRINTED DOCUMENTS SUCH AS PRICE LISTS, ORDER FORMS, SALES AGREEMENTS OR MAINTENANCE AGREEMENTS, INCLUDING ANY ELECTRONIC MEDIUM SUCH AS CD-ROM.

REV. 04/11/2001

VENDOR PREFERENCE CERTIFICATE

CERTIFICATION AND APPLICATION* IS HEREBY MADE FOR PREFERENCE IN ACCORDANCE WITH WEST VIRGINIA CODE, 5A-3-37 (DOES NOT APPLY TO CONSTRUCTION CONTRACTS).

A. APPLICATION IS MADE FOR 2.5% PREFERENCE FOR THE REASON CHECKED:

( ) BIDDER IS AN INDIVIDUAL RESIDENT VENDOR AND HAS RESIDED CONTINUOUSLY IN WEST VIRGINIA FOR FOUR (4) YEARS IMMEDIATELY PRECEDING THE DATE OF THIS CERTIFICATION; OR

( ) BIDDER IS A PARTNERSHIP, ASSOCIATION OR CORPORATION RESIDENT VENDOR AND HAS MAINTAINED ITS HEADQUARTERS OR PRINCIPAL PLACE OF BUSINESS CONTINUOUSLY IN WEST VIRGINIA FOR FOUR (4) YEARS IMMEDIATELY PRECEDING THE DATE OF THIS CERTIFICATION; OR 80% OF THE OWNERSHIP INTEREST OF BIDDER IS HELD BY ANOTHER INDIVIDUAL, PARTNERSHIP, ASSOCIATION OR CORPORATION RESIDENT VENDO WHO HAS MAINTAINED ITS HEADQUARTERS OR PRINCIPAL PLACE OF BUSINESS CONTINUOUSLY IN WEST VIRGINIA FOR FOUR (4) YEARS IMMEDIATELY PRECEDING THE DATE OF THIS CERTIFICATION; OR

( ) BIDDER IS A CORPORATION NONRESIDENT VENDOR

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

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WHICH HAS AN AFFILIATE OR SUBSIDIARY WHICH EMPLOYS A MINIMUM OF ONE HUNDRED STATE RESIDENTS AND WHICH HAS MAINTAINED ITS HEAQUARTERS OR PRINCIPAL PLACE OF BUSINESS WITHIN WEST VIRGINIA CONTINUOUSLY FOR THE FOUR (4) YEARS IMMEDIATELY PRECEDING THE DATE OF THIS CERTIFICATION.

B. APPLICATION IS MADE FOR 2.5% PREFERENCE FOR THE REASON CHECKED:

( ) BIDDER IS A RESIDENT VENDOR WHO CERTIFIES THAT, DURING THE LIFE OF THE CONTRACT, ON AVERAGE AT LEAST 75% OF THE EMPLOYEES WORKING ON THE PROJECT BEING BID ARE RESIDENTS OF WEST VIRGINIA WHO HAVE RESIDED IN THE STATE CONTINUOUSLY FOR THE TWO YEARS IMMEDIATELY PRECEDING SUBMISSION OF THIS BID;
OR
( ) BIDDER IS A NONRESIDENT VENDOR EMPLOYING A MINIMUM OF ONE HUNDRED STATE RESIDENTS OR IS A NONRESIDENT VENDOR WITH AN AFFILIATE OR SUBSIDIARY WHICH MAINTAINS ITS HEADQUARTERS OR PRINCIPAL PLACE OF BUSINESS WITHIN WEST VIRGINIA EMPLOYING A MINIMUM OF ONE HUNDRED STATE RESIDENTS WHO CERTIFIES THAT, DURING THE LIFE OF THE CONTRACT, ON AVERAGE AT LEAST 75% OF THE EMPLOYEES OR BIDDERS' AFFILIATE'S OR SUBSIDIARY'S EMPLOYEES ARE RESIDENTS OF WEST VIRGINIA WHO HAVE RESIDED IN THE STATE CONTINUOUSLY FOR THE TWO YEARS IMMEDIATELY PRECEDING SUBMISSION OF THIS BID.

BIDDER UNDERSTANDS IF THE SECRETARY OF TAX & REVENUE DETERMINES THAT A BIDDER RECEIVING PREFERENCE HAS FAILED TO CONTINUE TO MEET THE REQUIREMENTS FOR SUCH PREFERENCE, THE SECRETARY MAY ORDER THE DIRECTOR OF PURCHASING TO: (A) RESCIND THE CONTRACT OR PURCHASE ORDER ISSUED; OR (B) ASSESS A PENALTY AGAINST SUCH BIDDER IN AN AMOUNT NOT TO EXCEED 5% OF THE BID AMOUNT

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

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Department of Administration
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2019 Washington Street East
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ADDRESS CORRESPONDENCE TO ATTENTION OF:
CHUCK BOWMAN
304-558-2157

VENDOR:
*709033021 703 841 3166
HAY GROUP INC
4301 N FAIRFAX DRIVE SUITE 600
ARLINGTON VA 22203

SHIP TO:
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DEPARTMENT OF
OFFICE OF ADMINISTRATION
601 57TH STREET SE
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AND THAT SUCH PENALTY WILL BE PAID TO THE CONTRACTING AGENCY OR DEDUCTED FROM ANY UNPAID BALANCE ON THE CONTRACT OR PURCHASE ORDER.

BY SUBMISSION OF THIS CERTIFICATE, BIDDER AGREES TO DISCLOSE ANY REASONABLY REQUESTED INFORMATION TO THE PURCHASING DIVISION AND AUTHORIZES THE DEPARTMENT OF TAX AND REVENUE TO DISCLOSE TO THE DIRECTOR OF PURCHASING APPROPRIATE INFORMATION VERIFYING THAT BIDDER HAS PAID THE REQUIRED BUSINESS TAXES, PROVIDED THAT SUCH INFORMATION DOES NOT CONTAIN THE AMOUNTS OF TAXES PAID NOR ANY OTHER INFORMATION DEEMED BY THE TAX COMMISSIONER TO BE CONFIDENTIAL.

UNDER PENALTY OF LAW FOR FALSE SWEARING (WEST VIRGINIA CODE 61-5-3), BIDDER HEREBY CERTIFIES THAT THIS CERTIFICATE IS TRUE AND ACCURATE IN ALL RESPECTS; AND THAT IF A CONTRACT IS ISSUED TO BIDDER AND IF ANYTHING CONTAINED WITHIN THIS CERTIFICATE CHANGES DURING THE TERM OF THE CONTRACT, BIDDER WILL NOTIFY THE PURCHASING DIVISION IN WRITING IMMEDIATELY.

BIDDER: Hay Group, Inc.

DATE: February 16, 2007

SIGNED: Edwin C. Hustead

TITLE: Senior Vice President

* CHECK ANY COMBINATION OF PREFERENCE CONSIDERATION(S) IN EITHER "A" OR "B", OR BOTH "A" AND "B" WHICH YOU AR

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE	TELEPHONE	DATE

TITLE	FEIN	ADDRESS CHANGES TO BE NOTED ABOVE

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State of West Virginia
Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

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ADDRESS CORRESPONDENCE TO ATTENTION OF:
CHUCK BOWMAN
304-558-2157

VENDOR:
*709033021 703 841 3166
HAY GROUP INC
4301 N FAIRFAX DRIVE SUITE 600

ARLINGTON VA 22203

SHIP TO:
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DEPARTMENT OF
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601 57TH STREET SE
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ENTITLED TO RECEIVE. YOU MAY REQUEST UP TO THE MAXIMUM 5% PREFERENCE FOR BOTH "A" AND "B".
(REV. 12/00)

NOTICE

A SIGNED BID MUST BE SUBMITTED TO:

DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
BUILDING 15
2019 WASHINGTON STREET, EAST
CHARLESTON, WV 25305-0130

THE BID SHOULD CONTAIN THIS INFORMATION ON THE FACE OF THE ENVELOPE OR THE BID MAY NOT BE CONSIDERED:

SEALED BID

BUYER: CB-23

RFQ. NO.: DEP13936

BID OPENING DATE: 02/21/2007

BID OPENING TIME: 1:30 PM

PLEASE PROVIDE A FAX NUMBER IN CASE IT IS NECESSARY TO CONTACT YOU REGARDING YOUR BID:

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE	TELEPHONE	DATE

TITLE	FEIN	ADDRESS CHANGES TO BE NOTED ABOVE

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State of West Virginia
Department of Administration
Purchasing Division
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CONTACT PERSON (PLEASE PRINT CLEARLY):
Edwin C. Hustead, Sr. Vice President

****** THIS IS THE END OF RFQ DEP13936 ****** TOTAL:

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SIGNATURE	TELEPHONE	DATE
TITLE	FEIN	ADDRESS CHANGES TO BE NOTED ABOVE

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[redacted]

Technical Proposal For
Department of Environmental Protection

Buyer: CB-23
RFQ No.: DEP13936
Bid Opening Date: 2/21/2007
Bid Opening Time: 1:30 PM

Submitted by:
HayGroup
4301 N. Fairfax Drive, Suite 600
Arlington, VA 22203
(703) 841-3100
(703) 841-3108 (fax)

Edwin C. Hustead
Senior Vice President

2/16/07
Date

TABLE OF CONTENTS

Executive Summary

The Hay Group is pleased to respond to West Virginia's Department of Environmental Protection (DEP)'s request for proposal DEP13887 to provide actuarial consulting services.

The Hay Group (Hay) is an international consultancy with expertise in actuarial services as well as building effective organizations, management development, developing and implementing reward programs and conducting and evaluating surveys, with over 2,300 employees serving clients from 88 offices in 47 countries.

Hay proposes a team of consultants that collectively embodies all of the expertise essential to this engagement. The team has a proven track record of providing actuarial consulting services with respect to environmental liabilities. The key members of the team are experienced in the unique budget and time constraints facing governmental employers.

The principal in charge of governmental actuarial services is Edwin Hustead. Mr. Hustead is a vice-president of Hay Group and manages the Arlington office actuarial department, as well as overseeing all governmental actuarial services. Mr. Hustead is a is a Fellow of the Society of Actuaries (FSA), a Member of the American Academy of Actuaries (MAAA) and an Enrolled Actuary and will ensure that appropriate staff are assigned to the contract.

The project manager selected for this assignment is Adam Reese. Mr. Reese is a Fellow of the Society of Actuaries (FSA), a Fellow of the Institute of Actuaries (FIA), a Fellow of the Conference of Consulting Actuaries (FCA), a Member of the American Academy of Actuaries (MAAA) and an Enrolled Actuary.

To ensure the Department of Environmental Protection and the Special Reclamation Advisory Council receive the full breadth of expertise needed to successfully complete the tasks set out in the scope of work, Hay has partnered with Tiller Consulting Group Inc., given their substantial experience with environmental liabilities. Margaret Tiller Sherwood, President of Tiller Consulting Group, Inc., is a Fellow of the Casualty Actuarial Society (FCAS), an Associate of the Society of Actuaries (ASA), a Member of the American Academy of Actuaries (MAAA), and a Fellow of the Conference of Consulting Actuaries (FCA). In addition to her actuarial qualifications, she is a Chartered Property and Casualty Underwriter (CPCU) and holds an Insurance Institute of America diploma in risk management (ARM). Margaret has a Bachelor and a Master of Arts in Mathematics from Vanderbilt University and a Master of Science in Statistics from Stanford University. Margaret minored in chemistry and had enough hours to qualify for a minor in molecular biology while at Vanderbilt. She was awarded a California Heart Association Research Training Grant after her first year at Vanderbilt, which she used to work in the Biology Department of the University of California at Irvine (UCI) during the summer. Margaret returned the following summer to UCI to work for the Chair of the Biology Department on another research project.

Margaret worked extensively in the environmental risk area in partnership with her husband, an environmental engineer who passed away in 1997. Since that time she has worked on several projects that included incidental environmental risk exposures.

Mr. Reese and Ms. Sherwood have each been consulting for over 20 years and collectively have the experience to cover all of the actuarial practice areas included in the scope of work.

Mr. Reese and Ms. Sherwood prepared the prior actuarial report and therefore are already familiar with the requirements of the Special Reclamation Fund, the permitting process, and the needs of the Department of Environmental Protection with respect to the management of the Special Reclamation Fund. They have experience working to build an actuarial model that projects land reclamation and water treatment costs and can readily update and expand the functionality of the model to meet the requirements set out in the RFP.

The adequacy of the Special Reclamation Fund requires modeling both projected incomes and expenditures. The incomes include coal tax receipts, permit bond forfeitures, civil and other penalties, and investment income The expenditures include capital expenditures for both land and water reclamation work as well as on-going expenses for water treatment and administration expenses. Mr. Reese has extensive experience developing long-term financial models including static and dynamic evaluations accounting for variations in inflation, investment returns, and linkages to fund expenses. Ms. Sherwood has extensive rate-making and liability assessment experience in a broad range of casualty actuarial work areas. The combined team of Mr. Reese and Ms. Sherwood therefore provides the DEP with the expertise needed to prepare a model to forecast the Special Reclamation Fund for a minimum of 20 years, with the ability to identify the separate components of the fund liabilities (land costs including: surface mines, underground mines, tipples, preparation plants, and impoundments; and water costs).

They will be supported by Sanjit Puri and Amy Butler. Biographies of the team members are included in the appendix.

Statement of the Problem

The vast coal deposits in West Virginia have provided the State with the benefit of significant revenues and its residents with long-term employment. Improvements in mining operations have translated into increased productivity, and combined with the recent decline in demand for coal, West Virginia coal mines now employ fewer than 20,000 miners, about 20 percent of the total US mining workforce.

When a mine's coal deposits are exhausted and the mine is closed, the State's Department of Environmental Protection is entrusted with the responsibility of protecting the public health and ensuring the safety of these properties by land reclamation and treating the water.

To fund this reclamation work, the State enacted legislation that created the Special Reclamation Fund (SRF). The SRF receives income from bond forfeitures, civil penalties, and a special coal tax as recommended by the Special Reclamation Advisory Council and the Department of Environmental Protection management

The Department of Environmental Protection therefore seeks the services of an actuary to prepare a report on the Fund's fiscal soundness in accordance with West Virginia Code § 22-1-17. This is the third actuarial analysis of the SRF. The first actuarial analysis of the SRF was completed in 1993 and the second was performed by Hay Group in 2005.

Proposal Format

Section I of the proposal includes confirmation of our compliance with the mandatory contract requirements and describes the team members. Biographies of the team members are provided in Appendix A.

Section II sets out the technical proposal and includes our timetable to complete the assignment. Copies of sample actuarial valuation reports are provided in Appendix B.

Section III is our Cost Proposal. As required, the Cost Proposal is included under separate cover.

Section I - Mandatory Requirements

In this section we affirm that Hay Group and our subcontractor Tiller Consulting Group Inc. meet the mandatory requirements to be considered for the contract.

License Requirements

The actuarial report will be prepared and signed jointly by Adam Reese and Margaret Sherwood.

- Adam Reese is a Fellow of the Society of Actuaries, a Fellow of the Institute of Actuaries, a Fellow of the Conference of Consulting Actuaries, a Member of the American Academy of Actuaries, and an Enrolled Actuary.

- Margaret Sherwood is a Fellow of the Casualty Actuarial Society, an Associate of the Society of Actuaries, a Fellow of the Conference of Consulting Actuaries, a Member of the American Academy of Actuaries, and holds the CPCU and ARM designations. As indicated in her biography, Margaret has significant experience providing actuarial rate making for environmental liability clients.

Continuing Professional Education

Not only have Mr. Reese and Ms. Sherwood participated in and conducted continuing professional education sessions to satisfy more than the minimum requirements of the actuarial profession over the last two years, but they have each devoted substantial volunteer time to ensure that high quality continuing professional education is available to other actuaries.

In 2004, Ms. Sherwood served as President of the Conference of Consulting Actuaries, and Mr. Reese served as chair of the 2004 Annual Meeting Committee of the Conference of Consulting Actuaries. The Conference of Consulting Actuaries is the leading provider of continuing professional education for consulting actuaries. Ms. Sherwood recently completed her Board term, and Mr. Reese currently serves on the Board of the Conference of Consulting Actuaries. In addition, Mr. Reese serves on the Conference's Annual Meeting Committee, which develops the continuing education sessions for the Conference's annual meeting.

The following tables document the Continuing Professional Education sessions attended by Mr. Reese and Ms. Sherwood during 2005 and 2006.

Adam Reese		Conference of Consulting Actuaries	American Academy of Actuaries	Enrolled Actuary
Minimum required hours for CPE certification		**30 per year**	**12 per year**	**36 in 3 years**
Hay Group Benefits Practice In-house Training	Attendee	10.00	10.00	4.00
CCA 2006 Annual Meeting	Attendee	14.90	14.90	12.90
CCA 2006 Annual Meeting	Presenter	16.80	8.40	
Medicare Prescription Drug Seminar	Presenter	16.80	8.40	
2006		58.50	41.70	16.90
Hay Group Benefit Practice In-house Training	Presenter /Attendee	7.00	6.00	
Medicare Part D Audio Seminar	Presenter	10.80	5.40	
The Great GASB	Presenter	3.00	1.50	6.00
CCA 2005 Annual Meeting	Attendee	13.00	13.00	6.00
CCA 2005 Annual Meeting	Presenter	4.00	2.00	8.00
CCA 2005 Annual Meeting	Presenter	16.80	8.40	
2005		54.80	33.90	20.00

Margaret Tiller Sherwood		Conference of Consulting Actuaries	American Academy of Actuaries	Society of Chartered Property and Casualty Underwriters	Enterprise Risk Management
Minimum required hours for CPE certification		**30 per year**	**12 per year**	**60 in 2 years**	
CCA Small Firms Roundtable	Presenter	4.00	4.00	4.00	
Intern'l Congress of Actuaries Meeting (Paris)	Attendee	10.75	10.75	10.75	
Book for Contingencies Article	Author	4.00	4.00	4.00	
Missouri Self-Insurers Association Meetings	Attendee/Presenter	3.25	3.25	3.25	
Enterprise Risk Management Professional	Course 702	24.00	24.00	24.00	
St. Louis CPCU Chapter Meeting	Attendee	1.00	1.00	1.00	
CCA Annual Meeting	Attendee	11.00	11.00	11.00	
2006		58.00	58.00	58.00	
Association of Consulting Actuaries (Great Britain)	Attendee	7.75	7.75	7.75	
Enrolled Actuaries Meeting	Attendee/Presenter	4.00	4.00	4.00	
American Academy of Actuaries Meeting	Attendee	12.00	12.00	12.00	Completed five of the six required courses for the designation as an Enterprise Risk Management Professional. Attending sixth course in February-May 2007.
Society of Actuaries Meeting	Presenter	3.25	3.25	3.25	
Missouri Self-Insurers Association Meetings	Attendee	5.00	5.00	5.00	
TRIA Research		2.75	2.75	2.75	
Missouri WC Law Change Meeting	Attendee	2.00	2.00	2.00	
Casualty Loss Reserve Seminar	Attendee	4.00	4.00	4.00	
Enterprise Risk Management Professional	Course 701	38.75	38.75	38.75	
Casualty Actuarial Society Pass Mark Panel	Panelist	6.25	6.25	6.25	
CCA Annual Meeting	Attendee/Presenter	12.50	12.50	12.50	
Ass"n of Governmental Risk & Insurance Pools	Presenter	5.25	5.25	5.25	
Conner Ash In-House Continuing Education	Presenter	2.25	2.25	2.25	
2005		105.75	105.75	105.75	

No Conflict of Interest

We affirm that Hay Group does not have any conflict of interest with regard to any other work performed for the State of West Virginia.

External Quality Control Review Report

No external quality control review report is available as the actuarial profession does not require an external quality control review report. Hay Group has been the actuary for the Commonwealth of Pennsylvania for 80 years. From time to time the Commonwealth will retain the services of another actuarial firm to conduct an audit of the work performed and issue a report on their findings. In the latest such report on our work for the Commonwealth of Pennsylvania the actuarial firm did not have any material findings from their audit.

Liability Insurance

The Hay Group maintains a current and valid professional liability insurance policy.

No Debt Affidavit

A completed copy of the no debt affidavit is included in the appendix

Prohibition against Gratuities

We affirm that we have not paid nor would we pay any gratuities to solicit or secure this contract.

Certification Related to Lobbying

We affirm that no federal appropriated funds have been paid by Hay to any person for purposes of influencing an officer or employee of any Federal entity or a member of Congress in connection with the awarding of any Federal contract.

Indemnification

Hay agrees to indemnify, defend and hold harmless the State and the Fund,-their officers, and employees from and against; (1) Any claims or losses for services rendered by any subcontractor, person or firm performing or supplying services, materials or supplies in connection with the performance of the contract; (2) Any claims or losses resulting to any person or entity injured or damaged by Hay, its officers, employees, or subcontractors by the publication, translation, reproduction, delivery, performance, use or disposition of any data used under the contract in a manner not authorized by the contract, or by Federal or State statutes or regulations; (3) Any failure of Hay, its officers, employees or subcontractors to observe State and Federal laws, including but not limited to labor and wage laws.

Prior Actuarial Engagements

As stated above, Hay Group prepared the prior actuarial study for the Department of Environmental Protection. Apart from this engagement we affirm that Hay Group has not had any other prior actuarial engagements with the State of West Virginia within the last five years.

Client Base

We have more than 7,000 clients around the world. With 88 offices in 47 countries, we can partner with clients anywhere in the world.

Hay Group clients come from the private, public, and not-for-profit sectors, across every industry. Their diverse business challenges mean we help them recognize and face their unique issues, as well as their unique cultures.

Our public plan clients include:

- Commonwealth of Pennsylvania
- Port Authority of New York and New Jersey
- Metropolitan Washington Airports Authority
- City of Arlington, TX
- City of Baltimore, MD
- City of McAllen, TX
- City of Philadelphia, PA
- City of San Antonio, TX
- City of Sherman, TX
- Alameda County, CA
- Athens-Clarke County, GA
- Dauphin County, PA
- Delaware County, PA
- Lehigh County, PA
- Northampton County, PA
- Washington County, PA
- Warren County, NJ
- York County, PA

Section II - Technical Proposal

The services we will provide are set out below.

Entrance Conference

We will participate in an on-site entrance conference, meeting with and interviewing each Special Reclamation Advisory Council member. These interviews will enable us to learn the key concerns of each member and provide the framework for how we will structure the valuation report to meet their needs.

We will also interview DEP staff, review the findings in the February 2006 Study *(Assessment of Alternative Funding Mechanisms to Encourage Environmental Compliance and to Maintain Solvency of the Special Reclamation Fund)* and the updated April 2006 *Consensus Coal Production Forecast for West Virginia*.

We will also review the Department's database of reclamation expenses for forfeited permits and legacy projects. The requirements of the scope of work include developing separate liabilities for underground mine permits and surface mine permits. Reviewing the structure and content of the database will enable us to develop a data request that will meet the needs of the Special Reclamation Advisory Council members and minimize the level of effort needed to extract the data in a form that can be used for analysis and inclusion in the valuation process.

Environmental Liability Actuarial Valuation

The valuation report requires separate liability projections for costs associated with surface mines permits and underground mine permits. The prior valuation model prepared by Hay Group took account of the acreage of each permit, but did not stratify the costs for small acreage permits separately from large acreage permits. To provide the additional detail and breakout of costs for underground and surface mines, small acreage and large acreage permits, as well as permits for tipples, preparation plants and impoundments, we will prepare detailed data collection instructions for these components.

After analyzing the data, we will prepare a summary of the proposed valuation assumptions and report them to the DEP for review and confirmation. Our project outline includes a step for requesting additional data to clarify or expand on data findings from the initial analysis. This step may not be needed depending on the quality and robustness of the data collected.

Upon confirmation of the actuarial assumptions (i.e. parameters for the actuarial model), we will proceed with conducting the static valuation and preparation of the environmental liability actuarial valuation report.

The liabilities included in the report will show:

- Land reclamation costs for permits that have already been forfeited, including residual capital costs for site reclamation on sites where reclamation has already begun, as well as site reclamation on sites where reclamation has not yet begun
  - Land reclamation costs will be developed separately for surface mines and underground mines,
  - Land costs will also include separate projections of reclamation for tipples, preparation plants, and impoundments,

- Water capital costs for permits that have already been forfeited

- Ongoing water treatment costs for permits that have already been forfeited

- Expected land reclamation costs for permits expected to be forfeited from the total in-force permits as of the valuation date.
  - These costs will be developed separately for surface mines and underground mines, as well as separate costs for tipples, preparation plants, and impoundments.

- Expected water capital costs for permits expected to be forfeited from the total in-force permits as of the valuation date

- Expected on-going water treatment costs for permits expected to be forfeited from the total in-force permits as of the valuation date

Our primary data source for developing the assumptions will be the DEP database. Depending on the credibility of the data, we may seek other sources for developing the costs (including data from the United States Office of Surface Mines). Using these resources we will develop costs separately for:

- Land reclamation liabilities versus water liabilities

- Surface mines versus underground mines

- Small acreage permits versus large acreage permits (the definition of "small" and "large" to be confirmed during the entrance conference)

- Tipples, preparation plants, and impoundments, The assets included in the valuation will be current (invested) assets as well as a projection of expected income to the fund. The sources of income that will be projected and included in the actuarial valuation are:

- Income on the invested assets
- Coal tax revenues
- Receipts from bond forfeitures, civil penalties, and fines

The valuation report will project the annual cash income and outgo from the fund under current law and the associated fund balance at year end using the "best estimate" assumptions developed and communicated to the Department and the SRFAC. The projection will be for a minimum of 20 years. In the event the projected funds are exhausted within this 20 year projection, the report will show the fund balance at zero (i.e. the fund will not be projected to be in debt).

Dynamic Valuation of the Special Reclamation Fund

In addition to the "static" valuation best on best estimate assumptions, we will also prepare a "dynamic" valuation model for use by the Department. We will include an assessment of the key parameters affecting the financial solvency of the Fund and deterministic projections of the Fund for 20 years under a sufficient number of scenarios to demonstrate the range of results that can be expected.

The projections will show the key inputs to the model (Coal Tax receipts, Bond Forfeitures, Civil Penalties, and Investment Income) as well as the projected outputs from the model (Expenditures on Land Reclamation, Water Treatment, and Administrative Expenses).

We will document the dynamic model so that it can be delivered to the Department and used expertly by staff to measure the financial affect on the fund of various changes in reclamation costs, water treatment costs, ongoing water treatment costs, and revenues to the fund.

While the primary focus of the evaluation will be a 20-year projection of the Fund and its financial soundness over this period, using trend projections for both anticipated revenues and expenses after 20 years we will include an analysis of the ability to of the Fund to support liabilities beyond 20 years.

Project Plan and Timetable

Task	Responsibility	Proposed Timeline
1. Attend entrance conference	Hay & WVDEP	Early March
2. Write up meeting notes from entrance conference	Hay	Week following 1.
3. Review new studies	Hay	March
4. Develop and issue initial data requests	Hay	Late March
5. Issue Progress Report	Hay	April 1, 2007
6. Provide data to Hay	WVDEP	Two weeks after 4.
7. Review data received from WVDEP and research other data sources	Hay	April
8. Build static valuation model	Hay	April / May
9. Issue Progress Report	Hay	May 1, 2007
10. On-site meeting (a) Review parameters from data analysis (b) Discuss data issues (c) Attend Council meeting	Hay & WVDEP	May
11. *Issue supplemental data request. This step may not be needed, depending on the completeness of the initial data set*	Hay	Week following 10
12. Issue Progress Report	Hay	June 1, 2007
13. Review second data set, perform analysis. Develop updated set of recommended assumptions. This step may not be needed	Hay	June
14. Build dynamic valuation model	Hay	June
15. Write 1st draft of valuation report	Hay	June
16. Issue 1st draft of valuation report	Hay	June
17. Issue Progress Report	Hay	July 1, 2007
18. On-site meeting (a) Discuss draft valuation report (b) Demonstrate dynamic model (c) Attend Council meeting	Hay & WVDEP	July
19. Write up meeting notes from meeting	Hay	July
20. Revise analysis based on feedback from meeting	Hay	July
21. Issue Progress Report	Hay	August 1, 2007
22. Write 2nd draft of valuation report	Hay	August
23. Issue 2nd draft of valuation report	Hay	August

Task	Responsibility	Proposed Timeline
24. On-site meeting (a) Discuss draft valuation report (b) Attend Council meeting	Hay & WVDEP	August
25. Issue Progress Report	Hay	Sept. 1, 2007
26. Finalize valuation report	Hay	September
27. Issue final valuation report, deliver dynamic valuation model and documentation	Hay	No later than October 31, 2007
28. Attend exit conference	Hay & WVDEP	By September 15, 2007

All analyses will be made in accordance with the applicable actuarial standards of practice promulgated by the Actuarial Standards Board. The conclusions and recommendations will be presented in a written report with supporting documentation. The project plan includes adequate time for issuance of a supplemental data request, analysis of the data, and incorporating the revised data in the valuation model and valuation report.

Section III – Cost Proposal

The Cost Proposal is included under separate cover.

APPENDIX B - COPIES OF ACTUARIAL REPORTS

We enclose copies of three actuarial reports.

1. Actuarial Evaluation of General Liability Risk Retention Program as of June 30, 2005 for South Dakota Public Entity Pool for Liability

2. West Virginia Department Of Environmental Protection 2005 Actuarial Valuation of the Special Reclamation Fund

3. Commonwealth of Pennsylvania Actuarial Valuation of the Post-Retirement Medical Plan

For both West Virginia and Pennsylvania, in addition to the valuation report, we also developed an actuarial model that was delivered to the client for use in evaluating program management options and scenario testing the impact of certain valuation parameters

South Dakota Public Entity Pool for Liability

JUNE 30, 2005
ACTUARIAL EVALUATION OF
<u>GENERAL LIABILITY RISK RETENTION PROGRAM</u>

March 31, 2006

TILLER CONSULTING GROUP, INC.

Actuaries • Environmental Risk Consultants

TILLER CONSULTING GROUP, INC.

10401 Litzsinger Road • St Louis, Missouri 63131-3500
(314) 567-7480 • FAX (314) 567-4199

March 31, 2006

South Dakota Public Entity Pool for Liability
1429 East Sioux
Pierre, South Dakota 57501

Attention: Mr. Dennis Rounds
Executive Director

JUNE 30, 2005
ACTUARIAL EVALUATION OF
GENERAL LIABILITY RISK RETENTION PROGRAM

This report details the results of our study of the South Dakota Public Entity Pool for Liability's general liability experience since it began its general liability risk retention program on July 1, 1988. Work on this project was performed by Margaret Tiller Sherwood, FCAS, ASA, MAAA, FCA, CPCU, ARM.

Chapter I of this report summarizes our work. Particular attention should be paid to the section on limitations and reliances. Chapter II provides a detailed description of the actuarial analysis to estimate PEPL's loss and allocated loss adjustment expense liabilities at June 30, 2005 and June 30, 2006 and expected losses and allocated loss adjustment expenses for accident years July 1, 2005-06 and July 1, 2006-07. Chapter III contains a detailed discussion of the actuarial analysis to estimate PEPL's claim administration liability at June 30, 2005 and June 30, 2006. A comparison of the current and prior reports' projected ultimate losses and allocated loss adjustment expenses is shown in Chapter IV. Claim data and patterns are contained in Appendix A. The risk margin is detailed in Appendix B. The contribution split between general and automobile liability is detailed in Appendix C. The exhibits and appendices should be considered integral parts of this report.

We appreciate the opportunity to conduct this study for the South Dakota Public Entity Pool for Liability. We will be happy to answer any questions concerning our work.

TILLER CONSULTING GROUP, INC.

By *Margaret T. Sherwood*
Margaret Tiller Sherwood, FCAS, ASA, MAAA, FCA, CPCU, ARM
President

CONTENTS

EXHIBITS

I. SUMMARY

The general liability portion of PEPL began on that date.

A. BACKGROUND AND SCOPE

The South Dakota Public Entity Pool for Liability (PEPL) began on 7/1/88. The only coverage provided by PEPL since that date has been for the employees of the State of South Dakota (the State). PEPL is, for risk financing purposes, essentially equivalent to a risk retention program for the State's general liability, automobile liability, and medical malpractice exposures. This year, the State requested that we prepare separate reports for general and automobile liability in response to a request from the Federal government that the entire PEPL fund be split between those two exposures.

PEPL has had a small number medical malpractice claims reported to date. The reported losses and ALAE for these claims are relatively small They are included in the general liability data and estimates.

There have been seven major coverage changes:

1. coverage for student drivers became excess of the minimum required by the State's financial responsibility law beginning 7/1/91 (prior to that date, PEPL's coverage was primary);

2. the School of Medicine's new Physical and Occupation Therapy programs are covered beginning 7/1/92;

3. natural gas pipeline inspections previously performed by the Federal government are covered effective 7/1/94 when the State took over this function;

4. PEPL began covering pain and suffering for all open and unreported claims and new claims for ministerial, but not discretionary, acts effective 7/1/95, slightly retroactive from 8/16/95, the date the State Supreme Court ruled that the State did not have sovereign immunity for ministerial acts;

5. intentional acts are excluded beginning 5/7/96;

6. medical care for prison inmates is included beginning 5/1/01 and is excluded from the excess insurance coverage, so that PEPL retains the entire risk up to its own limits; and

7. liability arising from the construction of residential and other structures under the Governor's House and Daycare Building Project at Mike Durfee State Prison was added 7/1/01.

In response to the 8/16/95 Supreme Court ruling, PEPL made several changes:

- changed its defined limit from $1,000,000 to $500,000 per occurrence for occurrences for accident period 9/21/95-6/30/98 and returned it to $1,000,000 effective 7/1/98;

- purchased excess insurance starting 9/21/95 (retentions are discussed in Section A of Chapter II); and

- purchased a finite risk contract from $25,000 to $100,000 of loss, with the ALAE split pro-rata to the loss, for accident period 9/21/95-6/30/98.

The finite risk contract was canceled and the premium returned after the accident period as no coverage had been used.

On 11/16/95, the State Supreme Court ruled that the 180 day notice requirement had been met if the claim administrator's form was sent to the claim administrator or to the State Risk Management Department. PEPL had been relying on Section 3-21, which stated that notice of intent to sue the State had to go to the Attorney General and Commissioner of Administration.

The South Dakota Supreme Court ruling, Hancock v. Western South Dakota Juvenile Services Center should help PEPL's use of immunity statutes to obtain defense summary judgments. We have not reflected this change in our analysis, other than as it is reflected in the data.

PEPL asked Tiller Consulting Group, Inc. to perform the following tasks:

- estimate loss and ALAE and claim administration liabilities at 6/30/05 and 6/30/06, including a risk margin and discounted for anticipated investment income;

- estimate expected retained losses and ALAE for accident years 7/1/05-06 and 7/1/06-07, including a risk margin and discounted for anticipated investment income;

- discuss the contribution for fiscal year 7/1/05-06; and

- recommend a minimum contribution for fiscal year 7/1/06-07.

This study updates prior work by Tiller Consulting Group, Inc. The immediately prior report is our November 13, 2004 "June 30, 2004 Actuarial Evaluation of Liability Risk Retention Program" report for PEPL.

Actuarial terminology used in this report is defined in the glossary at the end of the report. The term "losses" in this report refers only to losses, unless otherwise noted. The term "allocated loss adjustment expenses" (ALAE) refers to attorneys' fees, medical testimony costs, etc. associated with settling individual claims. The term "unallocated loss adjustment expenses" (ULAE) in this report refers to the overall cost of claim handling not attributed to individual claims. There costs are sometimes referred to as claim administration costs.

The term "claims" in this report refers to occurrences, unless otherwise noted The term "claims with loss or ALAE" refers to claims with loss and/or ALAE.

The term "retained" refers to the $0-100,000 layer of losses for accident period 9/21/95-6/30/01 and to the $0-$250,000 layer of losses for accident period 7/1/01-07, 10% of the losses between $250,000 and $1,000,000 per occurrence for accident year 7/1/03-04, and 25% of the losses between $250,000 and $1,000,000 per occurrence for accident period 7/1/04-07 and the PEPL's pro-rata portion of ALAE in those layers through 6/30/04. PEPL retains all ALAE for accident period 7/1/04-07.

B. DISTRIBUTION AND USE

This report has been prepared solely for PEPL to use in evaluating its general liability loss, ALAE, and ULAE liabilities and contributions as detailed above. These estimates may be used in PEPL's 6/30/05 and 6/30/06 financial statements and for budgeting for the 7/1/05-06 and 7/1/06-07 fiscal years.

We understand that PEPL may give a copy of this report to Advanced Risk Management Techniques, Inc. (its risk management consultant), its outside auditor, any excess insurer interested in providing coverage for PEPL, and the State. Other distribution or use of this report or the estimates presented in it requires our prior, written permission. This report may be reproduced only in its entirety.

C. LIMITATIONS AND RELIANCES

We relied, without verification or audit, on claim, exposure and other data supplied by PEPL. Partial claim data are shown in Appendix A. We reviewed these data for overall reasonableness, but did not audit or verify any of them as a part of this study. We found some minor problems with the data supplied that are discussed in detail in Chapter II.

The ultimate losses and ALAE estimated in this report are expected values and do not reflect differences from the actual ultimate losses and ALAE which could result from, for example, the following:

- inaccurate data,
- unanticipated changes in the payment and reporting patterns,
- unanticipated changes in the legal environment,

- unanticipated changes in the economic environment, and

- the statistical fluctuation in losses and ALAE around the expected value when all other factors remain constant

We estimated the statistical fluctuation by the inclusion of a risk margin (see Appendix B for details). The actual experience could be worse than our estimates including the risk margin.

We discounted the loss and ALAE liabilities and risk margin at 6/30/05 and 6/30/06 and the expected retained losses and ALAE and risk margin for accident years 7/1/05-06 and 7/1/06-07 assuming that interest is earned at an annual rate of 5.0%, at PEPL's request. This is the same as the 5.0% used in our immediately prior report. We understand PEPL earns investment income at a higher annual rate than 5.0% over the length of the time it takes to pay claims for an accident year.

We did not reflect the effect of the 2% judgment limit.

We assumed that the coverage provided by PEPL will remain the same through 6/30/07 as it was at 7/1/05 (detailed in Section A of Chapter II). We assumed that PEPL covers losses and ALAE and related expenses normally covered by general liability, automobile liability, and medical malpractice insurance. This means, for example, that such losses as pollution and inverse condemnation will not be covered by PEPL.

The take-over of natural gas pipeline inspections previously performed by the Federal government contains the potential exposure to a large loss. The State should consider transferring this exposure back to the Federal government because of the large potential claims that could arise from it. The State had no claims from this exposure reported at 6/30/05. We did not specifically increase our loss and ALAE estimates for this exposure. The State should consider increasing its risk margin to reflect the added variability of having this exposure.

We assumed that PEPL's per occurrence defined limit applies to both losses and ALAE based on information supplied by PEPL. We assumed that PEPL will keep the same per occurrence defined limit for accident years 7/1/05-06 and 7/1/06-07 that it had at 7/1/05 (i.e., $1,000,000). We assumed that there have been and will be through 6/30/07 no claims incurred in excess of PEPL's defined limit.

We assumed that PEPL will purchase excess insurance through 6/30/07 above $250,000 of loss per occurrence, with a 75% quota share, as it did at 7/1/05. We assumed that for the excess insurance above the $100,000 and $250,000 per occurrence limits, the ALAE are split pro-rata to the losses through 6/30/05. We assumed PEPL retains all ALAE for accident period 7/1/04-07. We assumed that all PEPL's excess insurers are solvent.

In addition to the loss and ALAE liabilities and expected losses and ALAE estimated in our report, PEPL should budget for claim administration costs, excess insurance premiums, and other non-loss expenses charged to PEPL. Estimates of these costs are contained in our discussion of the fiscal year 7/1/05-06 contribution and recommended minimum contribution for fiscal year 7/1/06-07.

We assumed that there has been and will continue to be a positive relationship between the activities out of which general liability claims arise (exposure) and personal services expenditures.

Our analysis assumes that past experience, with adjustments for the changes beginning 7/1/95, is indicative of future experience both in terms of the development of prior years' losses and ALAE and the 7/1/05-06 and 7/1/06-07 accident years. Throughout our analysis we assumed that the claims have been and will continue to be handled in a professional manner.

We did not include all supporting analyses in this report. This report contains complete documentation for those analyses we consider "best." We will be happy to provide information on the additional analyses upon request.

Additional assumptions are contained in the text, notes to the exhibits, and appendices. The exhibits and appendices attached in support of our conclusions should be considered integral parts of this report.

D. CONCLUSIONS

Exhibit I-1 summarizes our results. Our estimates are shown undiscounted with no risk margin, discounted with no risk margin, and discounted with a risk margin.

The loss and ALAE liability estimates at 6/30/05 and 6/30/06 before the inclusion of a risk margin and consideration of anticipated investment income include outstanding losses and ALAE (case reserves) at those dates, case reserve development for claims reported at those dates, and losses and ALAE associated with claims that have been incurred but are unreported at those dates. The last two items are combined and shown as expected unreported losses and ALAE in the supporting exhibits.

We did not discount or include a risk margin for the claim administration liabilities because they are so small in relation to the loss and ALAE liabilities.

Exhibit I-2 shows the indicated surplus at 6/30/06 and the suggested minimum surplus excluding the risk margin for the general liability portion of this program. The indicated surplus at 6/30/05 is $3,752,920. We did not split the surplus between general and automobile liability in our prior report, so we can not compare the current and prior estimates. The indicated surplus at 6/30/06 is $3,564,634. This is slightly higher than the suggested minimum surplus of $3,400,000.

In Exhibit I-2 we showed the expected claim administration liability at 6/30/05 and 6/30/06 to be $0, as per PEPL's request, to match its financial statements. This is a change from the prior report and appears to be contrary to Governmental Accounting Standards Board (GASB) Statement 10. The amount is very small in relation to the total liability, so this is not a material deviation from that standard.

The recommended minimum contribution for fiscal year 7/1/06-07 of $2,873,366 is shown in Exhibit I-3. It is the sum of the expected retained losses and ALAE undiscounted with no risk margin, the expected excess insurance premium, and the expected administrative expenses for that year, reduced by the $164,634 amount expected to be in excess of the minimum recommended surplus at 6/30/06. This is a 6.3% increase from the contribution for fiscal year 7/1/05-06. The 7/1/06-07 contribution reflects exposure changes, normal economic and social inflation, and the assumption that some of the better than expected experience for accident year 7/1/04-05 will continue.

The expected excess insurance premium for accident year 7/1/06-07 is based on what we are seeing in the industry but is not a guarantee of what PEPL will actually be quoted.

Based on the historical information for PEPL, the excess insurance and administration expenses for fiscal years 7/1/05-06 and 7/1/06-07 are split 80.0% general liability and 20.0% automobile liability. This is a change from the 70.0% general liability and 30.0% automobile liability split used for the total contributions in the prior report. These splits are used in Exhibits I-2 and I-3. The supporting detail is in Appendix C

In Exhibits I-2 and I-3 we showed the expected loss and ALAE liabilities at 6/30/05 and 6/30/06 and the expected retained losses and ALAE for accident years 7/1/05-06 and 7/1/06-07 to be undiscounted with no risk margin, as per PEPL's request, to match its financial statements and budgeting process. This is a change from the prior report, in which we used the loss and ALAE liabilities discounted with a risk margin, as per PEPL's prior request.

The risk margins in this report reflect one of three types of risk that could impact the financial status of PEPL. The three types of risk that can cause costs to be other than expected are as follows:

> <u>Process Risk</u> - Process risk is the year-to-year random fluctuations of actual losses and ALAE around expected losses and ALAE. The size of these fluctuations is related to the size of the exposure base: the smaller the exposure base, the larger the fluctuation is likely to be as a percentage of expected ultimate losses and ALAE.
>
> <u>Parameter Risk</u> - The method and data used to determine expected unpaid losses and ALAE, even after adjustment for any anticipated changes, may prove to be poor indicators of actual future experience. Parameter risk is the risk that, while the model may be correct, the parameters may be incorrect due to unanticipated changes in such items as the social and legal environments, the nature of underlying hazards, and the timing of claim reporting.

Specification Risk - There also is a possibility that the model may not be correct. This is called specification risk. A model may be incorrect due to some of the same reasons that affect the model parameters such as unanticipated changes in such items as the social and legal environments, the nature of underlying hazards, and the timing of claim reporting.

We think that a risk retention program such as PEPL's, of any size, should earmark funds to account for these risks We call these funds a risk margin.

The risk margin that we included estimates the impact of the process risk and is based on a 90% confidence level. This means that in 90 out of 100 identical situations, the actual values will be less than the estimates plus the risk margin.

The risk margin percentage in the current report is 24%. This compares to the 16% for general liability in our November 13, 2004 report. The increase in the general liability percentage results estimating separate risk margins for general and automobile liability instead of a combined risk margin.

PEPL could reasonably decide to increase the risk margins in this report to include an estimate of the parameter and specification risks, particularly with the addition of the natural gas pipeline inspection exposure and the many recent changes. It is very difficult to estimate these risks. Consequently, we think PEPL should maintain a $3,400,000 minimum surplus excluding the process risk margin to reflect the parameter and specification risks of the general liability portion of its program.

We worked closely with the State of South Dakota's Finance Department for this report so that our exhibits reflect the fund balance and non-loss liability numbers and methods it uses to prepare PEPL's financial statement and budgets.

There are some differences between the paid losses and ALAE on PEPL's Financial Report and those on the claim reports These are due to payment timing: payments are recorded on the claim reports before the checks are cut. Because we used the 6/30/05 claim report for estimating unpaid losses and ALAE at 6/30/05 and the Financial Report uses information from checks cut, our estimate of the indicated surplus at 6/30/05 and 6/30/06 will be slightly different from what it would be based on PEPL's Financial Report. We did not make this adjustment because this difference has historically been small.

Our analysis of PEPL's claim administration liability at 6/30/05 and 6/30/06 reflected in Exhibit I-1 assumes that deposits made to GAB Business Services, Inc. and Claims Associates Inc. through these dates are the amounts needed to cover all claims incurred through these dates that will be handled on a per claim basis. To the extent that this is not true, PEPL may have an additional asset or liability depending on whether the deposits are greater or less than, respectively, the expected cost of the claims handled on a per claim basis.

Our analysis of PEPL's liabilities at 6/30/06 reflected in Exhibit I-2 assumes that reinsurance recoveries for loss and ALAE payments during fiscal year 7/1/06-07 are essentially instantaneous with payments on which recoveries are due. To the extent that this is not true, PEPL may have an additional asset to reflect reinsurance recoverable, which could change the indicated surplus at 6/30/06.

A comparison of the projected ultimate losses and ALAE, both unlimited and retained, the current and prior reports is shown and discussed in detail in Chapter IV. The changes are within the variation we expect with an additional year of data, the changes in exposure, and the change in per occurrence retention.

For the prior report, we removed all the non-PEPL costs that have been paid out of the PEPL fund from the historical information. We understand that the State has reimbursed PEPL for those costs and will be paying them from another source in the future.

PEPL may undergo changes in experience, exposure, retention, and law that could affect its general liability risk retention program. To be aware of the existence and effect of these changes, we recommend that an actuarial study such as this one be performed annually.

Exhibit I-1

South Dakota Public Entity Pool for Liability

General Liability

Summary

1. Expected Loss and ALAE Liability at 6/30/05	
a. Undiscounted with No Risk Margin	4,090,000
b. Discounted with No Risk Margin	3,570,000
c. Discounted With Risk Margin	4,430,000
2. Expected ULAE Liability at 6/30/05	56,000
3. Expected Loss and ALAE Liability at 6/30/06	
a. Undiscounted with No Risk Margin	4,840,000
b. Discounted with No Risk Margin	4,240,000
c. Discounted With Risk Margin	5,250,000
4. Expected ULAE Liability at 6/30/06	57,000
5. Expected Retained Losses 7/1/05-06	
a. Undiscounted with No Risk Margin	1,890,000
b. Discounted with No Risk Margin	1,570,000
c. Discounted With Risk Margin	1,950,000
6. Expected Retained Losses 7/1/06-07	
a Undiscounted with No Risk Margin	1,930,000
b. Discounted with No Risk Margin	1,610,000
c. Discounted With Risk Margin	1,990,000

Notes: (1), (3), (5), and (6) estimates are from Exhibits II-1 and II-2.

(2) and (4) estimates are from Exhibit III-1.

Exhibit I-2

South Dakota Public Entity Pool for Liability

General Liability

Indicated Surplus at 6/30/06 and
Suggested Minimum Surplus Excluding Risk Margin

1. Actual Fund Balance for Risk Margin at 6/30/05	7,916,888
2. Expected Liabilities at 6/30/05	
a. Undiscounted Loss Liability With No Risk Margin ((1a) of Exhibit I-1)	4,091,511
b. Claim Administration Liability - PEPL USES $0 ((2) of Exhibit I-1)	0
c. Other Liabilities	72,457
d. Total	4,163,968
3. Indicated Surplus at 6/30/05 ((1) - (2d))	3,752,920
4. Contribution for 7/1/05-06	2,702,124
5. Expected Interest Earned 7/1/05-06	200,000
6. Expected Administrative Expenses Paid 7/1/05-06	560,080
7. Excess Insurance Premium 7/1/05-06	640,000
8. Expected Retained Losses and ALAE Paid 7/1/05-06	1,140,259
9. Expected Fund Balance at 6/30/06 ((1) + (4) + (5) - (6) - (7) - (8))	8,478,673
10. Expected Liabilities at 6/30/06	
a. Undiscounted Loss Liability With No Risk Margin ((3a) Total of Exhibit I-1)	4,839,039
b. Claim Administration Liability - PEPL USES $0 ((4) Total of Exhibit I-1)	0
c. Other Liabilities	75,000
d. Total	4,914,039
11. Indicated Surplus at 6/30/06 ((9) - (10d))	3,564,634
12. Suggested Minimum Surplus	3,400,000

Notes: (1), (2c), (4), (5), and (10c) are from PEPL

(6) and (7) are 80% of the total based on Exhibit C-1. Total is from PEPL.

Exhibit I-3

South Dakota Public Entity Pool for Liability

General Liability

Recommended Contribution for 7/1/06-07

1. Expected Retained Losses and ALAE Undiscounted With No Risk Margin ((6a) of Exhibit I-1)	1,930,000
2. Expected Excess Insurance Premium	720,000
3. Expected Administrative Expenses	588,000
4. Expected Cost for Accident Year ((1) + (2) + (3))	3,238,000
5 Expected Investment Income	200,000
6. Contribution to Surplus (((12) of Exhibit I-2) - ((11) of Exhibit I-2))	(164,634)
7. Recommended Minimum Contribution for 7/1/06-07 ((4) - (5) + (6))	2,873,366

Note: (2) and (3) are 80% of the total based on Exhibit C-1. Total is from PEPL.

(5) is from PEPL.

II. ANALYSIS

A. LIMITS AND RETENTIONS

From its inception through 6/30/95, PEPL had a defined limit of $1,000,000 per occurrence. From 9/21/95 to 6/30/98, PEPL's defined limited was $500,000 per occurrence. Beginning 7/1/98, PEPL's defined limit is again $1,000,000. We assumed that these limits apply to losses and ALAE, based on information from PEPL, and that the $1,000,000 per occurrence defined limit will continue through 6/30/07.

PEPL did not purchase excess insurance from its inception through 9/20/95. From 9/21/95 to 6/30/98, PEPL purchased excess insurance from $100,000 to $500,000 of loss, with the ALAE split pro-rata to the loss. From 7/1/98 to 6/30/01, PEPL purchased excess insurance from $100,000 to $1,000,000 of loss, with ALAE split pro-rata to the losses. From 7/1/01 to 6/30/03, PEPL purchased excess insurance from $250,000 to $1,000,000 of loss, with ALAE split pro-rata to the losses. For accident year 7/1/03-04, PEPL purchased 90% quota share excess insurance from $250,000 to $1,000,000 of loss, with ALAE split pro-rata to the losses. For accident period 7/1/04-06, PEPL purchased 75% quota share excess insurance from $250,000 to $1,000,000 of loss, with PEPL retaining 100% of ALAE. We assumed PEPL would continue to purchase 75% quota share excess insurance from $250,000 to $1,000,000 of losses, with PEPL retaining all ALAE for accident year 7/1/06-07. We assumed that all PEPL's excess insurers are solvent.

The coverage for medical care for prison inmates, which PEPL started covering on 5/1/01, has been excluded from the excess insurance coverage since that time.

PEPL purchased a finite risk contract from $25,000 to $100,000 of loss, with the ALAE split pro-rata to the loss for accident period 9/21/95-6/30/98. This contract was canceled and the premium returned after the accident period as no coverage had been used.

There are 32 general liability claims with reported losses and ALAE greater than $100,000 at 6/30/05, five of which are greater than $500,000. We analyzed the claim data on an unlimited basis and then adjusted for the various limits and retentions.

B. DATA

The general liability claim, exposure, and other necessary data were provided to us by PEPL. GAB Business Services, Inc. (GAB) administered PEPL's general liability claims from PEPL's inception through claims incurred through 6/30/97 Claim Associates Inc. (CAI) started administering PEPL's claims beginning with those incurred on 7/1/97. Partial general liability claim data are shown in Appendix A.

PEPL has kept its own claim data since its inception. Unfortunately, not all the detailed claim runs at the 6/30 evaluations were kept. PEPL now is keeping each 6/30 detailed claim runs for each accident year.

During 2001 and the first part of 2002, PEPL completed a conversion of its claim data from one system to another. The data were reviewed and, in some instances, corrected during this process. There are some apparent discrepancies between the 6/30/00 and 6/30/01 data that are due to the correction of previously incorrect information. These changes did not result in substantially different estimates.

PEPL undertook an additional review of the claim data between 6/30/01 and 6/30/02. This resulted in many claims for zero dollars and some duplicates being removed from the system. These changes did not result in substantially different loss and ALAE estimates but did affect the claim counts.

The new format of the claim runs is considerably better.

Summary claim information was available at each 6/30 either from our own files or from PEPL. These summaries provided most of the information we needed for our analysis. The State also supplied claims closed with no loss and ALAE for the current analysis.

Based on the 6/30/04 information on claims closed with no loss and ALAE, it appears that the 6/30/03 information on claims closed with no loss and ALAE were not correct. We judgementally changed the 6/30/03 information used in this analysis.

There were some discrepancies, primarily for claim counts, between the historical summary claim information provided by PEPL and the summaries we compiled at 6/30/89 and 6/30/90 from the detailed claim runs. We used our claim counts and PEPL's losses and ALAE.

In the middle of accident year 7/1/01-02, rocks hitting windshields were changed from being coded as automobile liability to being coded as general liability.

We assumed the claim numbers refer to occurrences. It is important that claims be tied to occurrences to properly handle situations in which PEPL's defined limit or retention may be involved. Based on information in the detailed claim runs at 6/30/05, there are claims that should be, but are not treated, as one occurrence in the older accident years. This has been corrected in the more recent accident years.

On some of the historical claim runs, there are some open claims with no case reserves. Normally, if a claim is open, it should have a loss and/or an ALAE case reserve. For many of the claims on the 6/30/01 claim run, this was found to be a data problem resulting from the conversion, which has since been fixed. We changed the 6/30/01 information to reflect those claims as having been closed at time, although they are shown as open on that claim run.

On the 6/30/01 claim run, there are some minor differences between the sum of the payments plus case reserves reduced for excess insurance and other recoveries that have not been explained. PEPL researched these, and the data are consistent at subsequent evaluations.

C. PAIN AND SUFFERING

There is little information readily findable about the cost of pain and suffering as a separate loss component in the United States in general, and there is essentially no data on this for South Dakota. There is no information we could find on the difference in ALAE by having or not having pain and suffering as a possible damage.

We did find information on the cost of pain and suffering in three sources for our December 1, 1995 report:

- Compensation for Accidental Injuries in the United States by Deborah R. Hensler, M. Susan Marquis, Allan F. Abrahamse, Sandra H. Berry, Patricia A. Ebener, Elizabeth G. Lewis, E. Allan Lind, Robert J. MacCoun, Willard G. Manning, Jeannette A. Rogowski, and Mary E. Vaiana, published by RAND in 1991;

- "The Consumer Welfare Effects of Liability for Pain and Suffering: An Exploratory Analysis" by John E. Calfee and Clifford Winston, Brookings Papers on Economic Activity, published by Brookings Institution in 1993; and

- "Where the Auto Insurance Premium Dollar Goes," a Special Report by the Insurance Information Institute dated November 30, 1994.

After adjusting to common bases applicable to PEPL, there still was a wide range of possibilities:

- for automobile liability, the pain and suffering component of losses is 25 to 55%;
- for other liability, the pain and suffering component is 8%;
- for jury awards, 30-57% is for pain and suffering;
- a common estimate of pain and suffering is 2.5 times medical costs; and
- pain and suffering sometimes equals hedonic damages, i.e. the cost of prevention.

There are now almost ten complete accident years of data since the 8/16/95 State Supreme Court ruling that resulted in PEPL covering pain and suffering as a component of loss for ministerial acts. In this report, we relied on the State's experience, rather than on outside sources, for the effect of this change.

D. ANALYSIS DETAILS

The expected discounted loss and ALAE liability with risk margin at 6/30/06 is estimated in Exhibit II-1 as the sum of the expected discounted loss and ALAE liability at 6/30/06 and the discounted risk margin The expected discounted loss and ALAE liability at 6/30/06 is the product of the expected undiscounted loss and ALAE liability at 6/30/06 and discount factors. The expected undiscounted loss and ALAE liability at 6/30/06 is the sum of expected retained outstanding losses and ALAE at 6/30/06 and the expected retained unreported losses and ALAE at 6/30/06. The discount factors to reflect anticipated investment income assume a 5.0% annual interest rate and are based on the loss and ALAE payment pattern in Exhibit A-1. The risk margin percentage is based on the analysis detailed in Appendix B.

The expected retained outstanding losses and ALAE at 6/30/06 are the difference between the expected retained unpaid and unreported losses and ALAE at 6/30/06. The expected retained unreported losses and ALAE at 6/30/06 for accident period 7/1/88-05 include expected case reserve development on open claims at 6/30/06 and losses and ALAE associated with claims which have occurred prior to 7/1/05 but which are not reported at 6/30/06. The expected retained unreported losses and ALAE at 6/30/06 for accident year 7/1/06-07 are the expected losses and ALAE for that accident year.

Exhibit II-2 shows the expected discounted loss and ALAE liability with risk margin at 6/30/05. The explanation of this exhibit is analogous to that for Exhibit II-1 except that actual retained outstanding losses and ALAE at 6/30/05 are used instead of expected The actual retained outstanding losses and ALAE at 6/30/05 are the difference between the actual retained reported and paid losses and ALAE at 6/30/05.

The expected retained unreported losses and ALAE at 6/30/05 and 6/30/06 are estimated in Exhibit II-3. They are based on the retained projected ultimate losses and ALAE, the retained reported losses and ALAE at 6/30/05, and the loss and ALAE reporting pattern in Exhibit A-1. We assumed that retained and unlimited losses and ALAE have the same reporting pattern.

The expected retained unpaid losses and ALAE at 6/30/05 and 6/30/06 are estimated in Exhibit II-4. They are based on the retained projected ultimate losses and ALAE, the retained paid losses and ALAE at 6/30/05, and the loss and ALAE payment pattern in Exhibit A-1. We assumed that retained and unlimited losses and ALAE have the same payment pattern

The projected ultimate retained losses and ALAE are estimated in Exhibit II-5. The projected ultimate retained losses are the product of the selected ultimate retained loss ratios and the projected ultimate losses. The selected ultimate retained loss ratios are based on the reported retained loss ratios at 6/30/05. The projected ultimate retained ALAE are the product of the selected ultimate retained ALAE ratios and the projected ultimate ALAE. The selected ultimate retained ALAE ratios are based on the reported retained ALAE ratios at 6/30/05. The selections were made for accident year 7/1/03-04 to account for the 90% quota share excess insurance above PEPL's $250,000 per occurrence retention. The selections were made for accident period 7/1/04-07 to account for the 75% quota share excess insurance above PEPL's $250,000 per occurrence retention with PEPL retaining all ALAE.

The projected ultimate losses and ALAE are split into projected ultimate losses and projected ultimate ALAE in Exhibit II-6. The projected ultimate losses are the difference between the projected ultimate losses and ALAE and the projected ultimate ALAE. The projected ultimate ALAE are the product of the projected ultimate losses and ALAE and selected ultimate ratios. The selected ultimate ratios are based on the ratio of ALAE to losses and ALAE reported at 6/30/05.

The projected ultimate losses and ALAE for accident period 7/1/05-07 are estimated in Exhibit II-7 as the product of selected ultimate loss and ALAE rates and expected personal service expenditures in thousands. The selected ultimate loss and ALAE rates are based on the projected ultimate loss and ALAE rates for accident period 7/1/88-05.

The projected ultimate losses and ALAE for accident period 7/1/88-05 are estimated in Exhibit II-8. They are the product of reported losses and ALAE at 6/30/05 and development factors to ultimate. The development factors to ultimate are based on the loss and ALAE reporting pattern in Exhibit A-1.

Exhibit II-9 shows the ratio of projected ultimate claims with loss or ALAE to projected ultimate claims.

The projected ultimate claims with losses or ALAE are estimated in Exhibit II-10. For accident period 7/1/88-05, the projected ultimate claims with loss or ALAE are the reported claims with loss or ALAE at 6/30/05 increased by development factors to ultimate by accident year. The development factors to ultimate are based on the claim with loss or ALAE reporting pattern in Exhibit A-1. For accident period 7/1/05-07, the projected ultimate claims with loss or ALAE are the product of the selected ultimate frequency with loss or ALAE and expected personal services expenditures in millions. The selected ultimate frequency with loss or ALAE is based on the projected ultimate frequency with loss or ALAE for accident period 7/1/88-05.

The projected ultimate claims are estimated in Exhibit II-11. For accident period 7/1/88-05, the projected ultimate claims are the reported claims at 6/30/05 increased by development factors to ultimate by accident year. The development factors to ultimate are based on the claim reporting pattern in Exhibit A-1. For accident period 7/1/05-07, the projected ultimate claims are the product of the selected ultimate frequency and expected personal services expenditures in millions. The selected ultimate frequency is based on the projected ultimate frequency for accident period 7/1/88-05.

We used the projected ultimate claims and projected ultimate claims with loss or ALAE to check the reasonability of our estimates, to estimate the claim administration liabilities at 6/30/05 and 6/30/06, and in the risk margin simulation.

E. DISCUSSION

The projected ultimate frequency seems to be declining in recent accident years (Exhibit II-11). The 8/16/95 coverage change does not seem to have affected claim frequency, although the removal of many zero dollar and duplicate claims between 6/30/01 and 6/30/02 has made a difference. There is a one-time increase that occurred in the middle of accident year 7/1/01-02 when rocks hitting windshields were changed from being coded as automobile liability to being coded as general liability.

We selected an ultimate frequency of 0.410 for accident period 7/1/05-07. This compares to a projected ultimate frequency of 0.409 for accident period 7/1/99-05 in this report, a projected ultimate frequency of 0.528 for accident period 7/1/88-05 in this report, and the 0.475 selected for accident period 7/1/04-06 in our prior report.

The projected ultimate frequency with loss or ALAE also seems to be declining in recent accident years (Exhibit II-10). The 8/16/95 coverage change does not seem to have affected claim with loss or ALAE frequency, although the removal of many zero dollar and duplicate claims between 6/30/01 and 6/30/02 has made a difference. There is a one-time increase that occurred in the middle of accident year 7/1/01-02 when rocks hitting windshields were changed from being coded as automobile liability to being coded as general liability.

We selected an ultimate frequency with loss or ALAE of 0.270 for accident period 7/1/04-06. This compares to a projected ultimate frequency with loss or ALAE of 0.268 for accident period 7/1/99-05 in this report and the 0.300 selected for accident period 7/1/04-06 in our prior report.

The ratio of projected ultimate claims with loss or ALAE to projected ultimate claims seems to be increasing slightly over PEPL's history (Exhibit II-9).

We selected an ultimate loss and ALAE rate of 3.00 for accident period 7/1/05-07 (Exhibit II-7). This is slightly higher than the projected ultimate loss and ALAE rate of 2.96 for accident period 7/1/99-05 in this report and lower than the 3.25 selected for accident period 7/1/04-06 in our prior report.

The reported ratios of ALAE to losses and ALAE at 6/30/05 vary quite a bit, but seem to vary around 0.425 for the more recent accident years (Exhibit II-6). We selected this as the ultimate ratio of ALAE to losses and ALAE for accident period 7/1/04-07. This is lower higher than the ultimate ratio of ALAE to losses and ALAE of 0.440 selected in our prior report for accident period 7/1/03-06.

The reported ratios of losses limited to $100,000 to total losses at 6/30/05 vary quite a bit, but seem to vary around 0.552 (Exhibit II-5). This is higher than the 0.536 in our prior report. The reported ratio of losses limited to $250,000 to total losses at 6/30/05 also varies quite a bit, but seems to vary around 0.753. We selected 0.820 as the ultimate ratio of losses limited to $250,000 to total losses for accident period 7/1/05-07 to reflect higher ratios above $250,000 per occurrence in the more recent accident years. This is higher than the 0.794 selected in our prior report for accident period 7/1/04-06.

The reported ratio of pro-rata retained ALAE to total ALAE for losses limited to $100,000 at 6/30/05 also varies quite a bit, but seems to vary around 0.883 (Exhibit II-5). This is lower than the 0.890 in our prior report. The reported ratio of pro-rata retained ALAE to total ALAE for losses limited to $250,000 at 6/30/05 also varies quite a bit, but seems to vary around 0.950. We selected 1.000 as the ultimate ratio of pro-rata retained ALAE to total ALAE for accident period 7/1/05-07 because PEPL is expected to retain all ALAE for this accident period. This is the same as the 1.000 selected in our prior report for accident period 7/1/04-06 for the same reason.

Exhibit II-1

South Dakota Public Entity Pool for Liability

General Liability

Expected Discounted Loss and ALAE Liability at 6/30/06
With Risk Margin

Accident Year (1)	Expected Retained Outstanding Losses and ALAE at 6/30/06 (2)	Expected Retained Unreported Losses and ALAE at 6/30/06 (3)	Expected Undiscounted Loss and ALAE Liability at 6/30/06 ((2)+(3)) (4)	Discount Factors (5)	Expected Discounted Loss and ALAE Liability at 6/30/06 ((4)x(5)) (6)	Discounted Risk Margin (7)	Expected Discounted Loss and ALAE Liability at 6/30/06 With Risk Margin ((6)+(7)) (8)
7/1/88-89	0	0	0	1.000	0	0	0
7/1/89-90	0	0	0	1.000	0	0	0
7/1/90-91	0	0	0	1.000	0	0	0
7/1/91-92	0	0	0	1.000	0	0	0
7/1/92-93	0	0	0	1.000	0	0	0
7/1/93-94	0	0	0	1.000	0	0	0
7/1/94-95	0	0	0	1.000	0	0	0
7/1/95-96	0	0	0	1.000	0	0	0
7/1/96-97	384	0	384	0.976	375	90	465
7/1/97-98	0	0	0	0.953	0	0	0
7/1/98-99	0	0	0	0.942	0	0	0
7/1/99-00	10,054	5,755	15,809	0.923	14,594	3,503	18,097
7/1/00-01	54,508	5,720	60,228	0.903	54,407	13,058	67,465
7/1/01-02	489,274	116,571	605,845	0.899	544,572	130,697	675,269
7/1/02-03	519,344	152,159	671,503	0.886	594,965	142,792	737,756
7/1/03-04	817,939	205,455	1,023,394	0.880	900,431	216,103	1,116,534
7/1/04-05	470,321	245,352	715,673	0.868	620,854	149,005	769,859
7/1/05-06	639,168	1,107,035	1,746,203	0.863	1,506,300	361,512	1,867,812
7/1/88-06	3,000,992	1,838,047	4,839,039		4,236,498	1,016,760	5,253,258
7/1/06-07	0	1,928,794	1,928,794	0.833	1,606,906	385,658	1,992,564

Notes: (2) = ((7) of Exhibit II-4) - ((7) of Exhibit II-3).

(3) is (7) of Exhibit II-3.

(5) is based on the loss and ALAE payment pattern in Exhibit A-1 and assumes a 5.0% annual interest rate.

(7) = (6) x 0.24. 0.24 is the 90% confidence level risk margin factor from Appendix B

Exhibit II-2

South Dakota Public Entity Pool for Liability

General Liability

Expected Discounted Loss and ALAE Liability at 6/30/05
With Risk Margin

Accident Year (1)	Actual Retained Outstanding Losses and ALAE at 6/30/05 (2)	Expected Retained Unreported Losses and ALAE at 6/30/05 (3)	Expected Undiscounted Loss and ALAE Liability at 6/30/05 ((2)+(3)) (4)	Discount Factors (5)	Expected Discounted Loss and ALAE Liability at 6/30/05 ((4)x(5)) (6)	Discounted Risk Margin (7)	Expected Discounted Loss and ALAE Liability at 6/30/05 With Risk Margin ((6)+(7)) (8)
7/1/88-89	0	0	0	1.000	0	0	0
7/1/89-90	0	0	0	1.000	0	0	0
7/1/90-91	0	0	0	1.000	0	0	0
7/1/91-92	0	0	0	1.000	0	0	0
7/1/92-93	0	0	0	1.000	0	0	0
7/1/93-94	0	0	0	1.000	0	0	0
7/1/94-95	0	0	0	1.000	0	0	0
7/1/95-96	0	0	0	0.976	0	0	0
7/1/96-97	768	0	768	0.953	732	176	907
7/1/97-98	0	0	0	0.942	0	0	0
7/1/98-99	0	0	0	0.923	0	0	0
7/1/99-00	8,172	12,907	21,079	0.903	19,042	4,570	23,612
7/1/00-01	54,440	35,901	90,341	0.899	81,205	19,489	100,694
7/1/01-02	597,890	209,904	807,794	0.886	715,721	171,773	887,495
7/1/02-03	706,722	216,594	923,316	0.880	812,378	194,971	1,007,349
7/1/03-04	937,599	364,902	1,302,501	0.868	1,129,934	271,184	1,401,119
7/1/04-05	382,704	563,007	945,711	0.863	815,784	195,788	1,011,572
7/1/88-05	2,688,295	1,403,216	4,091,511		3,574,796	857,951	4,432,747
7/1/05-06	0	1,887,787	1,887,787	0.833	1,572,743	377,458	1,950,201
7/1/06-07	0	1,928,794	1,928,794	0.833	1,606,906	385,658	1,992,564

Notes: (2) = ((3) of Exhibit II-3) - ((3) of Exhibit II-4)

(3) is (4) of Exhibit II-3.

(5) is based on the loss and ALAE payment pattern in Exhibit A-1 and assumes a 5.0% annual interest rate.

(7) = (6) x 0.24. 0.24 is the 90% confidence level risk margin factor from Appendix B.

Exhibit II-3

South Dakota Public Entity Pool for Liability

General Liability

Expected Retained Unreported Losses and ALAE at 6/30/05 and 6/30/06

Accident Year (1)	Retained Projected Ultimate Losses and ALAE (2)	Retained Reported Losses and ALAE at 6/30/05 (3)	Expected Retained Unreported Losses and ALAE at 6/30/05 ((2)-(3)) (4)	Expected Retained Percentage Losses and ALAE Reported 7/1/05-6/30/06 as a Func. of (4) (5)	Expected Retained Losses and ALAE Reported 7/1/05-6/30/06 ((4)x(5)) (6)	Expected Retained Unreported Losses and ALAE at 6/30/06 ((4)-(6)) (7)
7/1/88-89	721,697	721,697	0	100.0%	0	0
7/1/89-90	431,387	431,387	0	100.0%	0	0
7/1/90-91	114,405	114,405	0	100.0%	0	0
7/1/91-92	402,802	402,802	0	100.0%	0	0
7/1/92-93	914,633	914,633	0	100.0%	0	0
7/1/93-94	1,259,925	1,259,925	0	100.0%	0	0
7/1/94-95	293,763	293,763	0	100.0%	0	0
7/1/95-96	887,512	887,512	0	100.0%	0	0
7/1/96-97	650,834	650,834	0	100.0%	0	0
7/1/97-98	863,132	863,132	0	100.0%	0	0
7/1/98-99	868,927	868,927	0	50.0%	0	0
7/1/99-00	1,172,484	1,159,577	12,907	55.4%	7,151	5,755
7/1/00-01	752,197	716,296	35,901	84.1%	30,182	5,720
7/1/01-02	2,076,562	1,866,658	209,904	44.5%	93,333	116,571
7/1/02-03	1,505,298	1,288,704	216,594	29.7%	64,435	152,159
7/1/03-04	1,624,845	1,259,943	364,902	43.7%	159,447	205,455
7/1/04-05	1,003,242	440,235	563,007	56.4%	317,655	245,352
7/1/05-06	1,887,787	0	1,887,787	41.4%	780,752	1,107,035
7/1/06-07	1,928,794	0	1,928,794	0.0%	0	1,928,794

Notes: (2) is (14) of Exhibit II-5

(7) is based on the loss and ALAE reporting pattern in Exhibit A-1.

Exhibit II-4

South Dakota Public Entity Pool for Liability

General Liability

Expected Retained Unpaid Losses and ALAE at 6/30/05 and 6/30/06

Accident Year (1)	Retained Projected Ultimate Losses and ALAE (2)	Retained Paid Losses and ALAE at 6/30/05 (3)	Expected Retained Unpaid Losses and ALAE at 6/30/05 ((2)-(3)) (4)	Expected Percentage Retained Losses and ALAE Paid 7/1/05-6/30/06 as a Func. of (4) (5)	Expected Retained Losses and ALAE Paid 7/1/05-6/30/06 ((4)x(5)) (6)	Expected Retained Unpaid Losses and ALAE at 6/30/06 ((4)-(6)) (7)
7/1/88-89	721,697	721,697	0	100.0%	0	0
7/1/89-90	431,387	431,387	0	100.0%	0	0
7/1/90-91	114,405	114,405	0	100.0%	0	0
7/1/91-92	402,802	402,802	0	100.0%	0	0
7/1/92-93	914,633	914,633	0	100.0%	0	0
7/1/93-94	1,259,925	1,259,925	0	100.0%	0	0
7/1/94-95	293,763	293,763	0	100.0%	0	0
7/1/95-96	887,512	887,512	0	100.0%	0	0
7/1/96-97	650,834	650,066	768	50.0%	384	384
7/1/97-98	863,132	863,132	0	50.0%	0	0
7/1/98-99	868,927	868,927	0	33.3%	0	0
7/1/99-00	1,172,484	1,151,405	21,079	25.0%	5,270	15,809
7/1/00-01	752,197	661,856	90,341	33.3%	30,114	60,228
7/1/01-02	2,076,562	1,268,768	807,794	25.0%	201,948	605,845
7/1/02-03	1,505,298	581,982	923,316	27.3%	251,814	671,503
7/1/03-04	1,624,845	322,344	1,302,501	21.4%	279,107	1,023,394
7/1/04-05	1,003,242	57,531	945,711	24.3%	230,038	715,673
7/1/05-06	1,887,787	0	1,887,787	7.5%	141,584	1,746,203
7/1/06-07	1,928,794	0	1,928,794	0.0%	0	1,928,794
Total			7,908,091			6,767,833

Notes: (2) is (14) of Exhibit II-5.

(7) is based on the loss and ALAE payment pattern in Exhibit A-1.

South Dakota Public Entity Pool for Liability

General Liability

Projected Ultimate Retained Losses and ALAE

Accident Period	Reported Losses at 6/30/05 Limited to $100,000	Limited to $250,000	Total	$100,000 Ratio ((2)/(4))	$250,000 Ratio ((3)/(4))	Selected Ultimate Retained Loss Ratio	Projected Ultimate Losses	Projected Ultimate Retained Losses ((7)x(8))
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
7/1/88-89	189,170	339,170	549,170	0.344	0.618	1.000	549,170	549,170
7/1/89-90	154,048	254,048	254,048	0.606	1.000	1.000	254,048	254,048
7/1/90-91	19,499	19,499	19,499	1.000	1.000	1.000	19,499	19,499
7/1/91-92	200,508	200,508	200,508	1.000	1.000	1.000	200,508	200,508
7/1/92-93	159,879	309,879	617,879	0.259	0.502	1.000	617,879	617,879
7/1/93-94	342,946	492,946	842,946	0.407	0.585	1.000	842,946	842,946
7/1/94-95	119,176	119,176	119,176	1.000	1.000	1.000	119,176	119,176
7/1/95-96 a	65,276	65,276	65,276	1.000	1.000	1.000	65,276	65,276
7/1/95-96 b	288,777	288,777	288,777	1.000	1.000	1.000	288,777	288,777
7/1/96-97	292,293	292,293	292,293	1.000	1.000	1.000	292,293	292,293
7/1/97-98	261,144	645,818	1,227,475	0.213	0.526	0.213	1,227,475	261,144
7/1/98-99	426,416	525,791	525,791	0.811	1.000	0.811	525,791	426,416
7/1/99-00	598,699	1,008,699	1,558,699	0.384	0.647	0.387	1,566,842	606,842
7/1/00-01	233,570	383,570	793,170	0.294	0.484	0.312	812,994	253,394
7/1/01-02	644,143	804,736	804,736	0.800	1.000	1.000	975,984	975,984
7/1/02-03	517,372	517,372	517,372	1.000	1.000	1.000	632,225	632,225
7/1/03-04	640,245	840,245	840,245	0.762	1.000	0.950	1,125,485	1,069,211
7/1/04-05	227,878	237,878	237,878	0.958	1.000	0.900	612,057	550,852
7/1/05-06						0.820	1,210,795	992,852
7/1/06-07						0.820	1,237,096	1,014,419
Total/Avg	5,381,039	7,345,681	9,754,938	0.552	0.753			

South Dakota Public Entity Pool for Liability

General Liability

Projected Ultimate Retained Losses and ALAE

Accident Period (1)		Reported ALAE at 6/30/05: Pro-Rata to $100,000 Retained Losses (10)	Pro-Rata to $250,000 Retained Losses (11)	Total (12)	$100,000 Ratio ((10)/(12)) (13)	$250,000 Ratio ((11)/(12)) (14)	Selected Ultimate Retained ALAE Ratio (15)	Projected Ultimate ALAE (16)	Projected Ultimate Retained ALAE ((15)x(16)) (17)	Projected Ultimate Retained Losses and ALAE ((9)+(17)) (18)
7/1/88-89		148,798	158,685	172,527	0.862	0.920	1.000	172,527	172,527	721,697
7/1/89-90		156,519	177,339	177,339	0.883	1.000	1 000	177,339	177,339	431,387
7/1/90-91		94,906	94,906	94,906	1 000	1 000	1.000	94,906	94,906	114,405
7/1/91-92		202,294	202,294	202,294	1.000	1.000	1.000	202,294	202,294	402,802
7/1/92-93		253,995	267,999	296,754	0.856	0.903	1.000	296,754	296,754	914,633
7/1/93-94		399,053	404,431	416,979	0.957	0.970	1 000	416,979	416,979	1,259,925
7/1/94-95		174,587	174,587	174,587	1.000	1.000	1.000	174,587	174,587	293,763
7/1/95-96	a	229,898	229,898	229,898	1.000	1 000	1.000	229,898	229,898	295,174
7/1/95-96	b	303,561	303,561	303,561	1.000	1.000	1.000	303,561	303,561	592,338
7/1/96-97		358,541	358,541	358,541	1.000	1.000	1.000	358,541	358,541	650,834
7/1/97-98		601,988	773,075	793,484	0.759	0.974	0.759	793,484	601,988	863,132
7/1/98-99		442,511	448,241	448,241	0.987	1.000	0.987	448,241	442,511	868,927
7/1/99-00		560,878	662,361	911,938	0.615	0.726	0.617	916,702	565,642	1,172,484
7/1/00-01		482,726	501,716	553,571	0.872	0.906	0.876	569,649	498,804	752,197
7/1/01-02		929,676	1,061,922	1,061,922	0.875	1.000	1.000	1,100,578	1,100,578	2,076,562
7/1/02-03		771,332	771,332	771,332	1.000	1.000	1.000	873,073	873,073	1,505,298
7/1/03-04		391,365	419,698	419,698	0.932	1 000	0.980	566,974	555,634	1,624,845
7/1/04-05		200,539	202,357	202,357	0.991	1.000	1.000	452,390	452,390	1,003,242
7/1/05-06							1.000	894,935	894,935	1,887,787
7/1/06-07							1.000	914,375	914,375	1,928,794
Total/Avg		6,703,167	7,212,943	7,589,929	0.883	0 950				

Notes: a - 7/1-9/20/95.
b - 9/21/95-6/20/96.

(7) is based on (5) for 7/1/88-01 and (6) for 7/1/01-03.

(7) for 7/1/03-04 is based on (6) and a 90% quota share excess insurance contract above $250,000 per occurrence.

(7) for 7/1/04-07 is based on (6) and a 75% quota share excess insurance contract above $250,000 per occurrence.

(8) is (8) of Exhibit II-6.

(15) is based on (13) for 7/1/88-01 and (14) for 7/1/01-04.

(15) for 7/1/04-07 is 1 000 because the excess insurance contract for this period applies to losses only.

(16) is (7) of Exhibit II-6.

Exhibit II-6

South Dakota Public Entity Pool for Liability

General Liability

Projected Ultimate Losses
and ALAE Separately

Accident Period (1)	Reported at 6/30/05 ALAE (2)	Losses and ALAE (3)	Ratio ((2)/(3)) (4)	Selected Ultimate Ratio (5)	Projected Ultimate Losses and ALAE (6)	Projected Ultimate ALAE ((5)x(6)) (7)	Projected Ultimate Losses ((6)-(7)) (8)
7/1/88-89	172,527	721,697	0.239	0.239	721,697	172,527	549,170
7/1/89-90	177,339	431,387	0.411	0.411	431,387	177,339	254,048
7/1/90-91	94,906	114,405	0.830	0.830	114,405	94,906	19,499
7/1/91-92	202,294	402,802	0.502	0.502	402,802	202,294	200,508
7/1/92-93	296,754	914,633	0.324	0.324	914,633	296,754	617,879
7/1/93-94	416,979	1,259,925	0.331	0.331	1,259,925	416,979	842,946
7/1/94-95	174,587	293,763	0.594	0.594	293,763	174,587	119,176
7/1/95-96 a	229,898	295,174	0.779	0.779	295,174 *	229,898	65,276
7/1/95-96 b	303,561	592,338	0.512	0.512	592,338 *	303,561	288,777
7/1/96-97	358,541	650,834	0.551	0.551	650,834	358,541	292,293
7/1/97-98	793,484	2,020,959	0.393	0.393	2,020,959	793,484	1,227,475
7/1/98-99	448,241	974,032	0.460	0.460	974,032	448,241	525,791
7/1/99-00	911,938	2,470,637	0.369	0.369	2,483,544	916,702	1,566,842
7/1/00-01	553,571	1,346,741	0.411	0.412	1,382,642	569,649	812,994
7/1/01-02	1,061,922	1,866,658	0.569	0.530	2,076,562	1,100,578	975,984
7/1/02-03	771,332	1,288,704	0.599	0.580	1,505,298	873,073	632,225
7/1/03-04	419,698	1,259,943	0.333	0.335	1,692,459	566,974	1,125,485
7/1/04-05	202,357	440,235	0.460	0.425	1,064,448	452,390	612,057
7/1/05-06				0.425	2,105,730	894,935	1,210,795
7/1/06-07				0.425	2,151,471	914,375	1,237,096
Total/Avg.	7,589,929	17,344,867	0.438				
7/1/88-99	3,669,111	8,671,949	0.423				

Notes: a - 7/1-9/20/95.
b - 9/21/95-6/30/96.

(5) is based on (4).

(6) is (4) of Exhibit II-8 and (8) of Exhibit II-7.
(6)* Split pro-rata to (3).

Exhibit II-7

South Dakota Public Entity Pool for Liability

General Liability

Projected Ultimate Losses and ALAE
7/1/05-07

Accident Year (1)	Projected Ultimate Losses and ALAE (2)	Personal Services Expenditures (Thousands) (3)	Projected Ultimate Loss & ALAE Rate ((2)/(3)) (4)
7/1/88-89	721,697	289,680	2.49
7/1/89-90	431,387	309,753	1.39
7/1/90-91	114,405	321,685	0.36
7/1/91-92	402,802	359,444	1.12
7/1/92-93	914,633	395,604	2.31
7/1/93-94	1,259,925	415,291	3.03
7/1/94-95	293,763	399,958	0.73
7/1/95-96	887,512	401,700	2.21
7/1/96-97	650,834	376,331	1.73
7/1/97-98	2,020,959	389,595	5.19
7/1/98-99	974,032	414,281	2.35
7/1/99-00	2,483,544	487,396	5.10
7/1/00-01	1,382,642	521,566	2.65
7/1/01-02	2,076,562	558,662	3.72
7/1/02-03	1,505,298	585,298	2.57
7/1/03-04	1,692,459	614,889	2.75
7/1/04-05	1,064,448	679,768	1.57
Total/Avg.	18,876,902	7,520,901	2.51
7/1/99-05	10,204,953	3,447,579	2.96

Accident Year (5)	Selected Ultimate Loss & ALAE Rate (6)	Expected Personal Services Expenditures (Thousands) (7)	Expected Losses and ALAE ((6)x(7)) (8)
7/1/05-06	3.00	701,910	2,105,730
7/1/06-07	3.00	717,157	2,151,471

Notes: (2) is (4) of Exhibit II-8.

(6) is based on (4).

Exhibit II-8

South Dakota Public Entity Pool for Liability

General Liability

Projected Ultimate Losses and ALAE
7/1/88-05

Accident Year (1)	Reported Losses and ALAE at 6/30/05 (2)	Development Factors to Ultimate (3)	Projected Ultimate Losses and ALAE ((2)x(3)) (4)
7/1/88-89	721,697	1.000	721,697
7/1/89-90	431,387	1.000	431,387
7/1/90-91	114,405	1.000	114,405
7/1/91-92	402,802	1.000	402,802
7/1/92-93	914,633	1.000	914,633
7/1/93-94	1,259,925	1.000	1,259,925
7/1/94-95	293,763	1.000	293,763
7/1/95-96	887,512	1.000	887,512
7/1/96-97	650,834	1.000	650,834
7/1/97-98	2,020,959	1.000 *	2,020,959
7/1/98-99	974,032	1.000 *	974,032
7/1/99-00	2,470,637	1.009	2,483,544 a
7/1/00-01	1,346,741	1.059	1,382,642 a
7/1/01-02	1,866,658	1.112	2,076,562
7/1/02-03	1,288,704	1.168	1,505,298
7/1/03-04	1,259,943	1.343	1,692,459
7/1/04-05	440,235	2.418	1,064,448

Notes: (3) is based on the loss and ALAE reporting pattern in Exhibit A-1.

* Selected to be 1.000 because all reported reported claims are closed and no additional claims are expected to be reported.

a - Development factors to ultimate not applied to reported losses and ALAE for large loss occurrences as follows:

7/1/99-00	1,040,351
7/1/00-01	743,105

Exhibit II-9

South Dakota Public Entity Pool for Liability

General Liability

Ratio of
Projected Ultimate Claims With Loss or ALAE
to Projected Ultimate Claims

Accident Period (1)	Projected Ultimate Claims With Loss or ALAE (2)	Projected Ultimate Claims (3)	Ratio ((2)/(3)) (4)
7/1/88-89	68	106	0.642
7/1/89-90	59	101	0.584
7/1/90-91	72	136	0.529
7/1/91-92	102	182	0.560
7/1/92-93	118	251	0.470
7/1/93-94	302	414	0.729
7/1/94-95	117	257	0.455
7/1/95-96	138	247	0.559
7/1/96-97	167	344	0.485
7/1/97-98	157	261	0.602
7/1/98-99	138	266	0.519
7/1/99-00	131	215	0.609
7/1/00-01	145	277	0.523
7/1/01-02	174	265	0.657
7/1/02-03	216	285	0.758
7/1/03-04	131	205	0.639
7/1/04-05	127	162	0.784
7/1/05-06	190	288	0.660
7/1/06-07	194	294	0.660

Notes: (2) is (4) and (10) of Exhibit II-10.

(3) is (4) and (10) of Exhibit II-11.

Exhibit II-10

South Dakota Public Entity Pool for Liability

General Liability

Projected Ultimate Claims With Loss or ALAE

Accident Period (1)	Reported Claims With Loss or ALAE at 6/30/05 (2)	Development Factor to Ultimate (3)	Projected Ultimate Claims With Loss or ALAE ((2)x(3)) (4)	Personal Services Expenditures (Millions) (5)	Projected Ultimate Frequency With Loss or ALAE ((4)/(5)) (6)
7/1/88-89	68	1.000	68	290	0.234
7/1/89-90	59	1.000	59	310	0.190
7/1/90-91	72	1.000	72	322	0.224
7/1/91-92	102	1.000	102	359	0.284
7/1/92-93	118	1.000	118	396	0.298
7/1/93-94	302	1.000	302	415	0.728
7/1/94-95	117	1.000	117	400	0.293
7/1/95-96	138	1.000	138	402	0.343
7/1/96-97	167	1.000	167	376	0.444
7/1/97-98	157	1.001	157	390	0.403
7/1/98-99	138	1.002	138	414	0.333
7/1/99-00	131	1.003	131	487	0.269
7/1/00-01	144	1.004	145	522	0.278
7/1/01-02	173	1.005	174	559	0.311
7/1/02-03	224	0.965	216	585	0.369
7/1/03-04	132	0.989	131	615	0.213
7/1/04-05	103	1.236	127	680	0.187
Total/Avg.			2,362	7,522	0.314
7/1/99-05			924	3,448	0.268

Accident Year (7)	Selected Ultimate Frequency With Loss or ALAE (8)	Expected Personal Services Expenditures (Millions) (9)	Projected Ultimate Claims With Loss or ALAE ((8)x(9)) (10)
7/1/05-06	0.270	702	190
7/1/06-07	0.270	717	194

Notes: (3) is based on the claim with loss or ALAE reporting pattern in Exhibit A-1.

(8) is based on (6).

Exhibit II-11

South Dakota Public Entity Pool for Liability

General Liability

Projected Ultimate Claims

Accident Period (1)	Reported Claims at 6/30/05 (2)	Development Factor to Ultimate (3)	Projected Ultimate Claims ((2)x(3)) (4)	Personal Services Expenditures (Millions) (5)	Projected Ultimate Frequency ((4)/(5)) (6)
7/1/88-89	106	1.000	106	290	0.366
7/1/89-90	101	1.000	101	310	0.326
7/1/90-91	136	1.000	136	322	0.422
7/1/91-92	182	1.000	182	359	0.507
7/1/92-93	251	1.000	251	396	0.634
7/1/93-94	414	1.000	414	415	0.998
7/1/94-95	257	1.000	257	400	0.643
7/1/95-96	247	1.000	247	402	0.614
7/1/96-97	344	1.000	344	376	0.915
7/1/97-98	261	1.001	261	390	0.669
7/1/98-99	265	1.002	266	414	0.643
7/1/99-00	214	1.003	215	487	0.441
7/1/00-01	276	1.004	277	522	0.531
7/1/01-02	264	1.005	265	559	0.474
7/1/02-03	282	1.010	285	585	0.487
7/1/03-04	198	1.035	205	615	0.333
7/1/04-05	125	1.294	162	680	0.238
Total/Avg.			3,974	7,522	0.528
7/1/99-05			1,409	3,448	0.409

Accident Year (7)	Selected Ultimate Frequency (8)	Expected Personal Services Expenditures (Millions) (9)	Projected Ultimate Claims ((8)x(9)) (10)
7/1/05-06	0.410	702	288
7/1/06-07	0.410	717	294

Notes: (3) is based on the claim reporting pattern in Exhibit A-1.

(8) is based on (6).

III. CLAIM ADMINISTRATION LIABILITY

PEPL's contract with Claims Associates Inc. (CAI) states that the per claim fee charged covers claims incurred during the contract period if they meet the following criteria:

1. reported within 24 months from the beginning of the contract period, and
2. closed within 36 months from the beginning of the contract period.

Claims incurred during the contract period and reported after 24 months from the beginning of the contract period and claims incurred during the contract period and reported within 24 months from the beginning of the contract period but still open at 36 months from the beginning of the contract period are to be handled on a time-and-expense (T&E) basis at CAI's then prevailing rates. This is the same arrangement PEPL had with GAB.

We used the CAI/GAB formula for estimating PEPL's claim administration liability at 6/30/05 and 6/30/06

We estimated the numbers of claims in these two categories at 6/30/05 and 6/30/06, assuming that the first claims reported are the first claims closed. We also assumed that all unreported claims at 24 months and unclosed claims at 36 months will be claims with loss. We assumed a per claim cost for these two categories of claims based on the provisions of the claim administration contract for 7/1/05-06.

The expected claim administration liabilities at 6/30/05 and 6/30/06 are shown in Exhibit III-1. They are the product of the maximum claims on a T&E basis and the expected per claim cost to handle these claims. The maximum claims on a T&E basis are based on the two categories which trigger T&E costs reduced for overlap in the two categories.

The expected claims unreported and unclosed at 6/30/05 and 6/30/06 are estimated in Exhibit III-2. They are based on the projected ultimate claims, actual reported claims at 24 months and at 6/30/05, actual closed claims at 36 months and at 6/30/05, and the claim reporting and closure patterns in Exhibit A-1.

This analysis of PEPL's claim administration liability at 6/30/05 and 6/30/06 assumes that deposits made to GAB and CAI through these dates are the amounts needed to cover all claims incurred through these dates that will be handled on a per claim basis. To the extent that this is not true, PEPL may have an additional asset or liability depending on whether the deposits are greater or less than, respectively, the expected cost of the claims handled on a per claim basis.

South Dakota Public Entity Pool for Liability

General Liability

Expected Claim Administation Liability
at 6/30/05 and 6/30/06

Accident Year (1)	Claims Incurred at and Expected to be Reported after 6/30/05 on T&E Basis (2)	Claims Incurred at and Expected to be Closed after 6/30/05 on T&E Basis (3)	Maximum Claims on T&E Basis After 6/30/05 (4)	Claims Incurred at and Expected to be Reported after 6/30/06 on T&E Basis (5)	Claims Incurred at and Expected to be Closed after 6/30/06 on T&E Basis (6)	Maximum Claims on T&E Basis After 6/30/06 (7)
7/1/88-89	0	0	0	0	0	0
7/1/89-90	0	0	0	0	0	0
7/1/90-91	0	0	0	0	0	0
7/1/91-92	0	0	0	0	0	0
7/1/92-93	0	0	0	0	0	0
7/1/93-94	0	0	0	0	0	0
7/1/94-95	0	0	0	0	0	0
7/1/95-96	0	0	0	0	0	0
7/1/96-97	0	1	1	0	0	0
7/1/97-98	0	0	0	0	1	1
7/1/98-99	1	1	1	0	1	1
7/1/99-00	1	3	3	0	1	1
7/1/00-01	1	6	6	1	4	4
7/1/01-02	1	20	20	1	7	7
7/1/02-03	3	46	46	1	14	14
7/1/03-04	7	33	33	2	33	33
7/1/04-05	6	26	26	6	26	26
7/1/05-06	0	0	0	10	46	46
7/1/06-07	0	0	0	0	0	0
Total			136			133

8. Expected Per Claim Cost to Handle Claims on T&E Basis

a. Incurred Through 6/30/04 After 6/30/04	410
b. Incurred Through 6/30/05 After 6/30/05	430

9. Expected Claim Administration Liability

a. At 6/30/05 ((4) Total) x (8a))	55,760
b. At 6/30/06 ((7) Total) x (8b))	57,190

South Dakota Public Entity Pool for Liability

General Liability

Expected Claim Administation Liability
at 6/30/05 and 6/30/06

Notes: (2) is (6) of Exhibit III-2 for 8/1/88-6/30/04, (4) of Exhibit III-2 for 7/1/04-05, and zero for 7/1/05-07

(3) is (12) of Exhibit III-2 for 8/1/88-6/30/03, (10) of Exhibit III-2 for 7/1/03-05, and zero for 7/1/03-05.

(4) is maximum of (2) and (3). Assumes first claims reported are first closed.

(5) is (8) of Exhibit III-2 for 8/1/88-6/30/05, (4) of Exhibit III-2 for 7/1/05-06, and zero for 7/1/06-07.

(6) is (14) of Exhibit III-2 for 8/1/88-6/30/04, (10) of Exhibit III-2 for 7/1/04-06, and zero for 7/1/06-07.

(7) is maximum of (5) and (6). Assumes first claims reported are first closed.

(8a) and (8b) are based on the current claim administration contract.

Exhibit III-2
Page 1 of 2

South Dakota Public Entity Pool for Liability

General Liability

Expected Claims Unreported and Unclosed at 6/30/05 and 6/30/06

Accident Year (1)	Projected Ultimate Claims (2)	Reported Claims at 24 Months (3)	Expected Unreported Claims at 24 Months ((2)-(3)) (4)	Reported Claims at 6/30/05 (5)	Expected Unreported Claims at 6/30/05 ((2)-(5)) (6)	Expected Reported Claims at 6/30/06 (7)	Expected Unreported Claims at 6/30/06 ((2)-(7)) (8)
7/1/88-89	106	100	6	106	0	106	0
7/1/89-90	101	103	(2)	101	0	101	0
7/1/90-91	136	130	6	136	0	136	0
7/1/91-92	182	177	5	182	0	182	0
7/1/92-93	251	250	1	251	0	251	0
7/1/93-94	414	407	7	414	0	414	0
7/1/94-95	257	255	2	257	0	257	0
7/1/95-96	247	241	6	247	0	247	0
7/1/96-97	344	345	(1)	344	0	344	0
7/1/97-98	261	260	1	261	0	261	0
7/1/98-99	266	261	5	265	1	266	0
7/1/99-00	215	211	4	214	1	215	0
7/1/00-01	277	269	8	276	1	276	1
7/1/01-02	265	250	15	264	1	264	1
7/1/02-03	285	273	12	282	3	284	1
7/1/03-04	205	198	7	198	7	203	2
7/1/04-05	162	156 *	6	125	37	156	6
7/1/05-06	288	278 *	10	0	288	223	65
7/1/06-07	294	284 *	10	0	294	0	294

Accident Year (1)	Closed Claims at 36 Months (9)	Expected Unclosed Claims at 36 Months ((2)-(9)) (10)	Closed Claims at 6/30/05 (11)	Expected Unclosed Claims at 6/30/05 ((2)-(11)) (12)	Expected Closed Claims at 6/30/06 (13)	Expected Unclosed Claims at 6/30/06 ((2)-(13)) (14)
7/1/88-89	91	15	106	0	106	0
7/1/89-90	89	12	101	0	101	0
7/1/90-91	106	30	136	0	136	0
7/1/91-92	150	32	182	0	182	0
7/1/92-93	163	88	251	0	251	0
7/1/93-94	381	33	414	0	414	0
7/1/94-95	221	36	257	0	257	0
7/1/95-96	207	40	247	0	247	0
7/1/96-97	302	42	343	1	344	0
7/1/97-98	225	36	261	0	260	1
7/1/98-99	213	53	265	1	265	1
7/1/99-00	175	40	212	3	214	1
7/1/00-01	238	39	271	6	273	4
7/1/01-02	224	41	245	20	258	7
7/1/02-03	239	46	239	46	271	14
7/1/03-04	172 *	33	166	39	172	33
7/1/04-05	136 *	26	77	85	126	36
7/1/05-06	242 *	46	0	288	144	144
7/1/06-07	247 *	47	0	294	0	294

South Dakota Public Entity Pool for Liability

General Liability

Expected Claims Unreported and Unclosed
at 6/30/05 and 6/30/06

Notes: (3) * is based on the reported claims at 6/30/05 and the claim reporting pattern in Exhibit A-1.

(7) is based on (2), (5), the reported claims at 6/30/06, and the claim reporting pattern in Exhibit A-1

(9) * is based on the closed claims at 6/30/05 and the claim closure pattern in Exhibit A-1.

(13) is based on (2), (11), the closed claims at 6/30/05, and the claim closure pattern in Exhibit A-1

IV. COMPARISON OF CURRENT AND PRIOR ESTIMATES

The prior report is our November 13, 2004 "June 30, 2004 Actuarial Evaluation of Liability Risk Retention Program" report for PEPL.

A. PROJECTED ULTIMATE LOSSES AND ALAE

Exhibit IV-1 shows a comparison of the current and prior reports' projected ultimate losses and ALAE. There is an overall $879,000 (4.0%) decrease.

The changes for accident period 7/1/88-03 are within the variation we expect with an additional year of data, with a lot of fluctuation due to changes in individual claims There is a $180,000 (1.1%) overall decrease for this accident period

The $472,000 (38.7%) increase in projected ultimate losses and ALAE for accident year 7/1/03-04 reflects worse than expected experience through 6/30/05, much of which is associated with one large loss and ALAE occurrence, offset by a 3.5% exposure decrease

The $1,067,000 (50.1%) decrease in projected ultimate losses and ALAE for accident year 7/1/04-05 reflects better than expected experience through 6/30/05 and a 3.7% exposure increase.

The $104,000 (4.7%) decrease in projected ultimate losses and ALAE for accident year 7/1/05-06 reflects a 3.2% exposure increase, which is more than offset by the slight reduction in the selected ultimate loss and ALAE rate. The latter assumes that part of the better than previously expected experience for accident year 7/1/04-05 will continue.

B. RETAINED PROJECTED ULTIMATE LOSSES AND ALAE

Exhibit IV-2 shows a comparison of the current and prior reports' retained projected ultimate losses and ALAE. There is an overall $459,000 (2.6%) decrease.

The only differences between Exhibits IV-1 and IV-2 are in accident period 7/1/95-06. The overall change for accident period 7/1/88-03 is a $10,000 (0.1%) decrease. This is within the variation we expect with an additional year of data

The $500,000 (44.4%) increase for accident year 7/1/03-04 reflects worse than expected experience through 6/30/05, much of which is associated with one large loss and ALAE occurrence, offset by a 3.5% exposure decrease.

The $882,000 (46.8%) decrease for accident year 7/1/04-05 reflects better than expected experience through 6/30/05 and a 3.7% exposure increase.

The $67,000 (3.4%) decrease for accident year 7/1/05-06 reflects a 3.2% exposure increase, which is more than offset by the slight reduction in the selected ultimate loss and ALAE rate. The latter assumes that part of the better than previously expected experience for accident year 7/1/04-05 will continue.

Exhibit IV-1

South Dakota Public Entity Pool for Liability

General Liability

Comparison of Current and Prior Reports' Projected Ultimate Losses and ALAE (000s)

	Projected Ultimate Losses and ALAE		Difference	
Accident Period	Prior Report	Current Report	Actual ((3)-(2))	Percentage ((4)/(2))
(1)	(2)	(3)	(4)	(5)
7/1/88-89	722	722	0	0.0%
7/1/89-90	431	431	0	0.0%
7/1/90-91	114	114	0	0.0%
7/1/91-92	403	403	0	0.0%
7/1/92-93	915	915	0	0.0%
7/1/93-94	1,260	1,260	0	0.0%
7/1/94-95	294	294	0	0.0%
7/1/95-96	888	888	0	0.0%
7/1/96-97	647	651	4	0.6%
7/1/97-98	1,999	2,021	22	1.1%
7/1/98-99	962	974	12	1.2%
7/1/99-00	2,627	2,484	(143)	-5.4%
7/1/00-01	1,739	1,383	(356)	-20.5%
7/1/01-02	1,530	2,077	547	35.8%
7/1/02-03	1,771	1,505	(266)	-15.0%
7/1/03-04	1,220	1,692	472	38.7%
7/1/04-05	2,131	1,064	(1,067)	-50.1%
7/1/05-06	2,210	2,106	(104)	-4.7%
Total/Avg.	21,863	20,984	(879)	-4.0%
7/1/88-03	16,302	16,122	(180)	-1.1%

Notes: (2) is (4) of Exhibit II-8 and (8) of Exhibit II-7 of our November 13, 2004 report.

(3) is (4) of Exhibit II-8 and (8) of Exhibit II-7.

South Dakota Public Entity Pool for Liability

General Liability

Comparison of Current and Prior Reports'
Retained Projected Ultimate Losses and ALAE
(000s)

Accident Period (1)	Retained Projected Ultimate Losses and ALAE: Prior Report (2)	Current Report (3)	Difference: Actual ((3)-(2)) (4)	Percentage ((4)/(2)) (5)
7/1/88-89	722	722	0	0.0%
7/1/89-90	431	431	0	0.0%
7/1/90-91	114	114	0	0.0%
7/1/91-92	403	403	0	0.0%
7/1/92-93	915	915	0	0.0%
7/1/93-94	1,260	1,260	0	0.0%
7/1/94-95	294	294	0	0.0%
7/1/95-96	888	888	0	0.0%
7/1/96-97	647	651	4	0.6%
7/1/97-98	923	863	(60)	-6.5%
7/1/98-99	857	869	12	1.4%
7/1/99-00	1,316	1,172	(144)	-10.9%
7/1/00-01	855	752	(103)	-12.0%
7/1/01-02	1,530	2,077	547	35.8%
7/1/02-03	1,771	1,505	(266)	-15.0%
7/1/03-04	1,125	1,625	500	44.4%
7/1/04-05	1,885	1,003	(882)	-46.8%
7/1/05-06	1,955	1,888	(67)	-3.4%
Total/Avg.	17,891	17,432	(459)	-2.6%
7/1/88-03	12,926	12,916	(10)	-0.1%

Notes: (2) is (18) of Exhibit II-5 of our November 13, 2004 report.

(3) is (18) of Exhibit II-5.

Appendix A

Patterns

A. PATTERNS

The claim reporting, claim with loss or ALAE reporting, claim closure, loss and ALAE reporting, and loss and ALAE payment patterns are shown in Exhibit A-1. The claim reporting pattern is based on the data shown in Exhibit A-2. The claim with loss or ALAE reporting pattern is based on the data shown in Exhibit A-3. The claim closure pattern is based on the data shown in Exhibit A-4 and the projected ultimate claims in Exhibit II-11.

The loss and ALAE reporting pattern is based on the data in Exhibit A-5. The loss and ALAE payment pattern is based on the data shown in Exhibit A-6 and the projected ultimate losses and ALAE in Exhibit II-8.

The outstanding losses and ALAE, open claims, and average case reserve are shown in Exhibit A-7.

The factors to ultimate are based on PEPL's data and our experience with other similar entities.

Exhibit A-1

South Dakota Public Entity Pool for Liability

General Liability

Reporting, Payment, and Closure Patterns

Months from Beginning of Accident Year	Expected Percentage Claims Unreported	Expected Percentage Claims With Loss Unreported	Expected Percentage Claims Unclosed	Expected Percentage Losses and ALAE Unreported	Expected Percentage Losses and ALAE Unpaid
(1)	(2)	(3)	(4)	(5)	(6)
0	100.0%	100.0%	100.0%	100.0%	100.0%
12	22.7%	19.1%	50.0%	58.6%	92.5%
24	3.4%	-1.1%	22.5%	25.6%	70.0%
36	1.0%	-3.6%	16.0%	14.4%	55.0%
48	0.5%	0.5%	5.0%	10.1%	40.0%
60	0.4%	0.4%	2.5%	5.6%	30.0%
72	0.3%	0.3%	1.5%	0.9%	20.0%
84	0.2%	0.2%	0.5%	0.4%	15.0%
96	0.1%	0.1%	0.3%	0.2%	10.0%
108	0.0%	0.0%	0.2%	0.0%	5.0%
120			0.1%		2.5%
132			0.0%		0.0%

Notes:

(2) is based on Exhibit A-2

(3) is based on Exhibit A-3

(4) is based on Exhibit A-4 and the projected ultimate claims in Exhibit II-11.

(5) is based on Exhibit A-5.

(6) is based on Exhibit A-6 and the projected ultimate losses and ALAE in Exhibit II-8.

Exhibit A-2
Page 1 of 2

South Dakota Public Entity Pool for Liability

General Liability

Reported Claims

Accident Year	Months From Beginning of Accident Year 12	24	36	48	60	72	84	96	108
7/1/88-89	67	100	103	107	106	106	106	106	106
7/1/89-90	74	103	101	101	101	101	101	101	101
7/1/90-91	98	130	135	135	135	135	135	135	136
7/1/91-92	142	177	178	178	178	181	181	181	181
7/1/92-93	178	250	250	252	252	252	252	252	252
7/1/93-94	213	407	410	413	413	413	413	414	414
7/1/94-95	206	255	257	257	258	258	257	257	257
7/1/95-96	187	241	245	247	247	247	247	247	247
7/1/96-97	291	345	344	345	346	342	343	344	344
7/1/97-98	186	260	261	262	261	261	261	261	
7/1/98-99	191	261	266	265	265	265	265		
7/1/99-00	172	211	213	213	213	214			
7/1/00-01	225	269	274	275	276				
7/1/01-02	224	250	259	264					
7/1/02-03	239	273	282						
7/1/03-04	177	198							
7/1/04-05	125								

Reported Claim Development Factors

Accident Year	Months From Beginning of Accident Year 12:24	24:36	36:48	48:60	60:72	72:84	84:96	96:108	108:120
7/1/88-89	1.493	1.030	1.039	0.991	1.000	1.000	1.000	1.000	1.000
7/1/89-90	1.392	0.981	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/90-91	1.327	1.038	1.000	1.000	1.000	1.000	1.000	1.007	1.000
7/1/91-92	1.246	1.006	1.000	1.000	1.017	1.000	1.000	1.000	1.000
7/1/92-93	1.404	1.000	1.008	1.000	1.000	1.000	1.000	1.000	0.996
7/1/93-94	1.911	1.007	1.007	1.000	1.000	1.000	1.002	1.000	1.000
7/1/94-95	1.238	1.008	1.000	1.004	1.000	0.996	1.000	1.000	1.000
7/1/95-96	1.289	1.017	1.008	1.000	1.000	1.000	1.000	1.000	1.000
7/1/96-97	1.186	0.997	1.003	1.003	0.988	1.003	1.003	1.000	
7/1/97-98	1.398	1.004	1.004	0.996	1.000	1.000	1.000		
7/1/98-99	1.366	1.019	0.996	1.000	1.000	1.000			
7/1/99-00	1.227	1.009	1.000	1.000	1.005				
7/1/00-01	1.196	1.019	1.004	1.004					
7/1/01-02	1.116	1.036	1.019						
7/1/02-03	1.142	1.033							
7/1/03-04	1.119								
Col. Avg	1.316	1.014	1.006	1.000	1.001	1.000	1.001	1.001	1.000
Over. Avg	1.300	1.013	1.005	1.000	1.000	1.000	1.001	1.000	0.999
Selected	1.250	1.025	1.005	1.001	1.001	1.001	1.001	1.001	1.000
Cumulative	1.294	1.035	1.010	1.005	1.004	1.003	1.002	1.001	1.000
% Unreported	22.7%	3.4%	1.0%	0.5%	0.4%	0.3%	0.2%	0.1%	0.0%

Exhibit A-2
Page 2 of 2

South Dakota Public Entity Pool for Liability

General Liability

Reported Claims

Accident Year	120	132	144	156	168	180	192	204
	Months From Beginning of Accident Year							
7/1/88-89	106	106	106	106	106	106	106	106
7/1/89-90	101	101	101	101	101	101	101	
7/1/90-91	136	136	136	136	136	136		
7/1/91-92	181	182	182	182	182			
7/1/92-93	251	251	251	251				
7/1/93-94	414	414	414					
7/1/94-95	257	257						
7/1/95-96	247							
7/1/96-97								
7/1/97-98								
7/1/98-99								
7/1/99-00								
7/1/00-01								
7/1/01-02								
7/1/02-03								
7/1/03-04								
7/1/04-05								

Reported Claim Development Factors

Accident Year	120:132	132:144	144:156	156:168	168:180	180:192	192:204	204:ULT
	Months From Beginning of Accident Year							
7/1/88-89	1.000	1 000	1.000	1.000	1.000	1.000	1.000	
7/1/89-90	1.000	1.000	1.000	1 000	1.000	1.000		
7/1/90-91	1.000	1.000	1.000	1.000	1.000			
7/1/91-92	1.006	1.000	1.000	1.000				
7/1/92-93	1.000	1.000	1 000					
7/1/93-94	1.000	1.000						
7/1/94-95	1.000							
7/1/95-96								
7/1/96-97								
7/1/97-98								
7/1/98-99								
7/1/99-00								
7/1/00-01								
7/1/01-02								
7/1/02-03								
7/1/03-04								
Col Avg	1.001	1 000	1.000	1.000	1 000	1.000	1 000	
Over. Avg.	1.001	1.000	1.000	1.000	1.000	1.000	1.000	
Selected	1.000	1.000	1.000	1 000	1.000	1 000	1.000	1 000
Cumulative	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
% Unreported	0 0%	0 0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

South Dakota Public Entity Pool for Liability

General Liability

Reported Claims With Loss or ALAE

Accident Year	Months From Beginning of Accident Year 12	24	36	48	60	72	84	96	108
7/1/88-89	41	67	NAV	66	68	68	68	68	68
7/1/89-90	50	NAV	62	61	59	59	59	59	59
7/1/90-91	NAV	82	73	70	70	71	71	71	72
7/1/91-92	123	107	107	99	100	101	102	102	102
7/1/92-93	127	138	117	120	119	119	119	118	118
7/1/93-94	163	307	314	304	300	301	301	304	302
7/1/94-95	123	153	123	117	118	117	117	117	117 *
7/1/95-96	129	161	133	139	139	140	137	137 *	138
7/1/96-97	191	184	187	167	166	166	166 *	168	167
7/1/97-98	124	178	175	157	157	157 *	157	157	
7/1/98-99	122	163	167	139	138 *	138	138		
7/1/99-00	129	168	141	135 *	131	131			
7/1/00-01	174	160	150 *	143	144				
7/1/01-02	171	175 *	178	173					
7/1/02-03	177 *	218	224						
7/1/03-04	124	132							
7/1/04-05	103								

Reported Claim With Loss or ALAE Development Factors

Accident Year	Months From Beginning of Accident Year 12:24	24:36	36:48	48:60	60:72	72:84	84:96	96:108	108:120
7/1/88-89	1.634			1.030	1 000	1.000	1.000	1.000	1.000
7/1/89-90			0.984	0.967	1.000	1.000	1.000	1.000	1 000
7/1/90-91		0.890	0.959	1.000	1 014	1.000	1 000	1 014	1.000
7/1/91-92	0.870	1.000	0.925	1.010	1.010	1.010	1 000	1:000	1 010
7/1/92-93	1.087	0.848	1.026	0.992	1.000	1.000	0 992	1.000	1.000
7/1/93-94	1.883	1.023	0.968	0.987	1.003	1.000	1.010	0.993	1.000
7/1/94-95	1.244	0.804	0.951	1.009	0 992	1.000	1.000	1.000	1.000
7/1/95-96	1.248	0.826	1.045	1.000	1.007	0.979	1.000	1.007	1.000
7/1/96-97	0.963	1.016	0.893	0.994	1.000	1.000	1.012	0 994	
7/1/97-98	1.435	0.983	0.897	1.000	1.000	1.000	1.000		
7/1/98-99	1.336	1.025	0.832	0 993	1.000	1.000			
7/1/99-00	1.302	0.839	0.957	0.970	1.000				
7/1/00-01	0.920	0 938	0.953	1.007					
7/1/01-02	1.023	1 017	0.972						
7/1/02-03	1.232	1.028							
7/1/03-04	1 065								
Col. Avg.	1 232	0 941	0.951	0.997	1 002	0.999	1.001	1 001	1.001
Over. Avg	1 205	0.952	0 947	0.995	1 002	0 999	1.003	0.999	1.001
Selected	1.250	1 025	0 960	1.001	1 001	1 001	1.001	1.001	1.000
Cumulative	1.236	0.989	0.965	1.005	1.004	1.003	1.002	1.001	1.000
% Unreported	19 1%	-1 1%	-3.6%	0 5%	0.4%	0.3%	0.2%	0 1%	0.0%

Note: * Judgementally increased based on subsequent information.

Exhibit A-3
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South Dakota Public Entity Pool for Liability

General Liability

Reported Claims With Loss or ALAE

Accident Year	Months From Beginning of Accident Year 120	132	144	156	168	180	192	204
7/1/88-89	68	68	68	69	68	68	68	68
7/1/89-90	59	59	59	59	59	59	59	
7/1/90-91	72	72	72	72	72	72		
7/1/91-92	103	102	102	102	102			
7/1/92-93	118	118	118	118				
7/1/93-94	302	302	302					
7/1/94-95	117	117						
7/1/95-96	138							
7/1/96-97								
7/1/97-98								
7/1/98-99								
7/1/99-00								
7/1/00-01								
7/1/01-02								
7/1/02-03								
7/1/03-04								
7/1/04-05								

Reported Claim With Loss or ALAE Development Factors

Accident Year	Months From Beginning of Accident Year 120:132	132:144	144:156	156:168	168:180	180:192	192:204	204:ULT
7/1/88-89	1.000	1.000	1.015	0.986	1.000	1.000	1.000	
7/1/89-90	1.000	1.000	1.000	1.000	1.000	1.000		
7/1/90-91	1.000	1.000	1.000	1.000	1.000			
7/1/91-92	0.990	1.000	1.000	1.000				
7/1/92-93	1.000	1.000	1.000					
7/1/93-94	1.000	1.000						
7/1/94-95	1.000							
7/1/95-96								
7/1/96-97								
7/1/97-98								
7/1/98-99								
7/1/99-00								
7/1/00-01								
7/1/01-02								
7/1/02-03								
7/1/03-04								
Col. Avg.	0.999	1.000	1.003	0.996	1.000	1.000	1.000	
Over Avg.	0.999	1.000	1.002	0.997	1.000	1.000	1.000	
Selected	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Cumulative	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
% Unreported	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Exhibit A-4
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South Dakota Public Entity Pool for Liability

General Liability

Closed Claims

Accident Year	Months From Beginning of Accident Year 12	24	36	48	60	72	84	96	108
7/1/88-89	48	84	91	101	104	105	106	106	106
7/1/89-90	56	87	89	95	98	98	101	101	101
7/1/90-91	66	92	106	130	131	135	135	135	136
7/1/91-92	73	134	150	158	177	181	181	181	181
7/1/92-93	90	158	163	240	243	245	249	249	249
7/1/93-94	131	345	381	399	408	410	412	410	414
7/1/94-95	121	188	221	249	253	254	256	257	257
7/1/95-96	122	182	207	235	240	241	246	246	247
7/1/96-97	182	272	302	333	339	336	340	343	343
7/1/97-98	134	216	225	253	255	257	259	261	
7/1/98-99	140	207	213	252	257	263	265		
7/1/99-00	104	158	175	201	208	212			
7/1/00-01	116	224	238	265	271				
7/1/01-02	148	191	224	245					
7/1/02-03	137	229	239						
7/1/03-04	127	166							
7/1/04-05	77								

Ratio of Closed to Projected Ultimate Claims

Accident Year	Months From Beginning of Accident Year 12	24	36	48	60	72	84	96	108
7/1/88-89	45.3%	79.2%	85.8%	95.3%	98.1%	99.1%	100.0%	100.0%	100.0%
7/1/89-90	55.4%	86.1%	88.1%	94.1%	97.0%	97.0%	100.0%	100.0%	100.0%
7/1/90-91	48.5%	67.6%	77.9%	95.6%	96.3%	99.3%	99.3%	99.3%	100.0%
7/1/91-92	40.1%	73.6%	82.4%	86.8%	97.3%	99.5%	99.5%	99.5%	99.5%
7/1/92-93	35.9%	62.9%	64.9%	95.6%	96.8%	97.6%	99.2%	99.2%	99.2%
7/1/93-94	31.6%	83.3%	92.0%	96.4%	98.6%	99.0%	99.5%	99.0%	100.0%
7/1/94-95	47.1%	73.2%	86.0%	96.9%	98.4%	98.8%	99.6%	100.0%	100.0%
7/1/95-96	49.4%	73.7%	83.8%	95.1%	97.2%	97.6%	99.6%	99.6%	100.0%
7/1/96-97	52.9%	79.1%	87.8%	96.8%	98.5%	97.7%	98.8%	99.7%	99.7%
7/1/97-98	51.3%	82.8%	86.2%	96.9%	97.7%	98.5%	99.2%	100.0%	
7/1/98-99	52.6%	77.8%	80.1%	94.7%	96.6%	98.9%	99.6%		
7/1/99-00	48.4%	73.5%	81.4%	93.5%	96.7%	98.6%			
7/1/00-01	41.9%	80.9%	85.9%	95.7%	97.8%				
7/1/01-02	55.8%	72.1%	84.5%	92.5%					
7/1/02-03	48.1%	80.4%	83.9%						
7/1/03-04	62.0%	81.0%							
7/1/04-05	47.5%								
Col Avg.	47.9%	76.7%	83.4%	94.7%	97.5%	98.5%	99.5%	99.6%	99.8%
Over. Avg.	47.1%	76.9%	83.8%	95.0%	97.6%	98.5%	99.4%	99.6%	99.8%
Selected	50.0%	77.5%	84.0%	95.0%	97.5%	98.5%	99.5%	99.7%	99.8%
% Unclosed	50.0%	22.5%	16.0%	5.0%	2.5%	1.5%	0.5%	0.3%	0.2%

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South Dakota Public Entity Pool for Liability

General Liability

Closed Claims

Accident Year	Months From Beginning of Accident Year 120	132	144	156	168	180	192	204
7/1/88-89	106	106	106	106	106	106	106	106
7/1/89-90	101	101	101	101	101	101	101	
7/1/90-91	136	136	136	136	136	136		
7/1/91-92	181 *	182	182	182	182			
7/1/92-93	249	251	251	251				
7/1/93-94	414	414	414					
7/1/94-95	257	257						
7/1/95-96	247							
7/1/96-97								
7/1/97-98								
7/1/98-99								
7/1/99-00								
7/1/00-01								
7/1/01-02								
7/1/02-03								
7/1/03-04								
7/1/04-05								

Ratio of Closed to Projected Ultimate Claims

Accident Year	Months From Beginning of Accident Year 120	132	144	156	168	180	192	204
7/1/88-89	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
7/1/89-90	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
7/1/90-91	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		
7/1/91-92	99.5%	100.0%	100.0%	100.0%	100.0%			
7/1/92-93	99.2%	100.0%	100.0%	100.0%				
7/1/93-94	100.0%	100.0%	100.0%					
7/1/94-95	100.0%	100.0%						
7/1/95-96	100.0%							
7/1/96-97								
7/1/97-98								
7/1/98-99								
7/1/99-00								
7/1/00-01								
7/1/01-02								
7/1/02-03								
7/1/03-04								
7/1/04-05								
Col. Avg.	99.8%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Over. Avg.	99.8%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Selected	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
% Unclosed	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

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South Dakota Public Entity Pool for Liability

General Liability

Reported Losses and ALAE

Accident Year	Months From Beginning of Accident Year 12	24	36	48	60	72	84	96	108
7/1/88-89	31,492	820,254	755,406	727,342	721,064	724,118	721,204	721,204	721,204
7/1/89-90	145,842	331,111	246,604	177,816	193,469	386,469	431,387	431,387	431,387
7/1/90-91	127,962	184,516	172,233	130,913	132,660	113,283	113,283	113,283	114,405
7/1/91-92	291,075	598,303	539,567	538,956	513,688	402,907	402,907	402,907	402,907
7/1/92-93	549,147	528,583	683,096	946,205	1,542,682	1,499,214	1,467,100	1,364,733	1,375,390
7/1/93-94	286,155	858,270	1,305,612	1,384,668	1,212,329	1,220,525	1,222,094	1,302,182	1,259,925
7/1/94-95	381,588	912,401	1,015,797	365,578	359,841	450,832	320,707	293,432	293,763
7/1/95-96	918,789	2,284,154	1,292,237	1,274,572	1,183,480	1,169,723	893,641	893,641	887,512
7/1/96-97	690,075	718,415	842,326	650,209	604,437	666,201	662,576	645,793	650,834
7/1/97-98	1,009,660	1,139,949	1,284,193	1,182,115	1,164,729	1,896,500	1,990,814	2,020,959	
7/1/98-99	443,974	692,013	852,641	791,773	874,232	953,697	974,032		
7/1/99-00	1,645,600	2,017,817	2,199,589	2,017,944	2,479,545	2,470,637			
7/1/00-01	1,676,526	1,500,876	1,724,402	1,676,405	1,346,741				
7/1/01-02	844,528	1,010,463	1,309,803	1,866,658					
7/1/02-03	708,707	1,318,757	1,288,704						
7/1/03-04	504,720	1,259,943							
7/1/04-05	440,235								

Reported Loss and ALAE Development Factors

Accident Year	Months From Beginning of Accident Year 12:24	24:36	36:48	48:60	60:72	72:84	84:96	96:108	108:120
7/1/88-89	26.046	0.921	0.963	0.991	1.004	0.996	1.000	1.000	1.000
7/1/89-90	2.270	0.745	0.721	1.088	1.998	1.116	1.000	1.000	1.000
7/1/90-91	1.442	0.933	0.760	1.013	0.854	1.000	1.000	1.010	1.000
7/1/91-92	2.055	0.902	0.999	0.953	0.784	1.000	1.000	1.000	1.000
7/1/92-93	0.963	1.292	1.385	1.630	0.972	0.979	0.930	1.008	0.992
7/1/93-94	2.999	1.521	1.061	0.876	1.007	1.001	1.066	0.968	1.000
7/1/94-95	2.391	1.113	0.360	0.984	1.253	0.711	0.915	1.001	1.000
7/1/95-96	2.486	0.566	0.986	0.929	0.988	0.764	1.000	0.993	1.000
7/1/96-97	1.041	1.172	0.772	0.930	1.102	0.995	0.975	1.008	
7/1/97-98	1.129	1.127	0.921	0.985	1.628	1.050	1.015		
7/1/98-99	1.559	1.232	0.929	1.104	1.091	1.021			
7/1/99-00	1.226	1.090	0.917	1.229	0.996				
7/1/00-01	0.895	1.149	0.972	0.803					
7/1/01-02	1.196	1.296	1.425						
7/1/02-03	1.861	0.977							
7/1/03-04	2.496								
Col. Avg	3.254	1.069	0.941	1.040	1.140	0.967	0.990	0.999	0.999
Over. Avg.	1.577	1.040	0.965	1.039	1.089	0.970	0.996	0.995	0.998
Selected	1.800	1.150	1.050	1.050	1.050	1.005	1.002	1.002	1.000
Cumulative	2.418	1.343	1.168	1.112	1.059	1.009	1.004	1.002	1.000
% Unreported	58.6%	25.6%	14.4%	10.1%	5.6%	0.9%	0.4%	0.2%	0.0%

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South Dakota Public Entity Pool for Liability

General Liability

Reported Losses and ALAE

Accident Year	Months From Beginning of Accident Year 120	132	144	156	168	180	192	204
7/1/88-89	721,204	721,204	721,204	721,697	721,697	721,697	721,697	721,697
7/1/89-90	431,387	431,387	431,387	431,387	431,387	431,387	431,387	
7/1/90-91	114,405	114,405	114,405	114,405	114,405	114,405		
7/1/91-92	402,802	402,802	402,802	402,802	402,802			
7/1/92-93	1,364,866	914,633	914,633	914,633				
7/1/93-94	1,259,925	1,259,925	1,259,925					
7/1/94-95	293,763	293,763						
7/1/95-96	887,512							
7/1/96-97								
7/1/97-98								
7/1/98-99								
7/1/99-00								
7/1/00-01								
7/1/01-02								
7/1/02-03								
7/1/03-04								
7/1/04-05								

Reported Loss and ALAE Development Factors

Accident Year	Months From Beginning of Accident Year 120:132	132:144	144:156	156:168	168:180	180:192	192:204	204:ULT
7/1/88-89	1.000	1.000	1.001	1.000	1.000	1.000	1 000	
7/1/89-90	1 000	1.000	1 000	1.000	1.000	1 000		
7/1/90-91	1.000	1.000	1.000	1.000	1.000			
7/1/91-92	1.000	1.000	1.000	1.000				
7/1/92-93	0.670	1.000	1.000					
7/1/93-94	1.000	1.000						
7/1/94-95	1.000							
7/1/95-96								
7/1/96-97								
7/1/97-98								
7/1/98-99								
7/1/99-00								
7/1/00-01								
7/1/01-02								
7/1/02-03								
7/1/03-04								
Col. Avg	0.953	1 000	1.000	1.000	1.000	1.000	1.000	
Over. Avg.	0.902	1.000	1.000	1.000	1.000	1 000	1.000	
Selected	1.000	1.000	1.000	1.000	1 000	1.000	1.000	1.000
Cumulative	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
% Unreported	0.0%	0.0%	0 0%	0.0%	0 0%	0.0%	0.0%	0.0%

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South Dakota Public Entity Pool for Liability

General Liability

Paid Losses and ALAE

Accident Year	Months From Beginning of Accident Year 12	24	36	48	60	72	84	96	108
7/1/88-89	10,182	595,094	661,176	691,872	715,759	720,574	721,204	721,204	721,204
7/1/89-90	41,058	61,248	95,135	119,275	142,216	184,379	431,387	431,387	431,387
7/1/90-91	22,658	57,916	81,785	101,706	111,308	113,283	113,283	113,283	114,405
7/1/91-92	33,589	121,885	249,415	279,430	285,786	402,907	402,907	402,907	402,907
7/1/92-93	79,956	148,927	205,650	253,958	269,181	293,272	299,228	331,040	338,070
7/1/93-94	57,816	263,643	449,236	1,097,345	1,129,402	1,167,109	1,190,355	1,224,794	1,259,925
7/1/94-95	31,268	147,955	202,720	255,614	336,511	294,682	283,207	293,432	293,763
7/1/95-96	41,986	260,483	483,566	683,448	813,861	836,178	875,346	876,304	887,512
7/1/96-97	52,616	139,266	394,834	482,528	521,806	561,679	588,442	635,926	650,066
7/1/97-98	49,447	185,061	312,235	425,839	638,857	760,611	1,643,598	2,020,959	
7/1/98-99	260,152	369,093	422,408	538,335	713,910	865,949	974,032		
7/1/99-00	216,705	1,217,693	1,510,726	1,708,487	2,380,165	2,462,465			
7/1/00-01	59,701	628,021	845,506	990,269	1,292,301				
7/1/01-02	112,049	419,079	638,704	1,268,768					
7/1/02-03	173,640	420,543	581,982						
7/1/03-04	195,727	322,344							
7/1/04-05	57,531								

Ratio of Paid to Projected Ultimate Losses and ALAE

Accident Year	Months From Beginning of Accident Year 12	24	36	48	60	72	84	96	108
7/1/88-89	1.4%	82.5%	91.6%	95.9%	99.2%	99.8%	99.9%	99.9%	99.9%
7/1/89-90	9.5%	14.2%	22.1%	27.6%	33.0%	42.7%	100.0%	100.0%	100.0%
7/1/90-91	19.8%	50.6%	71.5%	88.9%	97.3%	99.0%	99.0%	99.0%	100.0%
7/1/91-92	8.3%	30.3%	61.9%	69.4%	70.9%	100.0%	100.0%	100.0%	100.0%
7/1/92-93	8.7%	16.3%	22.5%	27.8%	29.4%	32.1%	32.7%	36.2%	37.0%
7/1/93-94	4.6%	20.9%	35.7%	87.1%	89.6%	92.6%	94.5%	97.2%	100.0%
7/1/94-95	10.6%	50.4%	69.0%	87.0%	114.6%	100.3%	96.4%	99.9%	100.0%
7/1/95-96	4.7%	29.3%	54.5%	77.0%	91.7%	94.2%	98.6%	98.7%	100.0%
7/1/96-97	8.1%	21.4%	60.7%	74.1%	80.2%	86.3%	90.4%	97.7%	99.9%
7/1/97-98	2.4%	9.2%	15.4%	21.1%	31.6%	37.6%	81.3%	100.0%	
7/1/98-99	26.7%	37.9%	43.4%	55.3%	73.3%	88.9%	100.0%		
7/1/99-00	8.7%	49.0%	60.8%	68.8%	95.8%	99.2%			
7/1/00-01	4.3%	45.4%	61.2%	71.6%	93.5%				
7/1/01-02	5.4%	20.2%	30.8%	61.1%					
7/1/02-03	11.5%	27.9%	38.7%						
7/1/03-04	11.6%	19.0%							
7/1/04-05	5.4%								
Col. Avg.	8.9%	32.8%	49.3%	65.2%	76.9%	81.1%	90.3%	92.9%	93.0%
Over. Avg.	7.9%	30.1%	44.3%	60.9%	74.6%	77.7%	86.8%	91.6%	89.8%
Selected	7.5%	30.0%	45.0%	60.0%	70.0%	80.0%	85.0%	90.0%	95.0%
% Unpaid	92.5%	70.0%	55.0%	40.0%	30.0%	20.0%	15.0%	10.0%	5.0%

Exhibit A-6
Page 2 of 2

South Dakota Public Entity Pool for Liability

General Liability

Paid Losses and ALAE

Accident Year	Months From Beginning of Accident Year 120	132	144	156	168	180	192	204
7/1/88-89	721,204	721,204	721,204	721,697	721,697	721,697	721,697	721,697
7/1/89-90	431,387	431,387	431,387	431,387	431,387	431,387	431,387	
7/1/90-91	114,405	114,405	114,405	114,405	114,405	114,405		
7/1/91-92	402,802	402,802	402,802	402,802	402,802			
7/1/92-93	341,921	914,633	914,633	914,633				
7/1/93-94	1,259,925	1,259,925	1,259,925					
7/1/94-95	293,763	293,763						
7/1/95-96	887,512							
7/1/96-97								
7/1/97-98								
7/1/98-99								
7/1/99-00								
7/1/00-01								
7/1/01-02								
7/1/02-03								
7/1/03-04								
7/1/04-05								

Ratio of Paid to Projected Ultimate Losses and ALAE

Accident Year	Months From Beginning of Accident Year 120	132	144	156	168	180	192	204
7/1/88-89	99.9%	99.9%	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%
7/1/89-90	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
7/1/90-91	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		
7/1/91-92	100.0%	100.0%	100.0%	100.0%	100.0%			
7/1/92-93	37.4%	100.0%	100.0%	100.0%				
7/1/93-94	100.0%	100.0%	100.0%					
7/1/94-95	100.0%	100.0%						
7/1/95-96	100.0%							
7/1/96-97								
7/1/97-98								
7/1/98-99								
7/1/99-00								
7/1/00-01								
7/1/01-02								
7/1/02-03								
7/1/03-04								
7/1/04-05								
Col Avg.	92.2%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Over. Avg	88.6%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Selected	97.5%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
% Unpaid	2.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Exhibit A-7
Page 1 of 4

South Dakota Public Entity Pool for Liability

General Liability

Outstanding Losses and ALAE

Accident Year	Months From Beginning of Accident Year								
	12	24	36	48	60	72	84	96	108
7/1/88-89	21,310	225,160	94,230	35,470	5,305	3,544	0	0	0
7/1/89-90	104,784	269,863	151,469	58,541	51,253	202,090	0	0	0
7/1/90-91	105,304	126,600	90,448	29,207	21,352	0	0	0	0
7/1/91-92	257,486	476,418	290,152	259,526	227,902	0	0	0	0
7/1/92-93	469,191	379,656	477,446	692,247	1,273,501	1,205,942	1,167,872	1,033,693	1,037,320
7/1/93-94	228,339	594,627	856,376	287,323	82,927	53,416	31,740	77,388	0
7/1/94-95	350,320	764,446	813,077	109,964	23,330	156,150	37,500	0	0
7/1/95-96	876,803	2,023,671	808,671	591,124	369,619	333,545	18,295	17,337	0
7/1/96-97	637,459	579,149	447,493	167,681	82,631	104,522	74,134	9,867	768
7/1/97-98	960,213	954,887	971,958	756,276	525,872	1,135,889	347,216	0	
7/1/98-99	183,822	322,920	430,233	253,438	160,322	87,748	0		
7/1/99-00	1,428,894	800,124	688,863	309,457	99,380	8,172			
7/1/00-01	1,616,825	872,855	878,896	686,136	54,440				
7/1/01-02	732,479	591,384	671,099	597,890					
7/1/02-03	535,067	898,214	706,722						
7/1/03-04	308,993	937,599							
7/1/04-05	382,704								

Open Claims

Accident Year	Months From Beginning of Accident Year								
	12	24	36	48	60	72	84	96	108
7/1/88-89	19	16	12	6	2	1	0	0	0
7/1/89-90	18	16	12	6	3	3	0	0	0
7/1/90-91	32	38	29	5	4	0	0	0	0
7/1/91-92	69	43	28	20	1	0	0	0	0
7/1/92-93	88	92	87	12	9	7	3	3	3
7/1/93-94	82	62	29	14	5	3	1	4	0
7/1/94-95	85	67	36	8	5	4	1	0	0
7/1/95-96	65	59	38	12	7	6	1	1	0
7/1/96-97	109	73	42	12	7	6	3	1	1
7/1/97-98	52	44	36	9	6	4	2	0	
7/1/98-99	51	54	53	13	8	2	0		
7/1/99-00	68	53	38	12	5	2			
7/1/00-01	109	45	36	10	5				
7/1/01-02	76	59	35	19					
7/1/02-03	102	44	43						
7/1/03-04	50	32							
7/1/04-05	48								

Exhibit A-7
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South Dakota Public Entity Pool for Liability

General Liability

Outstanding Losses and ALAE

Accident Year	Months From Beginning of Accident Year 120	132	144	156	168	180	192	204
7/1/88-89	0	0	0	0	0	0	0	0
7/1/89-90	0	0	0	0	0	0	0	
7/1/90-91	0	0	0	0	0	0		
7/1/91-92	0	0	0	0	0			
7/1/92-93	1,022,945	0	0	0				
7/1/93-94	0	0	0					
7/1/94-95	0	0						
7/1/95-96	0							
7/1/96-97								
7/1/97-98								
7/1/98-99								
7/1/99-00								
7/1/00-01								
7/1/01-02								
7/1/02-03								
7/1/03-04								
7/1/04-05								

Open Claims

Accident Year	Months From Beginning of Accident Year 120	132	144	156	168	180	192	204
7/1/88-89	0	0	0	0	0	0	0	0
7/1/89-90	0	0	0	0	0	0	0	
7/1/90-91	0	0	0	0	0	0		
7/1/91-92	0	0	0	0	0			
7/1/92-93	2	0	0	0				
7/1/93-94	0	0	0					
7/1/94-95	0	0						
7/1/95-96	0							
7/1/96-97								
7/1/97-98								
7/1/98-99								
7/1/99-00								
7/1/00-01								
7/1/01-02								
7/1/02-03								
7/1/03-04								
7/1/04-05								

Exhibit A-7
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South Dakota Public Entity Pool for Liability

General Liability

Average Case Reserve

Accident Year	Months From Beginning of Accident Year 12	24	36	48	60	72	84	96	108
7/1/88-89	1,122	14,073	7,853	5,912	2,653	3,544	NAP	NAP	NAP
7/1/89-90	5,821	16,866	12,622	9,757	17,084	67,363	NAP	NAP	NAP
7/1/90-91	3,291	3,332	3,119	5,841	5,338	NAP	NAP	NAP	NAP
7/1/91-92	3,732	11,079	10,363	12,976	227,902	NAP	NAP	NAP	NAP
7/1/92-93	5,332	4,127	5,488	57,687	141,500	172,277	389,291	344,564	345,773
7/1/93-94	2,785	9,591	29,530	20,523	16,585	17,805	31,740	19,347	NAP
7/1/94-95	4,121	11,410	22,585	13,746	4,666	39,038	37,500	NAP	NAP
7/1/95-96	13,489	34,300	21,281	49,260	52,803	55,591	18,295	17,337	NAP
7/1/96-97	5,848	7,934	10,655	13,973	11,804	17,420	24,711	9,867	768
7/1/97-98	18,466	21,702	26,999	84,031	87,645	283,972	173,608	NAP	
7/1/98-99	3,604	5,980	8,118	19,495	20,040	43,874	NAP		
7/1/99-00	21,013	15,097	18,128	25,788	19,876	4,086			
7/1/00-01	14,833	19,397	24,414	68,614	10,888				
7/1/01-02	9,638	10,023	19,174	31,468					
7/1/02-03	5,246	20,414	16,435						
7/1/03-04	6,180	29,300							
7/1/04-05	7,973								

South Dakota Public Entity Pool for Liability

General Liability

Average Case Reserve

Accident Year	Months From Beginning of Accident Year 120	132	144	156	168	180	192	204
7/1/88-89	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP
7/1/89-90	NAP	NAP	NAP	NAP	NAP	NAP	NAP	
7/1/90-91	NAP	NAP	NAP	NAP	NAP	NAP		
7/1/91-92	NAP	NAP	NAP	NAP	NAP			
7/1/92-93	511,473	NAP	NAP	NAP				
7/1/93-94	NAP	NAP	NAP					
7/1/94-95	NAP	NAP						
7/1/95-96	NAP							
7/1/96-97								
7/1/97-98								
7/1/98-99								
7/1/99-00								
7/1/00-01								
7/1/01-02								
7/1/02-03								
7/1/03-04								
7/1/04-05								

Appendix B

Risk Margin

B. RISK MARGIN

The assumptions used to determine the statistical confidence limits for the expected loss and ALAE liabilities at 6/30/05 and 6/30/06 and the expected losses and ALAE for accident years 7/1/05-06 and 7/1/06-07 are shown in Exhibit B-1.

While there is no general rule for determining confidence limits, one approach utilizes computer simulation. To perform the required simulation we need information on distributions of and moments about the mean for the number of claims and claim size.

Since we do not have data that allows us to determine the distributions and all the required moments with any degree of reasonability, we assumed that the number of claims and claim size have the Poisson and lognormal distributions, respectively. The Poisson and lognormal distributions have been widely used in actuarial literature to estimate the actual distributions.

We do have information about the means of these distributions for general liability based on the analysis in Chapter II. We made an additional assumption concerning the coefficient of variation of the claim size. Based on the information about reported claims over $100,000 for PEPL, our experience, and the properties of the lognormal distribution, we selected 12.0 as a reasonable coefficient of variation for this analysis.

The claims in the simulation have been limited to $250,000 per occurrence for accident period 7/1/88-05. In reality, they should have been limited to $1,000,000 for accident period 7/1/88-9/20/95, $100,000 per occurrence for accident period 9/21/95-6/30/01, and $250,000 per occurrence for 7/1/01-05 with an additional 10% of the losses and ALAE above $250,000 for accident year 7/1/03-04. Most of the open and unreported claims for accident period 7/1/88-05 are in the years with the $250,000 per occurrence retention, and there are no open occurrences expected above $250,000 per occurrence for accident year 7/1/03-04. The claims in the simulation have been limited to $250,000 per occurrence for accident year 7/1/05-06. This is the per occurrence retention for this accident year and ignores the impact of the 25% quota share retained losses above this amount. The simulation limits are applied to losses and ALAE combined, whereas the coverage applies to losses only with ALAE split pro-rata to the losses. These simplifying assumptions should produce reasonable risk margins.

We ran the simulation for general liability alone. This is different from the prior years' analyses, in which we ran the simulations both separately and combined for general and automobile liability and then pro-rated the combined results based on sum of the separate results. This change was made to reflect PEPL's request for separate estimates for general and automobile liability in response to a request from the Federal government.

We used the 90% confidence level for PEPL for its general liability risk retention program. Consequently, the risk margin is calculated as 24% of the total estimated loss and ALAE liabilities at 6/30/05 and 6/30/06 and the expected losses and ALAE for accident years 7/1/05-06 and 7/1/06-07 for PEPL's general liability risk retention program.

Exhibit B-1

South Dakota Public Entity Pool for Liability

General Liability

Simulation Assumptions

1. The number of claims has a Poisson distribution.

2. The average claim size has a lognormal distribution.

3. The coefficient of variation of the average claim size is 12.0. This is based on the State's reported claims greater than $100,000, other similar entities' experience, and the properties of the lognormal distribution.

4. The maximum allowable claim in the simulation is $250,000 for 7/1/88-05 and $250,000 for 71/05-06.

5. The risk margin percentage for the unclosed claims with loss or ALAE for 7/1/88-05 at 6/30/05 and for the projected ultimate claims with loss or ALAE for 7/1/05-06 applies to the unpaid losses and ALAE for 7/1/88-07 at 6/30/05 and at 6/30/06.

	Estimated Unclosed Claims With Loss or ALAE 7/1/88-05 at 6/30/05	Projected Ultimate Claims With Loss or ALAE 7/1/05-06
6. Number of Claims With Loss or ALAE (Based on Exhibit II-10)	251	190
7. Average Unlimited Claim Size (Based on (6) and Exhibits II-7 and II-8 and the loss and ALAE payment pattern in Exhibit A-1)	16,814	11,083

Simulation Results

Confidence Level (1)	Risk Margin Percentage (2)
75%	12%
80%	16%
85%	20%
90%	24%
95%	35%

Appendix C

Contribution Split

C. CONTRIBUTION SPLIT

Previously the Federal government required PEPL to split its fiscal year 7/1/05-06 and 7/1/06-07 contributions into general and automobile liability components. It is now requiring the PEPL split its fund completely into two parts: general liability and automobile liability.

We reviewed several possible bases for this split:

- projected ultimate losses and ALAE for accident years 7/1/88-89 through 7/1/06-07;
- projected ultimate retained losses and ALAE for accident years 7/1/88-89 through 7/1/06-07; and
- expected retained losses and ALAE discounted with risk margin for accident years 7/1/05-06 and 7/1/06-07.

Previously, we based the contribution split on the last of these.

Based on information provided for this actuarial analysis that PEPL is using undiscounted losses and ALAE with no risk margin for its financial statements and budgeting, we selected the second of these to split the excess insurance and administration costs for fiscal years 7/1/05-06 and 7/1/06-07. Consequently, we selected 80.0% as the general liability percentage and 20.0% as the automobile liability percentage for this analysis.

The bases and selection are shown in Exhibit C-1.

Exhibit C-1

South Dakota Public Entity Pool for Liability

Liability

Selected Percentage Split of Contribution
Between General and Automobile Liability
7/1/05-07

Accident Period	Projected Ultimate Losses and ALAE: General Liability	Projected Ultimate Losses and ALAE: Automobile Liability	Projected Ultimate Losses and ALAE: Total ((2)+(3))	Percentage of Total Projected Ultimate Losses and ALAE: General Liability ((2)/(4))	Percentage of Total Projected Ultimate Losses and ALAE: Automobile Liability ((3)/(4))	Projected Ultimate Retained Losses and ALAE: General Liability	Projected Ultimate Retained Losses and ALAE: Automobile Liability	Projected Ultimate Retained Losses and ALAE: Total ((7)+(8))	Percentage of Total Projected Ultimate Retained Losses and ALAE: General Liability ((7)/(9))	Percentage of Total Projected Ultimate Retained Losses and ALAE: Automobile Liability ((8)/(9))
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
7/1/88-89	721,697	85,652	807,349	89.4%	10.6%	721,697	85,652	807,349	89.4%	10.6%
7/1/89-90	431,387	109,145	540,532	79.8%	20.2%	431,387	109,145	540,532	79.8%	20.2%
7/1/90-91	114,405	352,335	466,740	24.5%	75.5%	114,405	352,335	466,740	24.5%	23.4%
7/1/91-92	402,802	677,424	1,080,226	37.3%	62.7%	402,802	677,424	1,080,226	37.3%	62.7%
7/1/92-93	914,633	432,117	1,346,750	67.9%	32.1%	914,633	432,117	1,346,750	67.9%	32.1%
7/1/93-94	1,259,925	180,884	1,440,809	87.4%	12.6%	1,259,925	180,884	1,440,809	87.4%	12.6%
7/1/94-95	293,763	333,508	627,271	46.8%	53.2%	293,763	333,508	627,271	46.8%	53.2%
7/1/95-96	887,512	375,607	1,263,119	70.3%	29.7%	887,512	375,607	1,263,119	70.3%	29.7%
7/1/96-97	650,834	562,824	1,213,658	53.6%	46.4%	650,834	473,790	1,124,624	57.9%	42.1%
7/1/97-98	2,020,959	675,970	2,696,929	74.9%	25.1%	863,132	316,676	1,179,808	73.2%	26.8%
7/1/98-99	974,032	559,757	1,533,789	63.5%	36.5%	868,927	473,203	1,342,130	64.7%	35.3%
7/1/99-00	2,483,544	844,901	3,328,445	74.6%	25.4%	1,172,484	293,867	1,466,351	80.0%	20.0%
7/1/00-01	1,382,642	421,092	1,803,735	76.7%	23.3%	752,197	421,092	1,173,290	64.1%	35.9%
7/1/01-02	2,076,562	676,597	2,753,158	75.4%	24.6%	2,076,562	527,438	2,603,999	79.7%	20.3%
7/1/02-03	1,505,298	599,574	2,104,872	71.5%	28.5%	1,505,298	445,177	1,950,475	77.2%	22.8%
7/1/03-04	1,692,459	107,875	1,800,334	94.0%	6.0%	1,624,845	107,875	1,732,720	93.8%	6.2%
7/1/04-05	1,064,448	230,825	1,295,273	82.2%	17.8%	1,003,242	230,825	1,234,067	81.3%	18.7%
7/1/05-06	2,105,730	696,795	2,802,525	75.1%	24.9%	1,887,787	626,279	2,514,066	75.1%	24.9%
7/1/06-07	2,151,471	736,050	2,887,521	74.5%	25.5%	1,928,794	661,562	2,590,355	74.5%	25.5%
7/1/95-07	18,995,491	6,487,867	25,483,358	74.5%	25.5%	15,221,614	4,953,391	20,175,006	75.4%	24.6%
7/1/01-07	10,595,968	3,047,716	13,643,684	77.7%	22.3%	10,026,528	2,599,156	12,625,684	79.4%	20.6%
7/1/05-07	4,257,201	1,432,845	5,690,046	74.8%	25.2%	3,816,581	1,287,841	5,104,422	74.8%	25.2%
7/1/00-05	7,721,409	2,035,963	9,757,372	79.1%	20.9%	6,962,145	1,732,407	8,694,552	80.1%	19.9%

Accident Period	Expected Retained Losses and ALAE Discounted With Risk Margin: General Liability	Expected Retained Losses and ALAE Discounted With Risk Margin: Automobile Liability	Expected Retained Losses and ALAE Discounted With Risk Margin: Total ((12)+(13))	Percentage of Expected Retained Losses and ALAE Discounted With Risk Margin: General Liability	Percentage of Expected Retained Losses and ALAE Discounted With Risk Margin: Automobile Liability
(1)	(12)	(13)	(14)	(15)	(16)
7/1/05-06	1,950,000	560,000	2,510,000	77.7%	22.3%
7/1/06-07	1,990,000	590,000	2,580,000	77.1%	22.9%

17. Selected Percentage Contribution Split — 80.0% — 20.0%

Notes:
(2) for 7/1/88-05 is (4) of Exhibit II-8 of the general liability report
(2) for 7/1/05-07 is (8) of Exhibit II-7 of the general liability report

(3) for 7/1/88-05 is (4) of Exhibit II-8 of the automobile liability report
(3) for 7/1/05-07 is (8) of Exhibit II-7 of the automobile liability report

(7) is (15) of Exhibit II-5 of the general liability report

(8) is (15) of Exhibit II-5 of the automobile liability report

(12) is (5c) and (6c) of Exhibit I-1 of the general liability report

(13) is (5c) and (6c) of Exhibit I-1 of the automobile liability report

(17) is based on (5), (6), (10), (11), (15), and (16).

Glossary

GLOSSARY

Accident Period - Period during which accidents occur, regardless of the report and payment dates.

Allocated Loss Adjustment Expenses (ALAE) - Legal fees, medical testimony costs, etc., associated with individual claims.

Case Reserve Development - Changes in reserve amounts on known cases as more information becomes available over time.

Development Factor - Factor to increase or decrease the number of claims or amount of losses at one time to their expected number or amount at another time.

Discount Factor - Factor to decrease the amount of money required at some future date so that the discounted money with accrued interest will equal the required amount at the future date.

Expected Losses - The amount of ultimate losses that are expected to occur during a specific period of time.

Incurred Losses - Losses that occur between two points in time, regardless of when reported or paid. Equals sum of reported and unreported losses.

Limited Losses - Losses that have been limited by the entity's self-insured retention.

Outstanding Losses - The projected ultimate claim cost estimated by the claims adjuster minus any payments.

Paid Losses - Losses that have been paid.

Reported Losses - Sum of paid and outstanding losses.

Risk Margin - Funds set aside to cover adverse fluctuation in losses.

Self-Insured Retention - Losses retained by the entity, usually from first dollar to some or no ~~limit~~.

Ultimate Losses - Total payout expected for accidents occurring in a particular period, regardless of when claims are reported or paid.

Unallocated Loss Adjustment Expenses (ULAE) - Cost of handling claims that is not associated with particular claims (i.e., ALAE).

Unreported Losses - Losses associated with claims that have occurred, which have not been reported. This includes both losses for claims that have not been reported and case reserve development.

State of West Virginia

DEPARTMENT OF ENVIRONMENTAL PROTECTION

2005 Actuarial Valuation of Special Reclamation Fund

REPORT

October 6, 2005

Submitted by:

HAY GROUP, INC
TILLER CONSULTING GROUP, INC

TABLE OF CONTENTS

EXECUTIVE SUMMARY

This report provides the Department of Environmental Protection (DEP) with information on the funded status of the Special Reclamation Fund (SRF) and an analysis of the fund's projected financial status under a range of operational parameters. The previous actuarial study was completed in 1993.

This report includes liabilities for reclamation activities on permits that have been forfeited as well as expected future reclamation activities on permits that have been issued. We believe it is appropriate to include the liabilities for permits that may be forfeited in the future for several reasons, including the guidance set out in Governmental Accounting Standard Number 10, an excerpt of which is:

State and local governmental entities other than public entity risk pools are required to report an estimated loss from a claim as an expenditure/expense and as a liability if both of these conditions are met:

a. *Information available before the financial statements are issued indicates that it is probable that an asset had been impaired or a liability had been incurred at the date of the financial statements. It is implicit in this condition that it must be probable that one or more future events will also occur, confirming the fact of the loss.*

b. *The amount of the loss can be reasonably estimated*

With regard to the basis for the fund's liabilities, we believe the accounting rules are framed to require the fund to account for both known forfeitures and anticipated forfeitures from existing permits. Accordingly, we have included in this report reclamation liabilities based on the date of forfeiture as well as based on the date of permit, to provide the SRF Advisory Committee with a complete picture of the fund's obligations.

SRF Liabilities

Table A shows the present value of future cash expenditures from 2005 to 2025 associated with land capital expenditures, water capital expenditures, ongoing water treatment expenditures, and administrative costs. These amounts include the DEP estimated costs for reclamation activities on permits that have already been forfeited, including on-going water treatment costs. The amounts shown in Table A are the discounted present value of projected cash flows using a discount rate of 2.50 percent. The results exclude cash costs that occur after the 20-year projection period. A complete description of the assumptions used in the valuation can be found in Section 5.

Table A
Reclamation Liability as of June 30, 2005 for Known and Expected Forfeitures
(Amounts shown in $millions)

Type of Liability	For Permits Forfeited Prior to July 1, 2005	For Expected Forfeitures After June 30, 2005	Total Reclamation Liabilities
Land Capital	$ 35.6	$ 96.0	$ 131.6
Water Capital	$ 15.6	$ 8.6	$ 24.2
Ongoing Water Treatment	$ 40.6	$ 24.1	$ 64.7
Administration Costs [1]	$ 6.3	$ 57.2	$ 63.5
Total	$ 98.1	$ 185.9	$ 284.0

The Special Reclamation Fund (SRF) receives revenues from several sources. The primary funding source is a tax on current coal sales. The second funding source occurs when permits are forfeited, as the SRF collects the bond amounts associated with the forfeited permits, and/or civil penalties and court settlements Lastly, the SRF's assets are invested in a fixed income fund managed by the West Virginia Investment Management Board, and therefore the SRF earns interest income. Table B shows the present value of the expected future coal tax receipts, bond forfeiture and civil penalties, and projected investment income/borrowings from 2005 to 2025. Future revenue streams have been discounted at 2.50 percent. The results exclude revenues that occur after the 20-year projection period. Before the end of the projection period the SRF assets are projected to be exhausted, resulting in a negative fund balance As the SRF is prohibited from borrowing, in the absence of additional funds, the SRF would delay commencement of reclamation projects or take other actions to reduce its expenses. For the purposes of this report we have projected reclamation expenses to be paid in accordance with the valuation model, resulting in a projected deficit.

Table B
Present Value of Future Revenue Sources as of June 30, 2005
(Amounts shown in $millions)

Coal Tax Revenue	Bond Forfeiture, Civil Penalties, and Court Settlements	Interest Income	Total
$ 106.8	$ 30.2	$ 3.2	$ 140.2

As of June 30, 2005, the SRF had invested assets of $29 6 million. Table C combines the projected reclamation liabilities, SRF current assets and expected future revenue to produce the Funded Status. A Funded Status of at least 100 percent means the current revenue structure (i e. legislated coal tax

[1] Administration costs are not directly attributable to permit forfeiture dates.

revenues and amounts of permit bonds) should provide sufficient funding to meet the long-term obligations of the SRF. A Funded Status of less than 100 percent indicates that the SRF assets, combined with expected future revenues are insufficient to fund expected future expenses.

Table C Funded Status as of June 30, 2005 Amounts in $millions	
1. Present Value of Future Revenues	$140.2
2. SRF Fund Assets as of June 30, 2005	$29.6
3. SRF Fund Assets plus Present Value of Future Revenues (1. + 2.)	$169.8
4. Present Value of Future Reclamation Expenditures	$284.0
5. Funded Status = (3) / (4)	59.8%

Table C shows the Special Reclamation Fund has a funded status of about 60 percent. If emerging experience is more favorable than that assumed in the valuation, the funded status could move closer to 100 percent

The funded status is currently below 100 percent. However, even for systems with a funded status above 100 percent, an additional management concern is whether funds are available to pay expenses when they fall due. We have therefore included a 20-year cash flow projection to illustrate the effect of timing of expenses and revenues on the fund's assets.

Table D shows the projected cash flow over the next 20 years. The elements shown in the projection are:

Expenditures, comprising:

- Land capital expenditures
- Water capital expenditures
- Ongoing water treatment expenditures
- Administration costs

Revenues, comprising:

- Coal tax receipts
- Bond forfeitures, civil penalties, and court settlements
- Investment income

The investment income is determined as 2.50 percent of the prior year-end closing fund balance. In the projection, in years where the fund balance is negative the investment income is set to zero

Table D shows that under the baseline assumptions, the fund balance is expected to grow to $32.0 million as of June 30, 2006 and then decline thereafter, reaching zero in FY 2012.

Table D shows the projected cash flow for the next 20 years under current law. Under current law, the coal tax of 14 cents per ton decreases to 7 cents per ton as of October 1, 2006.

Table D – Projected Cash Flow for 2005 - 2025

Fiscal Year Ending	Land Capital Expenditures	Water Capital Expenditures	Ongoing Water Treatment Expenditures	Admin Costs	Total Expenditures	Coal Tax Receipts	Bond Forfeitures, Civil Penalties, etc	Investment income	Total Income	Fund Balance
Jun-05										$ 29.6
Jun-06	$ 8.6	$ 7.7	$ 2.0	$ 2.6	$ 20.9	$ 19.3	$ 3.3	$ 0.7	$ 23.3	$ 32.0
Jun-07	$ 7.7	$ 4.5	$ 2.2	$ 2.7	$ 17.1	$ 11.3	$ 3.1	$ 0.8	$ 15.2	$ 30.1
Jun-08	$ 18.7	$ 3.6	$ 2.5	$ 2.8	$ 27.6	$ 8.5	$ 2.9	$ 0.8	$ 12.2	$ 14.7
Jun-09	$ 2.2	$ 0.3	$ 2.6	$ 2.9	$ 8.0	$ 8.1	$ 2.6	$ 0.4	$ 11.1	$ 17.7
Jun-10	$ 10.8	$ 1.0	$ 2.9	$ 3.0	$ 17.7	$ 7.5	$ 2.4	$ 0.4	$ 10.3	$ 10.4
Jun-11	$ 10.3	$ 0.9	$ 3.2	$ 3.0	$ 17.4	$ 6.9	$ 2.2	$ 0.3	$ 9.4	$ 2.3
Jun-12	$ 9.7	$ 0.9	$ 3.4	$ 3.1	$ 17.1	$ 6.4	$ 2.0	$ 0.1	$ 8.5	$ (6.4)
Jun-13	$ 9.1	$ 0.8	$ 3.7	$ 3.2	$ 16.8	$ 5.9	$ 1.9	$	$ 7.8	$ (15.4)
Jun-14	$ 8.5	$ 0.8	$ 3.9	$ 3.3	$ 16.5	$ 5.5	$ 1.8	$	$ 7.3	$ (24.6)
Jun-15	$ 8.0	$ 0.7	$ 4.1	$ 3.4	$ 16.2	$ 5.2	$ 1.7	$	$ 6.9	$ (34.0)
Jun-16	$ 7.7	$ 0.7	$ 4.3	$ 3.5	$ 16.2	$ 4.9	$ 1.6	$ -	$ 6.5	$ (43.8)
Jun-17	$ 7.4	$ 0.7	$ 4.5	$ 3.6	$ 16.2	$ 4.6	$ 1.5	$	$ 6.1	$ (54.1)
Jun-18	$ 7.1	$ 0.6	$ 4.7	$ 3.7	$ 16.1	$ 4.4	$ 1.4	$	$ 5.8	$ (64.5)
Jun-19	$ 6.8	$ 0.6	$ 4.9	$ 3.9	$ 16.2	$ 4.2	$ 1.3	$	$ 5.5	$ (75.3)
Jun-20	$ 6.6	$ 0.6	$ 5.1	$ 4.0	$ 16.3	$ 4.1	$ 1.2	$	$ 5.3	$ (86.2)
Jun-21	$ 6.3	$ 0.6	$ 5.3	$ 4.1	$ 16.3	$ 3.9	$ 1.1	$	$ 5.0	$ (97.4)
Jun-22	$ 6.0	$ 0.5	$ 5.4	$ 4.2	$ 16.1	$ 3.8	$ 1.0	$	$ 4.8	$ (108.8)
Jun-23	$ 5.8	$ 0.5	$ 5.6	$ 4.3	$ 16.2	$ 3.6	$ 1.0	$	$ 4.6	$ (120.5)
Jun-24	$ 5.6	$ 0.5	$ 5.7	$ 4.5	$ 16.3	$ 3.4	$ 0.9	$	$ 4.3	$ (132.5)
Jun-25	$ 5.3	$ 0.5	$ 5.9	$ 4.6	$ 16.3	$ 3.2	$ 0.8	$	$ 4.0	$ (144.8)
Jun-26	$ 5.1	$ 0.5	$ 6.0	$ 4.7	$ 16.3	$ 3.0	$ 0.8	$	$ 3.8	$ (157.3)

Following the executive summary is an Actuarial Certification.

Section 1 describes the actuarial model and the assumptions used to estimate the revenues and liabilities of the Special Reclamation Fund.

Section 2 examines options for managing the program to ensure solvency.

Section 3 provides a comparison of the funding mechanisms used by several other states, including the leading coal producing states.

Section 4 describes the data reviewed and used in the report.

Section 5 describes the actuarial assumptions used in the valuation.

The timely completion of our report depended on quick and complete responses to our data and information requests. The DEP staff provided us with timely and complete responses to all of our requests for information. We wish to thank them for their time and providing us with their counsel as well as the information that we used in this report.

ACTUARIAL CERTIFICATION

The State of West Virginia's Department of Environmental Protection retained the Hay Group to perform an actuarial valuation of the Special Reclamation Fund for the purposes of reporting the progress of the Fund The Hay Group retained the services of Tiller Consulting Group, Inc. to assist in the valuation.

This valuation has been conducted in accordance with generally accepted actuarial principles and practices.

The actuarial assumptions and methods employed in the measurement of the liability have been selected by the Hay Group and Tiller Consulting Group, Inc. after consultation with the staff of the DEP and the Special Reclamation Fund Board

The results shown in this report are reasonable actuarial results. However, a different set of results could also be considered reasonable actuarial results. The reason for this is that actuarial standards of practice describe a "best-estimate range" for each assumption, rather than a single best-estimate value. Thus, reasonable results differing from those presented in this report could have been developed by selecting different points within the best-estimate ranges for various assumptions.

The actuaries certifying to this valuation are members of the American Academy of Actuaries, the Society of Actuaries and other professional actuarial organizations and meet the General Qualification Standards of the American Academy of Actuaries for purposes of issuing Prescribed Statements of Actuarial Opinion.

Adam J Reese

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October 6, 2005

SECTION 1

ENVIRONMENTAL LIABILITY ACTUARIAL VALUATION

BACKGROUND

We began our review of the SRF's liabilities by reviewing the prior actuarial study, which was completed in 1993 We also reviewed the readily available information provided for this actuarial study

GASB 10 states that liabilities are incurred when the events setting them in place occur. Paragraph 22 of GASB 10 states:

> A liability for unpaid claims costs, including estimates of costs relating to incurred but not reported (IBNR) claims, should be accrued when insured events occur or, for claims-made policies, in the period in which the event that triggers coverage under the policy or participation contract occurs. That liability should be based on the estimated ultimate cost of settling the claims (including the effects of inflation and other societal and economic factors), using past experience adjusted for current trends, and any other factors that would modify past experience. Claim accruals for IBNR claims should be made if it is probable that a loss has been incurred and the amount can be reasonably estimated Changes in estimates of claims costs resulting from the continuous review process and differences between estimates and payments for claims should be recognized in results of operations of the period in which the estimates are changed or payments are made. Estimated recoveries on unsettled claims, such as salvage or subrogation, should be evaluated in terms of their estimated realizable value and deducted from the liability for unpaid claims

The 1993 actuarial study assumed that the event that incurred the liability was when a permit was forfeited. However, we believe that the more appropriate event is when the permit is issued After a permit has been issued, the mine operator may disturb the land, and if the permit is subsequently forfeited, there is a likelihood that the SRF will incur new expenses to reclaim the land and treat water to bring it into compliance with current environmental protection standards. The change in the event definition required that we construct a new model to estimate SRF's reclamation cost liability.

ACTUARIAL MODEL

The actuarial model we developed combines DEP estimated reclamation expenses for permits that have already been forfeited with our projection of expenses associated with future forfeited permits. The actuarial model uses separate rates to project the number of existing permits as of the measurement date that are expected to be released and the number that are expected to be forfeited. The model assumes that the SRF will not incur additional expenses when a permit is released The model projects four types of expenses associated with a forfeited permit In addition, a forfeited permit is expected to produce revenues to the SRF in the form of the amount of the bond associated with the permit, and/or any associated civil penalties or court settlements.

The three types of reclamation expenses associated with a forfeited permit are:

- Land capital expenditures
- Water capital expenditures
- Ongoing water treatment costs

Some sites only require land capital expenditures, while others require both land and water capital expenditures The model assumes that where water capital expenditures are incurred there will also be ongoing water treatment costs Some expenses that DEP originally categorized as water capital costs were designated as land capital costs for the purpose of this study because DEP expects no ongoing water treatment at these sites. The reclamation costs are developed based on a projection of the acreage and status of each permit, using average amounts per permit-acre. Therefore, the water capital expenditures are projected for all permits, even though some sites may not require water treatment activities.

In addition, the model includes a projection of the administration costs that will be incurred in the oversight of the reclamation activities. The model assumes that the administration costs are independent of the reclamation expenses and would increase in the future in line with price inflation.

The development of the assumptions for each of these costs is shown below.

The actuarial model was applied to a database of all existing issued permits that have not been released or forfeited. The data on each permit included:

- Date permit issued
- Status of the permit
- Number of permitted acres
- Total current bond amount

The model projected the number of permits expected to be released or forfeited each year in the next 20 years.

The projection of permit forfeiture was also used to determine the expected revenues from bond forfeiture and/or civil penalties and court settlements.

The actuarial model produced as output expected cash flows over the next 20 years. These cash flows were incorporated into a cash flow model that included projected tax receipts from coal production. The resulting fund balance was assumed to be invested in the WVIMB fixed income fund, producing income at a rate of 2.50 percent of the invested fund balance.

THE ASSUMPTIONS

The actuarial model used the following assumptions, each of which was developed from an analysis of experience data

- Rates of release of permits
- Rates of forfeiture of permits
- Expected land capital costs per acre of forfeited permit
- Expected water capital costs per acre of forfeited permit
- Expected ongoing water treatment costs as a percent of water capital cost
- Administration costs

Forfeiture Rates and Release Rates

Using the full data on the number of permits issued, released, and forfeited, we examined the experience rates of forfeiture and release. The data was collated by years since issuance. Since 1977, over 5,600 permits have been issued, of which 1,912 were still in force as of the end of 2004. Table 1.1 shows a summary of the data.

Table 1.1 -- Permit Data			
Year Issued	Number of Permits Issued	Number Still in Force as of June 2005	Percent Still In Force
1977	230	13	6%
1978	224	25	11%
1979	196	39	20%
1980	301	75	25%
1981	407	132	32%
1982	475	95	20%
1983	656	163	25%
1984	283	55	19%
1985	276	63	23%
1986	286	62	22%
1987	355	73	21%
1988	339	69	20%
1989	254	89	35%
1990	119	41	34%
1991	133	61	46%
1992	141	66	47%
1993	130	71	55%
1994	123	83	67%
1995	92	75	82%

Table 1.1 -- Permit Data			
Year Issued	Number of Permits Issued	Number Still in Force as of June 2005	Percent Still In Force
1996	99	82	83%
1997	103	89	86%
1998	66	54	82%
1999	48	42	88%
2000	59	57	97%
2001	61	60	98%
2002	58	58	100%
2003	68	68	100%
2004	52	52	100%
Total	**5,634**	**1,912**	**34%**

Chart 1.1

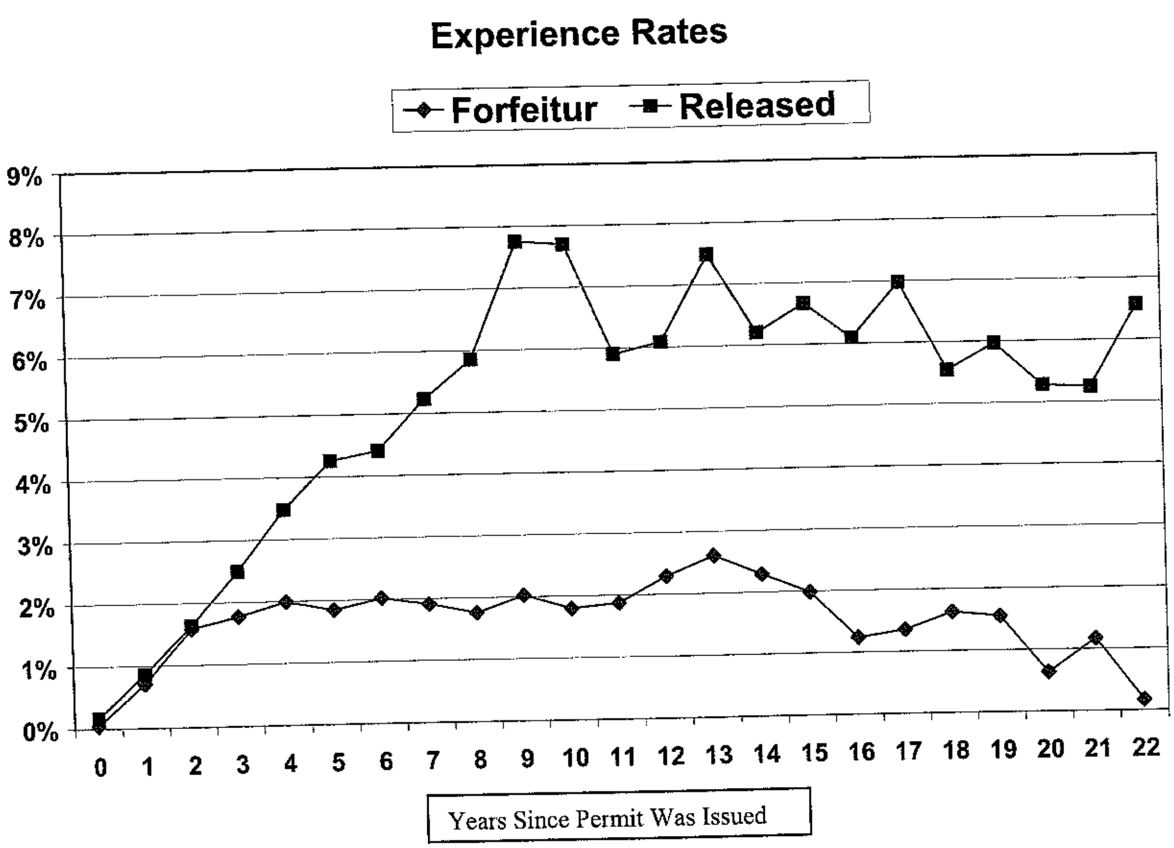


Chart 1.1 shows the raw experience rates by years since issuance. For each year since issuance, the experience rate is the ratio of the number forfeited or released in the year since issuance to the number in force at the beginning of the year. Chart 1.1 shows the rate of release increases steadily with duration since issuance and peaks at around 5 to 8 percent. The rate of forfeiture also increases with duration since issuance but levels off sooner at a rate of 2 to 3 percent and remains stable at this rate for over 10 years. The fluctuations in rates for years 10 and greater since issuance are primarily due to a paucity of data. We therefore applied a common actuarial smoothing approach to the data.

Chart 1.2

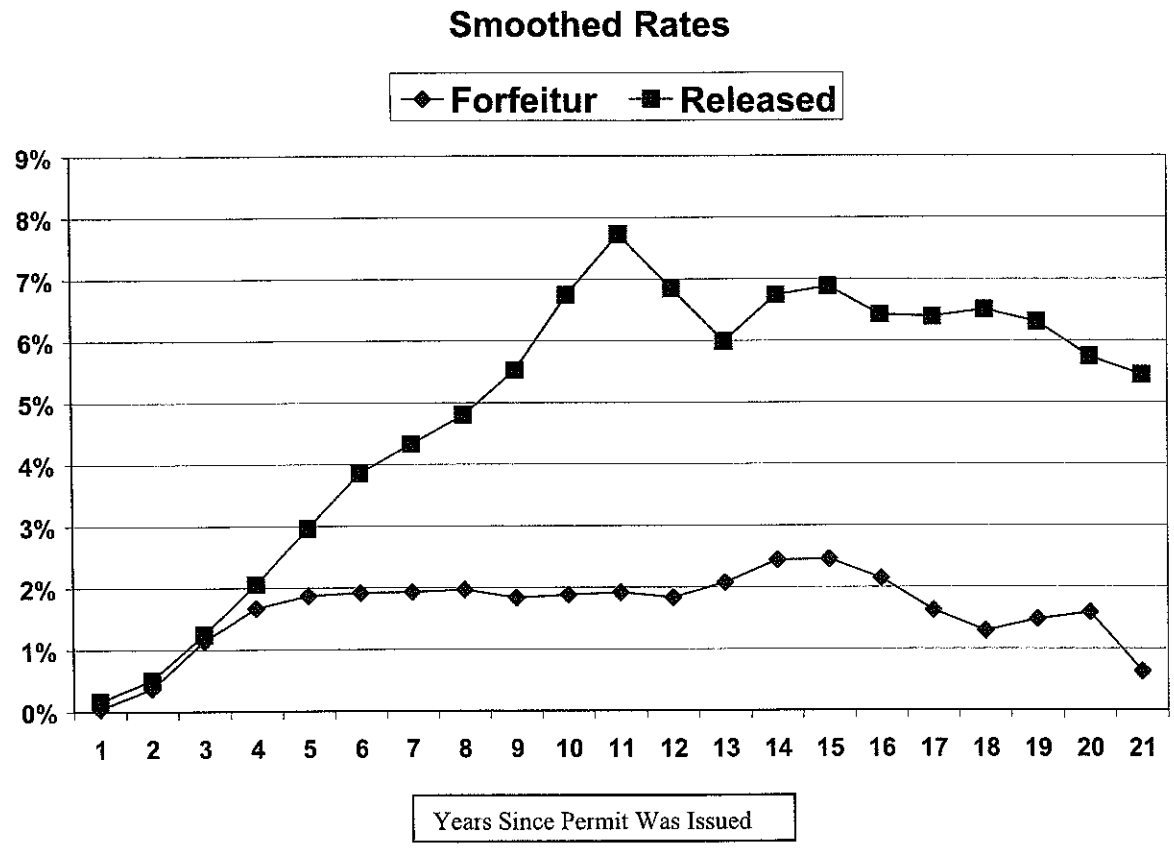


Chart 1.2 shows the smoothed rates. As the permitting process has undergone several changes over the last 20 years, we also examined the rates by cohorts to determine if a single set of rates would be appropriate or if separate rates were needed for different cohorts of permits.

Chart 1.3 - Cumulative Forfeiture Rates by Permitting Period

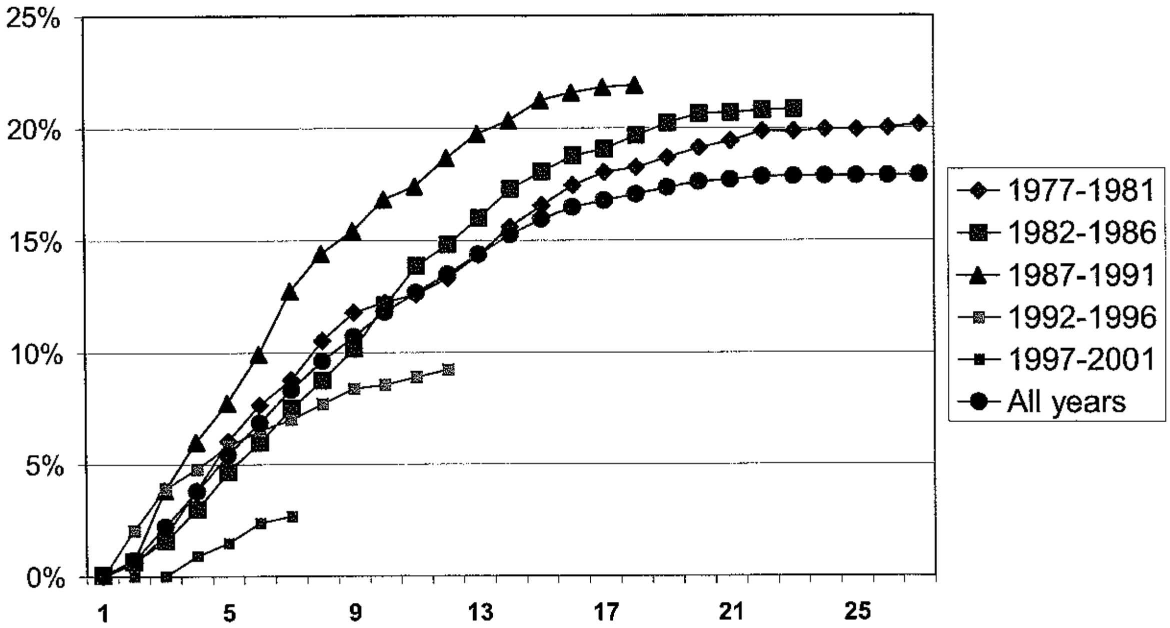


Chart 1.3 shows the experience forfeiture rates in 5-year cohorts The numerator is the total number of permits that have been forfeited through the year since issuance, and the denominator is the total number of permits issued in the 5-year cohort. This shows that about 20 percent of permits that are issued are eventually forfeited. Further, the analysis shows that half of the forfeitures occur 10 or more years after issuance, so a duration-based set of rates is called for.

Of particular note is the emerging experience for the latest cohort of 1997-2001 issued permits. This analysis shows a substantially lower rate of forfeiture in the early years compared to the experience of the permits issued before 1991.

Chart 1.4 -- Cumulative Release Rates by Years Since Issuance

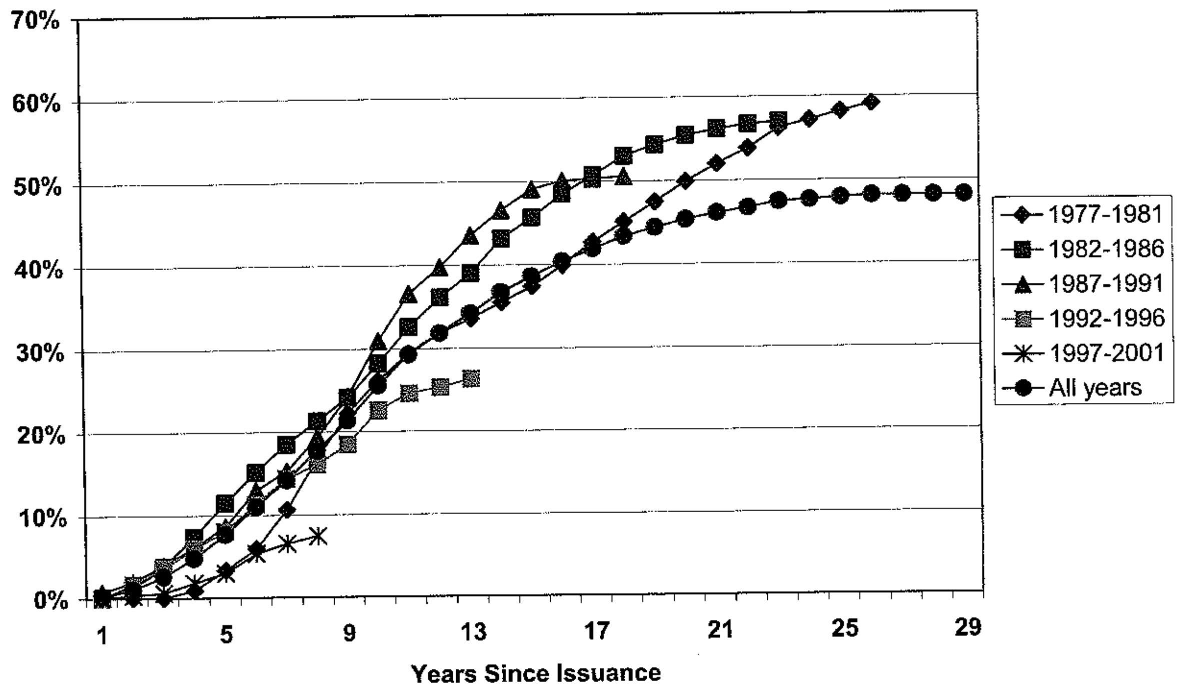


Chart 1.4 shows the cumulative release rates in 5-year cohorts. The numerator is the total number of permits that have been released for each 5-year cohort through the year since issuance and the denominator is the total number of permits issued in the 5-year cohort. The chart shows that 20 years after issuance about 50 percent of permits have been released. The chart shows a fairly consistent pattern of release rates by years since issuance, with emerging experience of slightly lower rates in the early years.

Based on the observations in Charts 1.3 and 1.4, we then pooled the data into two cohorts: permits issued prior to 1992 (i.e., for 1991 and prior) and permits issued after 1991.

Chart 1.5

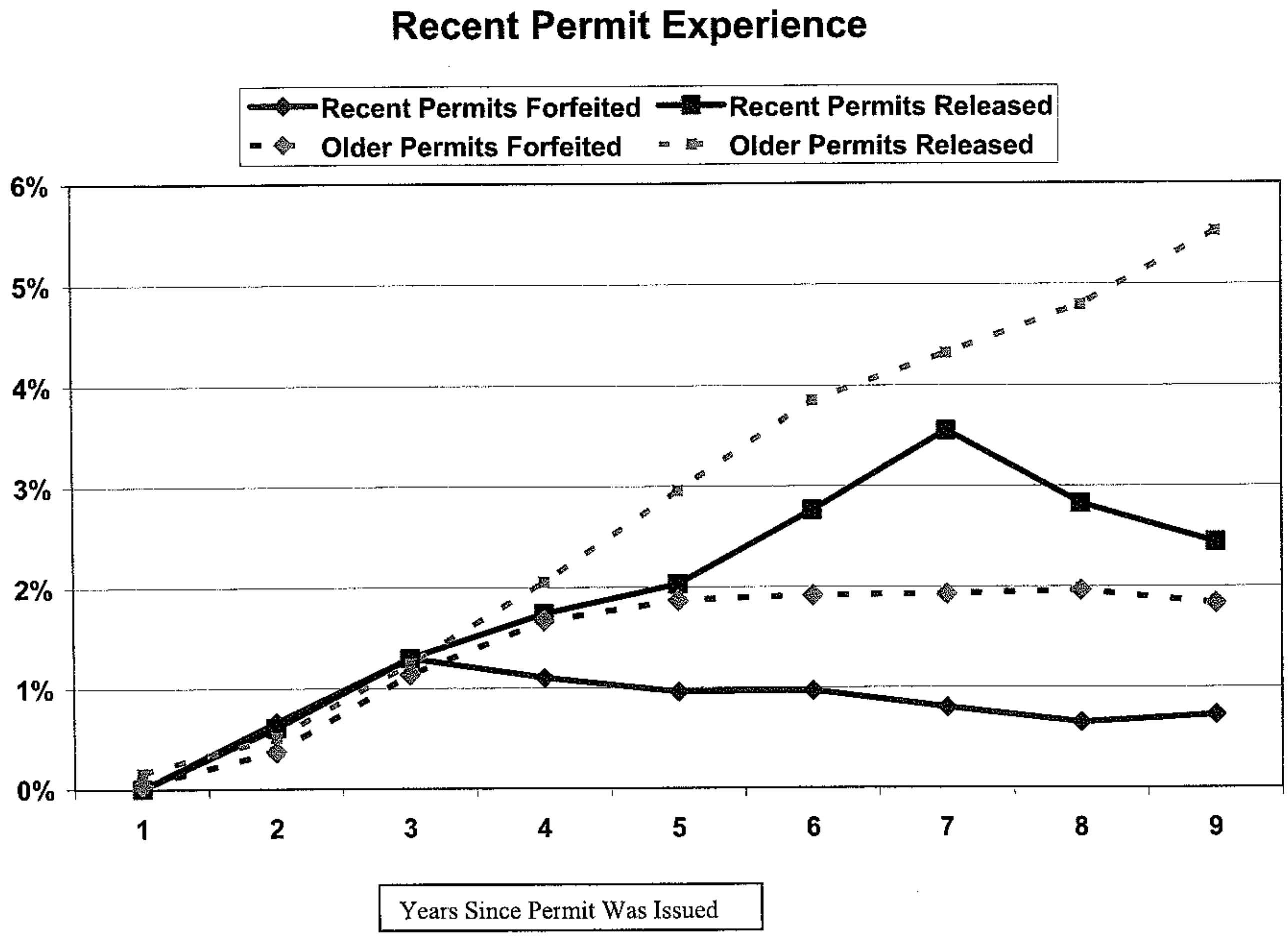


Chart 1.5 compares the emerging experience in the first 9 years since issuance of a permit. This chart shows that the rate of forfeiture for periods 5 years after issuance of recently issued permits (those issued since 1991) is about half the rate of the experience of those permits issued prior to 1992. The rate of release for recently issued permits is also lower than the rate for older permits.

Based on these observations we developed two sets of rates for the valuation. The first set provides the expected rate of release and forfeiture for permits issued prior to 1992. The second set is for permits issued after 1991.

Table 1.2 shows the valuation assumptions for the rates of forfeiture and release by year of issuance and years since issuance.

Table 1.2 -- Valuation Rates of Forfeiture and Release of Permit				
Years Since Issuance	Permits Issued Before 1992		Permits Issued After 1991	
	Forfeiture	Release	Forfeiture	Release
1			0.05%	0.15%
2			0.65%	0.60%
3			1.30%	1.30%
4			1.10%	1.75%
5			1.00%	2.00%
6			1.00%	2.75%
7			0.75%	3.50%
8			0.75%	3.00%
9			0.75%	3.00%
10			0.75%	3.00%
11			0.75%	3.00%
12			0.75%	3.00%
13	2.00%	6.00%	0.75%	3.00%
14	2.00%	6.00%	0.75%	3.00%
15	2.00%	6.00%	0.75%	3.00%
16	2.00%	6.00%	0.75%	3.00%
17	1.50%	6.00%	0.75%	3.00%
18	1.50%	6.00%	0.75%	3.00%
19	1.50%	6.00%	0.75%	3.00%
20	1.50%	6.00%	0.75%	3.00%
Over 20	1.50%	6.00%	0.75%	3.00%

We applied these rates to the in-force permits and compared the expected bond forfeiture, civil penalties and court settlement receipts with the actual receipts over the past few years

Table 1.3 summarizes the bond forfeitures, civil penalties, and court settlements reported for the last 4 fiscal years. FY2005 amounts are unaudited and may only include 11 months data.

Table 1.3 – Revenues from Bond Forfeitures, Civil Penalties, and Court Settlements				
	FY 2005	FY 2004	FY 2003	FY 2002
Bond Forfeitures	$321,000	$1,354,000	$401,000	$1,509,000
Civil Penalties	1,248,000	1,592,000	955,000	1,345,000
Other, including Court Settlements	1,557,000	375,000	518,000	1,322,000
TOTAL	$3,126,000	$3,321,000	$1,874,000	$4,176,000

Applying the forfeiture rates to permits of all bond sizes produced an expected level of receipts significantly higher than the recent experience. We therefore introduced weights to the forfeiture rates depending on the size of the bond. This resulted in forfeiture rates that were higher for smaller bonded amounts ($10,000 or less) and lower for larger amounts ($100,000 or more) In addition, these weighting factors produced expected revenues in line with the most recent experience.

Table 1.4 – Weighting Factors by Size of Bond	
Bond Size	Weighting
$10,000 and smaller	250%
Over $10,000 and under $100,000	100%
$100, 000 and larger	38%

Land Reclamation Costs

We performed an analysis of the land capital expenditures for the over 1,800 permits that have been forfeited.

Table 1.5 summarizes the data and shows the development of the 2005 land capital costs per acre of permitted land.

Table 1.5 – Land Capital Expenditure Per Acre	
1. Total expenditure in actual dollars	$98,573,833
2 Total disturbed acreage under permit	36,551
3. Average cost per acre (1. / 2.) in actual dollars	$2,697
4. Mid-point of experience data	1992
5. Average annual increase in land capital expenditures over experience period	5.8 %
6. Increase factor (1.058)^13	2.08
7. Average cost per acre in 2005 dollars (3. x 6.)	$5,613

Each permit in the database had an associated status. We grouped the statuses into three categories: active, inactive, and phased release. Permits that have already entered a phased release state were deemed less likely to be forfeited than those in active or inactive status. However, as a single mine operator may hold permits in all three statuses, even some permits in phased release status may be forfeited due to enterprise risk rather than reclamation cost risk. We therefore applied a factor to each permit based on these categories that reflected variations in the magnitude of potential liability. Table 1.6 shows these status factors.

Table 1.6 – Adjustment Factors for Permit Status	
Status	Liability Factor
Active	100%
Inactive	75%
Phased Release	50%

Source: Developed in consultation with SRFAC input.

Water Reclamation Costs

Table 1.7 summarizes the data on water capital expenditures and shows the development of the water capital expenditures as a percent of land capital expenditures.

Table 1.7 – Water Capital Expenditure Per Acre	
1. Total expenditure in actual dollars for open and closed water capital expenditure cases	$16,220,384
2. Total number of acres under permits	36,551
3. Cost per acre in actual dollars	$444
4. Mid-point of experience data	2002
5. Assumed annual increase in water capital expenditures over experience period	3 %
6. Increase factor (1.03)^3	1.09
7. Average cost per acre (3. x 6.)	$485
8. Water Capital Expenditure as a percent of Land Capital Expenditure (7. / Table 1.5 Item 7.)	9%

Water Treatment Costs

Table 1.8 summarizes the data on water treatment costs and shows the development of the annual water treatment costs as a percent of the water capital costs.

Table 1.8 – Water Treatment Costs	
1. Total capital expenditure in actual dollars for closed water capital expenditure cases	$11,824,589
2. Total number of permits	58
3. Average capital expenditure cost per closed case (1./2.)	$203,872
4. Total water treatment costs for closed water capital expenditure cases	$20,127,693
5. Total days from water capital construction completion to 7/31/05 for closed water capital expenditure cases	120,429
6. Average annualized Water Treatment Costs for closed water capital expenditure cases (4. / (5. / 365))	$61,004
7. Water Treatment Costs as a percent of Water Capital Expenditure (6. / 3.)	30%

Administration Costs

Generally, the administration costs are independent of the cost of the reclamation activities. The DEP staffing levels may be adjusted over time as the legacy of older permit forfeitures is processed. For valuation purposes, we have assumed the current staffing levels will remain unchanged. Future administration costs were estimated by increasing the current costs by 3 percent per year, reflecting the anticipated level of aggregate pay increases.

ACTUARIAL VALUATION

The actuarial model builds on the current cash projections developed by the DEP for the expected reclamation costs on sites where permits have already been forfeited.

Land Capital Expenditures

Table 1.9 shows the expected land capital expenditures for:

- Permits forfeited prior to July 1, 2001
- Permits forfeited after July 1, 2001 and before June 30, 2005
- Future forfeited permits that were issued before July 1, 2005, and
- Total of the above

Table 1.9 Land Capital Expenditures				
Fiscal Year Ending	Forfeited <7/1/2001	Forfeited >7/1/2001	Future Forfeited Permits	Total
30-Jun-05				
30-Jun-06	$2,413,480	$403,056		$2,816,536
30-Jun-07	$4,022,620	$3,716,873		$7,739,493
30-Jun-08	$14,259,688	$4,464,861		$18,724,549
30-Jun-09	$288,622	$1,926,810		$2,215,432
30-Jun-10			$10,034,329	$10,034,329
30-Jun-11			$9,612,311	$9,612,311
30-Jun-12			$9,052,549	$9,052,549
30-Jun-13			$8,501,275	$8,501,275
30-Jun-14			$7,894,950	$7,894,950
30-Jun-15			$7,484,900	$7,484,900
30-Jun-16			$7,190,602	$7,190,602
30-Jun-17			$6,903,097	$6,903,097
30-Jun-18			$6,624,457	$6,624,457
30-Jun-19			$6,356,877	$6,356,877
30-Jun-20			$6,100,388	$6,100,388
30-Jun-21			$5,854,501	$5,854,501
30-Jun-22			$5,618,780	$5,618,780
30-Jun-23			$5,392,787	$5,392,787
30-Jun-24			$5,176,097	$5,176,097
30-Jun-25			$4,968,329	$4,968,329
30-Jun-26			$4,769,093	$4,769,093

Source: Data from columns 2 & 3 taken from DEP June 2005 cash flow report

Water Capital Expenditures

Table 1.10 shows the expected water capital expenditures for:

- Permits forfeited prior to July 1, 2001
- Permits forfeited after July 1, 2001 and before June 30, 2005
- Future forfeited permits that were issued before July 1, 2005, and
- Total of the above

Table 1.10 Water Capital Expenditures				
Fiscal Year Ending	Forfeited <7/1/2001	Forfeited >7/1/2001	Future Forfeited Permits	Total
30-Jun-05				
30-Jun-06	$7,024,422	$0		$7,024,422
30-Jun-07	$4,020,027	$518,256		$4,538,283

Table 1.10 Water Capital Expenditures

Fiscal Year Ending	Forfeited <7/1/2001	Forfeited >7/1/2001	Future Forfeited Permits	Total
30-Jun-08	$3,249,720	$318,600		$3,568,320
30-Jun-09	$344,088			$ 344,088
30-Jun-10			$1,605,493	$1,605,493
30-Jun-11			$1,537,970	$1,537,970
30-Jun-12			$1,448,408	$1,448,408
30-Jun-13			$1,360,204	$1,360,204
30-Jun-14			$1,263,192	$1,263,192
30-Jun-15			$1,197,584	$1,197,584
30-Jun-16			$1,150,496	$1,150,496
30-Jun-17			$1,104,496	$1,104,496
30-Jun-18			$1,059,913	$1,059,913
30-Jun-19			$1,017,100	$1,017,100
30-Jun-20			$976,062	$976,062
30-Jun-21			$936,720	$936,720
30-Jun-22			$899,005	$899,005
30-Jun-23			$862,846	$862,846
30-Jun-24			$828,175	$828,175
30-Jun-25			$794,933	$794,933
30-Jun-26			$763,055	$763,055

Ongoing Water Treatment

Table 1.11 shows the ongoing water treatment costs for:

- Permits forfeited prior to July 1, 2001
- Permits forfeited after July 1, 2001 and before June 30, 2005
- Future forfeited permits that were issued before July 1, 2005, and
- Total of the above

Table 1.11 – Ongoing Water Treatment Costs

Fiscal Year Ending	Permits Forfeited <7/1/2001	Active in Perpetuity	Future Forfeited Permits	Total Water Quality
30-Jun-06	$361,639	$ 1,680,000	$0	$ 2,041,639
30-Jun-07	$536,155	$ 1,680,000	$0	$2,216,155

Table 1.11 – Ongoing Water Treatment Costs

Fiscal Year Ending	Permits Forfeited <7/1/2001	Active in Perpetuity	Future Forfeited Permits	Total Water Quality
30-Jun-08	$777,351	$ 1,680,000	$0	$2,457,351
30-Jun-09	$902,204	$ 1,680,000	$0	$2,582,204
30-Jun-10	$929,270	$ 1,680,000	$481,648	$3,090,918
30-Jun-11	$929,270	$ 1,680,000	$943,039	$3,552,309
30-Jun-12	$929,270	$ 1,680,000	$1,377,561	$3,986,831
30-Jun-13	$929,270	$ 1,680,000	$1,785,622	$4,394,892
30-Jun-14	$929,270	$ 1,680,000	$2,164,580	$4,773,850
30-Jun-15	$929,270	$ 1,680,000	$2,523,855	$5,133,125
30-Jun-16	$929,270	$ 1,680,000	$2,869,004	$5,478,274
30-Jun-17	$929,270	$ 1,680,000	$3,200,353	$5,809,623
30-Jun-18	$929,270	$ 1,680,000	$3,518,327	$6,127,597
30-Jun-19	$929,270	$ 1,680,000	$3,823,457	$6,432,727
30-Jun-20	$929,270	$ 1,680,000	$4,116,275	$6,725,545
30-Jun-21	$929,270	$ 1,680,000	$4,397,291	$7,006,561
30-Jun-22	$929,270	$ 1,680,000	$4,666,993	$7,276,263
30-Jun-23	$929,270	$ 1,680,000	$4,925,847	$7,535,117
30-Jun-24	$929,270	$ 1,680,000	$5,174,299	$7,783,569
30-Jun-25	$929,270	$ 1,680,000	$5,412,779	$8,022,049
30-Jun-26	$929,270	$ 1,680,000	$5,641,696	$8,250,966

Administration Costs

Table 1 12 shows the projected administration costs over the next 20 years.

Table 1.12 – Administration Costs

Fiscal Year Ending	Administration Costs
30-Jun-06	$ 2,624,766
30-Jun-07	$ 2,703,508
30-Jun-08	$ 2,784,614
30-Jun-09	$ 2,868,152
30-Jun-10	$ 2,954,197
30-Jun-11	$ 3,042,823
30-Jun-12	$ 3,134,107

Table 1.12 – Administration Costs		
Fiscal Year Ending	Administration Costs	
30-Jun-13	$	3,228,130
30-Jun-14	$	3,324,974
30-Jun-15	$	3,424,724
30-Jun-16	$	3,527,465
30-Jun-17	$	3,633,289
30-Jun-18	$	3,742,288
30-Jun-19	$	3,854,557
30-Jun-20	$	3,970,193
30-Jun-21	$	4,089,299
30-Jun-22	$	4,211,978
30-Jun-23	$	4,338,337
30-Jun-24	$	4,468,488
30-Jun-25	$	4,602,542
30-Jun-26	$	4,740,618

Coal Tax Revenues

Table 1.13 shows the projected coal production from the Consensus Forecast and the estimated coal production from active acres associated with the projected permits remaining in force. The tonnage from active acreage was determined as the consensus forecast tonnage in each year multiplied the ratio of active acreage in the beginning of each year to the active acreage at the beginning of fiscal year 2006 [2]

Table 1.13 – Projected Coal Production from Actively Operated Sites			
Fiscal Year	*Consensus Forecast*	*Active Acreage (Beginning of Fiscal year)*	*Tonnage from Active Acreage*
2006	140,350,000	226,352	140,350,000
2007	139,500,000	214,255	132,044,672
2008	139,050,000	202,361	124,312,147
2009	139,250,000	190,777	117,364,574
2010	137,600,000	179,574	109,163,577
2011	135,050,000	168,855	100,745,218
2012	133,550,000	158,621	93,588,087
2013	131,500,000	148,869	86,486,056
2014	131,100,000	139,662	80,890,421
2015	131,800,000	131,042	76,303,094

[2] Example: Tonnage from active acreage in 2011 = 135,050,000 x (168,855/226,352) = 100,745,218

Table 1.13 – Projected Coal Production from Actively Operated Sites			
Fiscal Year	*Consensus Forecast*	*Active Acreage (Beginning of Fiscal year)*	*Tonnage from Active Acreage*
2016	130,550,000	122,985	70,932,511
2017	131,200,000	115,453	66,919,928
2018	133,900,000	108,412	64,131,949
2019	137,200,000	101,831	61,723,527
2020	141,150,000	95,679	59,664,256
2021	144,250,000	89,928	57,309,629
2022	146,350,000	84,552	54,668,049
2023	147,650,000	79,525	51,874,536
2024	148,450,000	74,826	49,073,831
2025	148,950,000	70,433	46,348,328
2026	149,200,000	66,326	43,718,994

Table 1.14 Coal Production and Tax Revenues				
Fiscal Year	Coal Production Tons	Permanent 7 cent Tax	Temporary 7 cent Tax	Total Tax Revenues
2006	140,350,000	$ 9,628,010	$ 9,628,010	$ 19,256,020
2007	132,044,672	$ 9,058,264	$ 2,264,566	$ 11,322,830
2008	124,312,147	$ 8,527,811		$ 8,527,811
2009	117,364,574	$ 8,051,207		$ 8,051,207
2010	109,163,577	$ 7,488,618		$ 7,488,618
2011	100,745,218	$ 6,911,118		$ 6,911,118
2012	93,588,087	$ 6,420,138		$ 6,420,138
2013	86,486,056	$ 5,932,938		$ 5,932,938
2014	80,890,421	$ 5,549,077		$ 5,549,077
2015	76,303,094	$ 5,234,385		$ 5,234,385
2016	70,932,511	$ 4,865,963		$ 4,865,963
2017	66,919,928	$ 4,590,699		$ 4,590,699
2018	64,131,949	$ 4,399,443		$ 4,399,443
2019	61,723,527	$ 4,234,225		$ 4,234,225
2020	59,664,256	$ 4,092,958		$ 4,092,958
2021	57,309,629	$ 3,931,430		$ 3,931,430
2022	54,668,049	$ 3,750,217		$ 3,750,217
2023	51,874,536	$ 3,558,581		$ 3,558,581
2024	49,073,831	$ 3,366,453		$ 3,366,453
2025	46,348,328	$ 3,179,483		$ 3,179,483

Source: Coal Production Consensus Forecast Fiscal Year data determined as one half of calendar year data in which fiscal year begins and one half of calendar year data in which fiscal year ends.

Bond Forfeiture, Civil Penalties, and Court Settlements

Table 1.15 shows the projected revenues from bond forfeitures, civil penalties, and court settlements

Table 1.15 – Revenues from Bond Forfeitures, Civil Penalties, and Court Settlements	
Fiscal Year Ending	Expected Revenue
30-Jun-06	$3,321,102
30-Jun-07	$3,139,592
30-Jun-08	$2,864,955
30-Jun-09	$2,624,107
30-Jun-10	$2,373,970
30-Jun-11	$2,182,348
30-Jun-12	$2,040,741
30-Jun-13	$1,907,268
30-Jun-14	$1,782,039
30-Jun-15	$1,665,001
30-Jun-16	$1,555,668
30-Jun-17	$1,453,533
30-Jun-18	$1,358,119
30-Jun-19	$1,268,984
30-Jun-20	$1,185,713
30-Jun-21	$1,107,919
30-Jun-22	$1,035,242
30-Jun-23	$967,343
30-Jun-24	$903,909
30-Jun-25	$844,642

Investment Income

The investment income is estimated assuming a 2.5% net investment rate on the fund balance at the beginning of the year. As the SRF is prohibited from borrowing, when the projected fund balance is zero, there is no investment income in the following year.

Permit Projections

Table 1.16 shows the projected number of permits. Separate projections were made of active and inactive permits as well as permits in phased release. Of the almost 1,900 permits in force as of July 1, 2005, over half are projected to still be in force after 10 years

Table 1.16 – Projection of Number of Permits In Force				
Fiscal Year	Active	Inactive	Phased Release	Total
2005	1,218	231	440	1,889
2006	1,144	215	408	1,767
2007	1,072	201	378	1,650
2008	1,004	187	350	1,540
2009	938	174	324	1,436
2010	876	162	300	1,337
2011	817	150	278	1,245
2012	762	140	257	1,159
2013	710	130	239	1,078
2014	662	121	221	1,003
2015	616	112	205	934
2016	574	105	190	869
2017	535	97	176	808
2018	499	91	163	752
2019	465	84	151	700
2020	433	78	140	651
2021	404	73	130	606
2022	376	68	120	564
2023	351	63	111	525
2024	327	59	103	488
2025	304	55	96	455

Table 1.17 shows the projection of the acreage of permits in force. Of the almost 300,000 of acreage in force as of July 1, 2005, over 50 percent are projected to be in force after 10 years.

Table 1.17 – Projection of Acreage of Permits In Force				
Fiscal Year	Active	Inactive	Phased Release	Total
2005	226,352	20,615	47,541	294,508
2006	214,255	19,312	44,179	277,746
2007	202,361	18,074	41,043	261,478

Table 1.17 – Projection of Acreage of Permits In Force				
Fiscal Year	Active	Inactive	Phased Release	Total
2008	190,777	16,908	38,134	245,819
2009	179,574	15,805	35,439	230,818
2010	168,855	14,764	32,938	216,557
2011	158,621	13,791	30,617	203,029
2012	148,869	12,882	28,460	190,211
2013	139,662	12,032	26,456	178,150
2014	131,042	11,239	24,594	166,875
2015	122,985	10,499	22,863	156,347
2016	115,453	9,807	21,255	146,515
2017	108,412	9,161	19,761	137,334
2018	101,831	8,557	18,372	128,760
2019	95,679	7,994	17,082	120,755
2020	89,928	7,467	15,883	113,278
2021	84,552	6,976	14,769	106,297
2022	79,525	6,517	13,733	99,775
2023	74,826	6,088	12,770	93,684
2024	70,433	5,688	11,875	87,996
2025	66,326	5,314	11,043	82,683

Table 1.18 shows the projected acreage of in-force permits, forfeited permits, and released permits for the next 20 years.

Table 1.18 – Projection of Acreage for In-Force permits, Forfeited Permits, and Released Permits				
Fiscal Year	Acreage of In Force Permits	Acreage of Forfeited Permits	Acreage of Released Permits	End of Year In Force Acreage
2005	294,508	1,958	14,804	277,746
2006	277,746	1,821	14,447	261,478
2007	261,478	1,663	13,996	245,819
2008	245,819	1,515	13,486	230,818
2009	230,818	1,370	12,891	216,557
2010	216,557	1,260	12,268	203,029
2011	203,029	1,175	11,643	190,211
2012	190,211	1,094	10,967	178,150
2013	178,150	1,019	10,256	166,875

Table 1.18 – Projection of Acreage for In-Force permits, Forfeited Permits, and Released Permits				
Fiscal Year	Acreage of In Force Permits	Acreage of Forfeited Permits	Acreage of Released Permits	End of Year In Force Acreage
2014	166,875	948	9,580	156,347
2015	156,347	883	8,949	146,515
2016	146,515	823	8,358	137,334
2017	137,334	766	7,808	128,760
2018	128,760	713	7,292	120,755
2019	120,755	664	6,813	113,278
2020	113,278	617	6,364	106,297
2021	106,297	576	5,946	99,775
2022	99,775	537	5,554	93,684
2023	93,684	500	5,188	87,996
2024	87,996	465	4,848	82,683
2025	82,683	433	4,529	77,721

SECTION 2

DETERMINATION OF FUTURE FUNDING TO ENSURE SOLVENCY OF THE PROGRAM

In this section, we build on the valuation results in Section 1 to identify options for managing the program that will ensure solvency. The following charts and the information on which they are based only include revenues and expenditures for permits issued or forfeited prior to June 30, 2005.

Chart 2.1 shows the projected expenditures, revenues, and fund balance under current law that forms the basis for the valuation.

Chart 2.1

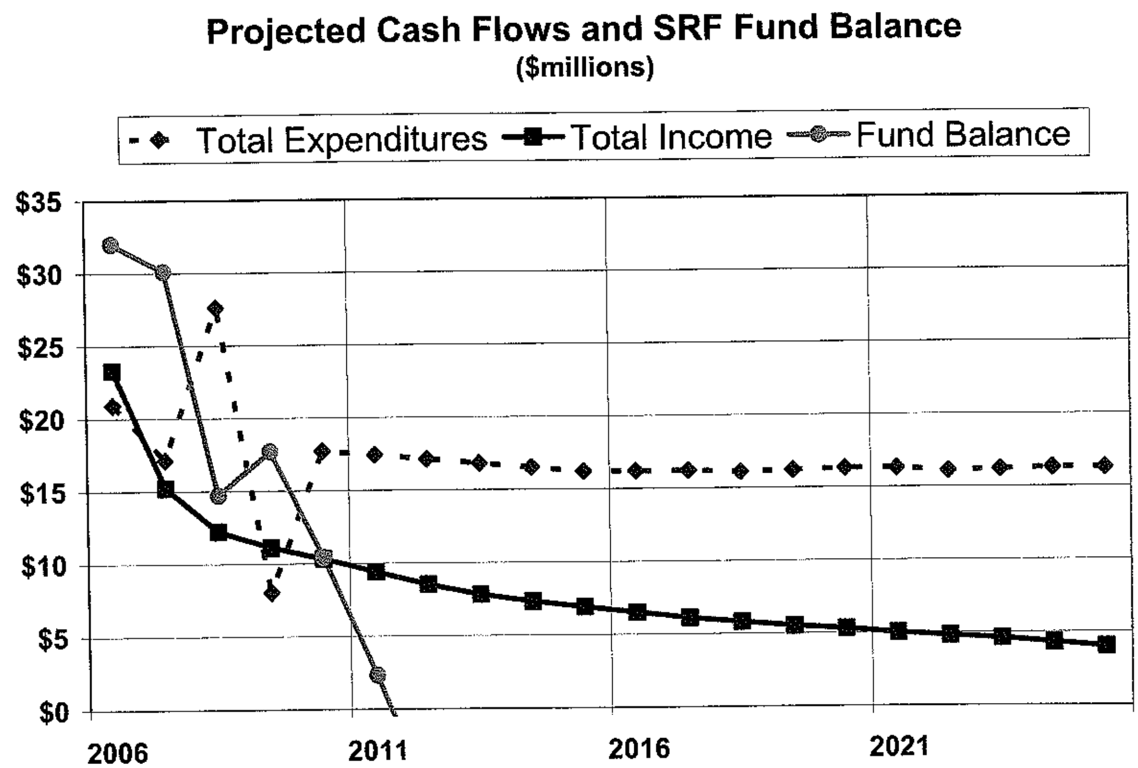


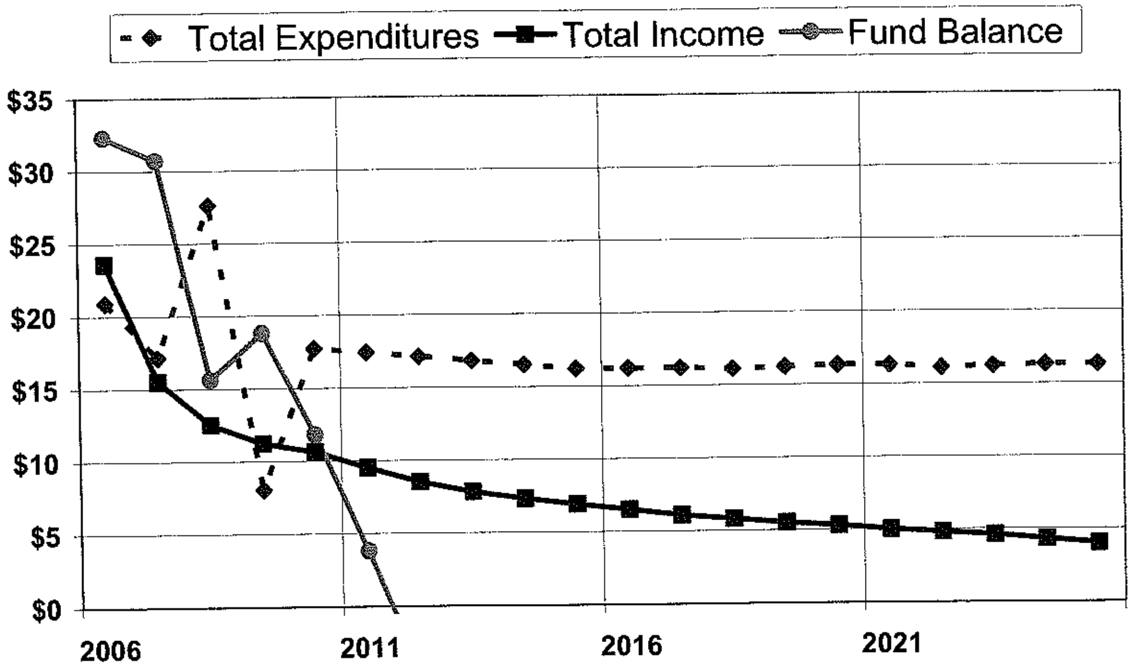
Chart 2.1 shows that after 2009, projected SRF expenditures are higher than projected income each year, resulting in a rapid decline in the fund balance, reaching zero in FY 2012. Note that the income includes projected coal tax revenues based on the consensus coal tax forecast multiplied by the ratio of projected active acreage in each year to the active acreage at the beginning of fiscal year 2006.

The first option we explored was to assess how changes in anticipated investment income would affect the SRF

Chart 2.2 shows the projected cash flows and SRF fund balance if the SRF were able to earn 1 percent higher investment returns annually. Increasing the investment earnings by 1 percent has minimal impact on the SRF fund balance and only defers the date the SRF is exhausted by less than one year.

Chart 2.2

Projected Cash Flows and SRF Fund Balance
($millions)



Note that the income includes projected coal tax revenues based on the consensus coal tax forecast multiplied by the ratio of projected active acreage in each year to the active acreage at the beginning of fiscal year 2006.

The second option we evaluated was how an additional coal tax after September 30, 2006 would impact the fund.

Chart 2.3

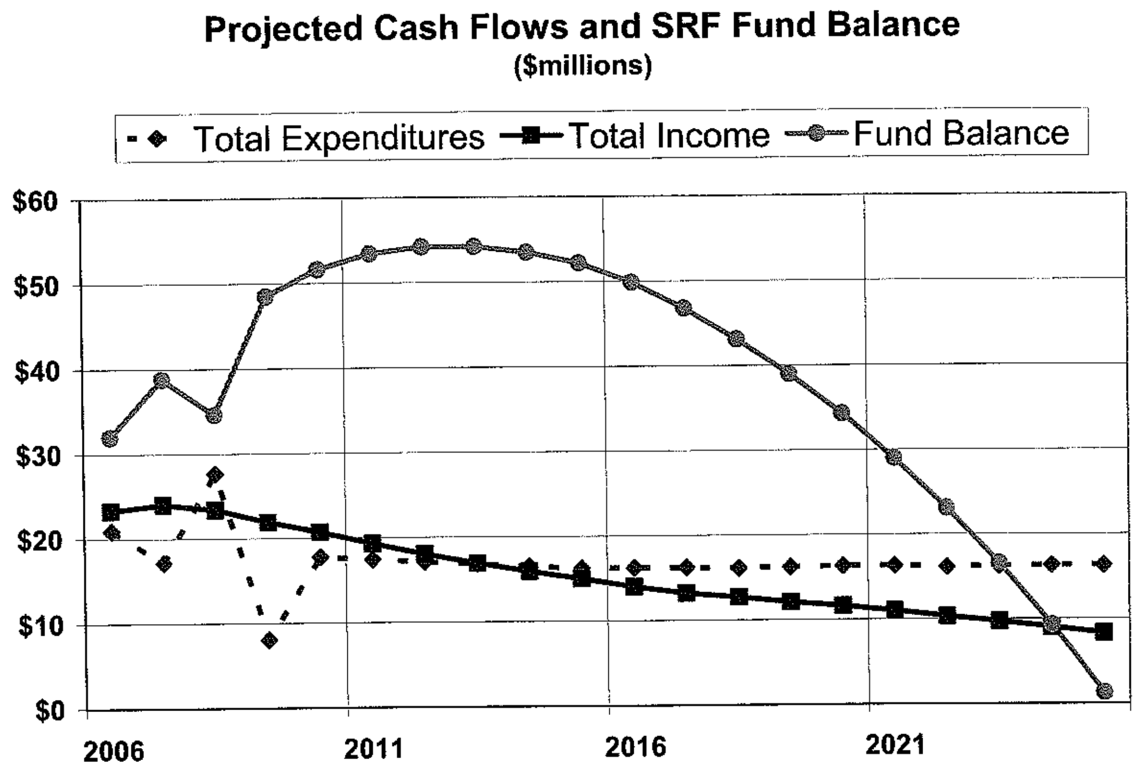


Chart 2.3 shows that an additional coal tax of 9 cents per ton, beginning October 1, 2006, produces sufficient additional income so that the Special Reclamation Fund is not exhausted in the next 20 years. Note that the income includes projected coal tax revenues based on the consensus coal tax forecast multiplied by the ratio of projected active acreage in each year to the active acreage at the beginning of fiscal year 2006.

Updated Bond Amounts

As the cost of reclamation activities increases over time due to general price inflation, it would be prudent to increase the bond amounts over time. Failure to do so results in the forfeited bond amounts covering a decreasing portion of the reclamation costs and creates a moral hazard

Furthermore, if bond amounts were increased significantly, they may be used to fully fund the reclamation activities of newly issued permits that become forfeited A full bonding analysis is outside the scope of this valuation, which is primarily focused on assessing the current liability for reclamation activities on active sites and expected forfeited permits that have already been issued

As an indication of how inflation erodes the value of the bond forfeiture revenues in real terms, we have illustrated the effect that bond amounts have on the SRF by doubling the current amounts Chart 2.4 shows the projected cash flows and SRF fund balance if all bond amounts currently in force were doubled effective July 1, 2005.

Chart 2.4

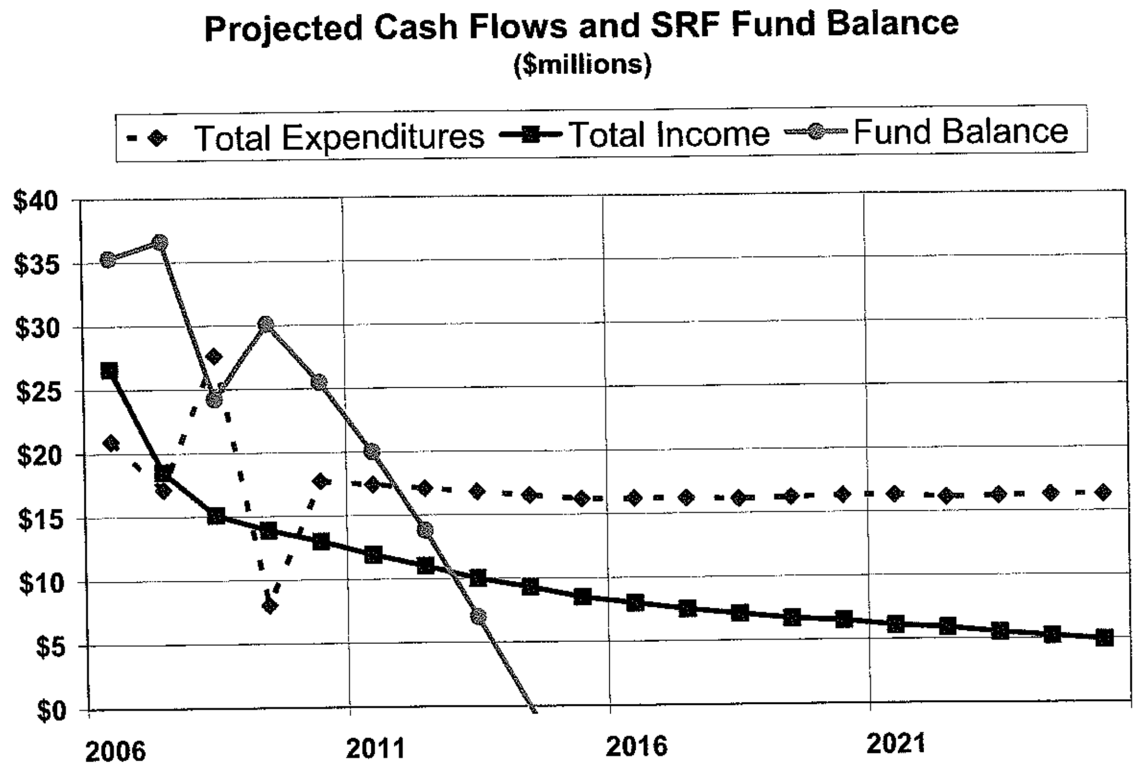


Chart 2.4 shows that if the SRF had issued bonding requirements at double the bond amounts currently in force, the time when the SRF is exhausted would be deferred by 2 years This analysis assumes the rate of forfeitures would not change. Note that the income includes projected coal tax revenues based on the consensus coal tax forecast multiplied by the ratio of projected active acreage in each year to the active acreage at the beginning of fiscal year 2006

SECTION 3

COMPARISON OF FUNDING MECHANISMS IN OTHER STATES

Need for Land Reclamation

Since passage of the Surface Mining Law in 1977, land reclamation has become a built-in component of coal mining. In fact, successfully reclaimed land quickly begins to resemble its natural condition and is difficult to distinguish from the surrounding landscape.

Both state and federal regulations require that a bond be posted as a condition of issuance of a permit to an operator. The bond is to ensure that the agency will have funds to reclaim the site in the event of permit revocation and bond forfeiture. Federal regulations recognize three major categories of reclamation bonds: corporate surety bonds, collateral bonds (cash; certificates of deposit; first-lien interests in real estate; letters of credit; federal, state, or municipal bonds; and investment-grade securities), and self bonds (legally binding corporate promises without separate surety or collateral, available only to permittees who meet certain financial tests). State programs generally recognize the same three categories, although the programs vary somewhat in terms of which financial instruments are acceptable.

West Virginia is a bond pool (Alternative Bonding System) state where a tax (currently 14 cents per ton) on coal production pays for any excess reclamation costs above what the bond for a particular site covers. The bond rate is set by rule and is $1,000 to $5,000 per acre, with a minimum per site of $10,000.

The bond is required until a finding that all reclamation has been successfully completed. Both state and federal regulations also set criteria for release of a bond upon completion of several phases:

- Phase I - backfilling and drainage control
- Phase II - revegetated according to standards and
- Phase III - meets all the standards of the approved plan.

Funding Land Reclamation

Mining, oil and gas companies that operate on federal lands are required by the federal government to restore that land to safe environmental conditions when they are finished. To do so the federal government requires the mining companies to demonstrate sufficient financial capacity, otherwise they are not allowed to operate.

Financial Instruments Used to Fulfill the Obligation

Mining companies use various financial instruments to fulfill the bond posting requirement by various states. Of the available financial instruments, states typically require surety bonds, corporate guarantees, and incrementally funded trusts. In addition to the above instruments, various states have their own bond pools. A mining company can enter such a pool if it meets the requirements and pays the appropriate dues.

Surety Bonds

In an attempt to demonstrate financial capacity, mining companies buy surety bonds The surety company issues these bonds. These bonds are financial assurance instruments that hold funds or collateral in reserve. In the unlikely event that a mining company fails to perform the reclamation, the federal government claims the surety bond in an attempt to prevent the cost of reclamation being transferred to the public. The bond is held by the government and is released to the operator upon successful completion of the reclamation. If the costs have been accurately anticipated, surety bonds protect the public from bearing the cost of reclamation of the land in the event of default by the mining company.

There are 24 states that have taken the primary responsibility of the reclamation of land for coal mining. These states together hold about $2.5 billion in financial assurances for the reclamation of coalmines

Due to the lack of profitability in the surety industry, many insurance providers have ceased issuing surety bonds This has led to the development of shortage of surety bond issuers, and this shortage of supply has led to an increase in the price of the surety bonds. Various other alternatives that have been suggested and are being practiced in different states are the corporate guarantee, bond pool, and incrementally funded trusts.

Corporate Guarantees

A corporate guarantee is a general obligation of the firm. The federal government uses independent auditors to analyze the financial strength of the corporation involved in mining to determine if the corporation is financially stable to perform the reclamation of the mined land. Corporate guarantees are currently being accepted for offshore oil and gas drilling companies. Coal mining companies can use corporate guarantees under the Office of Surface Mining regulations for the surface mining only. Of the 24 states that have taken primary land reclamation responsibility, 20 states accept corporate guarantees as a form of financial solvency for reclamation. Currently the federal government is not accepting any more corporate guarantees, primarily due to bankruptcies and abandoned obligations for sites in Colorado.

Corporate guarantees are an attractive tool for the mining companies as they are a relatively inexpensive way of providing financial capacity. The company does not need to invest money in any bond or to purchase any coverage from a third party. It is, however, a risk for the government, because in case of a bankruptcy, the government is like any other lender and is subordinate to the claims, with senior debt having a higher priority. In such a circumstance the government might be able to recover only a fraction of the cost associated with reclamation of land, or in some cases not recover any monies For the state of Nevada about 50% of the financial assurance is held in the form of corporate guarantee.

Bond Pools

A bond pool is a fund into which a group of qualified mining operators pay fees to participate The pool in return provides financial assurance for its participants. The qualified mining operators can begin operations after paying the joining fee and the ongoing fees In addition, operators must make payments into the fund based on their reclamation obligations. The payment is assessed at a fixed fee, generally some amount per acre of land being mined or an amount per tonnage of coal being mined The bond pool is not responsible for obligations exceeding the pool's resources. In such an event the additional cost of mine reclamation would fall on the public.

Currently, bond pools exist in several states The Alaska bond pool makes sure that sufficient funds are available in the pool even if the defaulting mine has not made all its payments. The defaulted mining operator is allowed to rejoin the pool if the operator reimburses the pool for all costs and pays additional participation costs. In Nevada 15% of the financial assurance is being held in the form of bond pools.

Incrementally Funded Trusts

These are administered by a third party and are accounts into which a mine operator makes payments that are dedicated to fully fund its own land reclamation obligation. To set up the fund the operator makes the first payment before mining begins, with subsequent payments being made into the fund as an ongoing process. The risk to the public in such a fund is that the operator might default before the fund becomes fully funded.

Wyoming

Wyoming is the largest producer of coal in the country, almost all of which is being mined from surface mines. The state has adopted a phased bond release program. The program constitutes three separate phases depending on the extent to which the mined land has been reclaimed. Phase 1 requires the mined area being backfilled and drainage controlled. Phase 2 requires the mined area to be revegetated according to the state's standards and so that the reclaimed area does not contribute any suspended particles to the streams. Phase 3 requires that the surface area meet all the standards approved by the reclamation plan.

Types of bonds accepted by the state of Wyoming are:

- Corporate surety bonds, issued by an insurance company holding a Wyoming surety license
- Federal insured Automatically Renewable Certificates of Deposits made payable solely to the Wyoming Department of Environmental Quality. Each CD needs to be purchased from a separate bank and should not exceed $100,000 in face amount
- U.S. Treasury Bonds, Bills, or Notes
- Cash can be deposit with the state Treasurer; in such a case cash does not earn interest

- Letter of Credit
- Self-Bonding
- Combination of any of the above instruments

For an initial bond, the amount to be filed with the administrator prior to commencing any mining is equal to the estimated cost of reclaiming the affected land. The estimated cost is based on the operators' cost estimate submitted with the permit plus the administrator's estimate of the cost to the state of bringing in personnel and equipment in the event the operator fails. Generally, the minimum bond is $10,000, but for surface coal mines in no event is it supposed to be less than $200 per acre of mining land.

After the reclamation for any affected land has been completed, the administrator of the fund can recommend the release of the bond. In such a circumstance up to 75% of the value of the bond can be recommended to be released. The remaining portion of the bond, which cannot be less than $10,000, is held for five years after the completion of reclamation, to assure proper revegetation and restoration of ground water.

Wyoming has an outstanding proposal to the Abandoned Mines Fund to reduce the per tonnage reclamation fees. The new schedule of fees is:

- $.25/ton for surface mined coal
- $.12/ton for underground mined coal
- $.08/ton for lignite mined coal

Kentucky

Kentucky is the third largest coal producing state in the country, behind Wyoming and West Virginia. Kentucky has three coal associations: Kentucky Coal Association, Western Kentucky Coal Association, and Coal Operators and Associates. Kentucky requires the operators prior to undertaking a surface coal mining operation to post reclamation performance bonds. The acceptable sources of bonds are:

- Self Bonds
- Surety Bonds
- Pay fees to alternative bonding systems such as the state's bond pool

The state has adopted a phased bond release program similar to Wyoming's.

Detailed Information about the Kentucky Bond Pool

The Kentucky bond pool consists of all the money collected and the interest earned from the interest bearing account. The money is meant to be used solely under the following circumstances:

- Reclaim in the event of forfeiture
- Compensate the cabinet for the cost of administration
- Fund audits and actuarial studies
- Cover operating and legal expenses

A bond pool commission manages the bond pool. The role of the commission is:

- Assign memberships to the bond pool to different operators
- Assign ratings to the mine operators. Ratings determine how much contribution is needed by the operator towards the pool
- Determine the tonnage fee
- Authorize expenditure from the bond pool

Criteria Required for the Bond Pool Membership

To be eligible to enter the bond pool, an applicant needs to pay a fee of $100 per permit. The commission then determines if the applicant is sufficiently financially stable to enter the bond pool. Based on the financial strength of the operator, the bond pool assigns three separate ratings:

- Rating "A" is assigned to the operator that has demonstrated excellent compliance for the last five of the seven years
- Rating "B" is assigned to the operator that demonstrated acceptable compliance for the last five of the seven years
- Rating "C" is assigned to the operator that demonstrated acceptable compliance for the last three of the five years

Fees Associated With the Bond Pool

Prior to admission to the bond pool each member must pay an admission fee, which depends on the rating achieved by the operator. The fees are as follows:

- $1,000 for Rating "A"
- $2,000 for Rating "B"
- $2,500 for Rating "C"

In addition to the admission fee the operator also needs to pay a permit specific fee. The fee charged is on a per acre basis. They are different for the different rating classes.

- $500 for Rating class "A"
- $1,500 for Rating class "B"
- $2,000 for Rating class "C"

These permit specific bond fees are released upon successful reclamation of the land under the three-phase release program adopted by the state.

If the operator does not qualify for the Kentucky Bond Pool, the operator must demonstrate sufficient financial capability for land reclamation in the form of external bonds or by self-bond. If the operator does not meet these criteria it is not allowed to mine in the state.

Pennsylvania

In 1982 Pennsylvania adopted a bonding system to meet federal requirements for land reclamation. Surface coal mining processes in Pennsylvania include surface mining, coal refuse processing, coal preparation plants, and coal disposal. All coal operators in the Commonwealth of Pennsylvania were required by the government to post a bond to cover the cost of land reclamation. The bonding system was composed of two parts: an alternate bonding system that covered the surface mines and the full cost bonding that covered underground mines. The contribution required for each operation was based on the potential reclamation obligations. The full cost bonding system is directed towards refuse disposal and surface activities associated with underground mining. Under this system the operator was required to post a specific flat per acre site-specific bond and contribute towards a pool of funds to be used to supplement forfeited bonds on any site. Under the latter system the operator was required to post a bond to cover the full cost of the land reclamation. Studies conducted on the Pennsylvania bonding system showed that the two stage-bonding systems were not sufficient to cover the land reclamation obligations. Thus in the spring of 1999 Pennsylvania merged the two separate bonding systems into one combined bonding system with the same requirements for surface and underground mines.

Acceptable Bond or Alternatives

The Commonwealth of Pennsylvania will accept financial capability to issue a permit for coal mining in any of the following forms:

- Surety bonds from a reliable insurance company
- Collateral bonds. In this case the department will keep the collateral in its possession until the obligation has been fulfilled
- Self-bonding
- A combination of any of the above mentioned bonding instruments

Period of Liability

For surface coal mining the Department assesses the liability to continue for five years after the reclamation process has been completed. For the underground coal mining the liability continues for five years after the completion of the reclamation except in the following circumstances:

- If there is a risk of water pollution, the Department will assess how long the liability is expected to continue.
- For bituminous coal mining, the liability is assumed to continue for 10 additional years after the reclamation is complete.

Bond Rate Calculation

Operators are required to pay a permit fee and an additional bond amount per acre based on the type of operation within the entire permit area.

The minimum requirements for an entire permit area are:

- $10,000 for bituminous coal mining
- $5,000 for anthracite coal mining

The per acre rates are as follows:

TABLE 3.1		
Activity	**Variables**	**Bond Amount**
Surface Coal	Support areas	$1,000 / acre
	Highwall: 0-85 feet	$3,000 / acre
	Highwall: 86-115 feet	$4,000 / acre
	Highwall: 116-150 feet	$5,000 / acre
	Highwall:>150 feet	Site Specific Evaluation
Coal Preparation Plants	Land Reclamation	$3,000 / acre
	Demolition of Structures	Site Specific Evaluation
Coal refuse reprocessing		$1,000 / acre
Coal Refuse Disposal		$1,000 / acre

In addition to the bond, a one-time non-refundable reclamation fee based on the total acreage of the permit being issued is assessed for the surface coal mining and coal refuse preprocessing operations. This fee is assessed at $100 per acre

Under the new system of full cost bond requirement, the value of the bond is determined on a site-by-site basis The actual cost is determined as a sum of direct costs and indirect costs. The direct costs are the sum of the different unit operations at the developed bond rate guidelines. Indirect costs are a percentage of the direct costs. The bond rate guidelines being adopted by Commonwealth of Pennsylvania are shown in Table 3.2

TABLE 3.2		
Bond Rate Guidelines		
Unit Operation	Bond Rate	Term
Mobilization/Demobilization	3-5%	Job
Dewatering	$ 1,000	Million gallons
Grading –Select	$ 1,200	Acre
Grading -<500 push	$ 0.50	Cubic Yard
Grading - >500 push	$ 0.08	Cubic Yard
Erosion and Sedimentation Controls	$ 0.05	Job
Ditch Excavation	$ 4	Cubic Yard
Lining -R3	$ 17	Square Yard
Lining -R4	$ 20	Square Yard
Lining -R5	$ 30	Square Yard

TABLE 3.2		
Bond Rate Guidelines		
Jute Matting	$ 3	Square Yard
High Velocity Erosion Control	$ 3	Square Yard
PVC Lining	$ 10	Square Yard
Filter Fabric	$ 0.70	Square Yard
Subsurface Drain	$ 12	Lineal Foot
Revegetation	$ 1,000	Acre
Seed Bed Preparation	$ 125	Acre
Agricultural Lime	$ 30	Tons
Fertilizer	$ 200	Pound
Nitrogen	$ 0.55	Pound
Phosphate	$ 0.35	Pound
Potassium	$ 0.30	Pound
Seed Type 1	$ 3.00	Pound
Seed Type 2	$ 6.90	Pound
Mulch	$ 300	Acre
Trees	$ 0.15	Stem

Bond Release

Similar to the states of Wyoming and Kentucky, Pennsylvania also follows a three-phased bond release program.

Virginia

Virginia is among the 24 states that have taken primary responsibility of land reclamation for coal mining. To do this effectively it requires that the mining companies demonstrate sufficient financial capability and post surety bonds or contribute to the Virginia Reclamation Fund.

Bond Requirements

Entrance fees are as follows:

- Entrance fee of $1,000 charged for each applicable permit
- In case the total balance of the fund is less than $1,750,000 the director can increase the entrance fee from $1,000 to $5,000
- The fund charges a renewal fee of $1,000 for any permit renewal

Per acreage fee:
In addition to the above entrance fee there is a bond requirement for the fund. The value of the bond is determined as follows:

- For underground mining operations that got the permits before 1991, the bond is calculated at the rate of $1,000 per acre of land being mined. The minimum value of the bond is $40,000
- For underground mining operations that got the permits after 1991, the bond rate is $3,000 per acre of land mine. The minimum value of the bond required in this case is still $40,000
- For other coal mining operations that entered before July 1991 the bond is calculated at the rate of $1,500 per acre with a minimum value of $100,000
- For coal mining operations that entered after July 1991 and not doing underground mining, the bond is calculated at the rate of $3,000 per acre with a minimum value of $100,000

In addition to the above fees, if the balance of the bond fund drops below $1,750,000, the operators are required to pay additional fees. These fees are determined at the following rates:

- For a surface mining company the additional fee is four cents per ton of mined coal
- For a deep mining company the additional fee is three cents per con of mined coal

Release of Bond

Similar to the other states Virginia also follows a three-phased bond release program.

Alaska

Alaska has a bond fund. The amount of bond required is $750 per acre of land being mined. If the mine operator can show the commissioner that the per acreage cost of land reclamation is less than $750, the bond requirement can be reduced. As an alternative to posting the bond the mine operators can decide to enter the state wide bond pool. Operators that decide to enter the pool have to submit an initial amount of 15% of the determined bond requirement plus an additional non refundable annual fee that equals 5% of the bond requirement. Upon successful reclamation of the land the initial 15% fee is refunded

Idaho

Idaho has a bond fund. The amount of the bond is determined as the estimated costs of reclamation under the reclamation plan for each acre of land to be affected during the first year of operation plus an additional 10%. The maximum amount of bond required for each acre of land is set at $2,500.

Acceptable bonds or alternatives under the Idaho bonding program are:

- Corporate surety bond
- Collateral bond
- Letters of Credit

Montana

Montana requires that a bond be posted for every acre of land being mined. The minimum amount of the bond is $200 per acre and the maximum is $2,500. Regardless of these limits the bond is set equal to the estimated costs to reclaim the land by the state. The State of Montana accepts cash, surety bonds or certificate of deposits as an acceptable form of bond.

SECTION 4

DATA

Data provided for this study is enumerated and discussed below. We did not audit or verify the data.

Data Originally Provided By West Virginia

The information listed below was provided by West Virginia's Department of Environmental Protection (DEP). Most of this information was provided during the proposal process or at our October 5, 2004 meeting with Department personnel. With one exception, the remainder was provided in an October 13, 2004 e-mail. The two exceptions were the draft report of "A Fiscal Risk Model of the Special Reclamation Fund and Mine Operations in West Virginia" by Michael J. Hicks, PhD, which was provided December 3, 2004, and the data on permit forfeitures by date of issuance, which was provided on February 10, 2005.

The following statutory information was provided:

- Senate Bill No. 5003, passed September 15, 2001.
- Section 22-3-11. Bonds; amount and method of bounding; bonding requirements' special reclamation tax and fund; prohibited acts; period of bond liability
- Section 22-3-12 Site-specific bonding; legislative rule; contents of legislative rule; legislative intent.
- Public Law 95-87, the Surface Mining Control and Reclamation Act of 1977 (SMRCA), passed August 3, 1997, and all revisions through December 31, 1993.
- Section 22-1-17. Special reclamation fund advisory council.

The following studies completed by other parties were provided:

- "Consensus Coal Production Forecast for West Virginia" by George W. Hammond, PhD issued in May 2004. This study provides actual coal production for 1998 through 2003 and a consensus forecast for 2004 through 2025.
- "Evaluation of Acid Mine Drainage Treatment Strategies Under the Special Reclamation Fund" by Paul Ziemkiewicz, PhD issued May 31, 2004. The conclusion of interest for our analysis was that 20-year treatment costs ranged from $459,000 to $2,858,000 with the large differences due to site-specific factors
- "A Fiscal Risk Model of the Special Reclamation Fund and Mine Operations in West Virginia" by Michael J Hicks, PhD issued in draft December 2004 This study

concluded that factors at the firm level are not correlated with AML violations, bond forfeiture, civil penalties, or state cessation orders. It also noted that the number of firms in this category was a very small (unstated) percentage of the permitted firms.

The following investment information for the Special Reclamation Fund was provided:

- Note 4 – Cash and Investments to the June 30, 2003 audited financial statement of the Special Reclamation Fund.
- Investment performance report for December 2001, December 2002, and December 2003.
- Statement of accounts at December 31, 2001, December 31, 2002, and December 31, 2003
- Historical investment returns of the separate pools managed by the West Virginia Investment Management Board. This information was provided in an Excel file.

The following accounting information for the Special Reclamation Fund was provided:

- Balance Sheet at June 30, 1992 and corresponding Independent Accountants' Compilation Report by Deloitte & Touche;
- A March 9, 1993 review by independent accountant Deloitte & Touche of the Department's procedures with respect to the accounting books and records;
- The Department's October 5, 2004 responses to the comments in the March 9, 1993 review tied to page number.
- Combined Balance Sheet and Statement of Revenues, Expenditures, and Changes in Fund Balances for fiscal years ending June 30, 2001, 2002, and 2003
- Statements of Cash Flows at July 31, 2004 (sic) for the fiscal year ending June 30, 2004 including monthly statements of revenue by source for July 2003 through June 2004.
- Statement of Cash Flows at August 31, 2004 for the fiscal year ending June 30, 2005 including monthly statements of revenue by source for July and August 2004.

Additional information provided is as follows:

- "Actuarial Study for West Virginia Special Reclamation Fund" issued in March 1993 by Deloitte & Touche.

- Model facts and assumptions used by the Department to project its cash flow for the next few years. This is the model suggested by the US Office of Surface Mining, which was adopted by the Special Reclamation Fund Advisory Council.

- Cash Flow Projection of Special Reclamation Funds from SR Reports 7/31/04 and Future Liabilities through December 31, 2010 summarized by fiscal year ending June 30.

- Cash Flow Projection of Special Reclamation Funds from SR Reports 8/31/04 and Future Liabilities through December 31, 2010 summarized by fiscal quarter – two different coal tax assumptions.

- Water Quality Liability Report for fiscal year 2002 prepared December 11, 2002. Shows office, company, permit number, county, estimated water quality total capital, estimated water quality annual chemical costs, estimated administrative costs, 20% contingency costs, and total operating costs.

- Water Quality Liability Report for fiscal year 2003 prepared January 6, 2004. This shows office, company, permit number, county, estimated water quality total capital, estimated water quality annual chemical costs, estimated administrative costs, 20% contingency costs, and total operating costs.

- Report on Reclamation Completed 1/1/01-12/31/03. Shows reclamation completion date, company, permit number, permit acres, land status, date of revocation, reclamation start date, and office.

- Report on OSR Reclamation Costs 1/1/01-12/31/03. Shows permit number, land status, water status, reclamation start date, date water quality construction started, bond collected, land dollars, land capital FIMS cost, FIMS administrative cost, actual water quality capital dollars, actual operating and maintenance dollars, water quality FIMS cost, water quality maintenance FIMS cost, and total cost. This was provided in hard copy and in an Excel spreadsheet.

- Land Reclamation Report for fiscal year 2002 prepared December 9, 2002. Shows office, company, permit number, county, permit acres, disturbed acres, estimated liability, date of revocation, and liability report post date.

- Land Reclamation Report for fiscal year 2003 prepared January 6, 2004. Shows office, company, permit number, county, permit acres, disturbed acres, estimated liability, date of revocation, and liability report post date.

- TPL and SSR Current Liability Report for fiscal year 2003 prepared January 6, 2004. Shows office, company, permit number, county, permit acres, disturbed acres, current liability, date of revocation, and liability report post date.

- OSR Bond Collected Permit Acres for 1/1/93-12/31/03 showing permit number, date of revocation, permit acres, disturbed acres, bond collected, average bond per permit, and bond rate per permit acre. This was provided in an Excel spreadsheet.

- Closed Progress Report as of 9/24/04. This shows company name, permit number, acres, county, bond amount, bond type, 30-day date, hearing date, consent date, final date, collection date, and comments. This was provided in an Excel spreadsheet.

- Active Progress Report as of 10/5/04. This shows company name, permit number, acres, county, bond amount, bond type, 30-day date, hearing date, consent date, final date, collection date, and comments. This was provided in an Excel spreadsheet.

- An untitled, undated report showing company name, permit number, acres, bond amount, bond type, date of revocation, collection date, amount collected, balance uncollected, comments, and surety company. This was provided in an Excel spreadsheet.

- Historical data on the number of permits issued by year from 1977 to 2004, the number of permits released, and the number forfeited, by year of forfeiture and by year of issuance.

Data Provided for the Model Revision

DEP provided updated and more detailed information for the model revision as detailed below. Some of this information was updated during the model revision, requiring further analysis.

The following statutory information was provided:

- House Bill No. 3033, approved by the Governor on April 18, 2005, which:
  - extends the temporary 7 cent tax for 18 months to September 30, 2006,
  - requires the Secretary of the DEP to
    - pursue cost effective alternative water treatment strategies,
    - conduct formal actuarial studies every two years and conduct informal reviews annually on the Special Reclamation Fund,
    - determine the feasibility of allowing full cost bonding in lieu of the per ton coal tax,
    - determine the feasibility of creating a water quality trust fund to provide long-term funding for water treatment from forfeited sites and to reduce the portion of the per ton coal tax,
    - determine the feasibility of establishing a bonding requirement for water treatment activities in lieu of a portion of the per ton coal tax.

The following files were provided in pdf form on 6/24/05 and in Excel spreadsheets 6/30/05:

- Summary of water quality capital costs and water quality on-going annual operating costs (WATER OPERATIONS file). We were provided with an updated Excel file on 8/11/05.

- Historical summary of Land capital expenditures and Water capital expenditures for all revoked coal mine permits as of May 31, 2005 (LAND & WATER CAPITAL file).
- Cash flow forecast of Special Reclamation Funds (CASHFLOW file).
- Coal Production History and Forecast (COAL file). We were provided with an updated Excel file on 8/5/05.
- Permits Issued by year from 1994 (ISSUED PERMITS file). We were provided with an updated Excel file on 8/5/05.
- Permitted Acres by Year from 1994 (ACRES file). We were provided with an updated Excel file on 8/5/05

We were provided with the following additional information on 6/30/05:

- History of WVDEP mining and reclamation program amendments.
- Schedule of Open Permits with Acreage and Bond amounts (OPEN PERMIT file).
- Schedule of Released Permits with Original Acres/Bond and Current Acres/Bond (RELEASED PERMIT file).

We also were provided with the following information:

- Permit status definitions on 7/11/05
- Answers to questions asked on 7/28/05 and 8/4/05 about data and analysis results to date on 8/11/05.
- Five years of revenue totals for bond forfeitures, civil penalties, and court settlements on 8/23/05.
- Additional revenue information for the 2002, 2003, and 2004 fiscal years on 8/23/05.
- Information on which sites were expected to have ongoing water costs on 9/9/05.
- Split of the legacy encumbered costs on 9/20/2005.

We understand there is a study being performed by Marshall University regarding funding and reclamation options for the SFR that will not be completed until the end of October. The results from that study were not, therefore, included in this study.

SECTION 5

ACTUARIAL ASSUMPTIONS

This section summarizes the actuarial assumptions used in the measurement

1.	Discount Rate	2.50 percent
2.	General cost inflation	3.00 percent
3.	Wage inflation	3.00 percent
4.	Rate of forfeiture of permits	Rates vary by year of issuance and years since issuance, and amount of bond. See tables 5.1 and 5.2
5.	Rate of release of permits	Rates vary by year of issuance and years since issuance. See table 5.1
6.	Land reclamation cost per acre in 2005 dollars	$5,613
7.	Water reclamation cost per acre in 2005 dollars	$485, or 9 percent of land reclamation cost per
8.	Water treatment costs as a percent of water capital expenditures	30 percent
9.	Time period between permit forfeiture and land and water capital expenditure	4 years
10.	Time period between water capital expenditure completion and ongoing water treatment costs	None. Ongoing water treatment costs are assumed to commence in the year that water treatment expenditures occur.
11.	Investment income	Based on expected full year return on prior year fund balance. Annual cash flows of revenues and expenditures assumed to operate in a non-interest bearing account.

Some expenses that DEP originally categorized as water capital costs were designated as land capital costs for the purpose of this study because DEP expects no ongoing water treatment at these sites

Table 5.1 shows the rates by year of issuance and years since issuance.

Table 5.1 -- Valuation Rates of Forfeiture and Release of Permit				
Years Since Issuance	Permits Issued Before 1992		Permits Issued After 1991	
	Forfeiture	Release	Forfeiture	Release
1			0.05%	0.15%
2			0.65%	0.60%
3			1.30%	1.30%
4			1.10%	1.75%
5			1.00%	2.00%
6			1.00%	2.75%
7			0.75%	3.50%
8			0.75%	3.00%
9			0.75%	3.00%
10			0.75%	3.00%
11			0.75%	3.00%
12			0.75%	3.00%
13	2.00%	6.00%	0.75%	3.00%
14	2.00%	6.00%	0.75%	3.00%
15	2.00%	6.00%	0.75%	3.00%
16	2.00%	6.00%	0.75%	3.00%
17	1.50%	6.00%	0.75%	3.00%
18	1.50%	6.00%	0.75%	3.00%
19	1.50%	6.00%	0.75%	3.00%
20	1.50%	6.00%	0.75%	3.00%
Over 20	1.50%	6.00%	0.75%	3.00%

We applied these rates to the 1,912 in-force permits and compared the expected bond forfeiture receipts with the actual receipts over the past few years. Applying the forfeiture rates to permits of all bond sizes produced an expected level of receipts significantly higher than the recent experience. We then introduced weights to the forfeiture rates depending on the size of the bond.

Table 5.2 – Weighting Factors by Size of Bond	
Bond Size	Weighting
$10,000 and smaller	250%
Over $10,000 and under $100,000	100%
$100, 000 and larger	38%

Table 5.3 shows the following annual tonnage of coal production was assumed in the forecast. The tonnage from active acreage was determined as the consensus forecast tonnage in each year multiplied the ratio of active acreage in the beginning of each year to the active acreage at the beginning of fiscal year 2006.[3]

Table 5.3 – Coal Production			
Calendar	Production Tons From Consensus Forecast	Acreage of Inforce permits	Production Tons from In-force Acreage
2005	140,600,000	226,352	140,350,000
2006	140,100,000	214,255	132,044,672
2007	138,900,000	202,361	124,312,147
2008	139,200,000	190,777	117,364,574
2009	139,300,000	179,574	109,163,577
2010	135,900,000	168,855	100,745,218
2011	134,200,000	158,621	93,588,087
2012	132,900,000	148,869	86,486,056
2013	130,100,000	139,662	80,890,421
2014	132,100,000	131,042	76,303,094
2015	131,500,000	122,985	70,932,511
2016	129,600,000	115,453	66,919,928
2017	132,800,000	108,412	64,131,949
2018	135,000,000	101,831	61,723,527
2019	139,400,000	95,679	59,664,256
2020	142,900,000	89,928	57,309,629
2021	145,600,000	84,552	54,668,049
2022	147,100,000	79,525	51,874,536
2023	148,200,000	74,826	49,073,831
2024	148,700,000	70,433	46,348,328
2025	149,200,000	66,326	43,718,994

[3] Example: Tonnage from active acreage in 2011 = 135,050,000 x (168,855/226,352) = 100,745,218

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COMMOMWEALTH OF PENNSYLVANIA

Actuarial Valuation of the Post–Retirement Medical Plan November 2006

Commonwealth of Pennsylvania
Actuarial Valuation of the
Post-Retirement Medical Plan

Table of Contents

SECTION 1

Executive Summary

The Commonwealth of Pennsylvania (The Commonwealth) sponsors two health care plans for eligible retirees. Eligible Commonwealth retirees and their dependents may continue subsidized health care coverage through the Commonwealth for the life of the retiree in the Retired Employee Health Program (REHP). In addition, eligible State Police annuitants and their dependents may continue coverage through the Retired Pennsylvania State Police Program (RPSPP) for life.

This is the first valuation of the Commonwealth's post-retirement benefit plans.

This valuation includes calculations made as of January 1, 2006 using census data collected as of April 2006 and health care claims costs for calendar 2005, for current retirees and future retirees eligible for coverage under these plans. These results were then projected using standard actuarial techniques to determine the liabilities and costs as of July 1, 2007 and July 1, 2008.

GASB 45

Before July 1, 2007, the Commonwealth reported the cost of retiree medical benefits on a cash basis. Beginning July 1, 2007, the Commonwealth will implement the new Governmental Accounting Standards Board (GASB) standard (Statement Number 45) on *Accounting and Financial Reporting by Employers for Post-employment Benefits Other Than Pensions*. This standard requires the Commonwealth to account for these benefits on a full accrual basis. A description of the GASB standard can be found in Section 2.

Benefit Plans

This valuation covers two separate health plans sponsored by the Commonwealth. The larger plan is the REHP which covers eligible retired Commonwealth employees and their dependents. The smaller plan is the RPSPP which covers eligible retired State Police enlisted members and their dependents. The eligibility conditions and benefit provisions for these two plans differ materially; therefore the valuation developed separate results for each plan and its covered population

Health Care Trend Rates

The accounting standard requires employers to anticipate future health care costs by adjusting today's per capita health care costs with projected health care trend rates. As shown in Appendix A, health care costs have outpaced general inflation and the annual rate of change has fluctuated significantly over time. It is difficult to accurately predict health care cost increases even one or two years into the future. The assumed increase in health care costs varies by type of benefit and year. The assumptions anticipate medical benefit costs increase by 9 percent in 2006, with the rate increase declining by 1 percent per year until the rate reaches 5 percent per year in 2010. Pharmacy benefit costs are assumed to increase by 11 percent in 2006, with the rate increase declining by 1 percent per year until the rate reaches 5 percent in 2012. Dental benefit costs are assumed to increase by 7 percent for 2006 through 2008, then 6 percent per year for 2009 through 2013. Thereafter, dental benefit costs are projected to increase by 5 percent annually. This assumption set starts with the current consensus trend rate and changes smoothly to an assumed, ultimate trend rate. The projected increases in the Medicare Part B premium were taken from the 2006 Medicare Trustees report with an ultimate rate of increase of 4 percent.

Key Valuation Results

We have measured the post-retirement medical liabilities for the retirees currently covered by the post-retiree health plans and for employees covered under the Commonwealth health plan for active employees as of July 1, 2007. The liabilities were calculated using a discount rate of 5.0 percent.

In Table 1.1 we have shown three measures of the liability: the present value of future benefits, the actuarial accrued liability, and the normal cost. The present value of future benefits is the discounted present value of all future employer-paid health premiums for both current and future retirees. The actuarial accrued liability is the portion of the present value of future benefits attributable to employee service rendered prior to July 1, 2007. The normal cost is the portion of the present value of benefits earned in Fiscal 2007-2008.

For REHP participants who retired before July 1, 2005, the Commonwealth pays the full cost of the total health insurance costs. For REHP participants who retired on or after July 1, 2005, the retirees pay one percent of their final salary and the Commonwealth pays the remainder of the cost. Currently, the Commonwealth pays the full cost of health insurance for RPSPP participants. In 2005 combined costs for both plans amounted to $500 million, and are projected to grow rapidly due to the combination of a growing retiree population and high short-term increases in health care costs.

The actuarial assumptions are described in Section 4, and shown in Appendix B.

Table 1.1 shows the valuation results and Table 1.2 shows the derivation of the Annual Required Contribution.

Table 1.1
Postretirement Medical Benefit Valuation Results
for REHP and RPSPP
(Amounts in $millions)

	2007	2008
Assumptions		
Discount rate	5%	5%
Healthcare cost trend rates		
• Medical benefit trend rate	8%	7%
• Pharmacy benefit trend rate	10%	9%
• Dental benefit trend rate	N/A	N/A
• Ultimate rate	5%	5%
Valuation Results		
1. Present Value of Future Benefits	$18,409.0	$19,568.4
2. Actuarial Accrued Liability	13,778.2	14,088.4
3. Assets	-	-
4. Unfunded Actuarial Accrued Liability (actuarial accrued liability less assets)	13,778.2	14,088.4
5. Normal Cost	271.4	284.9

Annual Required Contribution

The Annual Required Contribution (ARC) is the sum of four parts:

(i) the Normal Cost,
(ii) the Amortization payment on the Unfunded Actuarial Accrued Liability,
(iii) interest on the unfunded ARC (or overfunded ARC), and
(iv) adjustment to the ARC to prevent double accrual of principal payments on the unfunded actuarial accrued liability.

For an organization that fully funds the ARC each year, the ARC is simply the sum of (i) and (ii).

The Commonwealth has decided to amortize the unfunded actuarial accrued liability over 30 years.

Table 1.2
Postretirement Medical Benefit Valuation Results
Annual Required Contribution for REHP and RPSPP
(Amounts in $millions)

Annual Required Contribution (ARC)		2007	2008
1	Normal Cost	$271.4	$284.9
2	Amortization Cost	853.6	872.7
3	Interest on unfunded (overfunded) ARC	0.0	43.3
4	ARC adjustment	0.0	(53.5)
5	**Total Annual Required Contribution**	1,125.0	1,147.4

Table 1.3 shows the development of the Net Other Post Employment Benefits (OPEB) Liability. The Net OPEB Liability is the excess of the Annual Required Contribution over the amount funded by the employer. As this is a projection for the amounts as of June 30, 2008, the Net OPEB Liability is based on an expected employer contribution.

Table 1.3
Postretirement Medical Benefit Valuation Results
Net OPEB Liability for REHP and RPSPP
(Amounts in $millions)

		2007	2008
1	Net OPEB Liability as of July 1, 2007	$0.0	$477.4
2	Annual Required Contribution	1,125.0	1,147.4
3	Expected employer contribution	647.6	688.4
4	Net OPEB Liability as of June 30, 2008	477.4	936.4

Actuarial Certification

The Commonwealth retained the Hay Group to perform an actuarial valuation of the Post-Retirement Medical Plan to provide an estimate of the actuarial accrued liability and the Annual Required Contribution in accordance with GASB standards numbered 43 and 45 Use of the valuation results for other purposes may not be appropriate.

This valuation has been conducted in accordance with generally accepted actuarial principles and practices.

The results shown in this report are reasonable actuarial results However, a different set of results could also be considered reasonable actuarial results. The reason for this is that actuarial standards of practice describe a "best-estimate range" for each assumption, rather than a single best-estimate value. Thus, reasonable results differing from those presented in this report could have been developed by selecting different points within the best-estimate ranges for various assumptions

The actuaries certifying to this valuation are members of the Society of Actuaries and other professional actuarial organizations, and meet the General Qualification Standards of the American Academy of Actuaries for purposes of issuing Prescribed Statements of Actuarial Opinion.

Adam J Reese

Adam J. Reese, FSA, MAAA, EA
Hay Group
November 2006

Tom Wildsmith

Tom Wildsmith, FSA, MAAA
Hay Group
November 2006

SECTION 2

Description of GASB 45

Governmental Accounting Standards Board (GASB)

In June, 2004, the Governmental Accounting Standards Board (GASB) issued its long awaited standard on *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions* (OPEBs)

The standard covers both post-retirement and post-employment benefits. The types of benefits covered include:

- Medical
- Dental
- Vision
- Hearing
- Life insurance
- Long term disability
- Long term care

However, if any of these benefits are provided through a pension plan they would be accounted for under GASB 25 — otherwise they will be accounted for under GASB 45.

It has taken GASB over 15 years to issue the standard as they first added OPEBs to their technical agenda in 1988. The delay has helped governmental employers in several ways. Over the ensuing period, private sector firms learned to grapple with the issue after the Financial Accounting Standards Board (FASB) released its exposure draft and then after due deliberation issued the final standard (FAS 106) in 1990. The actuarial and accounting professions geared up to handle the change from cash to accrual accounting. Claims administrators are now experienced with meeting the special data requests, actuaries have refined their valuation models, and accountants understand the valuation results The actuarial profession revised and updated its Actuarial Standard of Practice, reissuing ASOP #6 — *Measuring Retiree Group Benefit Obligations* in December 2001. The GASB standard directs users to this actuarial standard for guidance on selection of actuarial assumptions.

The effective date for the new standard depends on the size of the employer. For entities with revenues in FY 2000 over $100 million, the effective date will be the fiscal year beginning after December 15, 2006 — although earlier adoption is encouraged. Entities with smaller revenues have later effective dates. The Commonwealth is adopting the standard beginning with the 2007-2008 financial reporting year.

The purpose of the standard is to treat post-retirement benefits in a manner similar to pensions. Governmental employers should recognize that OPEBs constitute compensation for employee service and they should recognize the cost of benefits during the periods when employee service is rendered. By accounting for OPEBs, GASB believes the accounting statement will improve the relevance and usefulness of financial reporting, provide information about the size of the liabilities and the extent to which they are funded, and ensure systematic accrual-basis measurement over employee service.

While the standard will require governmental employers to adopt accrual accounting, the standard sets out a broad range of options for employers. These options include the ability to choose , within limits, the:

- Actuarial cost method,
- Period for amortizing the unfunded actuarial accrued liability,
- Measurement date, and
- Frequency of valuations

The most common and most expensive of the OPEBs are retiree medical benefits, which provide a valuable component in employees' retirement benefits program. Most governmental employers fund their retiree medical plans on a pay-as-you-go basis. The GASB standard does not require employers to advance fund these benefits, however certain aspects of the measurement provide benefits for employers that fund the OPEB liability.

Actuarial Cost Method

A fundamental principle in financing the liabilities of any retirement program is that the cost of the benefits should be related to the period in which benefits are earned, rather than to the period of benefit distribution. There are several acceptable actuarial methods prescribed in the GASB standard that are acceptable under the GASB standard The Commonwealth directed the Hay Group to identify the actuarial cost method that would produce the lowest Annual Required Contribution We evaluated each of the methods and determined that the Projected Unit Credit (PUC) Cost Method produced the lowest ARC

Under the projected unit credit cost method, the actuary develops the discounted present value of all future benefit payments. For a retiree, this amount is the Actuarial Accrued Liability For an employee that has not yet retired, the Actuarial Accrued Liability is determined as the ratio of the employee's service as of the valuation date to the expected service at retirement As the valuation uses rates of retirement, the PUC method determines the Actuarial Accrued Liability as the weighted sum of the pro-rata calculations for expected retirements at each expected retirement age.

Actuarial Accrued Liability

The actuarial accrued liability is that portion of the present value of projected benefits which has been accrued during the employee's working life from the date of hire to the valuation date. Another way of viewing this liability is as the portion of the present value of projected benefits that will not be funded by future normal costs. Therefore, as long as participants enter the system with no past service credit (as is assumed in this case), there is no actuarial liability for a new entrant. Furthermore, the full present value of benefits is accrued by the end of each employee's working life.

The difference between the actuarial accrued liability and the funds accumulated as of the valuation date is referred to as the unfunded actuarial accrued liability. Unfunded actuarial accrued liabilities generally exist when (1) the liabilities are not funded, (2) benefits have been earned for periods in which no normal cost has been paid or (3) the amounts that have been funded were inadequate because of losses, changes in assumptions, changes in the funding method, or benefit improvements. The unfunded actuarial accrued liability equals the actuarial accrued liability less the value of the fund.

The Commonwealth proposes not to fund the ARC, but to continue funding the annual cash cost of the benefits. Accordingly, the FY 2007-2008 Annual Required Contribution (ARC) consists of two principal components: (1) a normal cost, which pays for benefits being earned in the current reporting period, and (2) amortization of the unfunded actuarial liability, which pays for benefits previously earned but not paid for. Adjustments are made to the ARC for prior unfunded or overfunded ARC amounts, and to prevent double accrual of principal payments on the unfunded accrued liability.

Development of the Normal Cost

The normal cost represents the benefits earned during the current reporting period. As stated in the previous section, the projected unit credit actuarial cost method is used in determining the normal cost

SECTION 3

The Valuation Results

Table 3.1 shows the present value of benefits, actuarial accrued liability, and the normal cost, as well as the Annual Required Contribution (ARC) for current and future members, projected as of July 1, 2007 and as of July 1, 2008.

Table 3.2 shows the results for current and future members of the REHP projected as of July 1, 2007 and July 1, 2008.

Table 3.3 shows the results for current and future members of the RPSPP projected as of July 1, 2007 and July 1, 2008.

The table shows the results for two separate populations: retired employees and their dependents, and active employees who are expected to receive benefits. For both tables, the liability shown for current retirees is for the retired employees as of the date the census data was collected, which was January 1, 2006.

Table 3.1
Post-Retirement Medical Valuation
As of July 1, 2007 and July 1, 2008
(dollars in millions)

	7/1/2007	7/1/2008
Present Value of Future Benefits	$18,409.0	$19,568 4
Actuarial Accrued Liability	13,778.2	1,4088.4
Assets	0 0	0.0
Unfunded Actuarial Liability	13,778.2	1,4088.4
Amortization Cost	853.6	872.7
Normal Cost	271.4	284.9
Interest on unfunded (over funded) ARC	0.0	43 3
ARC adjustment	0.0	(53.5)
Total Annual Required Contribution	**$1,125.0**	**$1,147.4**
Expected Employer Funding	$647 6	$688.4
Net OPEB Liability at End of Year	$477.4	$936 4

Table 3.2
Post-Retirement Medical Valuation of the REHP
As of July 1, 2007 and July 1, 2008
(dollars in millions)

	7/1/2007	7/1/2008
Present Value of Future Benefits	$15,390.0	$16,398.3
Actuarial Accrued Liability	11,402.8	11,620.6
Assets	0.0	0.0
Unfunded Actuarial Liability	11,402.8	11,620.6
Amortization Cost	706.4	719.8
Normal Cost	227.5	238.8
Interest on unfunded (over funded) ARC	0.0	37.3
ARC adjustment	0.0	(46.0)
Total Annual Required Contribution	**$933.9**	**$949.9**
Expected Employer Funding	$577.0	$612.0
Net OPEB Liability at End of Year	$356.9	$694.8

Table 3.3
Post-Retirement Medical Valuation of the RPSPP
As of July 1, 2007 and July 1, 2008
(dollars in millions)

	7/1/2007	7/1/2008
Present Value of Future Benefits	$3,019.0	$3,170.1
Actuarial Accrued Liability	2,375.4	2,467.8
Assets	0.0	0.0
Unfunded Actuarial Liability	2,375.4	2,467.8
Amortization Cost	147.2	152.9
Normal Cost	43.9	46.1
Interest on unfunded (over funded) ARC	0.0	6.0
ARC adjustment	0.0	(7.5)
Total Annual Required Contribution	**$191.1**	**$197.5**
Expected Employer Funding	$70.6	$76.4
Net OPEB Liability at End of Year	$120.5	$241.6

Allocation of the Annual Required Contribution

For financial planning and reporting purposes, the Commonwealth required that the valuation report include an allocation of the Annual Required Contribution. A separate cost for the RPSPP was developed just for State Police members. The allocation of the REHP ARC was based on the ratio of the projected payroll to the total projected payroll.

Table 3.4 shows the ARC for FY 2007/08 and Table 3.5 shows the ARC of FY 2008/09.

Table 3.4
Commonwealth of Pennsylvania
Post Retirement Benefit Liability and
Allocation of Annual Required Contribution
Amounts in ($ thousands)

	REHP 2005 Payroll	RPSPP 2005 Payroll	REHP Annual Required Contribution FY 07 / 08	RPSPP Annual Required Contribution FY 07 / 08
ARC Allocated to:				
Governmental Activities:				
Direction and supportive services	309,177		74,963	0
Protection of persons and property	1,199,959	300,446	290,941	190,223
Public education	33,811		8,198	0
Health and human services	1,160,132		281,285	0
Economic development	65,974		15,996	0
Transportation	462,117		112,044	0
Recreation and cultural enrichment	148,803		36,079	0
Governmental Activities Subtotal	3,379,973		819,505	190,223
Business-type Activities:				
State Lottery Fund	11,123		2,697	0
Minority Business Development Fund	124		30	0
Machinery and Equipment Loan Fund	282		68	0
Small Business First Fund	336		81	0
Rehabilitation Center Fund	9,856		2,390	0
State Workmen's Insurance Fund	17,611		4,270	0
Coal and Clay Mine Subsidence Insurance Fund	913		221	0
State Stores Fund	144,014	1,290	34,918	817
Purchasing Fund	3,986		966	0
Manufacturing Fund	10,056		2,438	0
Oil and Gas Lease Fund	-		0	0
Historical Preservation Fund	1,734		420	0
Business-type Activities Subtotal	200,035		48,500	817
Fiduciary Activities:				

Table 3.4
Commonwealth of Pennsylvania
Post Retirement Benefit Liability and
Allocation of Annual Required Contribution
Amounts in ($ thousands)

	REHP 2005 Payroll	RPSPP 2005 Payroll	REHP Annual Required Contribution FY 07 / 08	RPSPP Annual Required Contribution FY 07 / 08
State Employees' Retirement Fund	10,549		2,558	0
Underground Storage Tank Indemnification Fund	$ 530	$	$ 129	$ 0
School Employees' Retirement Fund	16,222		3,933	0
Underground Storage Tank Indemnification Fund	13		3	0
Med Care Availability & Reduction of Error Fund	2,993		726	0
Fiduciary Activities Subtotal	30,307		7,348	0
Component Units:				
Ben Franklin Technology Development	127		31	0
Port of Pittsburgh Commission Fund	353		86	0
Pennvest Fund	1,464		355	0
Philadelphia Regional Port Authority	4,947		1,199	0
Patient Safety Trust Fund	178		43	0
State System of Higher Education	136,257		33,037	0
Higher Education Assistance Agency	96,998		23,518	0
Component Units Subtotal	240,324		58,269	0
External Organizations:				
Pennsylvania Municipal Retirement Fund	1,310		318	0
PICA	-		0	0
External Organizations Subtotal	1,310		318	0
				0
Total REHP ARC Allocated	**$ 3,851,949**		**$ 933,940**	0
Total RPSPP ARC Allocated		**$ 301,736**		**$ 191,040**

Table 3.5 shows the Annual Required Contribution for FY 2008-2009

Table 3.5
Commonwealth of Pennsylvania
Post Retirement Benefit Liability and
Allocation of Annual Required Contribution
Amounts in ($ thousands)

	REHP 2005 Payroll	RPSPP 2005 Payroll	REHP Annual Required Contribution FY 08 / 09	RPSPP Annual Required Contribution FY 08 / 09
ARC Allocated to:				
Governmental Activities:				
Direction and supportive services	$ 309,177	$	$ 76,244	$ 0
Protection of persons and property	1,199,959	300,446	295,913	196,676
Public education	33,811		8,338	0
Health and human services	1,160,132		286,091	0
Economic development	65,974		16,269	0
Transportation	462,117		113,959	0
Recreation and cultural enrichment	148,803		36,695	0
Governmental Activities Subtotal	3,379,973		833,510	196,676
Business-type Activities:				
State Lottery Fund	11,123		2,743	0
Minority Business Development Fund	124		31	0
Machinery and Equipment Loan Fund	282		70	0
Small Business First Fund	336		83	0
Rehabilitation Center Fund	9,856		2,431	0
State Workmen's Insurance Fund	17,611		4,343	0
Coal and Clay Mine Subsidence Insurance Fund	913		225	0
State Stores Fund	144,014	1,290	35,514	844
Purchasing Fund	3,986		983	0
Manufacturing Fund	10,056		2,480	0
Oil and Gas Lease Fund	-		0	0
Historical Preservation Fund	1,734		428	0
Business-type Activities Subtotal	200,035		49,329	844
Fiduciary Activities:				
State Employees' Retirement Fund	10,549		2,601	0
Underground Storage Tank Indemnification Fund	530		131	0
School Employees' Retirement Fund	16,222		4,000	0
Underground Storage Tank Indemnification Fund	13		3	0
Med Care Availability & Reduction of Error Fund	2,993		738	0
Fiduciary Activities Subtotal	30,307		7,474	0

Table 3.5
Commonwealth of Pennsylvania
Post Retirement Benefit Liability and
Allocation of Annual Required Contribution
Amounts in ($ thousands)

	REHP 2005 Payroll	RPSPP 2005 Payroll	REHP Annual Required Contribution FY 08 / 09	RPSPP Annual Required Contribution FY 08 / 09
Component Units:				
Ben Franklin Technology Development	127		31	0
Port of Pittsburgh Commission Fund	353		87	0
Pennvest Fund	1,464		361	0
Philadelphia Regional Port Authority	4,947		1,220	0
Patient Safety Trust Fund	178		44	0
State System of Higher Education	136,257		33,601	0
Higher Education Assistance Agency	96,998		23,920	0
Component Units Subtotal	240,324		59,264	0
External Organizations:				
Pennsylvania Municipal Retirement Fund	1,310		323	0
PICA	-		0	0
External Organizations Subtotal	1,310		323	0
				0
Total REHP ARC Allocated	**$ 3,851,949**		**$ 949,900**	0
Total RPSPP ARC Allocated		$ **301,736**		**$ 197,520**

SECTION 4

Actuarial Assumptions

The selection of all actuarial assumptions, in valuations of post-retirement health care plans including the health care cost trend rate, should be guided by Actuarial Standard of Practice No 6, Measuring Retiree Group Benefit Obligations, as revised from time to time by the Actuarial Standards Board. Accordingly, actuarial assumptions should be based on the actual experience of the covered group, to the extent that creditable experience data are available, but should emphasize expected long-term future trends rather than give undue weight to recent past experience. The reasonableness of each actuarial assumption should be considered independently based on its own merits, its consistency with each other assumption, and the combined impact of all assumptions

The actuarial assumptions used to value the post-retirement medical liabilities can be categorized into three groups: economic assumptions, medical assumptions, and demographic assumptions.

Economic Assumptions

The two economic assumptions used in the valuation are the discount rate and the health care cost trend rates. The economic assumptions are used to account for changes in the cost of benefits over time and to discount future benefit payments for the time value of money.

Discount Rate

The investment return assumption (discount rate) should be the estimated long-term investment yield on the investments that are expected to be used to finance the payments of benefits. The investments expected to be used to finance the payments of benefits would be plan assets for funded plans, assets of the employer for pay-as-you-go plans, or a proportionate combination of the two for plans that are being partially funded.

Given the fact that the Commonwealth will not be advance funding the post-retirement medical benefits, we recommend using the rate expected to be earned by short-term liquid assets. That rate is assumed to be 5.0 percent.

Health Care Cost Trend Rates

Table 4 1 shows the health care cost trend rates that were used for the actuarial valuation of the Post-Retirement Medical Plan.

Table 4.1
Health Care Cost Trend Rate Assumptions

Year	Medical Benefits	Pharmacy Benefits	Dental Benefits	Part B Premiums
2006	9.0 %	11.0 %	7.0 %	13.2%
2007	8.0 %	10.0 %	7.0 %	11.0%
2008	7.0 %	9.0 %	7.0 %	0.0%
2009	6.0 %	8.0 %	6.0 %	0.1%
2010	5.0 %	7.0 %	6.0 %	4.0%
2011	5.0 %	6.0 %	6.0 %	3.6%
2012	5.0 %	5.0 %	6.0 %	3.7%
2013	5.0 %	5.0 %	6.0 %	3.7%
2014	5.0 %	5.0 %	5.0 %	3.4%
2015	5.0 %	5.0 %	5.0 %	3.9%
2016+	5.0 %	5.0 %	5.0 %	4.0%

Note: Short-term Part B Premium trend rates are taken from the 2006 Medicare Trustees Report.

Appendix A contains a chart showing the historical increases in health care premiums from two sources: the Hay Benefits Report, and the Federal Employees Health Benefit Plan for the period 1982 through 2006.

Medical Assumptions

A fundamental building block of the actuarial valuation is the current per capita cost of benefits. We received summaries of retiree health care claims paid in 2004 and 2005 as well as the number of retirees covered by the plans in each year. The data was validated and where the data was fully credible, we were able to develop baseline per capita costs from the latest year's data. The REHP retirees become eligible for Medicare upon attainment of age 65, at which point the REHP pays on a secondary basis after Medicare benefits, have been paid. Accordingly, the REHP medical costs for retirees age 65 and older are much lower than the REHP medical costs for retirees under age 65. For the pharmacy benefits, the REHP is primary at all ages. Separate health care costs were developed in 5-year age ranges. These rates reflect the impact that aging has on health care utilization.

Table 4.2 shows the baseline per capita claims costs that were used in the valuation.

Table 4.2
REHP
Per Capita Claims Costs in 2005

Age	Medical	Medical	Pharmacy
<50	$ 2,843		$ 1,132
50 - 54	$ 3,717		$ 1,467
55 - 59	$ 4,821		$ 1,670
60 - 64	$ 6,194		$ 1,896
65 - 69		$ 757	$ 2,241
70 - 74		$ 1,008	$ 2,466
75 - 79		$ 1,221	$ 2,574
80 - 84		$ 1,326	$ 2,669
85 - 89		$ 1,657	$ 2,650
90+		$ 1,714	$ 2,301

The per capita costs in Table 4.2 are appropriate rates for the projection of costs for current retirees. The benefit plan for employees who retire after July 1, 2004 will include different cost-sharing levels. The effect of these higher retiree cost-sharing levels was estimated using Hay Group's proprietary health actuarial models Healthcare Benefit Value Comparison (HCBVC) and Medicare Benefit Value Comparison (MedicareBVC). These actuarial models not only take into account the lower plan cost associated with higher cost-sharing, but also the induced demand effect from higher out-of-pocket costs. The adjustment factors developed for the REHP were:

- Pre-65 medical 95%
- Post-65 medical 96%
- Pharmacy 93%

Separate health care claims costs were developed for RPSPP members. These costs reflect several differences between the benefits and population of the State Police. One key difference is their eligibility for Medicare. State Police enlisted members hired before 1981 were not required to pay the Medicare Hospital Insurance contributions and therefore upon attainment of age 65 are not eligible for Medicare Part A and the RPSPP remains primary for their medical benefits. Accordingly, we developed both non-Medicare-eligible and Medicare-eligible rates for retirees over age 65. For State Police hired after 1981, and other members who enroll in Medicare having earned eligibility through a spouse or other employment, the Commonwealth pays the Part B premium for the Medicare-enrolled retiree. The RPSPP also includes coverage for dental benefits. Table 4.3 shows the baseline per capita claims costs that were used in the valuation of the State Police.

Table 4.3
RPSPP
Per Capita Claims Costs in 2005

Age	RPSPP Non-Medicare	RPSPP Medicare	RPSPP Pharmacy	RPSPP Dental	RPSPP Part B
<50	$ 2,599	$ 1,770	$ 1,205	$ 444	
50 - 54	$ 3,397	$ 1,549	$ 1,562	$ 444	
55 - 59	$ 4,407	$ 1,328	$ 1,778	$ 444	
60 - 64	$ 5,662	$ 1,106	$ 2,018	$ 444	
65 - 69	$ 4,690	$ 885	$ 2,385	$ 444	$ 938
70 - 74	$ 5,875	$ 1,178	$ 2,625	$ 444	$ 938
75 - 79	$ 7,145	$ 1,427	$ 2,740	$ 444	$ 938
80 - 84	$ 8,428	$ 1,549	$ 2,841	$ 444	$ 938
85 - 89	$ 9,826	$ 1,936	$ 2,821	$ 444	$ 938
90+	$ 11,042	$ 2,003	$ 2,449	$ 444	$ 938

The per capita costs in Table 4.3 are appropriate rates for the projection of costs for current RPSPP retirees. The benefit plan for employees who retire after July 1, 2007 will include higher cost sharing, including a three-tier drug copay benefit design. The effect of these higher retiree cost-sharing levels was estimated using Hay Group's proprietary health actuarial models. These actuarial models not only take into account the lower plan cost associated with higher cost-sharing, but also the induced demand effect from higher out-of-pocket costs. The adjustment factors developed for the RPSPP were:

- Pre-65 medical 91%
- Post-65 medical 96%
- Pharmacy 89%

Medicare Prescription Drug, Improvement, and Modernization Act of 2003

The Medicare Modernization Act of 2003 (MMA) added a new voluntary prescription drug benefit to Medicare, starting in 2006, called Medicare Part D. The Medicare Part D benefit includes a large federal subsidy with retirees required to pay on average about 25 percent of the plan cost.

There are several ways employers can integrate or coordinate their coverage with the new Medicare Part D coverage, although for 2006 employer plans like the Commonwealth, had fewer options. One option that was included in the MMA permits employers to keep their coverage, remain primary in providing that coverage, and receive a "federal drug subsidy" in lieu of the direct subsidy otherwise paid by the Centers for Medicare and Medicaid Services (CMS).

The Commonwealth's plan provides benefits and a net employer subsidy that is more valuable than the Medicare Part D coverage. Accordingly, as the benefits satisfy the actuarial equivalence test, the Commonwealth is eligible for a federal drug subsidy equal to 28 percent of each retiree's drug expenses between certain thresholds. The Commonwealth applied for the retiree drug subsidy, and the application was accepted by CMS. For 2006, those thresholds are $250 and $5,000. If a retiree incurs drug expenses in excess of $5,000, the Commonwealth will receive a direct subsidy payment from the Centers for Medicare and Medicaid Services (CMS) of $1,330, less any Federal received rebates from pharmaceutical manufacturers.

In February, 2006, GASB issued a proposed Technical Bulletin on how to account for the retiree drug subsidy payments. The approach set out in the Technical Bulletin requires reporting of these amounts as a grant program. The Commonwealth expects to receive $34 million in FY 2007/08 under the Retiree Drug Subsidy, but the GASB Technical Bulletin deems the payment a "grant" and the GASB 45 valuation cannot anticipate the payment and offset the payments against the postretirement liability. The GASB Board approved issuance of the Technical Bulletin in June 2006. Accordingly, although the Commonwealth can expect to receive over $30 million in FY 2007/08 under the retiree drug subsidy, this payment and future years' payments cannot be taken into account in determining the GASB 45 liability. Other Medicare Part D coordination approaches could be used in later years that we would expect to lower the Actuarial Accrued Liability and the ARC.

Demographic Assumptions

The demographic assumptions used for valuing the liabilities of the post-retirement medical plan are those used for the actuarial valuation of the State Employees Retirement System.

The demographic assumptions include the rate of mortality, the rate of withdrawal, the rate of retirement, and the rate of disability. Ancillary demographic assumptions include the age of female spouses, coverage rates, and participation rates. The complete set of demographic assumptions is included in Appendix B.

SECTION 5

Financial Accounting Information

In addition to establishing the Annual Required Contribution (ARC), this report shows the progress toward funding of the plan benefits This section includes a schedule of the funding progress, which is a statement of disclosure to report the information required by Governmental Accounting Standards Board (GASB) Statement No. 43.

Also included is a schedule of employer contributions. This schedule compares the expected contribution to the plan with the Annual Required Contribution Since there is a lag-period between the determination of the ARC and the determination of the amounts actually funded, the tables show estimated amounts based on the funding policy as of the measurement date.

Funding Policy

The Commonwealth funding policy as of the measurement date is to continue the current policy of funding the benefits on a pay-as-you-go basis.

GASB Statement number 45 sets out the requirements for governmental employers to determine the Annual Required Contribution for the postretirement benefit plan costs GASB Statement number 43 sets out the required disclosures for the plans.

The following tables have been prepared as of June 30, 2006 using estimated covered payroll and projected valuation results

GASB 43 Disclosures

Table 5.1 shows the schedule of funding progress for the Retired Employees Health Program (REHP) and Table 5.2 shows the schedule of funding progress for the Retired Pennsylvania State Police Program (RPSPP)

Table 5.3 (for the REHP) and Table 5.4 (for the RPSPP) show the projected Annual Required Contribution for FY 2007/08 and FY2008/09, and the projected employer contributions. The ratio of the projected employer contributions to the ARC is the percentage of the ARC that is funded

Table 5.1
Retired Employees Health Program
Schedule of Funding Progress
(dollars in millions)

Fiscal Year Ending June 30	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded Actual Liability (UAAL) (b-a)	Funded Ratio (a/b)	Estimated Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a)/c)
2008	$0	$11,621	($11,621)	0.00%	$4,131	-281%
2009	$0	$11,825	($11,621)	0.00%	$4,338	-273%

Table 5.2
Retired Pennsylvania State Police Program
Schedule of Funding Progress
(dollars in millions)

Fiscal Year Ending June 30	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded Actual Liability (UAAL) (b-a)	Funded Ratio (a/b)	Estimated Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a)/c)
2008	$0	$2,468	($2,468)	0.00%	$324	-762%
2009	$0	$2,561	($2,561)	0.00%	$341	-751%

Table 5.3
Retired Employees Health Program
Schedule of Employer Contributions
(dollars in millions)

Fiscal Year Ending June 30	Annual Required Contribution	Expected Employer Contribution	Percentage Contributed
2008	$934	$577	62%
2009	$950	$612	64%

Table 5.4
Retired Pennsylvania State Police Program
Schedule of Employer Contributions
(dollars in millions)

Fiscal Year Ending June 30	Annual Required Contribution	Expected Employer Contribution	Percentage Contributed
2008	$191	$71	37%
2009	$198	$76	38%

GASB No. 43 Disclosure
Development of Net OPEB Obligation

Table 5.5
Postretirement Medical Benefits REHP

Actuarial Valuation Date	Annual Required Contribution (a)	Interest on Unfunded ARC (b)	Adjustment of the ARC (c)	Annual OPEB Cost (d) = (a) + (b) + (c)	Actual Contribution (e)	Increase in OPEB obligation (f) = (d) – (e)	Net OPEB liability at end of year (g) = prior year (g) + (f)
7/1/2007	$933.9	$0.00	$0.00	$933.9	–		

Table 5.6
Postretirement Medical Benefits RPSPP

Actuarial Valuation Date	Annual Required Contribution (a)	Interest on Unfunded ARC (b)	Adjustment of the ARC (c)	Annual OPEB Cost (d) = (a) + (b) + (c)	Actual Contribution (e)	Increase in OPEB obligation (f) = (d) – (e)	Net OPEB liability at end of year (g) = prior year (g) + (f)
7/1/2007	$191.1	$0.00	$0.00	$191.1	–		

SECTION 6

Summary of Plan Provisions

Retired Employees Health Program

All employees who retire (early and normal retirement) from the State are eligible for the Post-Retiree Medical Plan, except deferred vested retirees. Spouses and dependent children of retirees are also eligible for health care coverage sponsored by the State.

Eligible retirees have various options, depending on (a) their date of retirement and (b) their Medicare status

Table 6.1				
	Non-Medicare Retirees		**Medicare-Eligible Retirees**	
Retirement date	**Prior to 7/1/04**	**On or after 7/1/04**	Prior to 7/1/04	On or after 7/1/04
Medical Plan Options	Basic	Not available	Medicare Supplement & PEBTF Major Medical	Medicare Supplement
	HMO	HMO	HMO	HMO
	PPO	PPO		
		POS		
Pharmacy Plan	$7 copay for retail. $15 copay for mail order. No formulary	Three-tier copayment; formulary	**$7 copay for retail. $15 copay for mail order. No formulary**	**Three-tier copayment; formulary**

Non-Medicare eligible retirees who retired prior to 7/1/04 have three options: Basic, HMO, and PPO. Non-Medicare eligible retirees who retired after or on 7/1/04 also have three options: PPO, HMO, and a Consumer Driven option.

The summaries of the plan provisions described below are those of the HMO Option

Table 6.2
HMO Option

	Retiree Cost Sharing	
Benefit	**Retired Prior to 7/1/2004**	**Retired on or after 7/1/2004**
Deductible *(Applies to all benefits unless otherwise noted)*	None	None
OOP Max	None	None
Physician Visits		
PCP	$15 co-pay	$15 co-pay
Specialist	$25 co-pay	$25 co-pay
Preventive Care		
Adult		
Routine Physical	$15 co-pay	$15 co-pay
Annual Routine Gynecological exams	$15 co-pay	$25 co-pay
Annual Routine Mammograms	0% coinsurance	0% coinsurance
Pediatric		
Routine Physical	$15 co-pay	$15 co-pay
Immunizations	$15 co-pay (for office visit)	$15 co-pay (for office visit)
Emergency Room	$25 (waived if admitted)	$50 (waived if admitted)
Hospital Expenses	0% coinsurance semi-private room (private if medically necessary	0% coinsurance semi-private room (private if medically necessary
Medical/Surgical Expenses	0% coinsurance	0% coinsurance
SNF	0% coinsurance (180 day max)	0% coinsurance (180 day max)
Home Health	0% coinsurance (60 visits in 90 days)	0% coinsurance (60 visits in 90 days)
Chiropractic Care	$15 co-pay (combined 60 visits/year max)	$15 co-pay (combined 60 visits/year max)
MH and Substance Abuse	Provided by UBH	Provided by UBH

The summaries of the plan provisions described below are those of the PPO Option.

Table 6.3
PPO Option

	Retiree Cost Sharing			
	Retired Prior to 7/1/2004		Retired on or after 7/1/2004	
Benefit	**In Network**	**Out-of-Network**	**In Network**	Out-of-Network
Deductible *(Applies to all benefits unless otherwise noted)*	None	$250 Individual; $500 family	None	$400 per person; 30% of the next $5,000
OOP Max	None	$1,000 individual; $2,000 family	None	$1,500 individual; $3,000 family
Physician Visits				
PCP	$15 co-pay	20% coinsurance	$15 co-pay	30% coinsurance
Specialist	$15 co-pay	20% coinsurance	$15 co-pay	30% coinsurance
Preventive Care				
Adult				
Routine Physical	$15 co-pay	20% coinsurance	$15 co-pay	30% coinsurance
Annual Routine Gynecological exams	$15 co-pay	20% coinsurance (OON ded. waived)	$15 co-pay	30% coinsurance (OON ded. waived)
Annual Routine Mammograms	0% coinsurance	20% coinsurance (OON ded. waived)	0% coinsurance	30% coinsurance (OON ded. waived)
Pediatric				
Routine Physical	$15 co-pay	20% coinsurance	$15 co-pay	30% coinsurance
Immunizations	0% coinsurance	20% coinsurance (OON ded. waived)	0% coinsurance	30% coinsurance (OON ded. waived)
Emergency Room	$25 (waived if admitted)	$25 (waived if admitted)	$25 (waived if admitted)	$50 (waived if admitted)
Hospital Expenses	0% coinsurance	20% coinsurance (up to 70 days/year; 100% thereafter)	0% coinsurance	30% coinsurance (up to 70 days/year; 100% thereafter)
Medical/Surgical Expenses	0% coinsurance	20% coinsurance	0% coinsurance	30% coinsurance
SNF	0% coinsurance (240 days)	20% coinsurance (up to 240 days)	0% coinsurance (240 days)	30% coinsurance (up to 240 days)
Home Health	0% coinsurance	20% coinsurance	0% coinsurance	30% coinsurance
Chiropractic Care	$15 co-pay for first visit only	20% coinsurance	$15 co-pay for first visit only	30% coinsurance
MH and Substance Abuse	Provided by UBH	Provided by UBH	Provided by UBH	Provided by UBH

The summaries of the plan provisions described below are those of the Consumer Driven Option

Table 6.4 Consumer Driven Option			
	Retiree Cost Sharing		
	Retired Prior to 7/1/2004	Retired on or after 7/1/2004	
Benefit		**In Network**	**Out-of-Network**
Deductible *(Applies to all benefits unless otherwise noted)*	PLAN NOT AVAILABLE	$1,500 individual; $3,000 family. The PEBTF contributes $1,000 per individual & $2,000 per family per year into a Health Reimbursement Account (HRA). Therefore, the OOP max (In network) is $500 per individual or $1,000 per family per year.	
OOP Max		$500 Individual (after HRA); $1,000 family (after HRA)	$3,500 Individual (after HRA); $7,000 family (after HRA)
Physician Visits			
PCP		0% coinsurance	30% coinsurance
Specialist		0% coinsurance	30% coinsurance
Preventive Care		Covered up to $500 a year ($1,000 for family)	Not Covered
Adult			
Routine Physical			
Annual Routine Gynecological exams			
Annual Routine Mammograms			
Pediatric			
Routine Physical			
Immunizations			
Emergency Room		0% coinsurance	30% coinsurance
Hospital Expenses		0% coinsurance	30% coinsurance (up to 70 days/year; 100% thereafter)
Medical/Surgical Expenses		0% coinsurance	30% coinsurance
SNF		0% coinsurance (240 day max)	30% coinsurance (up to 240 days; 100% thereafter)
Home Health		0% coinsurance	30% coinsurance
Chiropractic Care		0% coinsurance	30% coinsurance
MH and Substance Abuse		Provided by UBH	Provided by UBH

The summary of the plan provisions described below is that of the Basic Option.

Table 6.5 Basic Option		
	Retiree Cost Sharing	
Benefit	**Retired Prior to 7/1/2004**	**Retired on or after 7/1/2004**
Deductible *(Applies to all benefits unless otherwise noted)*	PEBTF Major Medical $100 per person, max 3 per family; 20% of next $1,900 and 0% thereafter	PLAN NOT AVAILABLE
OOP Max	PEBTF Major Medical $380 per person plus deductible and any charges in excess of the UCR	
Physician Visits		
Primary Care Physician	Responsible for charges; must submit to PEBTF Major Medical	
Specialist	Responsible for charges; must submit to PEBTF Major Medical	
Preventive Care		
Adult		
Routine Physical	Not covered; pay 100% of cost	
Annual Routine Gynecological exams	0% coinsurance	
Annual Routine Mammograms	0% coinsurance (over age 40)	
Pediatric		
Routine Physical	0% coinsurance	
Immunizations	0% coinsurance	
Emergency Room	0% coinsurance if medical emergency and treated within 72 hours	
Hospital Expenses	0% coinsurance semi-private room (private if medically necessary)	
Medical/Surgical Expenses	0% coinsurance	
SNF	0% coinsurance (120 day max)	
Home Health	0% coinsurance (120 visits in 90 days)	
Chiropractic Care	0% coinsurance	
MH and Substance Abuse	Provided by UBH	

Retiree Contributions

Commonwealth employees who retire on or after July 1, 2004 are required to pay retiree contributions as a condition of receiving retiree medical coverage The retiree contribution is set at 1 percent of the employee's final salary, for employees who retired before July 1, 2005 the Commonwealth pays 100% of the cost.

Spouses and dependents of deceased retiree may continue to participate in the plan if they pay retiree contributions. These retiree contributions are designed to cover the full cost of the coverage.

Retired Pennsylvania State Police Program

Table 6.6 shows a summary of the plan provisions of the RPSPP.

Table 6.6 RPSPP Plan Option			
Retiree Cost Sharing			
	Retired Prior to 7/1/2004	Retired After to 7/1/2004	
Benefit		In Network	Out Network
Deductible *(Applies to all benefits unless otherwise noted)*	$100 Individual; $300 Family	None	$250 Individual; $750 family
OOP Max	$380	None	$1,500 Individual; $3,000 Family
Physician Visits			
PCP	$15 Reimbursement, balance covered at 80%	$15 co-pay	20% coinsurance
Specialist	$15 Reimbursement, balance covered at 80%	$25 co-pay	$15 co-pay
Preventive Care			
Adult			
Routine Physical	Covered at 80%	$15 co-pay	$15 co-pay
Annual Routine Gynecological exams	Covered at 80%	$15 co-pay	$15 co-pay
Annual Routine Mammograms	0% coinsurance	0% coinsurance	0% coinsurance
Pediatric			
Routine Physical	Covered at 80%	$15 co-pay	$15 co-pay
Immunizations	0% coinsurance	0% coinsurance	0% coinsurance
Emergency Room	0% coinsurance	$50(waived if admitted)	$50 (waived if admitted)

Table 6.6 RPSPP Plan Option			
Retiree Cost Sharing			
	Retired Prior to 7/1/2004	Retired After to 7/1/2004	
Benefit		**In Network**	**Out Network**
Hospital Expenses	Covered at 100% with few limits.	0% coinsurance	20% coinsurance
Medical/Surgical Expenses	Covered at 100% with few limits.	0% coinsurance	20% coinsurance
SNF	Covered at 100% with few limits.	0% coinsurance (240 days)	20% coinsurance (240 days)
Home Health	Covered at 100% with few limits.	0% coinsurance	20% coinsurance
Chiropractic Care	0% coinsurance	$15 co-pay for first visit only	20% coinsurance
MH and Substance Abuse	Covers 12 medically necessary emergency mental health psychotherapy visits	$25 co-pay; 60 visits max in a year	50% coinsurance after deductible
Prescription Drugs	Retail & Mail Order (6 months supply)	Retail	Mail Oder (3 months supply)
Generic	$1	$5 copay	$10 copay
Preferred brand	$1	$10 copay	$20 copay
Non-Preferred brand	$1	$15 copay	$30 copay

SECTION 7

Participant Data

The following tables show the current retired participants, and the potential participants who are currently active.

Table 7.1
Current Retired Population

Age Group	Females		Males		Total	
	REHP	RPSPP	REHP	RPSPP	REHP	RPSPP
<50	675	27	496	147	1,171	174
50-54	1,672	15	1,464	152	3,136	167
55-59	3,333	14	4,693	821	8,026	835
60-64	3,909	3	5,671	1,131	9,580	1,134
65-69	3,630	0	4,577	551	8,207	551
70-74	3,340	0	3,897	226	7,237	226
75-79	3,404	1	3,581	205	6,985	206
79+	6,317	1	4,691	189	11,008	190
Total	26,280	61	29,070	3,422	55,350	3,483

Table 7.2
Active Population

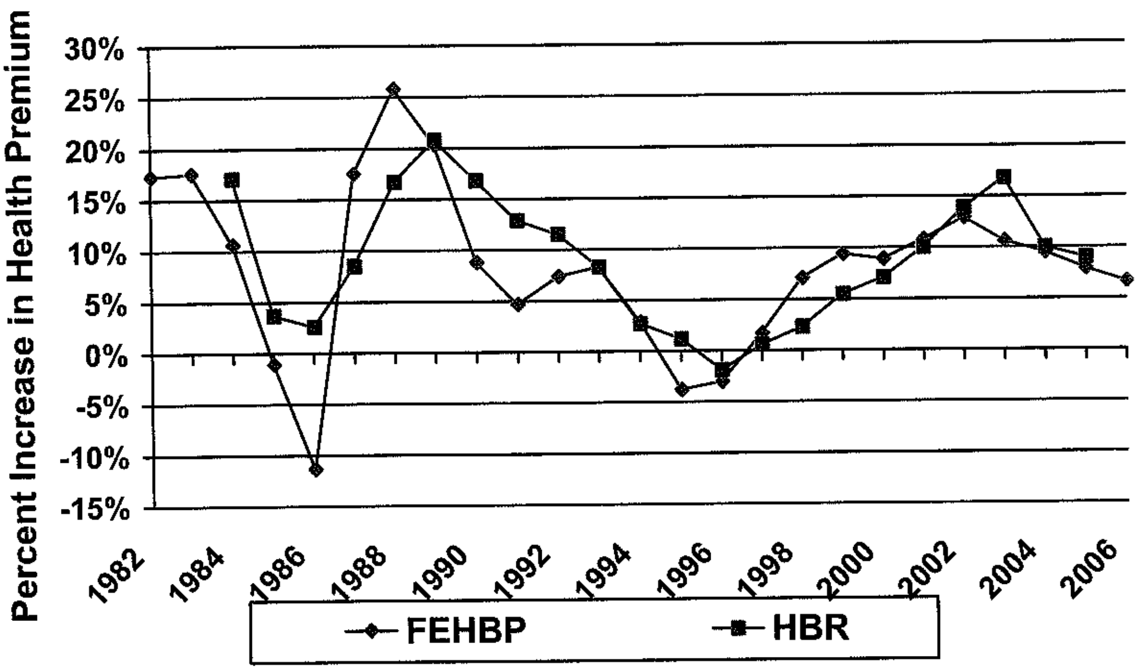
Age Group	Females		Males		Total	
	REHP	RPSPP	REHP	RPSPP	REHP	RPSPP
<20	19	0	7	0	26	0
20-24	797	4	597	29	1,394	33
25-29	2,174	25	2,301	218	4,475	243
30-34	2,682	32	3,575	588	6,257	620
35-39	3,633	50	5,470	1,552	9,103	1,602
40-44	4,615	37	6,217	1,050	10,832	1,087
45-49	6,328	25	7,544	475	13,872	500
50-54	7,609	9	8,503	149	16,112	158
55-59	5,577	0	8,138	39	13,715	39
60-64	1,612	0	2,490	2	4,102	2
65+	462	0	758	0	1,220	0
Total	35,508	182	45,600	4,102	81,108	4,284

Data on employees and retirees who are currently not participating were not included in this analysis.

APPENDIX A

HAY BENEFITS REPORT SURVEY AND FEDERAL EMPLOYEES HEALTH BENEFIT PROGRAM

MEDICAL PREMIUM INCREASES



The above chart shows the annual percentage change in the premiums for the Federal Employees Health Benefit Program as well as the annual change in the average premiums among the Hay Benefits Report participants.

The chart shows the cyclical nature of annual premium rate increases (and decreases).

Since 2003 we have seen the gradual decline in premium rate increases. The FEHBP appears to be a leading indicator of price changes. In 2005 the FEHBP average was 7.9% and in 2006 it was 6.6%.

Appendix B

Actuarial Assumptions

The complete set of actuarial assumptions for the post-retirement medical plan comprises three types of assumptions:

- Demographic assumptions
- Economic assumptions
- Healthcare assumptions

The demographic assumptions used are the same ones as are used in the State Employees Retirement System actuarial valuation. As the timing of an employee's decision as to when to retire is driven primarily on their financial security, the use of consistent assumptions ensures any changes made in the retirement system assumptions are reflected in both the annuitant costs and cost of their retire medical coverage.

The demographic assumptions used were based on a review of experience under SERS from 2001 through 2005. This section contains an extract of the full set of rates used in the valuation. The full set of rates is in the Sixteenth Investigation of Actuarial Experience of the State Employees' Retirement System of the Commonwealth of Pennsylvania; March 15, 2006; which can be obtained from SERS. The rates are the probabilities that an event will occur in the year after the valuation and are all assumed to occur at the beginning of the year. For instance, the male retirement rate of 25.0 percent at age 60 means that 250 of every 1,000 employees age 60 and who are eligible for full benefits are expected to retire at the date of the valuation.

DEMOGRAPHIC ASSUMPTIONS

Pre Retirement Mortality and Disability:

Representative Rates of Separation Due to Death and Disability				
	Death		Disability	
Age	*Male*	Female	Male	Female
20	0.02%	0.02%	N/A	N/A
25	0.02	0.02	0.03%	0.07%
30	0.03	0.02	0.09	0.17
35	0.05	0.03	0.16	0.29
40	0.06	0.05	0.25	0.38
45	0.12	0.07	0.44	0.60
50	0.21	0.12	0.61	0.91

Representative Rates of Separation Due to Death and Disability				
	Death		Disability	
Age	*Male*	Female	Male	Female
55	0.33	0 18	0.80	1.15
60	0.48	0 30	N/A	N/A

Withdrawal Rate:

For General Employees

Representative Rates of Separation Due to Withdrawal								
	Male				Female			
	Years of Service				Years of Service			
Age	0	5	9	14	0	5	9	14
20	11.9%	N/A	N/A	N/A	11 2%	N/A	N/A	N/A
25	11.6	2.0%	2.0%	N/A	10.2	2.7%	2.1%	N/A
30	11.1	2 0	1.5	1.5%	10.2	2.7	1.9	2.0%
35	10.9	1.8	1.0	1.1	10.2	2.2	1.4	1.6
40	10.9	1.3	1.0	1.1	10.0	2.2	0.9	0.6
45	10.5	1.3	0.5	0.6	9.8	2.0	0.9	0.6
50	10.2	1 1	0.5	0.6	9.8	2.0	0.5	0.6
55	10.2	1.5	1.5	1 5	9.8	1 7	1.4	1.6

For Special Employees

Rates of Separation Due to Withdrawal For Special Benefit Classes if Different from General Employee Rates			
Years of Service	State Police/ Hazardous Duty	Legislators	Judicial Officers
0	5 6%	0.0%	0.0%
1	5.6	3.9	0.2
2	3.7	3.9	0.2
3 - 4	2.8	3.9	0.2
5	1.9	3.9	0.2
6	1.9	3.9	0.2
7 - 9	.9	3.9	0.2

Rates of Separation Due to Withdrawal For Special Benefit Classes if Different from General Employee Rates			
Years of Service	State Police/ Hazardous Duty	Legislators	Judicial Officers
10+	.9	3.9	0.2

Retirement Rate:

Assumptions for General Employees while Active Members

Normal Retirement Rate
(35 years of service under age 60; 3 years of service over age 60)
On June 30, 2008, the minimum service for eligibility for subsidized health benefits will increase from 15 to 20 years.

Representative Rates of Separation for Eligibility for Full Unreduced Benefits		
Age	Male	Female
45 - 59	30.0%	30.0%
60 - 61	25.0	25.0
62	33.0	33.0
63 - 64	22.0	22.0
65	33.0	33.0
66 - 79	22.0	22.0
80	100.0%	100.0%

Early Retirement Rates

Representative Rates of Separation for Eligibility for Reduced Benefits				
Age	5 – 14 Years of Service		15 or More Years of Service	
	Male	Female	Male	Female
25	3.0%	3.9%	N/A	N/A
30	2.5	3.5	N/A	N/A
35	1.9	2.8	2.6%	2.7%

Representative Rates of Separation for Eligibility for Reduced Benefits				
Age	5 – 14 Years of Service		15 or More Years of Service	
	Male	Female	Male	Female
40	1.7	1 7	2.6	2.7
45	1.1	1.6	2.6	2 7
50	1.0	1 3	2.6	2.7
55	2 3	2.3	3.9	3.9

Special benefit Class other than General Employees

Normal Retirement Rates

Representative Rates of Separation Due to Retirement other than State Police with 19 or More Years of Service			
Age	State Police/ Hazardous Duty	Legislators	Judicial Officers
50	7.2%	1.25%	N/A
55	7.2	1.9	2.3
60	7.2	2.5	2.3
65	71.8	3.8	2.3
70	34.5	5.0	100 0
75	34.5	6.3	N/A
80	100.0	100.0	N/A

Early Retirement Rates

Rates of Separation Due to Early Retirement at Any Age		
State Police/ Hazardous Duty	Legislators	Judicial Officers
0.9%	3.9%	0.2%

Normal Retirement Rate for police with more than 19 years of service

Rates of Separation due to Retirement for State Police with 19* or More Years of Service

Years of Service	Rate	Years of Service	Rate
19*	4.0%	26-32	15.8%
20 – 23	1.0	33	29.7
24*	29.7	34-38	40.6
25	16.8	39+	100.0

* State Police with 19 and 24 years of service at the beginning of the year are assumed to retire at the point they reach 20 and 25 years respectively during the year and to receive the FOP award.

Post Retirement Mortality:

Non-disabled Retirees, Beneficiaries and Survivors: The RP-2000 Healthy Annuitant Mortality Table projected to 2008.

Disability Retirees: The RP-2000 Disabled Retiree Mortality Table projected to 2008.

Spouse Age Difference: Females are assumed to be 2 years younger than males.

ECONOMIC ASSUMPTIONS

Years of Service Purchased by Eligible Members

Service	Number of Years Purchased
0	0.4
1	0.3
2	0.2
3	0.1
4+	0.0

Interest Rate: 5.0 percent compounded annually. The assumed interest rate of 5.0 percent is the investment return less investment and administrative expenses

Career Salary Increases

The career salary scale shown on the following table includes average increases in the employee salary due to promotions and longevity growth The average career salary growth is 3.8 percent per year In addition, it is assumed that the salary schedules will increase by 3.3 percent a year. The scale on the following table does not include the assumed 3.3 percent general salary increase

Assumed future salary increases were modified with respect to Class AA and Class A employees (other than members of the judiciary, legislators and select others) who are subject to the age 60/35 years of service superannuation requirements, to reflect negotiated increases applicable to such employees through June 30, 2007, as summarized below:

Valuation Assumptions for Negotiated Salary Increases				
Fiscal Year Beginning July 1	General	Assumed Longevity	Average Promotion	Total
2005	3.0%	0.0%	1.7%	4.7%
2006	3.5%	3.6%	1.7%	8.8%

Career Salary Scale for Members			
Completed Years of Service	Annual Increase	Completed Years of Service	Annual Increase
1	16.90%	14	2.80%
2	8.30%	15	2.70%
3	5.90%	16	2.60%
4	4.60%	17	2.50%
5	4.20%	18	2.40%
6	3.80%	19	2.30%
7	3.50%	20	2.20%
8	3.20%	21	2.10%
9	3.20%	22	2.00%
10	3.10%	23	1.90%
11	3.00%	24	1.80%
12	2.90%	25	1.70%
13	2.80%	26+	1.60%

State Police

The pay increase assumption used for State Police is 3.5 percent as of July 1, 2006 and 4 percent as of July 1, 2007.

Health Care Cost Trend Rates

Medical claims cost increases	
Initial rate	9 % for CY 2006, declining by 1% per year
Ultimate rate	5 %
Pharmacy claims cost increases	
Initial rate	11 % for CY 2006, declining by 1% per year
Ultimate rate	5 %
Dental claims	7% for CY2006-2008, 6% for CY 2009-2013
Ultimate rate	5%

Ancillary Demographic Assumptions

Participation Rates

Based on an analysis of the data provided, we have assumed the post-retirement participation rate is 95 percent.

Coverage Level Election Rates

The table below shows the percentage of retirees by coverage level.

Plan Coverage Levels

Plan	Percent Electing Single Coverage	Percent Electing Retiree & Spouse or Other Dependent Coverage
REHP	45%	55%
RPSPP	15%	85%

APPENDIX C - REFERENCES

State of South Dakota
Mr. Dennis Rounds
Executive Director
South Dakota Public Entity Pool for Liability
(605) 773-5879

Commonwealth of Pennsylvania
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Office of the Budget, Comptroller Operations
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(717) 787-9895

United States Postal Service
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Manager, Corporate Finance
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Washington, DC 20260
(202) 268-3774

Harris Corporation
Mr. Ron A. Wyse
Director of Benefits
1025 W. NASA Blvd
Melbourne, FL 32919
(321) 727-9158

Pennsylvania State Employees' Retirement System (SERS)
Eric Henry
Executive Director
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Harrisburg, PA 17108
(717) 787-5759

Public Health Service
Kimberly A. Darling, CGFM, CPA
Accountant
Audit Liaison Staff
Program Support Center
(301) 443-6648

RFQ No DEP 13936

AFFIDAVIT

West Virginia Code §5A-3-10a states:
No contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and the debt owned is an amount greater than one thousand dollars in the aggregate

DEFINITIONS:
'Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon

"Debtor" means any individual, corporation, partnership, association, limited liability company or any other form or business association owing a debt to the state or any of its political subdivisions "Political subdivision" means any county commission; municipality; county board of education; any instrumentality established by a county or municipality; any separate corporation or instrumentality established by one or more counties or municipalities, as permitted by law; or any public body charged by law with the performance of a government function or whose jurisdiction is coextensive with one or more counties or municipalities "Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount

EXCEPTION:
The prohibition of this section does not apply where a vendor has contested any tax administered pursuant to chapter eleven of this code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement

LICENSING:
Vendors must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agencies or political subdivision Furthermore, the vendor must provide all necessary releases to obtain information to enable the Director or spending unit to verify that the vendor is licensed and in good standing with the above entities

CONFIDENTIALITY:
The vendor agrees that he or she will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the agency's policies, procedures and rules. Vendors should visit **www.state.wv.us/admin/purchase/privacy** for the Notice of Agency Confidentiality Policies

Under penalty of law for false swearing (West Virginia Code, §61-5-3), it is hereby certified that the vendor acknowledges the information in this said affidavit and are in compliance with the requirements as stated

Vendor's Name: Hay Group, Inc.

Authorized Signature: Edwin C. Hustead Date: 2/16/07

No Debt Affidavit *(Revised 10/13/06)*

ACORD CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 12/18/2006

PRODUCER (610)526-9130 FAX (610)526-2021
Altus Partners, Inc.
19 Conestoga Road
Building 3, Suite 111
Rosemont, PA 19010

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

INSURED Hay Group Investment Holding B.V.
Wanamaker Building
100 Penn Square East
Philadelphia, PA 19107

INSURERS AFFORDING COVERAGE	NAIC #
INSURER A: Indian Harbor Insurance Co.	36940
INSURER B:	
INSURER C:	
INSURER D:	
INSURER E:	

COVERAGES

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	ADD'L INSRD	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS	
		GENERAL LIABILITY COMMERCIAL GENERAL LIABILITY CLAIMS MADE / OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: POLICY / PRO-JECT / LOC				EACH OCCURRENCE	$
						DAMAGE TO RENTED PREMISES (Ea occurence)	$
						MED EXP (Any one person)	$
						PERSONAL & ADV INJURY	$
						GENERAL AGGREGATE	$
						PRODUCTS - COMP/OP AGG	$
		AUTOMOBILE LIABILITY ANY AUTO ALL OWNED AUTOS SCHEDULED AUTOS HIRED AUTOS NON-OWNED AUTOS				COMBINED SINGLE LIMIT (Ea accident)	$
						BODILY INJURY (Per person)	$
						BODILY INJURY (Per accident)	$
						PROPERTY DAMAGE (Per accident)	$
		GARAGE LIABILITY ANY AUTO				AUTO ONLY - EA ACCIDENT	$
						OTHER THAN AUTO ONLY: EA ACC	$
						AGG	$
		EXCESS/UMBRELLA LIABILITY OCCUR / CLAIMS MADE DEDUCTIBLE RETENTION $				EACH OCCURRENCE	$
						AGGREGATE	$
							$
							$
							$
		WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? If yes, describe under SPECIAL PROVISIONS below				WC STATU-TORY LIMITS / OTH-ER	
						E.L. EACH ACCIDENT	$
						E.L. DISEASE - EA EMPLOYEE	$
						E.L. DISEASE - POLICY LIMIT	$
A		OTHER Errors & Omissions	MPP903050203	07/31/2006	07/31/2007	Liability Limit: $10,000,000 SIR: $250,000	

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES / EXCLUSIONS ADDED BY ENDORSEMENT / SPECIAL PROVISIONS
Certificate is issued as evidence of insurance per policy terms, conditions and exclusions.
Contract Reference #DEP13887

CERTIFICATE HOLDER

State of West Virginia
Purchasing Division
Attn: Chuck Bowman
2019 Washington Street, East
P.O. Box 50130
Charleston , WV 25305-0130

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF THE ISSUING INSURER WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT. BUT FAILURE TO MAIL SUCH NOTICE SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE
Harrison Clement/HHC
Harrison H. Clement

IMPORTANT

If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s)

DISCLAIMER

The Certificate of Insurance on the reverse side of this form does not constitute a contract between the issuing insurer(s), authorized representative or producer, and the certificate holder, nor does it affirmatively or negatively amend, extend or alter the coverage afforded by the policies listed thereon.