



WSSPC Board Meeting

California Geological Survey Conference Room
Suite 1200
801 K Street
Sacramento, California

Thursday November 15, 2018

8:30 a.m. – 5:00 p.m.

Friday November 16, 2018

8:30 a.m. – 11:30 a.m.

AGENDA

Time	Tab	Item	Lead
8:00 a.m.		Continental Breakfast in Conference Room	
8:30 a.m.		Call to Order, Welcome, and Introductions Welcome to Caleb Cage and Lara Brodetsky	Peter McDonough WSSPC Vice Chair
8:35 a.m.		USGS Report Call (650) 329-5154	Keith Knudsen USGS
8:55 a.m.	Tab 1	Approval of Minutes WSSPC Board of Directors' Meeting of May 4, 2018	McDonough
	Tab 2	Review of Annual Business Meeting Minutes May 4, 2018	McDonough
9:00 a.m.	Tab 3	WSSPC Executive Director's Report <ul style="list-style-type: none"> • 3A-WSSPC Cash on Hand • 3B-WSSPC FY Income & Expense (December 2017 – September 2018) • 3C- FEMA FY17 Complete Cooperative Agreement • 3D- State Support Projects in WSSPC FY • Office Updates 	Patti Sutch WSSPC Executive Director
9:30		FEMA Report Call (202) 646-4037	David Javier FEMA

9:45		BREAK	
10:00	Tab 4	Review and Approval of Conflict of Interest Policy	Sutch
	Tab 5	Review and Approval of Financial Policies and Procedures	Sutch
	Tab 6	Review and Approval of Personnel Policies	Sutch
	Tab 7	Review of WSSPC Assets /Inventory	Sutch
10:30 a.m.	Tab 8	Review of 2019 Policy Recommendations <u>DRAFT Policy Recommendation 19-1: Rapid and Effective Tsunami Identification and Response</u> <u>DRAFT Policy Recommendation 19-3: Post-Earthquake Technical Clearinghouses</u> <u>DRAFT Policy Recommendation 19-4: Seismic Provisions in the 2015 International Building Codes</u>	McDonough
11:30		LUNCH Ella Restaurant	
1:00		Review of 2019 Policy Recommendations, continued <u>DRAFT Policy Recommendation 19-10: Joint Policy for the Evaluation and Seismic Remediation of School Buildings</u> <u>DRAFT Policy Recommendation 19-11: Reliability of Lifeline Services</u> <u>DRAFT Policy Recommendation 19-12: Earthquake Actuated Automatic Gas Shutoff Devices</u>	McDonough
2:00		New Business	McDonough
2:05		Future Meetings <ul style="list-style-type: none"> • 2019 Awards Conference call – January 2019 • 2019 Board Meetings –Salt Lake City, Utah, April 26, 2019 and Sacramento, November 2019 	Sutch

		<ul style="list-style-type: none"> • 2019 WSSPC Annual Meeting – Salt Lake City, Utah, April 25-26, 2019 • 2019 Earthquake Program Managers – Salt Lake City, Utah, April 22-25, 2019 	
2:10		BREAK	
3:00	Tab 9	Interviews – Closed Session	Board
5:00 p.m.		Daily Adjournment	McDonough
5:45		Board Dinner – Foundation, 400 L Street	

Questions? Patti Sutch 916-799-5410 (cell)

Friday November 16, 2018

8:30 a.m. Interviews – Closed Session

11:30 a.m. Meeting Adjournment



**Western States Seismic Policy Council
Board of Directors' Meeting
Crowne Plaza Hotel
Seattle, Washington
May 4, 2018**

MINUTES

Present:

Ryan Arba, California Governor's Office of Emergency Services (proxy for Mark Ghilarducci)
Karen Berry, Colorado Geological Survey
Mike Conway, Arizona Geological Survey
Peter McDonough, Utah Seismic Safety Commission
John Metesh, Montana Bureau of Mines and Geology
Brad Richy, Idaho Office of Emergency Management
Barrett Salisbury, Alaska Division of Geological & Geophysical Surveys (proxy for Steve Masterman)
Patti Sutch, Western States Seismic Policy Council

Call to Order and Introductions – Peter McDonough

Peter McDonough, WSSPC Board Chair, called the meeting to order and all present introduced themselves.

Approval of Minutes – Peter McDonough

MOTION: To approve the minutes of December 7, 2017 (Brad Richy).

SECOND: Ryan Arba.

VOTE: Unanimously in favor.

Executive Director Report – Patti Sutch

Patti reviewed the financial documents under Tab 4 in the Meetings Notebook, stating that WSSPC finances are in good shape. She discussed the draft Logic Model and asked the Board for any input. Karen Berry revised one of the Long term Output boxes. Patti then discussed the possible office move when the lease expires in December 2020.

Board of Directors Slate – Peter McDonough

Mike O'Hare's departure left a vacancy on the Board that Caleb Cage (NV-EM) agreed to fill starting in the new fiscal year. Others agreeing to put their names forward for two-year terms beginning in December 2018 are Steve Masterman (AK-GS), John Metesh (MT-GS), and Brad Richy (ID-EM).

MOTION: To accept the nominees for Board of Directors for 2-year terms starting in December (Brad Richy).

SECOND: Karen Berry.

VOTE: Unanimously in favor.

Review of Policy Recommendations – Peter McDonough

Policy Recommendation 18-1: Both Montana and Alaska added to the Appendix. It is ready to move forward to the members.

Policy Recommendation 18-2: Appendix A was removed.

Policy Recommendation 18-3: One of the references was removed.

Policy Recommendation 18-4: No further changes were made.

California Bills – Ryan Arba

Two bills are before the California legislature: one would require city and county building departments to create, and CalOES to maintain, an inventory of vulnerable buildings (AB 2681), another bill would change the building code from life safety to providing immediate occupancy after an earthquake, for buildings with higher occupancies (AB 1857).

WSSPC Policy Survey – Patti Sutch

Results of the policy survey of policy adoption were presented in the Annual Report. Although we received input from all states but Arizona, we were unable to compare the results with the previous survey. Mike Conway promised to get Arizona results to us.

Next Board Meeting – Peter McDonough

All agreed on the next meeting date of Thursday, November 15, 2018, for the Board meeting in Sacramento.

New Business – Peter McDonough

John Metesh said that the Basin & Range Province Committee wants to develop new policies. Peter McDonough mentioned that the Engineering, Construction, and Building Codes Committee was thinking of new policies as well.

John Metesh also suggested having a short quarterly call of the Board to keep in touch – the Logic Model could be the first reason for such a call.

Meeting Adjournment

MOTION: To adjourn the meeting (Brad Richy).

SECOND: Barrett Salisbury.

VOTE: Unanimously in favor.

Respectfully submitted,

Patricia L. Sutch, Secretary



**Western States Seismic Policy Council
Annual Business Meeting
Crowne Plaza Hotel
Seattle, Washington
May 4, 2018**

MINUTES

Present, + indicates Member and/or Proxy:

+Mulivanu Aimu, American Samoa Department of Homeland Security
++Ryan Arba, California Governor's Office of Emergency Services (and proxy for California Geological Survey)
+Dan Belanger, Alaska Division of Homeland Security and Emergency Management
+++Karen Berry, Colorado Geological Survey (and proxy for Colorado Division of Homeland Security & Emergency Management and Colorado Earthquake Hazard Mitigation Council)
++Bob Carey, Utah Division of Emergency Management (and proxy for Utah Geological Survey)
+Michael Conway, Arizona Geological Survey
John Crofts, Utah Division of Emergency Management
++Maximilian Dixon, Washington Emergency Management Division (and proxy for British Columbia Emergency Management)
+Leo Espia, Guam Homeland Security / Office of Civil Defense
++Melinda Gibson, Wyoming Office of Homeland Security (and proxy for Wyoming State Geological Survey)
Joan Gomberg, U.S. Geological Survey
David Javier, Federal Emergency Management Agency
++Andy Jochems, New Mexico Bureau of Geology & Mineral Resources (and proxy for New Mexico Department of Homeland Security & Emergency Management)
+Rich Koehler, Nevada Bureau of Mines & Geology
+Peter McDonough, Utah Seismic Safety Commission
Erin Mommsen, Western States Seismic Policy Council
+Kevin Richards, Hawaii Emergency Management Agency
++Brad Richy, Idaho Office of Emergency Management (and proxy for Idaho Geological Survey)
++Althea Rizzo, Oregon Office of Emergency Management (and proxy for Oregon Department of Geology and Mineral Industries)
+Barrett Salisbury, Alaska Division of Geological and Geophysical Surveys
Patti Sutch, Western States Seismic Policy Council

Call to Order and Welcome

Peter McDonough called the meeting to order and welcomed everyone.

Establishment of a Quorum – Patti Sutch

Patti called the Roll of 39 members and 25 members or proxies were present, establishing a quorum.

Approval of Minutes – Peter McDonough

MOTION: To approve the minutes of the Annual Business Meeting April 28, 2017 (Bob Carey).

SECOND: Maximilian Dixon.

VOTE: Unanimously in favor.

FEMA Update – David Javier

David thanked WSSPC and Patti for the opportunity to speak. He explained that there are 4 NEHRP agencies including FEMA. Six new states were added to the FEMA NEHRP program for a total of 39 states in the program. The entire NEHRP program is funded at \$8.5 M. The funding process started early this year with the goal of increasing transparency and decreasing complexity (goals of FEMA's new Strategic Plan). Next year there is an anticipated increase of about \$404,000 to the program. In the future the funding distribution information will be available on the FEMA website. FEMA Grants is on track for a mid- May release of the Notice of Funding Opportunity (NOFO), and there will be 30 days to submit the documents. Awards will be made by the end of July for an August 1 start. He said WSSPC's funding would be \$403,457 for the FY18 year, with a base plan funding of \$227,000. FEMA hopes to have NEHRP reauthorization within the year. FEMA has had conversations with each consortia, partner and state to help prioritize actions that FEMA should take. (Several states said they hadn't had a conversation). David left the meeting.

USGS Update – Joan Gomberg

Joan Gomberg filled in for Keith Knudsen. The USGS released its one year forecast for Central U.S. seismicity and just released the second report of three on the Hayward fault (Haywired scenario). The rest of Joan's presentation focused on her Subduction Zone Initiative efforts outlined in USGS Circular 1428. Studies of the earthquake recurrence of the Cascadia Subduction Zone are being funded by the Powell Center and work starts in October 2018. Earthquake Early Warning has \$12 M earmarked and two years to spend the money but overall the USGS budget has a 21% reduction in FY19 as compared with FY17. Bill Leith is the head of the Earthquake Program.

Executive Director Report – Patti Sutch

Patti reviewed the WSSPC financial status as presented in the Meetings Notebook. A new requirement this year is to prepare a Logic Model showing inputs, outputs, and outcomes. A final report is due at the end of July. We solicited new Affiliate members but none joined, and all but one existing member (State Farm) renewed.

Election of Board of Directors – Peter McDonough

Steve Masterman (AK-GS), John Metesh (MT-GS), and Brad Richy (ID-EM) have offered to re-run for a two year term starting December 1, and Caleb Cage (NV-EM) has agreed to add his name to the proposed slate.

MOTION: To approve the slate of Directors (Ryan Arba).

SECOND: Bob Carey.

VOTE: Unanimously in favor.

Basin & Range Province Committee – Richard Koehler

The committee has 12 members; 4 were on the conference call. Members are working on LiDAR acquisition. Quaternary fault mapping will no longer be added to the USGS Fault and Fold Database. State maps are now a state responsibility. Eight states are competing for USGS funding and they are looking for other funding sources. The Seismic Hazards Workshop held in February had about 50 participants and resulted in published articles and a poster session. Planning for an Intermountain West URM Summit / Workshop is being led by Craig dePolo and Bob Carey. The committee has no additional comments on the policy recommendations but have some ideas for potential new policies.

Engineering, Construction, and Building Codes Committee – Peter McDonough

Last year the Committee reviewed one policy recommendation on non-ductile concrete buildings and incorporated all of the comments, and no further comments or changes resulted from their committee meeting yesterday.

Tsunami Hazard Mitigation Committee – Maximilian Dixon

The Committee made changes to 3 of the 4 policy recommendations (18-1, 18-2, and 18-4). Maximilian asked if we have a guide to help local communities create scenarios? He also asked how the policies are being used and what are we trying to achieve? Pete McDonough said they are used by different Utah agencies; Bob Carey said they used the URM policy to try to secure funding for fixing schools, and an earlier policy was used to retrofit the University of Utah Library; Rich Koehler said the policies are used by the Nevada Earthquake Safety Council to motivate local jurisdictions; Bob Carey added that the seismic monitoring policy supported the University of Utah Seismograph Stations to expand their network; and Pete added the Utah Building Codes Committee referred to the policy that advocated jurisdictions should adopt the seismic provisions of the building codes.

Adoption of Policy Recommendations – Peter McDonough

Policy Recommendation 18-1: Earthquake and Tsunami Planning Scenarios

Maximilian Dixon suggested adding First Nations and tribes.

MOTION: To accept the policy recommendation with the suggested changes (Richard Koehler).

SECOND: Kevin Richards.

VOTE: Unanimously in favor.

Policy Recommendation 18-2: Developing Earthquake and Tsunami Risk-Reduction Strategies

Maximilian Dixon added links to the NOAA Strategic Plan.

MOTION: To accept the policy recommendation with the changes (Bob Carey).

SECOND: Brad Richy.

VOTE: Unanimously in favor.

Policy Recommendation 18-3: Definitions of Recency of Surface Faulting for the Basin and Range Province

No additional changes were suggested.

MOTION: To accept the policy recommendation (Barrett Salisbury).

SECOND: Maximilian Dixon.

VOTE: Unanimously in favor.

Policy Recommendation 18-4: Identification and Mitigation of Non-Ductile Concrete Buildings

Maximilian's Committee suggested adding First Nations and tribes.

MOTION: To accept the policy recommendation with changes (Maximilian Dixon).

SECOND: Brad Richy.

VOTE: Unanimously in favor.

Policy Recommendations and Committee Assignments for 2019

16-1: Rapid and Effective Tsunami Identification and Response (Tsunami Committee)

16-3: Post-Earthquake Technical Clearinghouses (All)

16-10: Joint Policy for the Evaluation and Seismic Remediation of School Buildings (All + EERI)

16-11: Reliability of Lifeline Services (Engineering, Construction & Building Codes Committee with Utah Seismic Safety Commission)

16-12: Earthquake Actuated Automatic Gas Shutoff Devices (Engineering, Construction & Building Codes Committee and Basin & Range Province Committee)

Patti will send out an email with these assignments.

Policy Survey

The policy survey results are linked from the WSSPC website homepage. Pete McDonough said they will incorporate the information into the Utah Seismic Safety Commission's strategy.

Next Meetings

2019 location for the NEPM is undecided and 2020 is the National Earthquake Conference year. Salt Lake City was mentioned for 2019 but no decision has been made at this time.

New Business

There being no new business, Pete thanked the WSSPC staff for the meetings.

Adjournment

MOTION: To adjourn the meeting (Ryan Arba).

SECOND: Maximilian Dixon.

VOTE: Unanimously in favor.

Respectfully submitted,

Patricia L. Sutch, Secretary



Cash on Hand as of September 30, 2018

Checking	\$4,180.75
Money Market	\$142,208.68
CD	\$10,158.41
<u>Petty Cash</u>	<u>\$1.49</u>
	\$156,549.33
September 2018 FEMA Expenses billed October 5, 2018	\$31,565.57
TOTAL	\$188,114.90

Western States Seismic Policy Council
Income & Expense
December 2017 through September 2018

	TOTAL Dec '17 - Sep '18	FEMA Grant 2017	FEMA Grant 2018	WSSPC
Income				
401.0 · Interest Inc				
401.1 · Money Mkt Interest Income	178.24	0.00	0.00	178.24
401.2 · CD Interest Income	17.19	0.00	0.00	17.19
Total 401.0 · Interest Inc	195.43	0.00	0.00	195.43
410.0 · Membership Dues	2,775.00	0.00	0.00	2,775.00
450.0 · Grants Earned				
460.0 · FEMA Grants Earned				
460.13 · 2017 FEMA Grants Earned	211,961.65	211,961.65	0.00	0.00
460.14 · 2018 FEMA Grants Earned	53,896.13	0.00	53,896.13	0.00
Total 460.0 · FEMA Grants Earned	265,857.78	211,961.65	53,896.13	0.00
Total 450.0 · Grants Earned	265,857.78	211,961.65	53,896.13	0.00
Total Income	268,828.21	211,961.65	53,896.13	2,970.43
Expense				
500.0 · P/R Expenses				
500.1 · Salary	109,067.40	87,731.92	21,335.48	0.00
500.2 · Benefits				
500.7 · Employee IRA Contribution				
500.701 · Employer IRA Contrib-forSutch	2,252.40	1,801.92	450.48	0.00
500.7 · Employee IRA Contribution - Other	0.00	0.00	0.00	0.00
Total 500.7 · Employee IRA Contribution	2,252.40	1,801.92	450.48	0.00
500.2 · Benefits - Other	13,844.17	11,814.55	2,029.62	0.00
Total 500.2 · Benefits	16,096.57	13,616.47	2,480.10	0.00
500.3 · Employer Contrib/Taxes	8,491.62	6,854.40	1,637.22	0.00
500.4 · Workers' Comp	853.95	563.25	290.70	0.00
500.5 · Payroll Service	2,471.22	1,563.73	907.49	0.00
Total 500.0 · P/R Expenses	136,980.76	110,329.77	26,650.99	0.00
506.0 · Prof Fees Accounting	9,062.00	9,062.00	0.00	0.00
507.0 · Prof Fees Consulting	9,543.90	4,960.00	4,583.90	0.00
510.0 · Office Supplies	3,154.77	1,645.06	1,195.93	313.78
515.0 · Telephone	1,720.04	1,452.57	267.47	0.00
520.0 · Printing	609.65	587.23	22.42	0.00
522.0 · Postage and Delivery	84.98	51.46	33.52	0.00
525.0 · Internet Services	1,923.85	1,260.49	663.36	0.00
530.0 · Staff Expenses				
530.1 · Staff Meals	402.39	392.60	0.00	9.79
530.2 · Staff Mileage	61.21	61.21	0.00	0.00
530.3 · Staff Transportation	731.96	731.96	0.00	0.00
530.4 · Staff Hotel	2,089.20	2,089.20	0.00	0.00

Western States Seismic Policy Council Income & Expense

December 2017 through September 2018

	TOTAL Dec '17 - Sep '18	FEMA Grant 2017	FEMA Grant 2018	WSSPC
Total 530.0 · Staff Expenses	3,284.76	3,274.97	0.00	9.79
535.0 · Executive Committee Expense				
535.1 · Meals Exec Comm	761.67	179.86	0.00	581.81
535.2 · Mileage Exec Comm	337.23	337.23	0.00	0.00
535.3 · Transportation Exec Comm	3,145.50	3,145.50	0.00	0.00
535.4 · Hotel Exec Comm	2,409.07	2,409.07	0.00	0.00
535.0 · Executive Committee Expense - Other	17.37	17.37	0.00	0.00
Total 535.0 · Executive Committee Expense	6,670.84	6,089.03	0.00	581.81
550.0 · Workshops/Projects				
550.2 · EQ Program Managers Meeting	18,067.74	18,067.74	0.00	0.00
550.4 · State Support-HI	33,477.41	33,419.91	0.00	57.50
550.9 · State Support - WY	14,353.54	0.00	14,353.54	0.00
Total 550.0 · Workshops/Projects	65,898.69	51,487.65	14,353.54	57.50
554.0 · Conferences				
554.12 · 2018 WSSPC Annual Meeting	5,782.96	6,325.42	0.00	-542.46
Total 554.0 · Conferences	5,782.96	6,325.42	0.00	-542.46
570.0 · Insurance				
570.1 · Liability Insurance	1,006.00	1,006.00	0.00	0.00
570.3 · Insurance Other	271.00	271.00	0.00	0.00
570.0 · Insurance - Other	-101.65	0.00	0.00	-101.65
Total 570.0 · Insurance	1,175.35	1,277.00	0.00	-101.65
575.0 · Rent	20,090.00	13,965.00	6,125.00	0.00
580.0 · Bank Service Charges	99.00	99.00	0.00	0.00
583.0 · Miscellaneous Expenses	0.00	0.00	0.00	0.00
591.0 · Licenses and Permits	95.00	95.00	0.00	0.00
Total Expense	266,176.55	211,961.65	53,896.13	318.77
Net Income	<u>2,651.66</u>	0.00	0.00	2,651.66

**Western States Seismic Policy Council
FEMA FY 2017 Cooperative Agreement
August 1, 2017 - August 31, 2018
Cooperative Agreement #EMW-2017-CA-00096**

PLANNED TASKS / EXPENSES	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018
SUMMARY PLANNED COSTS												
Total Cooperative Agreement Amount	279,833.00											
Amt Budgeted Per Month	16,145.41	17,145.45	16,200.45	18,145.45	23,118.25	22,255.45	49,865.45	18,123.00	16,190.45	49,552.75	16,145.45	16,945.44
Cumulative Amount Budgeted	16,145.41	33,290.86	49,491.31	67,636.76	90,755.01	113,010.46	162,875.91	180,998.91	197,189.36	246,742.11	262,887.56	279,833.00
Cumulative Budget Remaining	263,687.59	246,542.14	230,341.69	212,196.24	189,077.99	166,822.54	116,957.09	98,834.09	82,643.64	33,090.89	16,945.44	0.00
SUMMARY ACTUAL COSTS												
Amt Expended Per Month	18,017.20	15,979.47	13,251.85	20,622.83	22,954.31	22,127.23	16,575.81	41,990.62	17,436.87	42,475.09	18,667.30	29,734.42
Amount Expended to Date	18,017.20	33,996.67	47,248.52	67,871.35	90,825.66	112,952.89	129,528.70	171,519.32	188,956.19	231,431.28	250,098.58	279,833.00
Cumulative Funds Remaining	261,815.80	245,836.33	232,584.48	211,961.65	189,007.34	166,880.11	150,304.30	108,313.68	90,876.81	48,401.72	29,734.42	0.00
PLANNED MONTHLY COSTS - BASE PLAN \$225,000												
	16,145.41	17,145.45	16,200.45	18,145.45	23,118.25	22,255.45	49,865.45	18,123.00	16,190.45	49,552.75	16,145.45	16,945.44
TASK 1.0 DEVELOP SEISMIC POLICIES	1,100.00	1,237.26	2,249.21	2,798.50	6,572.80	2,560.21	2,800.00	2,800.00	2,304.20	9,386.65	2,497.00	2,821.00
1.1 Develop & Encourage Adoption of Policy Recommendation	600.00	800.00	749.21	1,198.50	480.00	800.00	900.00	900.00	1,004.20	900.00	1,297.00	1,100.00
1.2 Conduct Board Meetings	500.00	437.26	1,500.00	1,600.00	6,092.80	1,760.21	1,900.00	1,900.00	1,300.00	8,486.65	1,200.00	1,721.00
TASK 2.0 PROVIDE FORUMS	1,500.00	1,002.89	2,446.25	2,097.00	1,300.00	3,350.06	4,215.00	3,696.85	3,630.93	11,802.50	2,300.00	1,996.00
2.1 Hold WSSPC Annual Meeting (including Awards)	1,355.00	762.89	2,096.25	1,747.00	800.00	1,550.06	1,815.00	1,848.42	1,630.93	6,302.50	1,700.00	1,196.00
2.2 Earthquake Program Managers Meeting	145.00	240.00	350.00	350.00	500.00	1,800.00	2,400.00	1,848.43	2,000.00	5,500.00	600.00	800.00
TASK 3.0 PROVIDE OUTREACH AND EDUCATION	5,357.39	5,642.50	4,285.00	4,219.56	5,518.00	4,499.98	4,096.39	5,397.49	4,597.70	4,342.43	4,792.39	4,647.38
3.1 Website	1,362.00	1,600.00	1,200.00	1,500.00	1,500.00	1,200.00	1,000.00	1,000.00	1,400.00	1,442.43	1,400.00	1,800.00
3.2 Quarterly Electronic Newsletter & Monthly Bulletins	2,960.39	3,142.50	2,185.00	2,719.56	3,018.00	2,199.98	2,296.39	3,097.49	2,700.00	2,900.00	3,392.39	2,847.38
3.3 Annual Report *	0.00	0.00	0.00	0.00	1,000.00	1,100.00	800.00	1,000.00	497.70	0.00	0.00	0.00
3.4 Conduct Community Education and Outreach	1,035.00	900.00	900.00	0.00	0.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00
TASK 4.0 MAINTAIN & ENCOURAGE PARTNERSHIPS	1,038.00	1,478.04	502.60	830.00	1,230.00	510.20	761.06	313.75	342.19	301.29	499.90	1,081.06
4.1 Maintain & Encourage Partnerships	52.00	986.00	300.00	330.00	230.00	100.00	381.06	213.75	242.19	201.29	399.90	581.06
4.2 Affiliate Member Program	986.00	492.04	202.60	500.00	1,000.00	410.20	380.00	100.00	100.00	100.00	100.00	500.00
TASK 5.0 FINANCIAL AND GRANTS MANAGEMENT	7,150.02	6,159.76	5,467.39	6,200.39	7,872.45	7,985.00	7,468.00	5,914.91	4,065.43	3,886.88	5,431.16	5,150.00
5.1 Manage Cooperative Agreement	1,850.00	1,200.00	1,138.00	810.39	1,372.45	1,000.00	800.00	800.00	950.00	800.00	1,200.00	1,200.00
5.2 Manage WSSPC Finances	1,700.00	1,959.76	1,329.39	890.00	1,500.00	2,085.00	2,650.00	2,277.55	1,000.00	1,200.00	1,800.00	1,650.00
5.3 Maintain Office and Support Personnel	3,600.02	3,000.00	3,000.00	4,500.00	5,000.00	4,900.00	4,018.00	2,837.36	2,115.43	1,886.88	2,431.16	2,300.00
TASK 6.0 OUTCOMES REPORT	0.00	625.00	1,250.00	0.00	625.00	1,250.00	625.00	0.00	1,250.00	0.00	625.00	1,250.00
6.1 Prepare quarterly Outcomes Reports	0.00	625.00	1,250.00	0.00	625.00	1,250.00	625.00	0.00	1,250.00	0.00	125.00	0.00
6.2 Prepare final Outcomes Report	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	500.00	1,250.00
TASK 7.0 SUPPORT STATES	\$54,833.00	0.00	1,000.00	0.00	2,000.00	0.00	2,100.00	29,900.00	0.00	0.00	19,833.00	0.00
7.1 Support Travel to NEPM	\$19,833.00									19,833.00		
a. R VI New Mexico												
b. R VIII Montana												

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c. R VIII Wyoming												
d. R IX Nevada												
e. R IX Hawaii												
f. R IX Guam												
g. R IX American Samoa												
h. R IX Northern Mariana Islands												
i. R X Alaska												
j. R X Idaho												
k. R X Washington												
7.2 Hawaii Workshop*	\$35,000.00	1,000.00		2,000.00		2,100.00	29,900.00					
a. Secure meeting space		1,000.00					13,000.00					
b. Support travel				2,000.00			16,900.00					
c. Support registration						2,100.00						

* Indicates Contracts are included in these tasks

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ACTUAL TASKS / EXPENSES	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018	
ACTUAL MONTHLY COST - BASE PLAN	18,017.20	15,979.47	13,251.85	20,622.83	22,954.31	22,127.23	16,575.81	41,990.62	17,436.87	42,475.09	18,667.30	29,734.42	
TASK 1.0 DEVELOP SEISMIC POLICIES	461.85	1,818.94	1,218.06	1,271.23	4,153.08	1,390.61	1,165.59	51.44	1,440.34	3,932.95	1,033.67	235.02	
1.1 Develop & Encourage Adoption of Policy Recommendation	170.16	1,448.20	566.54	0.00	242.88	212.64	1,070.44	25.72	1,008.24	871.61	0.00	39.17	
1.2 Conduct Board Meetings	291.69	370.74	651.52	1,271.23	3,910.20	1,177.97	95.15	25.72	432.10	3,061.34	1,033.67	195.85	
TASK 2.0 PROVIDE FORUMS	461.84	46.34	623.19	635.61	437.15	1,679.82	1,615.89	1,616.80	5,785.35	13,330.09	-264.98	39.17	
2.1 Hold WSSPC Annual Meeting (including Awards)	461.84	0.00	18.88	0.00	0.00	1,254.55	880.14	846.62	3,648.85	7,350.31	-264.98	39.17	
2.2 Earthquake Program Managers Meeting	0.00	46.34	604.31	635.61	437.15	425.27	735.75	770.18	2,136.50	5,979.78	0.00	0.00	
TASK 3.0 PROVIDE OUTREACH/PUBLIC EDUCATION	7,856.63	6,998.26	5,080.35	5,289.00	6,109.74	6,314.17	5,998.25	10,528.80	5,170.28	5,209.08	8,649.46	5,671.40	
3.1 Website	1,731.12	1,541.41	2,001.82	2,667.10	2,588.23	2,635.57	1,335.89	1,864.11	1,534.34	3,126.28	2,990.12	2,204.80	
3.2 Quarterly Electronic Newsletter & Monthly Bulletins	3,962.14	4,182.43	1,661.84	2,039.26	3,400.08	2,721.74	1,451.04	5,954.06	2,928.68	1,539.46	4,548.15	2,839.87	
3.3 Annual Report	0.00	0.00	434.69	503.19	48.57	935.60	2,545.27	2,659.19	587.23	0.00	0.00	0.00	
3.4 Conduct Community Education and Outreach	2,163.37	1,274.42	982.00	79.45	72.86	21.26	666.05	51.44	120.03	543.34	1,111.19	626.73	
TASK 4.0 MAINTAIN & ENCOURAGE PARTNERSHIPS	996.61	208.55	660.96	768.03	412.86	106.32	380.61	334.35	360.08	90.56	25.84	352.54	
4.1 Maintain & Encourage Partnerships	996.61	92.69	113.31	0.00	48.57	63.79	380.61	334.35	360.08	90.56	25.84	313.37	
4.2 Affiliate Member Program	0.00	115.86	547.65	768.03	364.29	42.53	0.00	0.00	0.00	0.00	0.00	39.17	
TASK 5.0 FINANCIAL AND GRANTS MANAGEMENT	7,559.66	6,768.35	4,857.25	9,467.98	9,425.76	12,487.46	4,638.58	7,045.91	3,240.76	6,904.93	7,468.26	7,875.87	
5.1 Manage Cooperative Agreement	3,269.37	2,803.73	910.58	331.05	510.01	637.91	261.66	1,954.68	888.21	135.83	1,188.72	705.07	
5.2 Manage WSSPC Finances	1,045.23	1,367.11	963.11	1,231.50	3,584.90	7,129.03	832.57	2,815.06	624.15	1,245.15	1,576.35	959.68	
5.3 Maintain Office and Support Personnel	3,245.06	2,597.51	2,983.56	7,905.43	5,330.85	4,720.52	3,544.35	2,276.17	1,728.40	5,523.95	4,703.19	6,211.12	
TASK 6.0 OUTCOMES REPORT	680.61	139.03	75.54	26.48	194.29	42.53	142.73	604.41	1,440.06	135.83	1,703.37	1,717.51	
6.1 Prepare quarterly Outcomes Reports	680.61	139.03	75.54	26.48	194.29	42.53	142.73	604.41	1,440.06	135.83	1,703.37	0.00	
6.2 Prepare final Outcomes Report	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,717.51	
TASK 7.0 SUPPORT STATES	\$54,833.00	0.00	0.00	736.50	3,164.50	2,221.43	106.32	2,634.16	21,808.91	0.00	12,871.65	51.68	13,842.91
7.1 Support Travel to NEPM	\$19,833.00	0.00	0.00	0.00	264.84	0.00	0.00	0.00	0.00	12,849.01	0.00	4,967.91	
a. R VI New Mexico										1,210.96			
b. R VIII Montana										1,070.13			
c. R VIII Wyoming										1,514.52			
d. R IX Nevada										0.00			
e. R IX Hawaii										2,208.00			
f. R IX Guam										3,623.05			
g. R IX American Samoa										0.00		4,967.91	

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h. R IX Northern Mariana Islands											0.00		
i. R X Alaska											1,507.18		
j. R X Idaho											1,405.67		
k. R X Washington											309.50		
7.2 Hawaii Workshop	\$35,000.00	0.00	0.00	736.50	2,899.66	2,221.43	106.32	2,634.16	21,808.91	0.00	22.64	51.68	8,875.00
a. Secure meeting space													
b. Support travel													
c. Support registration													
CONTRACTS /	TOTAL	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018
Task 1.0													
Task 2.0													
Task 3.3 Copy, assemble, print tabs, bind Annual Report	\$600								600.00				
Task 4.0													
Task 5.0													
Task 7.2 Contract for Hawaii workshop meeting space	\$14,000		1,000.00					13,000.00					

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279,833.00	
39,126.83	
	10,728.91
	28,397.92
39,337.48	
	22,804.05
	16,533.43
57,396.21	
	16,404.43
	33,459.08
	4,397.70
	3,135.00
8,888.09	
	4,017.25
	4,870.84
72,751.39	
	13,120.84
	20,041.70
	39,588.85
7,500.00	
	5,750.00
	1,750.00
	225,000.00
54,833.00	

State Support Projects in WSSPC Fiscal Year December 2017 – November 2018

FY17 State Support Project

Hawaii Workshop - WSSPC supported a 2-day workshop February 21-22, 2018 titled “Increasing Hawaii’s Resiliency: Mitigating Natural Hazards” sponsored by the Hawaii Emergency Management Agency. Approximately 70 people attended the workshop held in Honolulu, Oahu. Attendees were from federal (FEMA), state, county and city emergency management; University of Hawaii; county planning departments; state Departments of Land and Natural Resources, Health, and Business, Economic Development, and Tourism; Coastal Zone Management; Honolulu Office of Climate Change, Sustainability and Resiliency; National Guard; Army Corps of Engineers; utilities (power, electricity, gas, and water); as well as private sector businesses and non-profits. Nine Hawaii Earthquake and Tsunami Advisory Committee (HETAC) members also attended.

The workshop focused on power, utilities, water supply and buildings, their vulnerabilities, and possible solutions. The State encouraged participants to think creatively of opportunities for mitigation projects and expand their network of practitioners to ultimately improve the state’s ability to recover more quickly from a disaster.

Outreach Materials - In addition to the workshop, funding was used to print Hawaii Natural Hazards Wheels.

Funding: \$35,000.00

Status: Completed.

FY18 State Support Projects

Hawaii: Support HETAC and provide outreach materials

1. **HETAC** – Hawaii Earthquake and Tsunami Advisory Committee (HETAC) meets quarterly. Typical expenses for WSSPC to reimburse include the meeting space, catering, and travel expenses for members attending from the other islands.

Funding: \$15,000.00

Status: In progress. Two meetings will have been held by November 30, 2018.

2. **Outreach materials** – Hawaii requested the funding for development and distribution of Public Service Announcements for the local market, design and production of marketing material, and fees associated with participation in community preparedness events.

Funding: \$15,000.00

Status: Materials discussed to date are Hawaii Natural Hazards Wheels and power banks to charge cell phones. Nothing has been ordered; waiting for Hawaii to decide on the items.

Nevada: Run 2 “Nevada is Earthquake Country” billboard campaigns

WSSPC contracted with Lamar for a billboard campaign in Las Vegas valley. Eleven digital billboards, 4 static billboards, and 7 posters were displayed in October 2018. The static and poster billboards were created on a heavier weight vinyl to be stored and re-used for the spring 2019 campaign.

Funding: \$35,123.00

Status: Half completed.

Wyoming: Provide earthquake preparedness branded materials

Wyoming requested promotional items for their ShakeOut outreach. WSSPC oversaw the production of 1700 pop sockets, 1800 Smartphone wallets and stands, and 1620 portable power banks. The larger items displayed the “Drop, Cover, Hold On logo” on them, while the pop sockets had “The Great Wyoming ShakeOut” imprinted. Items were shipped to Wyoming by the end of September.

Funding: 27,000.00

Status: Completed.

Guam: Support Earthquake Mitigation Workshop

“Mitigating Guam’s Earthquake Risk” is the theme for the workshop. WSSPC coordinated with Guam on the hotels, location, meeting space, and catering.

Funding: \$30,000.00

Status: In the planning stage. To be held February 5-6, 2019 in Agana, Guam. Currently waiting for a contract from the Westin.

Idaho: Support Earthquake exercise in March 2019

Funding: \$30,424.00

Status: Not started.



Western States Seismic Policy Council

Conflict of Interest Policy

Article I. Purpose

The purpose of the Conflict of Interest Policy is to protect the interests of the Western States Seismic Policy Council (WSSPC), a 501(c)(3) tax exempt organization, when it is contemplating entering into a transaction or arrangement that might benefit the private interest of a director, officer, or key employee of WSSPC. In order to deal openly and fairly with actual and potential conflicts of interest that may arise as a consequence of this involvement, WSSPC adopts the following Conflict of Interest Policy.

Article II. Policy

Directors, officers, and key employees are expected to use good judgment, to adhere to high ethical standards, and to conduct their affairs in such a manner as to avoid any actual or potential conflict between the personal interests of a director, officer, or key employee and those of WSSPC. A conflict of interest exists when the loyalties or actions of a director, officer, or key employee are divided between the interests of WSSPC and the interest of the director, officer, or employee. Both the fact and the appearance of a conflict of interest should be avoided.

Article III. Definitions

Interested person. Any director, officer, or key employee who has a direct or indirect financial interest. In addition, an interested person shall include subcontractors.

Financial interest. A person has a financial interest if the person has, directly or indirectly, through business, investment, or family:

- a. An ownership or investment interest in any entity with which WSSPC has a transaction or arrangement,
- b. A potential ownership or investment interest in, or compensation arrangement with, any entity or individual with which WSSPC is contemplating a transaction or arrangement.
- c. A compensation arrangement with WSSPC, or with any entity or person with which WSSPC has a transaction or arrangement.

A financial interest is not necessarily a conflict of interest. Under Article IV, Section 2, a person who has a financial interest may have a conflict of interest only if the WSSPC Board of Directors decides that a conflict of interest exists.

Family. Family includes spouses/domestic partners, ancestors, siblings, step-siblings, children, grandchildren, greatgrandchildren, and the spouses/domestic partners of ancestors, siblings, step-siblings, children, grandchildren, and greatgrandchildren.

Key Employee. A key employee is an employee whose total annual compensation (including benefits) from WSSPC is greater than \$150,000 **and** who (a) has responsibilities or influence over WSSPC similar to that of officers or directors, **or** (b) manages a program that represents 10% or more of the activities, assets, income, or expenses of WSSPC, **or** (c) has or shares authority to control 10% or more of WSSPC's capital expenditures, operating budget, or compensation for employees.

Article IV. Procedures

1. Duty to Disclose

An interested person must disclose the existence of any actual or possible conflict of interest and be given the opportunity to disclose all material facts to the WSSPC Board of Directors considering the proposed transaction or arrangement.

2. Determining Whether a Conflict of Interest Exists

After disclosure of the financial interest and all material facts at a Board meeting, the director, officer, or key employee shall leave the meeting while the determination of a conflict of interest is discussed and voted upon. The remaining Board members shall determine if a conflict of interest exists.

3. Procedures for Addressing the Conflict of Interest

An interested person may make a presentation at the WSSPC Board meeting, but after the presentation, the person shall leave the meeting during the discussion of, and the vote on, the transaction or arrangement involving the possible conflict of interest.

The WSSPC Chair shall, if appropriate, appoint a disinterested person or committee to investigate alternatives to the proposed transaction or arrangement.

After exercising due diligence, the WSSPC Board of Directors shall determine whether WSSPC can obtain with reasonable efforts a more advantageous transaction or arrangement from a person or entity that would not give rise to a conflict of interest.

If a more advantageous transaction or arrangement is not reasonably possible under circumstances not producing a conflict of interest, the WSSPC Board shall determine by a majority vote of the disinterested directors whether the transaction or arrangement is in

WSSPC's best interest, for its own benefit, and whether it is fair and reasonable. In conformity with the above determination it shall make its decision as to whether to enter into the transaction or arrangement.

4. Violations of the Conflict of Interest Policy

If the WSSPC Board has reasonable cause to believe a director, officer, or key employee has failed to disclose actual or possible conflicts of interest, it shall inform that person of the basis for such belief and afford the member as opportunity to explain the alleged failure to disclose.

If, after hearing the person's response and after making further investigation as warranted by the circumstances, the WSSPC Board determines the person has failed to disclose an actual or possible conflict of interest, it shall take appropriate disciplinary and corrective action.

Article V. Records of the Proceedings

The minutes of the WSSPC Board shall contain the names of the persons who disclosed or otherwise were found to have a financial interest in connection with an actual or possible conflict of interest, the nature of the financial interest, any action taken to determine whether a conflict of interest was present, and the WSSPC Board's decision as to whether a conflict of interest in fact existed.

In addition, the minutes shall contain the names of the persons who were present for discussions and votes relating to the transaction or arrangement, the content of the discussion, including any alternatives to the proposed transaction or arrangement, and a record of any votes taken in connection with the proceedings.

The Executive Director shall report to the FEMA Project Officer in writing any real or potential conflict of interest as defined by Federal, California, or local statutes, regulations or policies which may arise during the administration of the federal award.

The Executive Director shall report to the FEMA Project Officer within five days of learning of the family, business, or professional conflict of interest.

Article VI. Annual Statements

Each director, officer, and key employee shall sign an Annual Disclosure Statement which affirms that the person has received a copy of this Conflict of Interest Policy, has read and understood the Policy, has agreed to comply with the Policy, and discloses any direct or indirect financial interest.

All Annual Disclosure Statements shall be submitted to the Secretary of WSSPC and filed with the minutes of the first meeting of the Board of Directors held each year.

Article VII. Periodic Reviews

To ensure that WSSPC operates in a manner consistent with its charitable purposes and its status as an organization exempt from federal income tax, the WSSPC Board shall authorize and oversee a periodic review of the administration of this Conflict of Interest Policy. The review may be written or oral. The review shall consider the level of compliance with the Policy, the continuing suitability of the Policy, and whether the Policy should be modified and improved.

Article VIII. Use of Outside Experts

When conducting periodic reviews as provided in Article VII, WSSPC may, but need not, use outside advisors. If outside experts are used, their use shall not relieve the WSSPC Board of its responsibility for ensuring periodic reviews are conducted.

**Director, Officer, and Key Employee
Annual Conflict of Interest Statement**

1. Printed Name: _____

2. Position:

Are you a voting Director? Yes No

Are you an Officer? Yes No

If you are an Officer, which position do you hold: _____

Are you a Key Employee? Yes No

Are you a subcontractor? Yes No

3. I affirm the following:

I have received a copy of the WSSPC Conflict of Interest Policy. _____ (initial)

I have read and understand the policy. _____ (initial)

I agree to comply with the policy. _____ (initial)

I understand that WSSPC is a charitable organization and in order to maintain its federal tax exemption it must engage primarily in activities which accomplish one or more of tax-exempt purposes. _____ (initial)

4. Disclosures:

a. Do you have a financial interest (current or potential), including a compensation arrangement, as defined in the Conflict of Interest policy with WSSPC? Yes No

i. If yes, please describe it: _____

ii. If yes, has the financial interest been disclosed, as provided in the Conflict of Interest policy? Yes No

b. In the past, have you had a financial interest, including a compensation arrangement, as defined in the Conflict of Interest policy with WSSPC? Yes No

i. If yes, please describe it, including when (approximately):

ii. If yes, has the financial interest been disclosed, as provided in the Conflict of Interest policy? Yes No

Signature: _____

Date: _____

Date of Review by Board of Directors: _____

Western States Seismic Policy Council

Financial Policies and Procedures

Approval Date: November 15, 2018

General

1. The Board of Directors formulates financial policies, delegates administration of the financial policies to the Executive Director, and reviews operations and activities at each Board meeting.
2. The Executive Director is also the corporate Treasurer according to the ByLaws.
3. The Executive Director will maintain a current and accurate Chart of Accounts and provide a current Income/Expense statement to the Board of Directors at each Board meeting.
4. Professional financial service providers will be maintained and reviewed annually. These include QuickBooks accounting software; Paylocity for payroll services; Sutter Health Plus, ChoiceBuilder, Fidelity Security Life Insurance Company, Unum, and Ameriflex_for benefits; The Hartford for worker's comp insurance; property and liability insurance through Nonprofits Insurance Alliance of California (NIAC) obtained through brokers Anixter & Oser, Inc.; East-West Bank in San Francisco for checking, money market and CD; PayPal for merchant services; Charles Schwab for administration of SIMPLE IRA plan; Bob Cain of Layer 3 Technology for computer network maintenance; and Evelyn Cook, Cook CPA Group, accountant.
5. Policies and procedures will be reviewed for adoption annually by the Board of Directors.

Cash and Check Receipts

1. WSSPC mail is picked up from our postal box and opened by the Program Manager who stamps the date of receipt on the contents.
2. Checks and cash received are recorded against an invoice prepared in QuickBooks, and one copy of the invoice is provided as a receipt to the sender.
3. Cash received is entered into QuickBooks as "Petty Cash" and placed in a locked drawer in the Executive Director's office.
4. Checks are endorsed by rubber stamp that specifies to which bank account the deposit will be made.
5. The endorsed check(s) and deposit slip will be filled out and mailed to East West Bank.
6. A second copy of the invoice, together with the check, will be held for the bank deposit confirmation. Upon receipt of the deposit confirmation, all documents will be filed in the Bank Deposits folder for that fiscal year.
7. A third copy of the invoice and check will be made for the specific income category and filed in a folder corresponding to the income category as established in the QuickBooks Chart of Accounts.

Cash and Check Disbursements Excluding Payroll

1. Authorized signers on the WSSPC bank account are the Executive Director/Treasurer, Board Chair/President, Vice Chair/Vice President and the Past Board Chair/Past President.
2. Invoices received for payment will be reviewed for conformity to the existing contracts and agreements and approved by the Executive Director.
3. Approved invoices will be entered into QuickBooks.
4. The Executive Director will prepare checks on a weekly basis.
5. A copy of each check and/or invoice will be stamped with Date Paid, Check No., and Amount and filed in reverse numerical order in the "Checks" folder.
6. The expense category corresponding to the General Ledger category will be noted on each invoice.
7. Checks written for an amount over \$5000 require approval and countersignature by a corporate officer (Board Chair/President, Vice Chair/Vice President) to be obtained and filed in the "Countersigned Checks over \$5000" folder.
8. Voided Checks will have "VOID" written across them and shall be filed in the "Voided Checks" folder. The check shall be entered in QuickBooks payable to "VOID" to retain the sequential numbering of checks.
9. Blank checks shall be kept in a locked drawer in the Executive Director's office.

Bank Reconciliations

1. Bank statements shall be opened by the Executive Director.
2. The Executive Director will reconcile the bank statements monthly, and print out a QuickBooks reconciliation for each account held.
3. The bank statements and reconciliation documents shall be attached and filed in the "Bank Statements" folder.
4. The Executive Director shall provide the Board of Directors with a statement of the balances in the bank accounts at each Board meeting.

Credit Cards

1. The Executive Director is authorized to have 2 business credit cards, one of which must have the ability to accumulate frequent flyer miles.
2. The frequent flyer miles accumulated from WSSPC purchases and business flights will be used only for WSSPC business purposes.
3. The Executive Director will keep a record of the miles that are accumulated and used for WSSPC purposes. The Executive Director will use the credit cards only for WSSPC business.
4. Credit cards shall be locked in a file drawer in the Executive Director's office when not in use.
5. The cards shall not be used over the credit limits and any balance shall be paid in full during the billing period.

Purchases

1. All purchases over \$5000 must be approved in advance by the Board Chair.
2. All purchases not accounted for in the budget must be approved in advance by the Board Chair and/or the Board of Directors.
3. Supplies ordered by the Program Manager must be approved by the Executive Director in advance.

Credit Card Merchant Services

1. The Executive Director will maintain a Merchant Services Agreement with PayPal to allow for the capability of accepting credit cards for payment.
2. The Executive Director will track the deposits made to the bank account to confirm the date and correct posting of the transaction.
3. The Executive Director will create an invoice in QuickBooks (if one has not already been created) against which the income will be applied.
4. A copy of the paid invoice will be emailed to the customer.
5. The Executive Director will reconcile the transaction with the monthly merchant services statement and the monthly bank statement.
6. The copy of the paid invoice and the settled transaction will be attached and filed in the appropriate file folder.

Payroll and Benefits

1. Each hourly employee will be responsible for completing a time sheet on a weekly basis.
2. Time sheets will be signed and submitted to the Executive Director on a weekly basis.
3. The Executive Director shall review and approve the hours worked by the hourly employees.
4. The Executive Director shall enter the hours worked on the Paylocity website (<http://www.paylocity.com>) in a timely way so that late penalties are not incurred.
5. The Executive Director shall be paid a salary bi-monthly in the amount of the annual salary divided by 24 pay periods.
6. The Executive Director shall work the full number of hours in each pay period.
7. Employees will be paid bi-monthly by Paylocity on the 5th and 20th of the month.
8. Paylocity is authorized to make three (3) checking account withdrawals for each payroll to cover (1) the net value of earnings, (2) employer and employee taxes and (3) payroll fees.
9. Paylocity will provide on their website a Payroll Summary Report itemizing the payroll earnings, deductions and fees.
10. The Executive Director will review and reconcile the invoice if needed, and enter the invoice into QuickBooks. The entry for the end of the month payroll shall be recorded with the end of the month date.

11. The payroll invoices will be filed in the "Paylocity" folder.
12. Regular Full-time employees, defined as employees who work 30 hours or more per week, will be eligible for benefits.
13. All employees are eligible for a company match to a SIMPLE IRA plan after 1 year employment, if they wish to participate in salary reductions.
14. Employer contributions to the SIMPLE IRA are made at 3% of earnings up to the maximum employee contribution allowed.
15. Employees 50 years of age or older are eligible for catch up contributions to the SIMPLE IRA and the employer match on those contributions.
16. All other benefits will be paid in accordance with the WSSPC Personnel Policies. A current copy of the WSSPC Personnel Policies is kept in the Personnel binder in the Executive Director's office and is distributed to each employee.
17. The health care rebate distributed under the provisions of the Affordable Care Act, if any, shall be returned to the health plan for which it applies in the form of a premium in the same employer/employee contribution percentages for that plan.

Travel Reimbursements

1. Each employee, Board member, and eligible Committee member (as determined by the Board) will complete an expense voucher for reimbursement for any travel on WSSPC business. The form shall state the business purpose of travel, dates, and expenses and shall be accompanied by all receipts.
2. Each new Board member shall receive a copy of the current Board Meeting Travel Reimbursement Policy.
3. Lodging for Board members will be at the government rate whenever possible.
4. Airfare will be reimbursed for economy class travel.
5. Mileage will be reimbursed at the current IRS rate as shown on the www.irs.gov website.
6. Meals will be reimbursed with documentation; per diems will not be paid.
7. Staff will be reimbursed for parking on the infrequent days they are required to stay late or perform duties outside of normal business hours.
8. The Executive Director will approve the reimbursements according to the contracts, grants, or agreements.
9. The Executive Director will prepare the check and return a copy of the reimbursement form to the payee.
10. The original reimbursement form with original receipts will be filed in the "Staff Reimbursement" or "Executive Committee Reimbursements" folder, as appropriate.
11. Expense reimbursement requests will be submitted within 60 days for payment.

Consultants and Contractors

1. Consideration will be made of internal capabilities to accomplish services before contracting for them.
2. The qualifications of the consultant and reasonableness of fees will be considered in hiring consultants.
3. Consultant services will be paid for as work is performed or as delineated in the contract.
4. The Board of Directors will approve audit and other significant contracts or sub-contracts.
5. The Executive Director will compile the necessary data for submitting 1099s, business property statements, and federal and state tax returns. The accountant will prepare the documents and return them to the Executive Director for review and on-time submittal.
6. An accountant will perform an annual financial review and submit a written financial report for the WSSPC fiscal year to be completed by March 1 of the following year. The report shall be given to the Board of Directors.
7. New contracts for goods and services shall be bid competitively if the cost exceeds or is expected to exceed \$5000.

Equipment

1. Equipment purchased with a cost of \$5000 or more and a useful life of more than one year will be placed into one of three Asset categories in QuickBooks: Computers, Software, or Equipment.
2. QuickBooks entries will include the purchase date, the item, and the cost of the computer hardware and software and equipment. Serial numbers, ID numbers, and warranty information for items will be kept in a separate document.
3. The original sales receipt will be placed in the folder for that item and a copy made for the appropriate Assets folder for that fiscal year.
4. When property is disposed of an entry will be made in QuickBooks.
5. Equipment purchases over \$5000 will not be charged to federal grants or cooperative agreements unless there is approval for an Equipment category in the budget.
6. A depreciation schedule will be prepared annually by the accountant for the financial statements.
7. An inventory of all assets shall be made annually and provided to the Board of Directors annually.
8. Equipment leases will be reviewed, approved and signed by the Executive Director.
9. A copy of each equipment lease will be kept on file.

Office Space Lease

1. The Executive Director will review property leases prior to submission to the Board of Directors.
2. The Board of Directors will approve the property lease and direct the Executive Director to sign the lease.
3. The Executive Director will keep a copy of the property lease on file.

Insurance

1. Reasonable, adequate coverage will be maintained to safeguard the assets of the corporation. Such coverage will include property and liability, worker's compensation, and other insurance deemed necessary and approved by the Board of Directors.
2. The Executive Director will review insurance policies before renewal to ensure adequate coverage limits.
3. If personal cars are used for company business, the Executive Director will maintain a file with a copy of the employee's current driver's license and current insurance.
4. The Executive Director will maintain insurance policies in insurance files.

Telephone Use

1. The Executive Director is authorized to have a cell phone paid by WSSPC for WSSPC business.
2. WSSPC business calls made from phones outside the office should be billed to WSSPC's telephone account.

Grants and Contracts

1. The Executive Director will carefully review each award and contract to ensure compliance with all financial and programmatic provisions.
2. The Executive Director will maintain originals of all grants and contracts in a file, including work plans, budgets, progress reports, and reimbursement submittals.
3. The Executive Director will prepare initial entries into the Chart of Accounts in QuickBooks for each grant.
4. Entries into QuickBooks for expenses charged to federal grants and cooperative agreements shall be in conformance with the most current version of 2 CFR Part 200 (OMB SuperCircular).
5. A financial audit will be subject to the provisions for non-profit organizations as contained in the most current version of 2 CFR Part 200 (OMB SuperCircular).
6. The Executive Director will include copies of all transmittals, including emails, in the file folder.
7. The Executive Director will review and approve all reports to funding sources. Copies will be given to the Board of Directors.
8. The financial status of each grant including the expenses and budget to date will be provided to the Board of Directors at each Board meeting.
9. The Executive Director will submit all financial reports in a timely manner.

Non-grant Income and Expenses

1. Non-grant related income and expenses will be separately accounted for in QuickBooks. An example of such expense is meals on business trips; an example of such income is Affiliate member fees or interest on WSSPC funds.
2. The Executive Director will report the status of WSSPC funds at each Board of Directors meeting.

Budgets

1. The Executive Director will prepare an annual budget for WSSPC, which will include all grants.
2. The Executive Director will provide the WSSPC budget to the Board of Directors, who will approve the budget.
3. Changes in the approved WSSPC portion of the budget must be approved by the Board of Directors and/or Board Chair if they exceed \$5000.
4. Changes to grant budgets must be approved by the Board of Directors if the changes exceed 10% of the total budget amount.

Personnel Files

1. The Executive Director will register each employee with Paylocity and will maintain a personnel file for each employee containing appropriate documentation.
2. The Executive Director will maintain a WSSPC Personnel Policies binder in the office.
3. Retention of personnel records shall adhere to the current schedules provided by non-profit associations' guidelines and filed in the WSSPC Personnel Policies binder.

Record Retention Policy

1. All financial records, including documentation and receipts, will be kept for at least 7 years.
2. All personal and financial data will be shredded upon disposal.

Western States Seismic Policy Council

2018-2019 Personnel and Benefits Policies Summary

About the WSSPC Personnel Policies

This Summary outlines some of the benefits and services that WSSPC provides.

This Summary is not intended to be a comprehensive resource on the benefits available, nor does it cover all the rules and restrictions that may apply to those benefits.

Enrolling in Benefits

You may enroll in benefits after your first date of benefits eligibility, once the Executive Director has submitted your data to the benefits providers.

Enrolling is easy. The Executive Director will guide you through the process.

Important Deadlines

WSSPC's benefit plan year is July 1 through June 30.

Please complete your benefit enrollment by the designated deadline:

New Employees: within 30 days of hire date. If no election is made within this time, you will be assigned default coverage.

Life Status Changes: within 30 days of the qualifying event (60 days for a birth, adoption, placement for adoption, new guardianship or SCHIP event). If you do not report your life status change within 30 days of the event you will be unable to make benefit changes.

Default coverage: If you do not make a benefits election within 30 days of your Benefit Eligible Date, default benefits coverage is assigned. If you are defaulted, you cannot add dependents to health coverage or participate in Flexible Spending Accounts. The default coverage and any related premiums will be effective for the remaining benefit plan year unless you experience a Life Status Change.

Eligibility for Benefits

Regular Employees are those scheduled to work at least 30 hours per week and are eligible for most benefits described in this Summary. Part-time employees who work less than 30 hours a week are not eligible for benefits.

Full-Time Employees are those scheduled to work 40 hours per week.

Employees working less than 40 hours per week are not eligible for the following prorated time off benefits: Paid Time Off (PTO) / Jury Duty / Bereavement/ Holidays.

Temporary Employees are individuals hired for a specific period of time, typically less than 3 months, and are generally not eligible for any company benefits. Some exceptions may apply depending on State and Local regulations. Contact the Executive Director with your specific questions.

Student Interns hired through University Enterprises, Inc. are not considered employees of WSSPC. University Enterprises, Inc. is the Employer of Record, and all benefits questions should be addressed to them.

Company Sponsored Benefits

WSSPC sponsors medical, dental, vision, and life insurance plans for Regular Employees working at least 30 hours per week.

WSSPC also sponsors optional retirement plans and Flexible Spending Accounts for medical, dependent daycare, and commuting, available to Regular Employees working at least 30 hours per week.

Long-term disability benefits are available to the Executive Director only.

Western States Seismic Policy Council

2018-2019 Personnel and Benefits Policies Summary

Medical Plans

Medical plans are provided through Sutter Health Plus, which has a cafeteria plan for each of the metal tiers. WSSPC has selected the "Platinum" tier.

The medical benefits plan open enrollment period is during the month of May, as dictated by Sutter Health Plus. All medical benefits choices must be made and submitted by the date set by Sutter Health Plus.

WSSPC pays a fixed dollar amount which is equal to 80% of the premium for the Executive Director's medical coverage. If an employee chooses a less expensive plan than the Executive Director, a greater percentage up to the fixed dollar amount will be covered by the company.

Waiving Health Coverage: If you already have current group medical coverage, you may choose to waive or opt out of group health benefits. To waive coverage you must make an active election specifying that you decline medical benefits. You will also be asked to provide evidence of other group health care coverage. If you are a Regular Employee and don't submit an enrollment specifically waiving coverage with supporting documentation, you will be assigned default coverage.

Employees who waive health coverage are eligible to enroll in optional plans and flexible spending accounts.

For details about your health plans, contact the Executive Director or the broker for Sutter Health Plus directly: Corey Harris, at Benefits Done Right, (916) 568-2345, ext. 209, or online at www.sutterhealthplus.org.

Life Insurance Benefits

WSSPC provides life insurance benefits, paid in full by the company to all Regular Employees working 30 hours or more per week. Life insurance benefits of \$25,000 each come from ChoiceBuilder and UNUM. Employees may choose to convert this to their personal insurance upon voluntary termination at their own expense.

Dental and Vision Benefits

WSSPC provides dental and vision benefits through ChoiceBuilder to all Regular Employees working 30 hours or more per week.

WSSPC pays a fixed dollar amount which is equal to 80% of the premium for the Executive Director's dental and vision coverage. If an employee chooses a less expensive plan than the Executive Director, a greater percentage up to the fixed dollar amount will be covered by the company.

Waiving Health Coverage: If you already have current group dental and vision coverage, you may choose to waive or opt out of group benefits. To waive coverage you must make an active election specifying that you decline dental and vision benefits. You will also be asked to provide evidence of other group coverage. If you are a Regular Employee and don't submit an enrollment specifically waiving coverage with supporting documentation, you will be assigned default coverage.

Disability Benefits

WSSPC pays long-term disability benefits in full to the Executive Director through Fidelity Security Life Insurance Company. Coverage is for partial or total disability due to sickness or injury, with a 60 day waiting period before coverage begins. Insurance is provided through insurance broker Barbara Hernandez, barbara@properlyinsured.com at Anixter & Oser, Inc. (415) 898-1600, extension 128.

Company Sponsored Retirement Plan

WSSPC offers a SIMPLE IRA retirement plan through Charles Schwab in which voluntary pre-tax contributions may be made towards your retirement. If you are a new employee you will be responsible for tracking contributions made with prior employers to ensure that your contributions do not exceed IRS maximums. Prior employer contributions are not tracked by WSSPC or our Retirement Plan Administrator.

Western States Seismic Policy Council

2018-2019 Personnel and Benefits Policies Summary

Regular Employees who earn at least \$5000 per year and have also completed one-year of employment, are eligible to participate in WSSPC's SIMPLE IRA administered by Charles Schwab. You must complete a separate enrollment form available from WSSPC when you become eligible.

Employee contributions may be made to a SIMPLE IRA account up to the maximum allowed by the IRS for that year. Employees who qualify under IRS rules may make catch up contributions. WSSPC will match an employee's wages dollar for dollar up to 3% per year.

Optional Plans Available at Employee Expense

Flexible Spending Account (FSA) Plan: Healthcare and dependent daycare Flexible Spending Accounts (FSAs) are available for Regular Employees working 30 hours or more per week to participate in by setting aside pre-tax dollars up to certain limits. Important rules, regulations, and deadlines apply for this pre-tax benefit administered by Ameriflex.

Pre-Tax Commuter Benefits: Commuter Spending Accounts (CSAs) are available for Regular Employees working 30 hours or more per week. Van pools, public transit, or parking costs are covered, subject to certain monthly limits. Passes can be delivered right to your home, or you can submit monthly receipts for reimbursement.

A FSA credit card will be issued by Ameriflex which is pre-loaded with the amount elected for the year. Pre-tax paycheck deductions will be made up to the limits of your election. Receipts for services must be kept and repayment for services may occur if the charge is unauthorized.

Regular and Full Time Employees are eligible for FSAs the first of the month after 30 days employment.

Funds deducted from paychecks and not used are forfeited at the end of the plan year (unless rolled over according to plan requirements) or when an employee is terminated.

Pay and Hours

The pay period is semi-monthly from the 1st through the 15th and the 16th through the last day of each month. Regular paydays will occur on the 20th and the 5th of each month.

If the regular pay date is scheduled on a holiday or weekend, your paycheck will be dated the last business day prior.

Direct Deposit: Direct deposit of paychecks is available for U.S. bank accounts. This will be set up through Paylocity.

Regular office hours are from 8 a.m. to 5 p.m. with 1 hour lunch or until 4:30 p.m. with a half hour lunch. Where required by law or contract for overtime purposes, the workday begins at 12:01 a.m. and ends at midnight each day. The workweek begins at 12:01 a.m. Monday and ends midnight Sunday.

Time Off

The Paid Time Off (PTO) program applies to any absence from the job not otherwise covered by a specific time off benefit outlined in this summary (e.g. holiday pay, sick leave, jury duty, bereavement leave, etc.). PTO covers all scheduled vacation or personal time off as well as unscheduled situations such as emergencies.

Paid Time Off credit for Full-Time Employees working 40 hours per week is calculated on regular hours worked each pay period according to the following schedule:

Months	Hours Accrued	Max Hours
0 to 12	128	128
13 to 60	168	200
61 to 120	192	240
121+	208	256

Each multiple of eight hours equals the equivalent of one workday. Once the limit of "Max Hours" is reached, all further accruals will cease. Paid Time Off accruals will recommence after time off is taken and the balance of accrued time off is less than the "Max Hours".

Western States Seismic Policy Council

2018-2019 Personnel and Benefits Policies Summary

There is no waiting period before you may utilize Paid Time Off.

Usage and scheduling of time off is subject to the direction and approval of the Executive Director.

Accrued, but unused Paid Time Off will be included with your last paycheck upon termination.

Paid Sick Leave

All California employers are required to provide paid sick leave to eligible employees effective July 1, 2015. Eligible employees are regular exempt and non-exempt full time and part time, temporary, paid interns, intermittent, and per diem employees.

For hourly employees, one hour of paid sick leave will accrue for every 30 hours worked, including overtime hours. For salaried employees, sick leave will accrue at the rate of 2.889 hours per pay period.

Sick pay will be paid at the hourly rate in the pay period in which it occurred. If pay has fluctuated in the past 90 days, then the hourly rate will be determined by dividing total wages by the total hours worked in the previous 90 days.

An employee may use accrued sick leave beginning on the 90th day of employment.

Unused sick leave may be carried over to the next benefit year and will be capped at 100 hours (12.5 days).

Paid sick leave may be used for diagnosis, care, or treatment of an existing health condition of, or preventative care for an employee or an employee's family member which includes a child, parent, spouse, registered domestic partner, grandparent, grandchild, or sibling.

Paid sick leave may also be used for an employee who is a victim of domestic violence, sexual assault, or stalking.

If the need for sick leave is foreseeable, the employee must give reasonable advance notice.

Sick leave will not be paid out upon termination.

Additional Paid Leave

Additional Paid Leave: The following additional paid leave is available for Regular Full-time Employees working 40 hours per week. There is a month waiting period for new employees before you may utilize the following additional paid leave:

10 Jury Duty Days: If you miss work due to jury duty, you must submit the court summons. If you receive a court summons, please notify the Executive Director immediately. (Note that under rules of the Federal Labor Standards Act, deductions may not be made to Exempt Employees' pay due to absences caused by jury duty or attendance as a witness. Some states have additional regulations affecting payment and service of jury duty. Contact your Executive Director for further information).

5 Bereavement Leave Days (per occurrence): If a death occurs in your immediate family, please see the Executive Director to arrange the appropriate time off. Immediate family includes spouse, child, parent, brother, sister, grandparent, mother-in-law, father-in-law and domestic partner.

Health Benefits and Unpaid Leave

If you are granted an unpaid leave which is not covered under a state or federal leave plan (such as FMLA) you may continue your benefits coverage as if you are an active employee for 30 days. After 30 days, coverage continues until the end of the month in which the 30th day occurs.

As of the first of the following month, you must elect Cal-COBRA coverage if you want to continue benefits during your leave. At that time, you will be offered the right to continue your medical, dental, vision, and medical flexible spending account (FSA). You will be offered the right to convert your life insurance plans into individual plans. All other supplemental benefits will continue or terminate, based on the provider's requirement.

For additional information on eligibility for mandated Leaves of Absence contact the Executive Director.

Western States Seismic Policy Council

2018-2019 Personnel and Benefits Policies Summary

Paid Family Leave (California employees only): The Paid Family Leave program, also known as Family Temporary Disability Insurance program, is administered by the State Disability Insurance (SDI) program. Employers are required to deduct the Paid Family Leave contributions from the wages of employees who are covered by the SDI program. Benefits will be payable for Paid Family Leave by California Employment Development Dept. to those who apply and qualify. For more information, see the Paid Family Leave brochure posted on the WSSPC lunch room wall, "California Required Notifications".

Americans with Disabilities Act: The Company is committed to complying with the Americans with Disabilities Act (ADA) and ensuring equal opportunity in employment for qualified individuals with disabilities. All employment practices and activities are based on a non-discriminatory basis.

The company does not discriminate against qualified individuals with disabilities. The Company will reasonably accommodate the disabilities of qualified candidates or employees, including modifying work areas and equipment, unless undue hardship would result. Reasonable accommodation is available to all disabled employees, where their disability affects the performance of the essential job functions. All employment decisions are based on performance as defined in the position job description, not the disability of the individual. Qualified individuals with disabilities are entitled to equal pay and other forms of compensation (or changes in compensation) as well as organizational changes/structure, job assignments, classifications, position descriptions, promotion, and seniority. Medical records/reports will be kept separate and confidential.

This policy is neither exhaustive nor exclusive. The Company is committed to taking all other actions necessary to ensure equal employment opportunity for persons with disabilities in accordance with the ADA and all other applicable federal state, and local laws.

Equal Opportunity Employer

WSSPC is an Equal Opportunity Employer, providing employment without regard to race, color, ancestry, national origin (including limited English proficiency (LEP)), religion, creed, age (over 40), disability, sex, gender, sexual orientation, gender identity, gender expression, medical condition, genetic information, marital status, military and veteran status, or any other characteristic protected by law.

Company Holiday Schedule

The holiday calendar is published annually and is available for Full-Time Employees working 40 hours per week.

The following holidays are observed:

New Year's Day
Martin Luther King, Jr. Day
Presidents Day
Good Friday
Memorial Day
Independence Day
Labor Day
Columbus Day
Veterans Day
Thanksgiving Day
Day after Thanksgiving
Christmas Eve
Christmas Day
New Year's Eve

Employee Help and Information

Contact the Executive Director at (916-444-6816, Ext. 101) or psutch@wsspc.org for help or information.

INVENTORY OF WSSPC COMPUTERS, SOFTWARE, FURNITURE AND EQUIPMENT AS OF NOVEMBER 30, 2018

Item No.	Revised Item No.	Date Purchased	Computers	Software	Furniture & Equipment	Date Disposed	Description
1		11/30/2001			2,459.31		2 computer desks with 2 rolling files, 2 gray office chairs , 3 legal and 1 letter filing cabinets, storage cabinet
	01-1				460.57		Steel desk, right return, keyboard tray, shelf
	01-2				460.56		Steel desk, left return, keyboard tray, shelf
	01-3A,B				524.88		2 steel rolling files, 3-drawer
	01-4				145.69		30" metal storage cabinet
	01-5A,B				97.09	2016	2 gray office chairs
	01-6A,B,C,D				770.52		3 legal and 1 letter filing cabinets
2		2/19/2003			4,446.32		2 computers and Dell 17 in flat panel monitor
	03-1A,B				4,008.54	2010	2 computers with XP
	03-2				437.78	2012	Dell 17 in flat panel monitor
3	04-1	7/2/2004			1,202.25	2009	Ricoh Aficio 350 copier bought from QED Research in Palo Alto
4					216.48		Microwave (\$64.94) and Refrigerator (\$151.54)
	04-2A	8/4/2004			64.94		Microwave
	04-2B				151.54		Refrigerator
5	04-3A,B	9/23/2004			400.50		2 legal filing cabinets, locking
6		2004			0.00		Donated furniture from Palo Alto landlord: 2 3/4-height bookcases, 2 metal lateral files, 2 credenzas, round table and 4 chairs, large black office chair
	04-4A,B				0.00		2 3/4-height bookcases
	04-5A,B				0.00		2 brown metal 2-drawer lateral files
	04-6A,B				0.00		2 wooden credenzas
	04-7				0.00		round table and 4 chairs
	04-8				0.00		large black office chair in PM office
7	06-1A,B,C,D	1/20/2006			0.00		Donated from Patricia Sutch: 4 oak bookcases
8	06-2	7/31/2006	1,210.00			2010	emachine (computer) and network setup and LinkSys (network broadband and wireless routers) and LinkSys 5 port switch
9		11/30/2006			2,470.37		Dell laptop (Latitude D630) and docking station, Dell Laser color printer (3110cn), Dell 19-in Monitor, Canon Pixma printer, and computer bag.
	06-3				268.30	2009	Canon Pixma printer
	06-4				1,481.83	2011	Dell laptop (Latitude D630) and docking station
	06-5				236.43		Dell 19-in Monitor

INVENTORY OF WSSPC COMPUTERS, SOFTWARE, FURNITURE AND EQUIPMENT AS OF NOVEMBER 30, 2018

Item No.	Revised Item No.	Date Purchased	Computers	Software	Furniture & Equipment	Date Disposed	Description
	06-6		483.81				Dell Laser Color Printer (3110cn)
	06-7				40.26		Computer Bag
10	07-1A,B,C,D	8/20/2007			658.71	2016	4 AT&T telephones
11	08-1A,B,C	7/18/2008		1,304.69		2012	3 Adobe Dreamweaver
12	08-2A,B,C	7/22/2008		881.85		2011	3 Adobe 9
13	08-3A,B,C	7/31/2008		950.19		2012	3 Adobe Acrobat
14	08-4	10/16/2008	118.51			2018	Sony DRX480U DVD writer
15	09-1	3/19/2009		809.97		2010	3 Office Professional 2007 Upgrade
16		3/19/2009			520.61		3 office chairs (ED:2 chair ; PM: 1 chair)
	09-2A,B				199.30		2 pseudo-leather chairs in ED office
	09-3				321.31		1 mesh office chair in PM office "Quantum"
17	09-4	3/23/2009			290.04		1 mesh office chair in PM office "Quantum"
18		4/16/2009	2,827.40				2 HP Slimline Pavilion computers, 1 HP Server, 2 HP Photosmart 4580 printers, 1 additional HP Pavilion computer, Canon FAX.
	09-5A,B		1,152.72			2011	2 HP Slimline Pavilion computers
	09-6		761.24			2011	1 HP Server
	09-7A,B		152.22			2011	2 HP Photosmart 4580 printers (replaced by v313w printers under warranty)
	09-8		576.36			2018	1 HP Slimline Pavillion computer:This computer was replaced by HP under warranty in 2010 and repurposed as our server with a different backup system in 2011.
	09-9		184.86			2016	Canon MX 860 FAX/printer
19	09-10A,B	4/18/2009	423.48			2015	2 HP w1907 Monitors (server+student PCs)
20	09-11	11/30/2009	492.98				Lexmark X363dn Copier/Printer
21	10-1A,B	4/21/2010	220.83			2012	2 Dell v515w black printers (both warranty replacements for Dell v313w printers)
22	10-2A,B,C	8/16/2010		1,364.70		2013	3 MS Office 2010 Pro
23	10-3A,B	8/31/2010	1,698.68			2016	2 Dell Optiplex 380 computers (ED+Extra)
24	11-1A,B,C	5/12/2011		456.72		2016	3 Adobe Acrobat X
25	11-2	7/14/2011	1,426.30				Dell Vostro 3350 Laptop + Office 2010 Pro
26	11-3	7/28/2011	253.15			2018	1 omega Hard drive and backup for reconfigured server
27	11-4A,B,C	7/31/2011		725.00		2014	3 Adobe Dreamweaver CS5.5 Upgrade + 1 Dreamweaver CS5.5

INVENTORY OF WSSPC COMPUTERS, SOFTWARE, FURNITURE AND EQUIPMENT AS OF NOVEMBER 30, 2018

Item No.	Revised Item No.	Date Purchased	Computers	Software	Furniture & Equipment	Date Disposed	Description
				342.00		2014	3 Adobe Dreamweaver CS5.5 Upgrade
				383.00		2014	1 Dreamweaver CS5.5
28	12-1A,B	6/12/2012	366.33				2 HP OfficeJet Pro 8600 printers (ED+PM)
29		6/20/2012	274.58				2 HP 2011x 20" LED monitors
	12-2A		137.29			2015	HP 2011x Monitor (ED)
	12-2B		137.29				HP 2011x Monitor (Extra)
30	12-3	10/3/2012	823.75				Dell Optiplex 3010 computer (PM)
31	12-4	10/3/2012		336.31		2014	Office 2010 Pro (PM)
32		2/5/2014		593.97			2 Office Home & Business 2013 + 1 Publisher 2013
	14-1A,B			475.18			2 Office Home & Business 2013 (ED+PM)
	14-2			118.79			1 Publisher 2013 (PM)
33	14-3	9/23/2014		119.61			1 Publisher 2013 (Extra)
34	14-4	9/23/2014		239.24			1 Microsoft Office Home & Business 2013 (Extra)
35	14-5	11/28/2014		305.49			1 Adobe Acrobat XI (on PM computer)
36	15-1	7/28/2015			1,387.18		Nimlok curved display frame and case
37	15-2	7/31/2015			1,414.51		EZ Up 10' Canopy and Frame
38		7/29/2015	173.85				Goldtouch split keyboard, Logitech wireless trackball, Adesso touchpad
	15-3		104.16				Goldtouch split keyboard
	15-4		32.49				Logitech wireless trackball
	15-5		37.20				Adesso touchpad
39		7/31/2015			1,962.66		Chair, 2 keyboard trays, 2 monitor arms
	15-6				271.25	2016	ED Chair
	15-7				370.64		Banana Board keyboard tray (ED)
	15-8				303.80		Single Monitor arm (ED)
	15-9				258.23		Sit Stand Monitor arm (PM)
	15-10				758.74		Monitor arm extender and keyboard tray (PM)
40		7/31/2015	507.08				2 Lenovo monitors and 2 Logitech speaker sets (ED+PM)
	15-11A,B		463.70				2 Lenovo 23" LED LI2323S Monitors
	15-12A,B		43.38				2 Logitech Z130 speaker sets (ED+PM)
41	15-13	11/3/2015			43.20		EZ Up Roller Bag for EZ Up Canopy (stored with 15-2)
42	16-1	1/15/2016			273.05		High back ergonomic stool with arms (PM)

INVENTORY OF WSSPC COMPUTERS, SOFTWARE, FURNITURE AND EQUIPMENT AS OF NOVEMBER 30, 2018

Item No.	Revised Item No.	Date Purchased	Computers	Software	Furniture & Equipment	Date Disposed	Description
43	16-2A,B,C,D	7/16/2016			539.84		4 VOIP phones
44	16-3	9/23/2016			325.49		ED Chair "WorkPro"
45	16-4	11/30/2016	1525.22				2 Dell Optiplex 3040 desktop computers, upgrade Optiplex 3010
46	18-1A,B	7/3/2018	829.74				Dell Optiplex 3050 server, Seagate Backup Plus
47	18-2	7/26/2018		449.00			Adobe Acrobat Pro 2017
48	18-3	2/14/2018			194.84		Fellowes PowerShred 69cb paper shredder
49	18-4	8/22/2018			225.00		HON 510 series filing cabinet
50	18-5	9/13/2018	0				Dell Optiplex 3050 with Windows 10: Replaced 1 Dell Optiplex 3040 computer (16-4) under warranty
ORIGINAL COST	TOTALS		8,002.62	1,707.31	10,195.88		Sums are for currently held items - does not include disposed items

Annual Purchased Total

2000	0
2001	2,459.31
2002	0
2003	405.35
2004	1,819.23
2005	0
2006	3,720.63
2007	658.71
2008	2,373.39
2009	5,634.73
2010	3,284.21
2011	3,456.57
2012	1,663.68
2013	0
2014	1,258.31
2015	<u>2469.74</u>
	29,203.86

WESTERN STATES SEISMIC POLICY COUNCIL
DRAFT POLICY RECOMMENDATION 19-1

Rapid and Effective Tsunami Identification and Response

DRAFT Policy Recommendation 19-1

WSSPC recommends that each coastal state, province, and territory emergency management agency work with coastal jurisdictions to develop evacuation plans for both *near-* and *distant-*source tsunamis, and supplement these emergency plans with a preparedness education campaign focusing on instructions to evacuate based on ground shaking, that ensures all populated coastal areas in the WSSPC coastal states, territories and provinces are guided by at least one type of system, appropriate to local conditions. Strong coordination should also occur between and among federal partners, such as the U.S. Geological Survey, National Oceanic and Atmospheric Administration, etc. and state/academic institutions developing earthquake early warning system technologies, expanding upon the WSSPC Policy Recommendation on Earthquake Early Warning, to ensure appropriate community response to both earthquake and tsunami alerts.

Executive Summary

Coastal jurisdictions should develop emergency response plans which incorporate both *near-source tsunamis*, where there may be only minutes to evacuate, and *distant-source tsunamis*, where there may be hours to evacuate. For near-source tsunamis, a robust education and preparedness campaign should focus on the importance of “natural” warnings, such as earthquake ground shaking felt at the coast as precursor to an incoming tsunami. For distant-source tsunamis, emergency response plans should use redundant alert and warning notification and communication systems (standardized across the nation) which, in addition to standard evacuation and re-entry protocols, could include evacuation instructions via: 1) EAS to television and radio broadcast participants; 2) implementation of cell phone notification capabilities; 3) social media; 4) phone trees; 5) NOAA weather radios; 6) satellite and cable television; 7) door to door notification; 8) possibly beach-front sirens, if these devices are cost effective and could augment rapid dissemination of time sensitive tsunami alerts; and/or 9) aircraft (e.g. Civil Air Patrol) on-board notification systems, especially for remote coastlines, as available during emergencies. These warning and notification systems should be tested on a consistent basis (e.g. annually) for confirmation of performance and improved efficiency during an event. WSSPC will work with its federal partners (USGS, NOAA, FEMA, etc.) and the National

Tsunami Hazard Mitigation Program to help maintain a coordinated, consistent and effective, top-to-bottom earthquake and tsunami warning system and public preparedness strategy.

Background

Tsunamis have caused considerable damage and over 440,000 casualties worldwide over the last 150 years. Recent events such as the 2004 Indian Ocean and 2011 Tōhoku tsunamis are a sobering reminder of the magnitude of the problem coastal communities will face. For example, the 2011 Tōhoku tsunami killed ~15,800 people, while the economic impact is estimated to be ~\$235 billion, making it the most expensive disaster in history. Tsunamis most often are created by the rapid uplift of the sea floor offshore the coast during subduction zone earthquakes, and by localized landslides triggered in response to the earthquake shaking. Tsunamis not only affect nearby coastlines within minutes following an earthquake, but can travel long distances and impact distant shorelines within several to as many as 15 hours after the event. As a result, a clear and immediate distinction must be made between educational outreach campaigns directed at near- and distant-source tsunamis; effective public education and communication is paramount both preceding as well as following an event.

Not all earthquakes produce tsunami. Unnecessary evacuations are costly not only in terms of human risk and lost commerce, but also in the public's negative reaction to the next earthquake experienced on the coast. To eliminate unnecessary coastal evacuations, efforts directed at ongoing education are crucial to inform coastal residents and visitors of the procedures to evacuate coastal areas. For example, for a near-source tsunami, upon feeling strong or prolonged ground shaking, residents and visitors should instinctively move rapidly to high ground or inland and not wait for official notices. In contrast, a distant earthquake and tsunami can be detected by a tsunami warning system, which can determine quickly if evacuation is necessary. The warning system should include: 1) earthquake and tsunami detection by a modern seismic network and Tsunami Warning Center (e.g. the National or Pacific Tsunami Warning Centers); 2) tsunami warning transmissions from the Tsunami Warning Centers to state and local emergency operations personnel; and, 3) direct notification and support to the coastal inhabitants and visitors, through the use of various broadcast media, as well as other locally appropriate measures (such as social media, coastal sirens, reverse 911, phone tree, etc.) to initiate emergency response plans.

Distant Tsunamis

Distant tsunamis are caused by undersea earthquakes far from the affected coast. The public would not necessarily feel the earthquake and there will generally be time for an official warning and evacuation to safe areas. Tsunami preparedness and response plans for a distant tsunami should include plans, whether in “Warning” or “Advisory,” in order to help reduce over or under evacuation

of coastal areas. Evacuation strategies, both on-shore evacuation and offshore maritime evacuation, should also consider evaluation of tidal and/or weather-related conditions. The use of redundant warning systems would increase the immediacy and the coverage of the evacuation notification and could include one or more of the following:

- EAS to television and radio broadcast participants;
- Automated telephone notification systems (e.g. reverse-911) and implementation of cell phone notification capabilities. Adherence to planned implementation of the Integrated Public Alert and Warning System (WEA; IPAWS), resulting in specific alerts received by the public on their cell phones.
- Social media;
- Phone trees;
- NOAA weather radios;
- Satellite and cable television;
- Door to door notification;
- Beach-front sirens; and,
- Notification via aircraft (e.g. Civil Air Patrol) on-board notification systems, for remote coastlines as available during emergencies.

These warning and notification systems should be tested on a consistent basis (e.g. annually) for confirmation of performance and improved efficiency during an event. Only with multiple systems can the best and most immediate coverage be obtained, thereby potentially minimizing the number of injuries and loss of life from a distant tsunami. Education programs should emphasize that tsunami evacuees should only return to coastal areas in accordance with local plans and directions, which differ from cancellation of tsunami alerts by the Tsunami Warning Centers.

Near-source Tsunamis

A near-source tsunami will most likely be triggered by a major earthquake on a nearby subduction zone, such as the Cascadia subduction zone (CSZ) or Aleutian subduction zone. The earthquake would be characterized by several minutes of strong ground shaking and a tsunami would arrive at the shore within 10-30 minutes after the start of the earthquake. In the case of a near-source tsunami, the only effective warning system is the realization by the public that when strong or prolonged ground shaking is felt (in some cases when any shaking is felt), they must instinctively move rapidly away from the shoreline to reach high ground and safety. In the case of a near-source event, a Tsunami Warning Center will not be able to broadcast the message in time for the public to respond, and as such would mainly be providing a warning to other distant localities. For a near-source

tsunami, continued education is crucial to inform coastal residents and visitors of procedures to evacuate coastal areas upon feeling strong or prolonged ground shaking and not wait for official notices. Evacuation drills in at risk communities where residents practice evacuating to safe ground will help improve the muscle memory of the public during a real event.

Earthquake Early Warning

A new public alerting system is being developed to provide advance notification of earthquake shaking once an earthquake begins; for more information see WSSPC Policy Recommendation on Earthquake Early Warning. This technology allows people to take protective action and communities to secure critical infrastructure before damaging shaking arrives. An earthquake early warning is issued very rapidly following the initiation of an earthquake and provides alerts to people and communities that have not yet experienced ground shaking from the earthquake. Earthquake early warnings are possible because earthquakes produce differing types of waves that travel at different speeds. The faster P waves travel at about 6.5 kilometers per second and are first to arrive at seismic monitoring stations. These P waves contain important information about the size and location of the earthquake. Slower moving S waves (3.5 km per second) arrive after the P waves and cause more intense shaking capable of damage to buildings and infrastructure. WSSPC will work with its federal partners (USGS, NOAA, FEMA, etc.) and the National Tsunami Hazard Mitigation Program, including state/academic institutions, to help maintain a coordinated, consistent and effective, top-to-bottom earthquake and tsunami warning system and public preparedness strategy.

Education and Outreach

Placement of tsunami warning signs is an important aspect of educating the public about how to reach safety upon receipt of a warning. Signs are a proven education tool in recent tsunamis and should be implemented as determined appropriate by local authorities, with possible assistance from the National Tsunami Hazard Mitigation Program (NTHMP) in order to maintain continuity between coastal jurisdictions and states. Coastal jurisdictions should be encouraged to adopt standardized tsunami signs.

(See also: <http://www.dot.ca.gov/hq/traffops/engineering/control-devices/tsunami.htm>)

Regular and frequent testing of warning systems is essential to identify mitigation strategies for a more resilient and effective system. It is important to know that the system will work as intended should public safety officials ever need to send an alert or warning to a large region of the United

States. Only frequent, rigorous testing can provide an appropriate diagnosis of the system's performance.

Communities are encouraged to run notification and response exercises and public evacuation drills in order to ensure the evacuation plans are appropriate and well understood by the coastal population. The state and federal NTHMP partners should offer assistance to these communities in developing and running these exercises and drills.

Federal, state, and academic institutions involved in warning system development as well as public education and outreach should collaborate to ensure that when alerts (earthquake, tsunami) are issued, the appropriate response occurs.

Internal Section:

Facilitation and Communication

1. Encourage representatives from state agencies to use Policy Recommendation 16-1 with their legislative delegations to develop rapid, multiple tsunami education and notification systems in their respective states, territories and provinces. In addition, education and evacuation planning as well as exercises and drills are the most critical components of overall tsunami risk reduction and, therefore, should be promoted along with tsunami notification systems.
2. Forward Policy Recommendation 16-1 to the National Oceanic and Atmospheric Administration (NOAA), United States Geological Survey, the Federal Emergency Management Agency, and other Federal and State organizations as appropriate, for their budget and technical support.
3. Work with the National Tsunami Hazard Mitigation Program to support development of guidance on various rapid identification and notification systems to help supplement on-going, essential coordinated tsunami and earthquake preparedness, awareness, and response efforts.

Assessment

The assessment of this policy can be measured by: 1) the adoption of tsunami and earthquake hazard policies by state, territorial and provincial, as well as local governments on warning dissemination and evacuation; 2) comprehensiveness of notification systems adopted by state, territorial, provincial and local jurisdictions; 3) regular tests of operational capability of notification, evacuation and response; 4) reauthorization and continued implementation of Public Law 109-424 (the Tsunami Warning and Education Act) that requires improvement in tsunami detection, forecasting, warning, notification, outreach, and mitigation in tsunami jurisdictions; 5) communities being designated by NOAA/National Weather Service (with state assistance) as a TsunamiReady™ Community; and 6) number of public education workshops and surveys completed in at-risk tsunami jurisdictions.

History

Policy Recommendation 16-1 was revised and adopted by unanimous voice vote of the WSSPC membership at the Annual Business Meeting May 6, 2016. Policy Recommendation 16-1 was first adopted as Policy Recommendations 01-1 and 01-2 by unanimous vote of the WSSPC members at the Annual Business Meeting October 24, 2001. PR 01-1 was revised and adopted as PR 04-1 by unanimous vote of the WSSPC membership at the Annual Business meeting September 30, 2004. PR 01-2 was re-adopted as PR 04-2 by unanimous vote of the WSSPC membership at the Annual

Business meeting September 30, 2004. The Assessment section was revised and Policy Recommendations 04-1 and 04-2 were re-adopted as PR 07-1 and PR 07-2 by unanimous vote of the WSSPC membership at the Annual Business Meeting October 3, 2007. PR 07-1 and PR 07-2 were revised and re-adopted as PR 10-1 and 10-2 by unanimous vote of the WSSPC membership at the Annual Business Meeting July 9, 2010. Policy Recommendations 10-1 and 10-2 were combined into one policy recommendation: PR 13-1, and adopted by voice vote of the WSSPC membership at the Annual Business Meeting May 3, 2013; Montana Emergency Management abstained from voting.

WESTERN STATES SEISMIC POLICY COUNCIL
DRAFT POLICY RECOMMENDATION 19-1

Rapid and Effective Tsunami Identification and Response

DRAFT Policy Recommendation 19-1

WSSPC recommends that each coastal state, province, and territory emergency management agency work with coastal jurisdictions to develop evacuation plans for both *near-source* and *distant-source tsunamis*, and supplement these emergency plans with a preparedness education campaign focusing on instructions to evacuate based on ground shaking, that ensures all populated coastal areas in the WSSPC coastal states, territories and provinces are guided by at least one type of system, appropriate to local conditions. Strong coordination should also occur between and among federal partners, such as the U.S. Geological Survey (USGS), National Oceanic and Atmospheric Administration (NOAA), and the Federal Emergency Management Agency (FEMA) and state/academic institutions developing earthquake early warning system (EEW) technologies, expanding upon the WSSPC Policy Recommendation on Earthquake Early Warning, to ensure appropriate community response to both earthquake and tsunami alerts.

Executive Summary

Coastal jurisdictions should develop emergency response plans ~~that which~~ incorporate both *near-source tsunamis*, where there may be only minutes to evacuate, and *distant-source tsunamis*, where there may be hours to evacuate. For near-source tsunamis, a robust education and preparedness campaign should focus on the importance of “natural” warnings, such as earthquake ground shaking felt at the coast as precursor to an incoming tsunami. For distant-source tsunamis, emergency response plans should use redundant alert and warning notification and communication systems (standardized across the nation) which, in addition to standard evacuation and re-entry protocols, could include evacuation instructions. The warning systems should include:

- Emergency Alert System (EAS) to television and radio broadcast participants;
- Automated telephone notification systems (e.g. reverse-911) and implementation of cell phone notification capabilities.
- Wireless Emergency Alerts (WEA) to the public on their cell phones via the Integrated Public Alert and Warning System (IPAWS).
- Social media;
- Phone trees;

Commented [MD1]: Need include a mention of EEW and how it fits/benefits the tsunami alerting and evacuation procedures/systems.

- NOAA weather radios;
- Satellite and cable television;
- Door to door notification;
- Coastal sirens; and,
- Notification via aircraft (e.g. Civil Air Patrol) on-board notification systems, for remote coastlines as available during emergencies.

These warning and notification systems should be tested on a consistent basis (e.g. annually) for confirmation of performance and improved efficiency during an event. WSSPC will work with its federal partners (USGS, NOAA, FEMA, etc.) and the National Tsunami Hazard Mitigation Program (NTHMP) to help maintain a coordinated, consistent and effective, top-to-bottom earthquake and tsunami warning system and public preparedness strategy.

Background

Tsunamis have caused considerable damage and over 440,000 casualties worldwide over the last 150 years. Recent events such as the 2004 Indian Ocean and 2011 Tōhoku tsunamis are a sobering reminder of the magnitude of the problem coastal communities will face. For example, the 2011 Tōhoku tsunami killed ~15,800 people, while the economic impact is estimated to be ~\$335 billion, making it the most expensive disaster in history. Most often, tsunamis are created by the rapid uplift of the sea floor offshore during subduction zone earthquakes, and by localized landslides triggered in response to the earthquake shaking. Tsunamis not only affect nearby coastlines within minutes following an earthquake, but can travel long distances and impact distant shorelines several hours after the event. As a result, a clear and immediate distinction must be made between educational outreach campaigns directed at near-source and distant-source tsunamis; effective public education and communication is paramount both preceding as well as following an event.

It is important to eliminate unnecessary coastal evacuations, which can be costly in terms of human risk and lost commerce. Ongoing education is crucial for informing coastal residents and visitors of the procedures to evacuate coastal areas. For example, for a near-source tsunami, upon feeling strong or prolonged ground shaking, residents and visitors should instinctively move rapidly to high ground or inland and not wait for official notices. In contrast, a distant earthquake and tsunami can be detected by a tsunami warning system, which can determine quickly if evacuation is necessary.

Distant-source Tsunamis

Distant tsunamis are caused by earthquakes far from the affected coast. The public will not necessarily feel the earthquake and there will generally be time for an official warning and evacuation to safe areas. Tsunami preparedness and response plans for a distant tsunami should account for all NOAA alert levels in order to help ensure appropriate evacuation of coastal areas. Evacuation strategies, both on-shore evacuation and offshore maritime evacuation, should also consider evaluation of tidal and/or weather-related conditions. The use of redundant warning systems would increase the immediacy and the coverage of the evacuation notification (see executive summary for a list of what warning systems should include).

Warning and notification systems should be tested on a consistent basis (e.g. annually) for confirmation of performance and improved efficiency during an actual event. Only with multiple systems can the best and most immediate coverage be obtained, thereby potentially minimizing the

number of injuries and loss of life from a distant tsunami. Education programs should emphasize that tsunami evacuees should only return to coastal areas in accordance with local plans and ~~guidance~~~~directions~~, which differ from cancellation of tsunami alerts by the Tsunami Warning Centers.

Near-source Tsunamis

A near-source tsunami will most likely be triggered by a major earthquake on a nearby subduction zone, such as the Cascadia subduction zone (CSZ) or Aleutian subduction zone. The earthquake would be characterized by several minutes of strong ground shaking and a tsunami would arrive at the shore within 10-30 minutes after the start of the earthquake. In the case of a near-source tsunami, the only effective warning system is the realization by the public that when strong or prolonged ground shaking is felt (in some cases when any shaking is felt), they must ~~be trained to instinctively~~ move rapidly away from the shoreline to reach high ground and safety. In the case of a near-source event, a Tsunami Warning Center may not be able to broadcast the message in time for the public to respond, and as such would mainly be providing a warning to other distant localities. For a near-source tsunami, continued education is crucial to inform coastal residents and visitors of procedures to evacuate coastal areas upon feeling strong or prolonged ground shaking and not wait for official notices. Evacuation drills in at-risk communities where residents practice evacuating to safe ground will help improve the speed and effectiveness of evacuation during an event.

Education and Outreach

There are a variety of ways to educate the public about tsunami hazards and what to do to reduce their risk. Education and outreach could include exercises, campaigns and signage etc. Placement of tsunami warning signs is an important aspect of educating the public about how to reach safety upon receipt of a warning. Signs are a proven education tool in recent tsunamis and should be implemented as determined appropriate by local authorities, with possible assistance from the NTHMP in order to maintain ~~coordination~~ ~~continuity~~ between coastal jurisdictions and states. Coastal jurisdictions should be encouraged to adopt standardized tsunami signs.

(See also: <http://www.dot.ca.gov/hq/traffops/engineering/control-devices/tsunami.htm>)

Regular and frequent testing of warning systems by conducting drills and outreach campaigns is essential to ~~refine~~ ~~identify~~ mitigation strategies for a more resilient and effective system. It is important to know that the system will work as intended should public safety officials ever need to

send an alert or warning to a large region of the United States. Only frequent ~~and~~ rigorous testing can provide an ~~accurate~~ ~~appropriate~~ diagnosis of the system's ~~expected~~ performance.

Communities are encouraged to ~~conduct~~ ~~run~~ notification and response exercises and public evacuation drills in order to ensure ~~that~~ the evacuation plans are appropriate and well understood by the coastal population. The state and federal NTHMP partners should offer assistance to these communities in developing and running these exercises and drills.

Earthquake Early Warning

A new public alerting system is being developed to provide advance notification of earthquake shaking once an earthquake begins; for more information see WSSPC Policy Recommendation on Earthquake Early Warning. This technology allows people to take protective action and secure critical infrastructure before damaging shaking arrives. WSSPC will work with its federal partners (USGS, NOAA, FEMA, etc.) and the NTHMP, including state/academic institutions, to help maintain a coordinated, consistent and effective, top-to-bottom earthquake and tsunami warning system and public preparedness strategy.

Internal Section:

Facilitation and Communication

1. Encourage representatives from state agencies to use Policy Recommendation 16-1 with their legislative delegations to develop rapid, multiple tsunami education and notification systems in their respective states, territories and provinces. In addition, education and evacuation planning as well as exercises and drills are the most critical components of overall tsunami risk reduction and, therefore, should be promoted along with tsunami notification systems.
2. Forward Policy Recommendation 16-1 to the National Oceanic and Atmospheric Administration (NOAA), United States Geological Survey, the Federal Emergency Management Agency, and other Federal and State organizations as appropriate, for their budget and technical support.
3. Work with the National Tsunami Hazard Mitigation Program to support development of guidance on various rapid identification and notification systems to help supplement on-going, essential coordinated tsunami and earthquake preparedness, awareness, and response efforts.

Assessment

The assessment of this policy can be measured by: 1) the adoption of tsunami and earthquake hazard policies by state, territorial and provincial, as well as local governments on warning dissemination and evacuation; 2) comprehensiveness of notification systems adopted by state, territorial, provincial and local jurisdictions; 3) regular tests of operational capability of notification, evacuation and response; 4) reauthorization and continued implementation of Public Law 109-424 (the Tsunami Warning and Education Act) that requires improvement in tsunami detection, forecasting, warning, notification, outreach, and mitigation in tsunami jurisdictions; 5) communities being designated by NOAA/National Weather Service (with state assistance) as a TsunamiReady™ Community; and 6) number of public education workshops and surveys completed in at-risk tsunami jurisdictions.

History

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WESTERN STATES SEISMIC POLICY COUNCIL
DRAFT POLICY RECOMMENDATION 19-3

Post-Earthquake Technical Clearinghouses

DRAFT Policy Recommendation 19-3

WSSPC recommends that each member state, province, and territory establish a plan for a post-earthquake technical clearinghouse to be activated if possible within 24 hours after each major earthquake within its jurisdiction. WSSPC also recommends that multijurisdictional agreements between and among WSSPC members and Federal agencies be established to enable development in place that would allow for the establishment of a single comprehensive technical clearinghouse in the event of a large earthquake, preferably driven by the states involved.

Executive Summary

Post-earthquake technical clearinghouses for earthquake and related hazards (tsunamis, landslides, etc.) have been an important component of emergency response, recovery, and mitigation following large earthquakes. A technical clearinghouse, either established in a physical location or web based ~~(virtual)~~, can serve to coordinate real-time and post-earthquake hazard investigations to provide timely hazards observations for use by local, state, and federal emergency managers, scientific communities, and the public. This information is then used to improve assessments of earthquake hazards, earthquake engineering, mitigation strategies, economic losses, and emergency response to damaging earthquakes. The clearinghouse also serves to integrate, manage, disseminate and archive information so that it is available to emergency management, policy, and earthquake science practitionersdecision makers.

Multijurisdictional cooperation is especially important in the event of a large earthquake that affects multiple states. ~~Previously established~~Pre-event Memoranda of Agreements (MOA) between and among WSSPC members and Federal agencies would allow for the establishment of a single comprehensive technical clearinghouse for such an event.

Background

Post-earthquake technical clearinghouses have been an important component of emergency response, recovery, and mitigation following large earthquakes. Seismologists deploy instruments that measure aftershocks and investigate the mechanics of earthquakes. Geologists and geotechnical engineers document ground failures, including fault displacements, fissures, landslides, rock falls, and liquefaction. Geodesists investigate ground deformation and related strain. Structural engineers evaluate the effects of the earthquake on various types of buildings, bridges, dams, utilities, and other structures. Social scientists study direct and indirect impacts to people and businesses. Scientists and engineers also collect inundation and damage information if a tsunami is generated. This information is then used to improve our assessments of earthquake hazards, earthquake engineering, mitigation strategies for nonstructural hazards, and emergency response to damaging earthquakes.

The data collected in the days immediately following a major earthquake can be critical during emergency response and recovery. Scientists and engineers can determine the likelihood that landslides will move (from rain or aftershocks), and can assess the susceptibility of structures to collapse. Some data are perishable and must be collected as soon as possible, before erosion or ~~bulldozers~~ recovery/rebuilding efforts eliminate the evidence ~~or~~ and before aftershocks die out.

Data collected through clearinghouses help us to be better prepared for future large earthquakes. In addition, data on strong ground motion and damage to buildings helps to calibrate loss-estimation models, such as the Federal Emergency Management Agency's (FEMA) HAZUS program, and can be an important component of a Governor's or the President's disaster declaration as well as provide useful information for response, recovery and hazard mitigation.

A technical clearinghouse, either physical or web based ~~(virtual)~~, can serve to coordinate post-earthquake investigations and to share resources and information among investigators. The clearinghouse also serves to integrate and disseminate information so that it is available to decision makers and the media.

Post-earthquake technical clearinghouses were successfully implemented following the Landers, California (1992); Northridge, California (1994); Nisqually, Washington (2001); Wells, Nevada (2008); and Napa, California (2014) earthquakes. Additionally, clearinghouses have been established for other major international earthquake events and have been archived at the Earthquake

[Engineering Research Institute \(http://www.eqclearinghouse.org/\)](http://www.eqclearinghouse.org/). A clearinghouse provides a [reliable](#) place for scientists and engineers to report on their findings each day. In some post-earthquake situations, a clearinghouse may serve as one of the chief mechanisms for relaying critical information from scientists and engineers investigating the earthquake to emergency managers.

Only ~~California and Utah, and Nevada~~ have developed plans for post-earthquake technical clearinghouses; California and Hawaii have created clearinghouses for real-time tsunami observation and post-event information collection. Few WSSPC members have the resources to fully staff and operate a clearinghouse. Opportunities exist for members to collaborate with one another and to coordinate with the U. S. Geological Survey (USGS), FEMA, Earthquake Engineering Research Institute (EERI), university researchers, and other groups. The National Earthquake Hazards Reduction Program (NEHRP) agencies (USGS, FEMA, National Institute for Standards and Technology, and National Science Foundation) developed *The Plan to Coordinate Post-Earthquake Investigations* in 2003 (~~USGS Circular 1242~~[Holzer et al., 2003](#)) that includes provisions for cooperating with states to establish post-earthquake technical clearinghouses. Under this plan, the NEHRP agencies can step in and take the lead if WSSPC members are not prepared to establish a clearinghouse. [A response and recovery plan developed for Utah \(Solomon, 2001\) may provide valuable information for other WSSPC states as they plan to integrate response and recovery with technical clearinghouse plans.](#) [An 'After action report' for the 2014 South Napa earthquake describes successes, lessons and recommendations from the California Earthquake Clearinghouse South Napa Earthquake Activation and serves as a valuable resource for WSSPC member states considering clearinghouse plans](#) (http://www.eqclearinghouse.org/2014-08-24-south-napa/files/2015/04/California_Earthquake_Clearinghouse_After_Action_Report-South_Napa_Earthquake-2015.04.17.pdf).

Commented [r1]: I cannot verify Nevada's plan. Each plan should be referenced in the reference section. Can Utah and California people fill in a reference for their plan. I recommend deleting Nevada, because we do not seem to have a easily accessible plan.

Commented [r2]: Steve Bowman notes that this document is a bit old and is in need of updating.

State and federal partners through the National Tsunami Hazard Mitigation Program have also developed post-tsunami protocols to guide post-tsunami science surveys (Wilson et al., 2015). These include pre- and post-field coordination recommendations which could also be applied to earthquake clearinghouses.

Multijurisdictional cooperation is especially important in the event of a large earthquake that affects multiple WSSPC members. ~~Previously established~~ Pre-event Memoranda of Agreements (MOA)

between and among WSSPC members and Federal agencies would allow for the establishment of a single comprehensive technical clearinghouse for such an event.

Reference

Holzer, T.L. and others, 2003, The plan to coordinate NEHRP post-earthquake investigations, Circular 1242, U.S. Department of the Interior, U.S. Geological Survey, Menlo Park, CA.

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Solomon, B.J., 2001, Utah Geological Survey earthquake-response plan and investigation field guide, Utah Department of Natural Resources, Utah Geological Survey Open-File Report 384.

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Wilson, R., Wood, N., Kong, L., Shulters, M., Richards, K., Dunbar, P., Tamura, G., and Young, E., 2016, A protocol for coordinating post-tsunami field reconnaissance efforts in the USA: Natural Hazards 75, p. 2153-2165; doi 10.1007/s11069-014-1418-7, 2015.

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Internal Section:

Facilitation and Communication

WSSPC recommends that its members establish a plan for a post-earthquake technical clearinghouse (physical or virtual as circumstances dictate) to be activated if possible within 24 hours after a major earthquake within its jurisdiction. WSSPC further encourages its members to form MOAs to facilitate the operation of clearinghouses, including sending employees from one jurisdiction to another to assist in collection of field data and in staffing a clearinghouse. WSSPC will construct a roster of experts who are willing to participate and disseminate information on clearinghouses that are established after an earthquake.

The NEHRP agencies' post-earthquake investigations plan specifies coordination with states to operate clearinghouses. WSSPC members should develop MOAs with NEHRP agencies to facilitate clearinghouse staffing and operations, and to specify whether a member wishes the NEHRP agencies to take responsibility for establishing a clearinghouse. These MOAs could include triggers, such as USGS or EERI deployment only if moment magnitude or earthquake intensity exceeds certain values for an urban epicenter or for a rural earthquake. WSSPC members may wish to activate clearinghouses at lower triggers for purposes of training or when sufficient resources exist to respond to the earthquake. Any MOA should recognize the considerable role and interest of FEMA in post-earthquake technical clearinghouses.

To achieve the above goals, WSSPC will establish a Post-Earthquake Technical Clearinghouse Committee (PTCC) to update the WSSPC model post-earthquake technical clearinghouse plan, create a model virtual clearinghouse template for use by WSSPC members, and develop model MOAs for use among members and between members and NEHRP agencies for post-earthquake technical clearinghouse operation and assistance. PTCC should conduct workshops and use other means to help members establish individual post-earthquake technical clearinghouse plans and implement clearinghouse MOAs.

WSSPC recommends that the USGS provide mirrored or parallel access to its post-earthquake website. One ultra-high volume portal should be available to the general public. A second, password-protected site should be maintained. State emergency management agencies, state geological surveys, state seismic safety commissions and councils, earthquake consortia, university seismological laboratories, and engineering-research centers should have access to the password-

Commented [r3]: Have these goals been achieved? Does WSSPC have a PTCC? Has WSSPC developed a template? While these are all good ideas, if none of these items have been done, then suggest deleting this paragraph.

Commented [r4R3]: Steve Bowman also suggests deleting as these goals have not been achieved.

protected site. Protocols for coordination with outside field scientists and engineers should be developed.

WSSPC recommends that emergency response and recovery plans, [such as the one developed by the Utah Geological Survey](#), incorporate and refer to post-earthquake technical clearinghouse plans. There should be links between the technical clearinghouse and emergency management operations. Because the clearinghouse can provide vital information during emergency response and recovery, FEMA should work with emergency managers to assure that appropriate federal funding and FEMA staff support are provided for the clearinghouse, whenever a clearinghouse is established following an earthquake.

Once members have established post-earthquake technical clearinghouse plans, WSSPC recommends that they hold regular training sessions and exercises to ensure readiness and compatibility with other emergency response functions. WSSPC also recommends that those responsible for mobilizing post-earthquake clearinghouses participate in large-scale earthquake exercises sponsored by states or local jurisdictions to test procedures that link research activities with emergency operations centers.

Funding will be required to pay travel to update WSSPC's model post-earthquake technical clearinghouse plan, create a virtual clearinghouse template, prepare model MOAs, and hold workshops. WSSPC and the PTCC should take the lead in developing a proposal to acquire the necessary funding if work cannot be performed at WSSPC annual meetings and by electronic means.

Assessment

Measures of the success of this Policy Recommendation will be (1) the number of additional WSSPC members that develop post-earthquake technical clearinghouse plans, and (2) the number of MOAs established to facilitate clearinghouse operation, pending expansion of [Emergency Management Assistance Compacts \(EMAC\)](#) for clearinghouses. A periodic assessment should be made to determine the number of functioning clearinghouse plans and supporting MOAs. Regular exercising of plans and training should occur. WSSPC will periodically update its model post-earthquake technical clearinghouse plan, and will post this and individual member plans on the WSSPC website.

History

Policy Recommendation 16-3 was adopted by unanimous vote of the WSSPC membership at the Annual Business Meeting May 6, 2016. Policy Recommendation 16-3 was first adopted as Policy Recommendation 01-3 by unanimous vote of the WSSPC membership at the Annual Business meeting October 24, 2001. PR 01-3 was revised and re-adopted as PR 04-3 by unanimous vote of the WSSPC membership at the Annual Business meeting September 30, 2004. The Background section was revised and PR 04-3 was re-adopted as PR 07-3 by unanimous vote of the WSSPC membership at the Annual Business Meeting October 3, 2007. PR 07-3 was re-adopted as PR 10-3 by a majority voice vote of the WSSPC membership with Hawaii voting against the policy recommendation at the Annual Business Meeting July 9, 2010. An Executive Summary was added to Policy Recommendation 10-3 and the policy was re-adopted as Policy Recommendation 13-3 by unanimous vote of the WSSPC membership at the Annual Business Meeting May 3, 2013.

WESTERN STATES SEISMIC POLICY COUNCIL
DRAFT POLICY RECOMMENDATION 19-4

Seismic Provisions in the 2018 International Building Codes

DRAFT Policy Recommendation 19-4

WSSPC endorses the prompt adoption and enforcement of the seismic provisions of the 2018 *International Existing Building Code*, the 2018 *International Building Code*, and the 2018 *International Residential Code* (and the 2018 National Building Code of Canada, where applicable) as minimum standards by states, territories, provinces and/or local jurisdictions. Further, WSSPC discourages modifications or amendments that would weaken the Code or its required inspections. WSSPC also encourages Code organizations to continue the development and refinement of building codes and consensus standards to remain substantially equivalent to the National Earthquake Hazards Reduction Program (NEHRP) Recommended Seismic Provisions for New Buildings and Other Structures (FEMA 1050) and encourages authorities having jurisdictions to focus on seismic education, purpose, incentives, lifelines and the business/industry and residential sectors.

Executive Summary

The *International Existing Building Code*, the *International Building Code* and the *International Residential Code* identify the minimum standards for the protection of life, limb and property. These consensus documents, which are supported by every major construction organization in the United States, provide the means for local jurisdictions, states and territories to protect their citizens, safeguard the economic vitality of their communities and provide for a sustainable environment. Amending seismic provisions out of the Code that are essential to the structural integrity of buildings compromises the effectiveness of the document and the safety of the community. Coinciding with Code adoptions is the need for appropriate training so the seismic-resistance provisions may be consistently enforced and maintained. It is only through the adoption of the unamended code or applying more stringent provisions to the International Code that a community has a legitimate expectation to be resilient in the event of earthquakes for its citizens, businesses and homes.

Background

Some states and many jurisdictions have not adopted the International Building Code, potentially leaving their citizens at continued risk. States should be encouraged to remove obstacles that hinder adoption, and to motivate local jurisdictions to diligently update existing codes. It is recognized that some jurisdictions that have adopted the International Codes have drastically modified or omitted the seismic provisions of the Codes. This action not only jeopardizes their structures by not providing for earthquake resistant structures, but provides a false sense of security to their communities. Once adopted, the Codes must be uniformly and consistently enforced if they are to be effective. This will necessitate the training of building inspectors to **established and** required standards for certification. Partnerships with the homeowners, residents, builders, insurers, owners, elected officials, scientific groups, and others with focused concerns on lifelines and public safety will be required to overcome any lack of commitment to meet the desired outcomes.

Internal Section:

Facilitation and Communication

Incentive measures will need to be developed that involve federal, state, territorial, provincial and local funding to “encourage” adoption of building codes that recognize earthquake hazards. Education of the public on the need and purpose for codes must work towards a mindset to mitigate damage from earthquakes before they happen. Local building code inspectors will require training and certification in the new codes.

Assessment

A measure of the acceptance of this policy recommendation is the number of states, provinces, territories and local jurisdictions that have adopted seismic provisions that meet or exceed the seismic provisions in the 2018 editions of the International Existing Building Code, the International Building Code, and the International Residential Code.

History

Policy Recommendation 16-4 was adopted by unanimous vote of the WSSPC membership at the Annual Business Meeting May 6, 2016. Policy Recommendation 16-4 was first adopted as Policy Recommendation 01-4. PR 01-4 was revised and re-designed as PR 04-4 and re-adopted by unanimous vote of the WSSPC membership at the Annual Business Meeting September 30, 2004. The Policy Recommendation statement was revised and PR 04-4 was re-adopted as PR 07-4 by unanimous vote of the WSSPC membership at the Annual Business Meeting October 3, 2007. PR 07-4 was revised and re-adopted as PR 10-4 by unanimous voice vote of the WSSPC membership at the Annual Business Meeting July 9, 2010. Policy Recommendation 10-4 was updated and re-adopted as Policy Recommendation 13-4 by a unanimous vote of the WSSPC membership at the Annual Business Meeting May 3, 2013.

**WESTERN STATES SEISMIC POLICY COUNCIL
DRAFT POLICY RECOMMENDATION 19-10**

**Joint Policy for the Evaluation and Seismic Remediation
of School Buildings**

DRAFT Policy Recommendation 19-10

The Western States Seismic Policy Council, with the support of the Earthquake Engineering Research Institute, recommends that each member state, province and territory establish as a goal that all school buildings be seismically resilient. Seismically vulnerable school buildings should be retrofitted or replaced by new earthquake resilient school buildings as an important part of a nationwide school earthquake resiliency goal.

Commented [DM(1): Why is only EERI mentioned and not any other consortia/organizations?

Executive Summary

Our elementary and secondary school buildings contain the future of our country. Parents send their children to school every day with the belief that their children will be safe. However, many of the schools located in WSSPC's states, provinces and territories are older structures vulnerable to severe damage and even collapse in future earthquakes. This policy recommendation provides needed support for efforts to evaluate and remediate these hazards.

Background

The 1933 Long Beach, California M6.4 earthquake is well known for collapsing or severely damaging thousands of unreinforced masonry (URM) buildings, including over 230 school buildings. Fortunately, schools were not in session at the time of the earthquake. Had that been the case, thousands of children would have been injured or killed.

The outcry from this poor performance of school buildings directly led to the State of California passing the Field Act which mandated earthquake resistant construction requirements for future school buildings, and the Garrison Act which established the requirements for the seismic safety of existing school buildings.

Schools are increasingly used to shelter students in place during ~~natural~~ hazards, including floods, ~~and~~ hurricanes, ~~earthquakes well as earthquakes,~~ and other hazardous events. In addition, schools are often used as ~~emergency shelters~~ ~~refuge zones~~ for citizens within their communities. Thus school building resilience is a key to protecting the local population under diverse hazardous conditions.

There ~~have been~~ notable ~~efforts by~~ ~~some~~ ~~WSSPC~~ ~~member~~ ~~states~~ ~~and~~ ~~provinces,~~ including Idaho, ~~Washington,~~ Oregon, California, Alaska, ~~and~~ Utah ~~and~~ British Columbia, to identify at-risk school buildings and to begin the process of addressing the risk they present.

Internal Section:

Facilitation and Communication

This policy recommendation will be sent to WSSPC representatives in the member states, who will then be able to distribute it to policy and decision makers, elected officials, school districts, parent/teacher associations, teacher unions, school administrators, building departments and elected leaders.

Assessment

A measure of the acceptance and implementation of this policy recommendation is the number of states, provinces and territories as well as individual school districts that adopt a seismic retrofit evaluation and remediation plan for their school buildings.

History

Policy Recommendation 16-10 was adopted by unanimous vote of the WSSPC membership at the Annual Business Meeting May 6, 2016. Policy Recommendation 16-10 was first adopted as Policy Recommendation 13-10 which was adopted by unanimous vote of the WSSPC membership at the Annual Business Meeting May 3, 2013.

WESTERN STATES SEISMIC POLICY COUNCIL
DRAFT Policy Recommendation 19-11

Reliability of Lifeline Services

DRAFT Policy Recommendation 19-11

WSSPC encourages utility regulatory bodies and utility service providers to implement best practices and seismic design in the construction and maintenance of their infrastructure in order to assure satisfactory performance in future earthquakes.

Executive Summary

Lifelines form a critical segment of the nation's infrastructure. Disruption can significantly affect the resiliency of a community. Use of existing guidelines as well as development of new guidelines can serve as an effective method of identifying and reducing risk.

Background

Lifeline infrastructure including, but not limited to, electricity, gas, telecommunications, water, and waste water are critical to a community's wellbeing. Some lifelines are still being constructed using old methods and technologies that are known to be inadequate by seismic experts.

Much of the nation's existing infrastructure has not been designed to perform satisfactorily under extreme conditions produced by major earthquakes, including severe ground shaking, earthquake-induced tsunamis, fault rupture, large landslides and liquefaction. Lifelines should be designed to provide reliable performance under expected earthquake loading conditions to ensure that the region can withstand future earthquake damage without crippling consequences. Critical infrastructure requires system and component vulnerability studies in order to understand potential damages and operational consequences. Mitigation of infrastructure with a high likelihood of failure with extreme loss-of-service consequences should be addressed. This policy recommendation is a reinvigorated effort to follow through on resolving infrastructure liabilities originally identified in FEMA 271 "Plan for Developing and Adopting Seismic Design Guidelines and Standards for Lifelines" (1995).

Internal Section:

Facilitation and Communication

Implementation

WSSPC recommends that member states, provinces and territories encourage both public and private lifeline operators in their areas to utilize available seismic design and performance guidelines in the construction and operation of their facilities.

A consideration in the continued evolution and development of guidelines should be their potential use in ongoing maintenance, rehabilitation and risk mitigation to existing lifelines to decrease infrastructure seismic vulnerability. Implementation can be accomplished by working with state agencies and regulators, such as public works, energy and water resource departments. Additional stakeholders include public and private utility commissions and drinking water programs.

Assessment

The effectiveness of this policy can be determined by the implementation of industry recognized guidelines by regulators and utilities.

History

Policy Recommendation 16-11 was adopted by unanimous vote of the WSSPC membership at the Annual Business Meeting May 6, 2016. Policy Recommendation 16-11 was first adopted as Policy Recommendation 13-11 which was approved unanimously by vote of the WSSPC membership at the Annual Business Meeting May 3, 2013.

WESTERN STATES SEISMIC POLICY COUNCIL
DRAFT Policy Recommendation 19-12

Earthquake Actuated Automatic Gas Shutoff Devices

DRAFT Policy Recommendation 19-12

WSSPC recommends that each state, province or territory that is considering implementing requirements for installing earthquake-actuated automatic gas shutoff devices in schools, industrial, commercial and/or residential applications assure that shutoff valves meet the provisions of the most currently available revision of ANSI/ASCE/SEI Standard 25 (Earthquake-Actuated Automatic Gas Shutoff Devices) and be installed in conformance with the manufacturer's installation instructions. The cost versus benefit of turning gas on after an event or the analysis of false activation is left to the authority having jurisdiction. The policy only advocates that if a decision is made to proceed with earthquake actuated automatic gas shutoff devices that the current standard be utilized.

Commented [r1]: Should be added to reference list. My online search indicates that multiple book chapters are related to Standard 25. If anyone knows the proper book reference, please add it to the reference list. As it is now, readers will have difficulty finding this document.

Executive Summary

Natural gas piping and appliances may be damaged during earthquakes, causing gas leaks. These leaks, if ignited, can result in fires and explosions that may result in significant damage to structures and/or jeopardize personal safety ~~as well as resulting in significant damage to structures.~~

Fires and explosions may be more destructive to buildings than the earthquake itself. The ability to manually shut off a gas valve after an earthquake may be difficult or impossible due to debris or ground movement. Risk of gas-related damage is further exacerbated if structures are unoccupied, thus placing the burden of shutting off gas service upon utilities or government agencies. Several types of devices or systems are available to automatically shut off gas flow within structures if leakage occurs. These include excess flow valves and methane detectors connected to solenoid valves. Hybrid detection systems are available that can combine vibration sensing, excess gas flow and the presence of methane to cause valve closure. Earthquake actuated

automated gas shutoff valves rely on ground motion to initiate closure. The reliability of automatic gas shutoff valves has been greatly improved with the adoption of ANSI/ASCE/SEI Standard 25.

Background

The number of post-earthquake fire ignitions related to natural gas can be expected to be between 20% and 50% of the total post-earthquake fire ignitions. (California Seismic Safety Commission, 2002).

While the installation of excess flow valves is currently mandated by Federal Code on new or replacement natural gas service lines serving single family residences, these valves alone may not detect leakage within structures caused by damaged or overturned appliances or equipment. The value of these may be enhanced by the addition of an automatic gas shutoff valve. Earthquake-activated automatic gas shutoff devices are relatively inexpensive and a proven method to prevent the loss of gas, resultant fires, and ~~possible-potential~~ community conflagrations ~~that might result from an errant spark~~. However, these valves may close in situations where no gas leakage has occurred, leading to increased gas system restoration time since operators must visit each customer where gas service has been interrupted.

Reference

[ANSI/ASCE/SEI 25-2016, 2016, Earthquake-Actuated Automatic Gas Shutoff Devices, https://webstore.ansi.org/standards/ASCE/ANSIASCESEI252016](https://webstore.ansi.org/standards/ASCE/ANSIASCESEI252016)

California Seismic Safety Commission, 2002, *Improving Natural Gas Safety in Earthquakes*

Commented [r2]: Add appropriate reference for ANSI/ASCE/SEI Standard 25

Internal Section:

Facilitation and Communication

- Encourage communication with various jurisdictions that currently mandate the use of earthquake automated gas shutoff ~~devices~~ ~~devises~~ to ascertain the value of their programs.
- Commence an ongoing ~~evaluation~~ ~~education~~ program demonstrating [the benefits of installing both the pros and cons of](#) automatic gas shutoff valves ~~installation~~.
- Target utility companies, homeowners, and policy makers.

Assessment

The success of the policy may be measured by voluntary use of the ANSI/ASCE/SEI Standard 25 in selecting qualified Earthquake-Actuated Automatic Gas Shutoff Devices automatic shutoff valves as well as in meeting mandatory requirements established in states, provinces, territories and local jurisdictions.

History

Policy Recommendation 16-12 was adopted by unanimous vote of the WSSPC membership at the Annual Business Meeting May 6, 2016. Policy Recommendation 16-12 was first adopted as Policy Recommendation 13-12 which was adopted by unanimous vote of the WSSPC membership at the Annual Business Meeting May 3, 2013.