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Analysis of Filing

Hawaii Worker's Compensation Loss Cost Filing

Filed by the National Council on Compensation Insurance

Filing Date - July 20, 1998

Proposed Effective Date - November 1, 1998

QUESTION AND ANSWER FORMAT

Q. Please state your name and address for the record.

My name is Martin M. Simons. My business address is Post Office Box 61020, Columbia South Carolina, 29260. The phone number is 803-782-9169. It is often easiest to reach me by e-mail at mmsimons@msn.com.

Q. By whom are you employed?

I am the sole owner of an actuarial consulting firm in my own name. My consulting activity is limited to public agencies.

Q. Please tell us about your background relative to Property and Casualty insurance regulation?

I was the Deputy Director for Actuarial Services at the South Carolina Department of Insurance, and in that capacity was responsible for the Property and Casualty Division and the Life Accident and Health Division for the South Carolina Department of Insurance. I held the Chief Actuarial position at the Department for twelve years.

In addition, I have performed actuarial consulting services for several state agencies.

Q. For whom have you performed these actuarial consulting activities?

As a public actuarial consultant, my clients have included the Insurance Departments in Hawaii, Arkansas, Delaware, New Mexico, Illinois, Minnesota, Ohio, North Dakota and Georgia. I have also consulted for the Oklahoma Attorney General's Office for approximately eleven years, for the Hawaii Departments of Labor and Commerce, and the Louisiana Association of Business and Industry. In South Carolina, I have consulted for the Medical Professional Liability Patients' Compensation Fund, The Workers' Compensation Insurance Second Injury Fund, and The Department of Consumer Affairs. In addition, I have performed work for ABC News, and the government of the Province of Manitoba.

I am currently the actuary on the professional team of The Florida Commission on Hurricane Loss Projection Methodology and have served, since its inception, as a member of the Advisory Committee of the Hawaii Hurricane Relief Fund.

Q. What types of consulting have you performed for The Hawaii Insurance Division?

My actuarial consulting activity in Hawaii has included virtually all areas of property and casualty insurance regulation, including homeowners, motor vehicle insurance, all forms of personal and commercial lines of insurance as well as the analysis of actuarial self-insurance data and workers= compensation insurance. I have served as an actuarial consultant to each of the previous six Insurance Commissioners.

Q. Please tell us about your involvement with the National Association of Insurance Commissioners:

I have been involved with The National Association of Insurance Commissioners (NAIC) in many different areas. The NAIC is an organization whose membership includes the top insurance regulatory officials in all fifty states and the District of Columbia.

I have served as chairman of the Profitability Report Working Group. This is a group that has made several revisions to the National Association of Insurance Commissioners' (NAIC) By Line By State report, that presents financial results for property and casualty insurers. It is sold by the NAIC to parties who are interest in obtaining those financial reports.

I was also the Chairman of a working group, that revised the Insurance Expense Exhibit, which is the expense supplement to the Annual Statement, required by statute to be filed in each state each year by each insurer licensed to write property and casualty insurance in The State. This working group has also made revisions to the Annual Statement.

I have been chairman of the Property and Casualty Loss Cost Working Group. This was established to provide procedures for the implementation of loss cost filings by advisory organizations in all property and casualty lines except workers' compensation. I was Chairman of the Workers' Compensation Insurance Loss Cost Working Group, which was established to extend the loss cost concept to Workers' Compensation Insurance. Hawaii's adoption of loss costs for workers= compensation as well as for other lines of property and casualty insurance follows the work and recommendations of the NAIC in this area.

I have been a member of the liaison committee, providing for communications between the NAIC and the various advisory organizations, such as the NCCI on loss cost issues.

I was Chairman of the NAIC's CGL Filings Working Group, a group of regulators, established to present the NAIC member states with technical information relative to the regulators' position involving coverage in a general liability policy. This technical group was specifically formed to provide Insurance Departments with information regarding policies providing coverage for the indemnification of insureds for liabilities arising from the defense of third parties for which the insured has contractually acquired liability through hold harmless agreements.

I have been a member of the NAIC's General Liability Closed Claim Study and the Consumer Information Working Groups.

I have served as the South Carolina Insurance Department representative on the Statistical and Personal Lines Committees, and have provided technical consultation to the NAIC Executive Committee.

I have provided actuarial advice to the staff of the NAIC in several areas, including studies of insurance competition, consumer information, rate making and the underwriting cycle. I am the author of a "white paper" which has been used by the NAIC at the New Commissioners' School to provide an understanding of the basics of property and casualty insurance rate regulation. I also have served in an advisory capacity with the NCCI Oversight Working Group that reviewed the work performed for the NAIC in auditing the ratemaking, statistical gathering and filing activities of the National Council on Compensation Insurance.

I have served, along with Hawaii regulatory officials, on the NAIC=s Catastrophic Insurance Working Group, established following hurricanes Andrew and Iniki to assist states in dealing with regulating insurance for catastrophic occurrences such as hurricanes. I have assisted in the development, pricing structure and approval of the various public and quasi-public means of providing coverage for those catastrophic coverages.

Q. Have you authored any technical articles on property/casualty insurance?

I am the author of the following property and casualty insurance articles:

1. **"Looking Inside the Statistics"**
   Best's Review, P&C Ed, May 1986

2. **"Managing For Consistency"**
   Best's Review, P&C Ed, January 1987

3. **"Federal Oversight: The Wrong Answer"**
   Best's Review, P&C Ed, November 1988

4. **"Rate Regulation Revisited"**
   Best's Review, P&C Ed, July 1989

5. **"In Defense of Rate Regulators"**
   Best's Review, P&C Ed, June 1992

6. **"Taking the Next Step in Hurricane Modeling"**
   Best's Review, P&C Ed, May 1997

Q. Are you a member of any professional organizations?

I am an Associate of the Casualty Actuarial Society, a Member of the American Academy of Actuaries and a Fellow of the Conference of Consulting Actuaries, (formerly the Conference of Actuaries in Public Practice).

I have been invited by the Casualty Actuarial Society, a professional actuarial organization, to speak to its membership on issues such as preparing rate and loss cost filings, giving expert testimony, and providing catastrophic insurance through public and quasi-public agencies.

I have also been invited to speak by the Conference of Consulting Actuaries on various regulatory property and casualty insurance issues.

Q. Have you testified prior to your involvement in this case?

I have testified before legislative and regulatory bodies in British Columbia, Colorado, Connecticut, Illinois, Louisiana, Minnesota, Ohio, Oklahoma, and South Carolina as well as Hawaii.

Q. What experience do you have relative to this hearing?

I have over thirty years of experience in virtually all aspects of property and casualty insurance, including experience in actuarial positions, as well as other financial areas, marketing, branch management, agency experience and regulatory experience.

Following over 17 years of insurance industry experience, I was the Chief Property and Casualty Actuary with the South Carolina Insurance Department for twelve years beginning in 1985. Concurrently, I have been the State Actuary as a contractual employee with the Hawaii Insurance Division of DCCA since 1986. During that time period, I have also been retained and continue to be retained by the Oklahoma Attorney General's Office for over eleven years, providing, among other things, annual actuarial consultation relative to Workers' Compensation filings made by the National Council on Compensation Insurance. During the past twelve years, I have assisted regulators in several states and have served in a regulatory capacity at the National Association of Insurance Commissioners.

Q. Have you reviewed the filing made by the National Council on Compensation Insurance to the Hawaii Insurance Division, dated July 20, 1998?

I have reviewed the filing submitted to the Hawaii Insurance Division by the National Council on Compensation Insurance (NCCI) dated July 20, 1998.

Q. Please give us an overview of the filing:

In the filing, the NCCI has requested an increase of +6.4% in the prospective loss costs applicable to voluntary workers' compensation insurance written in Hawaii. The requested increase is proposed in the filing to be effective on November 1, 1998.

Hawaii statutes define prospective loss costs as follows:

> **"Prospective loss costs" means that portion of a rate that does not include provisions for expenses (other than loss adjustment expenses) or profit, and are based on historical aggregate losses and loss adjustment expenses adjusted through development to their ultimate value and projected through trending to a future point in time.**

The prospective loss costs developed in this filing are defined in a way that is consistent with the statutory definition. The proposed loss costs do not include provisions for expenses (other than loss adjustment expenses) or profit. To calculate the proposed loss costs, the NCCI first calculates loss development factors and trend factors. These calculated factors are used (although not exclusively) in the derivation of the prospective loss costs that are requested by the National Council to be approved by the Insurance Commissioner.

> **In addition, Hawaii statutes requires that workers' compensation insurance rates shall not be excessive, inadequate or unfairly discriminatory.**
>
> **Section 431:14-101 Purpose. The purpose of this article is to promote the public welfare by regulating insurance rates to the end that they shall not be excessive, inadequate, or unfairly discriminatory, and to authorize and regulate cooperative action among insurers in ratemaking and ratemaking related activities and in other matters within the scope of this article.**

Q. Did your analysis determine that the filing met the statutory requirements?

I find the loss development factors and the trends as calculated in the filing and used to produce the loss costs in the filing are excessive and will produce loss costs and will ultimately produce workers' compensation insurance rates that are excessive in direct contradiction with Hawaii statutes.

Q. What is Loss Development?

Loss development is a method whereby actuaries use past experience to project how claims will be ultimately paid over time. This is an important part of the rate making process in that we must project the ultimate costs associated with providing Workers' Compensation insurance in Hawaii. Claims frequently remain active for several years, necessitating a projection to determine the ultimate costs associated with those claims. Similarly, an estimate must be produced so that the loss costs and the ultimate rates associated with providing workers' compensation insurance under the proposed rates are not excessive, inadequate or unfairly discriminatory.

Q. How does your analysis of loss development differ from that of the NCCI?

The use of five years of loss development data after removing the highest and lowest factor from the five years to arrive at a three year average is an appropriate method to use in view of the underlying statistical data. This method provides assurance that aberrant loss development factors (those that are considered inappropriate for projecting losses) are not included in the calculations and subsequent projections. The National Council used five years of loss development but did not remove the highest and lowest factors. The NCCI method may be appropriate in years where there is a discernable pattern in loss development, but it does not provide the measure of confidence that the method excluding the highest and lowest factors provides. This is especially true during times like the present where loss development factors are both increasing and

decreasing during the period. It should be noted, however, that the differences brought about by excluding the highest and lowest factor, in this case, are minimal. The major differences between this analysis and the NCCI=s filed proposal are due to differences in the methods used to calculate the trend factors.

Q. What are the Trend Factors

Trend is the method that actuaries use to determine the underlying inflationary pressures that are taking place in the insurance process. In the case of rate level calculations for Workers' Compensation insurance, the trend factor calculated is an estimate of the underlying changes in the costs affecting Workers' Compensation over and above the changes that are taking place in payroll. For the most part, payroll changes are automatically accounted for in the rating procedure. It is important to note that a positive trend indicates that there are increases in the underlying insurance costs that are greater than the changes in the underlying payrolls. A zero trend would mean that the item being trended is changing at the same rate as the changes in payroll. Similarly a negative trend (which has actually been present now in Hawaii for several years) indicates that Workers' Compensation loss ratios are decreasing after considering the impact of the change in the underlying payrolls. A negative trend does not necessarily indicate that we expect costs to decrease, but that we expect the underlying workers= compensation insurance cost changes to be less than those for payrolls.

Q. Please describe your differences with the NCCI filing regarding trend factors:

The National Council, in this filing, did not use the trends they derived using the underlying Hawaii Workers' Compensation insurance statistical data as they have done in the past. Instead, they used a combination of several methods in order to arrive at a "selected" trend factor that was different from any of those that were derived from Hawaii loss experience. The NCCI "selection" along with the several components they used in arriving at their selection can be found on Appendix A-III of the filing.

Referring to Appendix A-III of the filing, the NCCI "selected" trend factor produces higher loss costs than any of the trend factors on the page with the exception of the trends identified as "actual change in loss ratios" and the "countrywide approved trend".

Before proceeding, it is necessary to explain two terms used in ratemaking. The first is "policy year" data. This is the statistical premium and claim experience of all the policies written in a specific year. The second term is "accident year" data which is the statistical experience for all premiums earned and claims for accidents that occur during a year regardless of when the policy was written. Policy year experience tends to be more stable but less responsive than accident year experience as a means of projecting losses.

Taking the first of the two cited items which the NCCI uses to justify its loss ratio trend selection, "the actual change in loss ratio", while often times

presenting useful information for review, it is not appropriate to base a trend factor on a single year of experience. This is most especially true when we are referring to a year that is as recent as the most recent policy year. The problem with using this one year of experience to derive the trend factor can best be explained by looking at the most recent "accident year" loss ratio which shows a substantial improvement and a negative factor when viewed against the most recent policy year. In other words, the "actual change in loss ratio" for a single year varies substantially depending upon the year being reviewed to calculate the change.

More importantly, the increasing trend alluded to by the "actual change in loss ratio" (for policy year 1996 vs. policy year 1995) factor reverses and becomes an even greater decrease if we are to use the most recent accident year experience (1997 accident year vs. 1996 policy year). This description is meant to point out the fallacy in using a single year to derive a trend factor or to use a single year change as the component of a trend "selection". The use of a one-year trend is inconsistent with reasonable actuarial methods. The decrease produced by the most recent accident year experience, while not used in this analysis, adds credibility to the belief that the indicated decrease produced by this analysis is conservative.

The second factor provided by the NCCI in support of the trend factors included in the filing, and as submitted by the NCCI will produce higher loss costs than the "selected" trend factor is the "countrywide approved trend". This factor is interesting in that the "countrywide approved trend" used by the NCCI is neither a countrywide trend nor an approved trend. The "countrywide" trend factor includes only states in which the NCCI gathers statistics, excluding the experience for several states.

In addition, the "countrywide approved trend" is based upon filed but not necessarily upon approved trends. In my involvement in Oklahoma, for example, the NCCI proposes revised loss costs on an annual (or more frequent) basis. Each NCCI loss cost proposal is subject to a public hearing before the Oklahoma State Board for Property and Casualty Insurance Rates. At each of the previous five workers' compensation loss cost hearings, The Oklahoma Board rejected the NCCI's filed trend factor in favor of lower trend factors presented by other parties to the hearing. In each case, the Oklahoma Board approved loss costs that were lower than those filed by the National Council, and in each of these cases, the major difference between the filed and approved loss costs was that the NCCI filed trend factors were deemed to be excessive.

In spite of these facts, the NCCI has presented its filed Oklahoma trend factors as the trend factors that were approved in Oklahoma. This one state is simply provided as an example. NCCI officials have stated that it is a standard NCCI practice (when the insurance regulatory official in a state does not produce a specific order with a specific trend factor in his or her approval of their filings) that they use filed trend factors for filing in other jurisdictions. The NCCI labels its trend as "countrywide approved trend" regardless of whether those factors had been approved, disapproved or otherwise rejected or revised by the regulatory officials responsible for approval of workers' compensation rates.

Thus, the NCCI has included in the "countrywide approved trend", those trend factors that were filed and subsequently disapproved, including cases in which the approval specifically dealt with a disapproval of the NCCI's filed trends. To refer to this as a "countrywide approved trend" is highly misleading at best. It should bear no weight in the development of trend factors for use in the State of Hawaii or anywhere else, and its inclusion in the NCCI selection is inconsistent with reasonable actuarial methods and standards.

In their response to the Insurance Division's interrogatories in this case, the NCCI continues to refer to their "countrywide" trends as "Filed and Approved". (see page 5 of NCCI's responses to The Hawaii Insurance Division's interrogatories) in spite of the fact that the Insurance Division informed the NCCI that such a reference was untrue and misleading. If the NCCI had used "filed" and "approved" trends to create the "filed and approved" trends, the factors would have been lower and the indicated loss cost contained in the filing as well as the ultimate rates paid by Hawaii businesses would have been lower.

In the absence of the two factors described above and which are totally inappropriate for use in developing trend factors, a review of the workers' compensation experience in Hawaii provides substantial evidence that the "selected" trend filed by the NCCI is excessive. It is far more appropriate to use a trend factor developed through a standard actuarial technique than to "select" a trend factor, especially in light of the previously described biases, shortcomings and fallacies in the NCCI's selection process.

In past filings in Hawaii as well as in other jurisdictions where filings are required, the NCCI has used an exponential trend calculation to derive the trend factors to be included in the development of workers' compensation loss costs. In the interrogatories submitted by the Insurance Division to the NCCI by letter dated July 27, 1998, the NCCI was requested to provide the Division with trend factors that are developed using an eight year exponential trend calculation and a five year exponential trend calculation. The response included trend factors as requested, including Hawaii workers' compensation data. In this current filing, an exponential trend calculation using Hawaii data will produce a reasonable estimate of the trends that are expected during the time the proposed loss costs are to be in effect. This method places a maximum amount of weight on Hawaii workers' compensation insurance experience and does not include the NCCI's "countrywide approved trend" data.

Q. Please describe the adjustments you made to the NCCI's filing:

The NCCI was requested to provide the Division with loss experience and loss cost calculations using five years of loss development data where the highest and lowest factors have been removed from the calculations. In addition, the data was requested on both a paid loss basis and a paid plus case loss basis.

Paid loss development follows the patterns of losses as they are paid from the initial policy years through the life of the underlying claims. This procedure produces a credible means to project the ultimate expected losses for the period based upon the losses that are paid as of the most recent reporting periods.

Paid plus case development follows the losses inclusive of the case reserves to project the ultimate expected losses based upon losses paid plus the case reserves as of the most recent reporting periods. Case reserves are the insurers= estimates of the ultimate claim dollars needed to pay all known claims. Paid loss development requires a great deal more estimating in the loss projection technique while paid plus case may be influenced to some extent by insurance company reserving practices. Using a combination of paid and paid plus case in this analysis provides us with a credible method of projecting known loss data into the future.

The resulting trend factors, using an average of paid and paid plus case methods, a five year underlying development period with the highest and lowest factors removed, and an eight year exponential projection technique, are produced in Table S-1. Table S-1 also provides (for comparison purposes) the "selected" trends that are included in the NCCI's filing.

Table S-1

	NCCI*	HID
annual indemnity trend	- 3.6%	-11.5%
annual medical trend	- 2.5%	- 7.2%

***Source: NCCI Filing**

A graphical presentation of the loss trend derivations may be found on Exhibits S-1 through S-4 at the end of this analysis. The tables below, (Table S-2 and Table S-3) present the data that is included on the trend exhibits in this analysis.

Table S-2 Policy Year Paid plus Case

Policy year paid plus case trend loss ratios (with 5 years of loss development exc high & low)				
Year	indemnity actual loss ratio	Indemnity fitted Loss ratio	Medical actual loss ratio	Medical Fitted loss ratio
1989	1.113	1.221	0.572	0.613
1990	1.171	1.081	0.596	0.568
1991	0.992	0.957	0.541	0.527
1992	0.913	0.847	0.511	0.489
1993	0.731	0.750	0.472	0.454
1994	0.615	0.664	0.402	0.421
1995	0.536	0.587	0.343	0.391
1996	0.570	0.520	0.396	0.362

Data source: National Council on Compensation Insurance (NCCI) response to Hawaii Insurance Division interrogatories, dated September 17, 1998.

Table S-3 Policy Year Paid

Policy year paid trend loss (with 5 years of loss development exc high & low)				
Year	indemnity actual loss ratio	Indemnity fitted Loss ratio	medical actual loss ratio	medical fitted loss ratio
1989	1.166	1.254	0.608	0.649
1990	1.232	1.138	0.638	0.607
1991	1.072	1.033	0.574	0.568
1992	1.003	0.937	0.565	0.531
1993	0.801	0.850	0.508	0.497
1994	0.703	0.772	0.447	0.464
1995	0.647	0.700	0.379	0.434
1996	0.716	0.636	0.448	0.406

Data source: National Council on Compensation Insurance (NCCI) response to Hawaii Insurance Division interrogatories, dated September 17, 1998.

To summarize this analysis, the NCCI "selected" trend factor, which is produced using mislabeled and misleading data, is replaced by trend factors produced by utilizing standard actuarial techniques and methods. This includes an eight year exponential trend calculation using five years of underlying Hawaii workers= compensation loss development data, exclusive of the highest and lowest factor in the five year period.

In addition, while the National Council's trend procedure places minimal weight on Hawaii workers' compensation experience, the trend methodologies used in this analysis places maximum weight on actual Hawaii workers' compensation insurance loss experience.

Applying the revised trend factors as previously described (including the change in the loss development projection techniques) to the policy year 1995 and policy year 1996 Hawaii workers' compensation loss data, the indicated change in Hawaii Workers' Compensation Insurance loss costs is -8.9% (a decrease of 8.9%) as opposed to the NCCI's filed + 6.4% (an increase of 6.4%).

Q. What are "F" classes?

"F" Classifications (federal classifications) are those classes of employment that are covered under the U.S. Longshoremen and Harbor Workers' Act as opposed to the Hawaii Workers' Compensation laws. Loss costs are also produced by the NCCI in the filing that are applicable to Hawaii's "F" classes. The NCCI utilized the same trend methodologies (i.e., using "selected" rather than actuarially derived trend factors) for the "F" Class loss cost calculations. Therefore, the same problems are present as those described for the industrial

classes, and similar adjustments are appropriate to make on the NCCI's "F" Class loss cost calculations (see Appendix B-IV of the filing) to assure that those loss costs are not excessive.

Q. Did you make any adjustments to the NCCI's filed "F" class rates?

Applying the same revision to the "F" class calculations as those for the industrial classifications produces an indicated change from the currently filed and approved loss costs of -10.8% (a reduction of 10.8%) in lieu of the filed + 5.3% (an increase of 5.3%).

Q. Please summarize your testimony:

> **Hawaii statutes provide for the following criteria in the making and approval of workers' compensation loss costs in Hawaii:**

Due consideration shall be given to:

Past and prospective loss experience within and outside this State; provided that if the claim does not exceed the selected deductible amount pursuant to section 386-100, and the employer reimburses the insurer for the amount, the claims shall not be calculated in the employer's experience rating or risk category;

The conflagration and catastrophe hazards, if any;

Dividends, savings, or unabsorbed premium deposits allowed or returned by insurers to their policyholders, members, or subscribers;

All other relevant factors within and outside this State.

Contracting classification premium program. With respect to each classification of risk in the construction industry, the rating organization shall file with the commissioner a contracting classification premium program, which is a method of computing premiums, that does not impose a higher premium solely because of an employer's higher rate of wages.

This analysis gives due consideration to each of these items. The NCCI loss costs and the ultimate workers' compensation rates in Hawaii comply with the requirements for the Contractor Classification Premium Program.

The resulting indicated changes in loss costs are produced on Table S-4, labeled "Summary and Conclusions".

Table S-4

SUMMARY AND CONCLUSIONS
Hawaii Workers' Compensation Insurance
Indicated changes in loss costs

	NCCI	Insurance Division
Industrial Classifications		
overall proposed change new and renewal policies	+ 6.4%	- 8.9%
By Industry Group		
manufacturing	+ 7.0%	- 9.4%
contracting	+12.3%	- 4.9%
office & clerical	+ 7.3%	- 9.1%
goods & services	+ 4.0%	-11.9%
miscellaneous	+ 4.1%	-11.8%
overall	+ 6.4%	- 8.9%
"F" Classes		
new and renewal policies	+ 5.5%	-10.8%

note: NCCI indications are taken from the NCCI filing.
Insurance Division indications are calculated according to the methods described earlier in this analysis.

If the "Insurance Division" workers' compensation insurance loss cost changes referenced in Table S-4 (above) are adopted, the Hawaii workers' compensation loss costs and the rates derived from those loss costs will not be excessive, inadequate or unfairly discriminatory. If the NCCI indications are implemented, the resulting loss costs and the rates derived from those loss costs will be excessive.

Q. Do you have any additional information that might help the hearing officer in this case?

For informational purposes, if the 1998 total annual workers' compensation premiums in Hawaii are estimated to be $138,000,000, the changes referred to in this analysis are as follows:

estimated annual premium with no change	**=**		**$ 138,000,000**
National Council proposal	**=**	**+ $**	**8,832,000**
Insurance Division indication	**=**	**- $**	**12,282,000**
Difference between NCCI and HID	**=**	**$**	**21,114,000**

Q. Does this conclude your testimony?

Yes!