# [Service Date October 7, 2005] BEFORE THE WASHINGTON STATE UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND	)	DOCKET NO. PG-041624
TRANSPORTATION COMMISSION,	)	
	)	ORDER NO. 07
Complainant,	)	
	)	
V.	)	ORDER APPROVING
	)	SETTLEMENT AGREEMENT
PUGET SOUND ENERGY, INC.,	)	
	)	
Respondent.	)	
	)	
	)	

- **Synopsis:** The Commission approves the settlement agreement filed by the parties to this proceeding requiring PSE to pay a penalty of \$90,000; to conduct an assessment of its system to determine whether further cathodic protection or system improvements are necessary; and to change its Operating Manual and field practices for detection of cathodic protection failure.
- 2 NATURE OF PROCEEDING. Docket No. PG-014624 is a complaint proceeding initiated by the Washington Utilities and Transportation Commission (Commission) against Puget Sound Energy, Inc. (PSE or the company) and an emergency adjudicative proceeding to determine whether to order emergency relief. The complaint arises out of a natural gas explosion on September 2, 2004, at the house located at 16645 SE 26<sup>th</sup> Place, Bellevue, Washington, resulting in the death of Mrs. Frances Schmitz.
- APPEARANCES. James F. Williams, Perkins Coie LLP, Bellevue, Washington, represents PSE. Cheryl A. Zakrzewski, Assistant City Attorney, Bellevue, Washington, represents the City of Bellevue. Donald T. Trotter, Assistant Attorney General, Olympia, Washington, represents Commission Staff.

- 4 BACKGROUND. This proceeding arises out of a natural gas explosion that occurred in the city of Bellevue's Spiritridge neighborhood, at the residence of Mrs. Frances Schmitz on September 2, 2004. The explosion resulted in Mrs. Schmitz' death. The Commission immediately initiated an Emergency Adjudication to investigate the cause of the explosion, which was alleged to be incorrect wiring in the VASA Park Rectifier.<sup>1</sup> The rectifier provided cathodic protection against corrosion to the natural gas line serving Mrs. Schmitz' house.
- <sup>5</sup> The Complaint initiating the Emergency Adjudication alleged that a hole in Mrs. Schmitz' natural gas line to her house allowed natural gas to leak out of the service line into the house, and that the leak in the service line to her house was caused by corrosion. The Complaint further alleged that, at the time of the explosion, the Vasa Park rectifier was incorrectly wired so as to promote the corrosion of steel natural gas service lines in the Spiritridge neighborhood in Bellevue in violation of WAC 480-193-010 and provisions of Title 49 CFR, Parts 191, 192, 193, and 194, incorporated by reference in Commission rules.<sup>2</sup>
- 6 PSE corrected the wiring in the Vasa Park Rectifier on September 3, 2004. In addition, PSE communicated with Staff, the city of Bellevue and local residents about the progress of the investigation. PSE replaced all coated steel pipe<sup>3</sup> affected by the Vasa Park rectifier with new polyethylene plastic pipe. In conjunction with Commission Staff, the company also participated in a comprehensive examination of the causes of the explosion.

<sup>&</sup>lt;sup>1</sup> In the Spiritridge neighborhood, and elsewhere on its system, PSE relies on an electric current to provide cathodic protection of its coated steel service and distribution pipe. Cathodic protection is a method of protecting metal pipe by preventing the material in the pipe from flowing away from the pipe, i.e. from corroding. The source of the electric current in the Spiritridge neighborhood was the Vasa Park rectifier.

<sup>&</sup>lt;sup>2</sup> See Complaint, September 13, 2004, ¶¶ 10, 14, 15, and 19.

<sup>&</sup>lt;sup>3</sup> PSE's distribution system contains both "coated" and "bare" steel pipe (as well as plastic pipe). "Coated" pipe is provided with a substance that helps prevent corrosion. In the Spiritridge neighborhood, the service pipes were of the "coated" variety.

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- Both Staff and PSE filed testimony in this proceeding addressing the investigation and the cause of the explosion. All of the prefiled testimony and exhibits were admitted into evidence during the settlement hearing on September 28, 2005. This evidence demonstrated that the mis-wired Vasa Park rectifier had no direct causal relationship to the explosion at Mrs. Schmitz' house. Staff's testimony concluded that a penalty of \$125,000 was appropriate in light of PSE's failure to meet the existing regulatory standard for cathodic protection during the period the Vasa Park rectifier was cross-wired. PSE's testimony
- during the period the Vasa Park rectifier was cross-wired. PSE's testimony asserted that the explosion was due to a tragic and unique confluence of events not the fault of PSE and that no monetary penalty was warranted because the mis-wiring in the Vasa Park rectifier was repaired within the 90-day period allowed under Commission rules.<sup>4</sup>
- SETTLEMENT AGREEMENT. On September 22, 2005 the parties filed a Revised Settlement Agreement and Revised Narrative Supporting Settlement Agreement.<sup>5</sup> The chief provisions of the revised agreement<sup>6</sup> are as follows:
  - PSE did not meet the standard for cathodic protection contained in federal rules during the limited time the Vasa Park rectifier was cross-wired, but remediated the cross-wiring within 90 days as required under applicable regulations.<sup>7</sup>

<sup>&</sup>lt;sup>4</sup> WAC 480-93-110 provides that an operator "must complete remedial action within ninety days to correct any cathodic protection deficiencies known and indicted by any test, survey or inspection."

<sup>&</sup>lt;sup>5</sup> The parties filed a Settlement Agreement and Narrative Supporting Settlement Agreement on August 25, 2005. The primary difference between the initial agreement and the one filed on September 22 is that under the initial agreement PSE would have paid no penalty but would have reimbursed the Commission and the city of Bellevue for the costs of investigation amounting to approximately \$100,000. The revised agreement calls for PSE to pay a penalty in the amount of \$90,000 but does not require reimbursement for costs. The revised agreement is otherwise substantially the same as the initial agreement.

<sup>&</sup>lt;sup>6</sup> This recitation of the provisions of the agreement is not intended to replace the actual terms of the agreement which govern the settlement.

<sup>&</sup>lt;sup>7</sup> Settlement Agreement, ¶ 26.

- PSE will pay a penalty of \$90,000, reflecting several mitigating factors, including its quick correction of the cross-wiring; the fact that the cause of the cross-wiring is unknown; the conclusion of the parties' experts about the effect of the cross-wiring; PSE's cooperation in the investigation and compliance with the Commission's Order No 1.<sup>8</sup>
- The experts who investigated the explosion concluded that: the leak on the service line into Mrs. Schmitz' residence was the result of severe external corrosion at the site of a "coating holiday"<sup>9</sup> on the pipeline, allowing gas to migrate into her house; several factors may have contributed to the corrosion; and the cross-wired Vasa Park rectifier had "little or no bearing" on the gas leak and explosion that occurred on September 2, 2004.<sup>10</sup>
- PSE will gather data for service lines, similar to the one at the Schmitz' residence, that had been installed for five years or more prior to the installation of cathodic protection, to determine whether further remedial actions need to be taken. PSE will work with Commission Staff, report to the Commission on progress and maintain a program of system-wide leak surveys. PSE estimates that this assessment will cost \$250,000 or more and is expected to be completed by September 2006.<sup>11</sup>
- PSE has changed its Operations Manual and practices for detecting failures of cathodic protection.<sup>12</sup>

<sup>&</sup>lt;sup>8</sup> Id; see also Order No. 01, September 17, 2005.

<sup>&</sup>lt;sup>9</sup> Steel service lines used for natural gas distribution are often coated with a substance that will prevent or inhibit corrosion. When there is a gap in the coating, it is called a "coating holiday." Such gaps are sometimes caused by inadvertent nicks on the pipe during construction or excavation.

<sup>&</sup>lt;sup>10</sup> Settlement Agreement, ¶ 6.

<sup>&</sup>lt;sup>11</sup> Id.,¶¶ 14-19; 29.

<sup>&</sup>lt;sup>12</sup> Id. ¶¶ 20-21.

- PSE will conduct one more leak survey in the Spiritridge neighborhood in 2006 for all remaining steel pipe served by the Vasa Park rectifier, and after that will perform future leak surveys there in accordance with protocols contained in the agreement.<sup>13</sup>
- 9 HEARING. The Commission convened a hearing to review the settlement on September 28, 2005. PSE presented the testimony of two witnesses: Duane Henderson, the company's Director of Safety and Operations Services, and Steve Secrist, Assistant General Counsel. Commission Staff presented the testimony of Alan Rathbun, the Commission's Pipeline Safety Director. The witnesses described the system-wide assessment the company would undertake under the settlement agreement, testifying that it would affect approximately 70-100,000<sup>14</sup> service lines of a vintage similar to the service line that provided natural gas to Mrs. Schmitz' residence. The company witnesses affirmed PSE's commitment to work with Staff in conducting the risk assessment and to undertake a mitigation plan that may include replacing pipe on certain service lines and adjoining mains, and correcting other service deficiencies.
- 10 Mr. Rathbun indicated that such an assessment was not required under federal or state rules and was on the "cutting edge" nationally in providing greater assurance of pipeline safety. He also stated that the assessment would serve the public interest because it would improve the safe operation of the company's distribution system and promote the safety of PSE's natural gas customers. In addition, he stated that it was possible this type of risk assessment and mitigation would be extended to other companies.
- **Discussion and decision.** We find that the revised settlement agreement should be approved. Notwithstanding the tragic loss of life in this incident, the preponderance of evidence does not establish a causal connection between the acknowledged violation in this complaint (the mis-wired rectifier) and the

<sup>&</sup>lt;sup>13</sup> Id., ¶¶ 23-24.

<sup>&</sup>lt;sup>14</sup> System-wide, PSE has in place approximately 680,000 service lines.

reasonable and serves the public interest. The agreed penalty appropriately reflects the temporary deficiency in cathodic protection to the Spiritridge area caused by the cross-wiring of the Vasa Park rectifier; the company's quick action to remediate the deficiency; and, its cooperation in investigating the incident and communicating with customers and the Commission. The terms of the settlement requiring a comprehensive risk assessment of service lines of the same vintage as Mrs. Schmitz' service line, and a mitigation plan, should reduce risks to PSE's customers and increase public safety.

# ORDER

12 THE COMMISSION ORDERS That the revised settlement agreement, attached to this Order and incorporated by reference, is approved.

Dated at Olympia, Washington, and effective this 6th day of October, 2005.

# WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

MARK H. SIDRAN, Chairman

PATRICK J. OSHIE, Commissioner

PHILIP B. JONES, Commissioner

NOTICE TO PARTIES: This is a final order of the Commission. In addition to judicial review, administrative relief may be available through a petition for reconsideration, filed within 10 days of the service of this order pursuant to RCW 34.05.470 and WAC 480-07-850, or a petition for rehearing pursuant to RCW 80.04.200 or RCW 81.04.200 and WAC 480-07-870.

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# BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Complainant,

v.

PUGET SOUND ENERGY, INC.,

Respondent.

DOCKET NO. PG-041624

REVISED SETTLEMENT AGREEMENT

## I. NATURE OF THE AGREEMENT

- This Revised Settlement Agreement ("Agreement") is entered into between the Staff of the Washington Utilities and Transportation Commission, Complainant ("Staff"), Respondent Puget Sound Energy, Inc. ("PSE"), and intervenor City of Bellevue, for the purpose of resolving all issues raised in the Complaint in these dockets. The Parties withdraw the previously filed Settlement Agreement and Narrative Supporting Settlement, each dated August 25, 2005.
- The Agreement is expressly subject to approval by the Washington Utilities and
   Transportation Commission ("Commission"), and it is not effective before such approval.

#### **II. EFFECTIVE DATE**

The Agreement is subject to approval by the Commission. The Agreement has no effect until it is approved by the Commission. The effective date of the Agreement is the date of the Commission's order approving the Agreement.

#### III. PARTIES

4 The parties to this Agreement are Staff, PSE, and the City of Bellevue (collectively, "Parties").

### IV. BACKGROUND

- <sup>5</sup> PSE is a public service company subject to Commission regulation under Title 80 RCW.
  As pertinent to this Agreement, PSE operates as a "gas company" as that term is defined in RCW 80.04.010. PSE owns and operates a natural gas distribution system in Western Washington. PSE serves residential, commercial and industrial customers with natural gas, under tariffs subject to Commission regulation. PSE is subject to Commission safety rules applicable to natural gas pipelines. *E.g.*, RCW 80.28.210.
- 6 Docket No. PG-041624 arose as a result of a fatal explosion that occurred in Bellevue, Washington at the residence of a PSE natural gas service customer, Mrs. Frances Schmitz. Of initial particular interest was the fact that the service line at Mrs. Schmitz's home received cathodic protection from a rectifier that PSE discovered was cross-wired the day after the explosion occurred. The Commission issued a Complaint on September 13, 2004 and promptly conducted an emergency adjudicative proceeding. As a result of the emergency adjudicative proceeding, the Commission approved an action plan

developed and agreed to by Commission Staff and PSE. That action plan is set forth in Order No. 1 in this docket, issued September 17, 2004. Thereafter, an exhaustive investigation was undertaken by WUTC Staff, PSE, and the City of Bellevue. Ultimately, all experts retained by the Parties concluded that the explosion was the result of longstanding corrosion and that several factors may have contributed to this corrosion and that the cross-wired rectifier had little or no bearing on the leak or the subsequent explosion that tragically took the life of Mrs. Schmitz.

- Among other things, the Complaint alleged that PSE violated RCW 80.28.210 and 49
   C.F.R. § 192.463(a), which the Commission has adopted by reference in *e.g.*, WAC 480-93-010.
- 8 Prehearing conferences in these dockets were held on October 21, 2004, March 15, 2005 and June 6, 2005. The only parties to these dockets are PSE, the Commission Staff and intervenor City of Bellevue.
- 9 Since the Commission issued the Complaint, investigation of this matter has proceeded. Staff has filed its direct testimony and PSE has filed its direct testimony. The City of Bellevue elected not to file direct testimony. According to the Commission's Case Schedule for this docket, August 22 and 23, 2005, were dates for the Parties to hold a settlement conference, to give the Parties an opportunity to discuss ways to resolve the remaining issues presented in these dockets, without a hearing.

10 The Parties share the goal that PSE's pipeline facilities be operated in compliance with Commission laws and rules related to the safe operation of those facilities.

#### V. AGREEMENT

The Parties have reached agreement on the issues raised in the Complaint and by the Commissioners and present their agreement for adoption by the Commission. The Parties voluntarily enter this Agreement without hearing or adjudication of any issues of fact or law to resolve the matters in dispute between them in what each Party believes is an appropriate manner, in light of the circumstances and the risks associated with litigation.

#### **Results of the Investigations**

On the morning of September 2, 2004, PSE personnel were responding to a reported odor of gas in the Spiritridge subdivision of Bellevue, Washington. While a PSE employee was meeting with the concerned neighbors and investigating the source of the odor, an explosion and fire occurred at the home of Mrs. Frances Schmitz, 16645 S.E. 26<sup>th</sup> Place, Bellevue, Washington. After a lengthy, thorough, and collaborative investigation between PSE, Commission Staff, and the City of Bellevue, it was determined that the explosion occurred because gas from a leak on Mrs. Schmitz's service line migrated into the residence and was ignited. As experts for both Staff and PSE would testify, the leak on the service line occurred as a result of severe external corrosion. Cathodic protection systems were first required by regulations to wrapped-steel pipe (such as the service line to Mrs. Schmitz's residence) in 1971, eight years after Mrs. Schmitz's service line was installed. The predominant cathodic protection current source servicing Mrs. Schmitz's

house is the rectifier located near Vasa Park in Bellevue, Washington (also known as the Vasa Park Rectifier). On September 3, 2004, PSE discovered that the Vasa Park Rectifier was cross-wired. PSE promptly corrected the wiring on this same day. PSE and Staff agree, however, that corrosion causing the leak pre-existed the cross-wiring of the Vasa Park Rectifier, and the temporary reversal of the Vasa Park Rectifier did not cause the explosion.

#### **Alleged Violations Cured**

13 PSE has cured the specific violations alleged in the Complaint.

#### **Risk Assessment and Mitigation**

- PSE will gather pipeline data for the services of similar vintage construction as Mrs. Schmitz (i.e., no cathodic protection for more than 5 years). The data PSE will gather includes corrosion leak history (LMS), cathodic protection history, Exposed Pipe Condition Reports (EPCR) information, USGS soils information, and information from field personnel interviews with individuals who have had the opportunity to work on existing buried pipe, including Quality Assurance, Corrosion Control, and Construction.
- PSE Corrosion personnel will then evaluate the data gathered and described in the preceding paragraph in order to identify issues or trends of concern related to services. This effort will be undertaken in a collaborative effort in conjunction with Commission Staff. Commission Staff will be apprised of these results and PSE will communicate protocols undertaken at each stage. The City of Bellevue will also be provided this information to the extent it applies to services located within the City of Bellevue.

- a. Determination as to the significance of the information, as it relates to the possible condition of the subject services;
- Recommendation as to follow up activities such as additional testing, examination of the services, or replacement of the services;
- c. Appropriateness of additional measures such as DCVG and CIS assessments, and additional or more frequent leak surveys;
- d. For any problematic areas that may be identified in services that warrant replacement, PSE will then undertake an investigation of adjoining sections of the main to determine if a main replacement is warranted; and
- e. PSE estimates the program will cost at least \$250,000.00.
- 16 If the Commission Staff and PSE disagree as to the appropriate steps to be taken after an assessment is made, they commit to discuss the nature of the disagreement and to work cooperatively to resolve it. If the matter cannot be resolved in this way, either Staff or PSE (or both) may bring the matter to the Commission for decision in a petition to enforce this Agreement.
- 17 Once protocols are developed to assess which services need further evaluation, PSE and Staff will present a status report to the Commission regarding PSE's collection of data, analysis of the data, development of protocols, and further investigative steps.

19 Additionally, PSE will continue with its bare steel and cast iron replacement program, and PSE and the WUTC will communicate to the public regarding this replacement program. That program is being undertaken separately from this Agreement and is not affected by this Agreement.

#### **Changes to Policies Regarding Rectifiers**

- 20 PSE has complied with WUTC Staff Recommendation Number 2, set forth in Exhibit
   No. (AER-2) of Staff witness Alan E. Rathbun.
- PSE has complied with WUTC Staff Recommendation Number 3, set forth in Exhibit
   No. (AER-2) of Staff witness Alan E. Rathbun, though the training of PSE personnel is ongoing.
- PSE has complied with WUTC Staff Recommendation Number 4, set forth in Exhibit
   No. (AER-2) of Staff witness Alan E. Rathbun.

#### **Return to Normal Operation Procedures**

PSE is relieved from the requirements of Commission Order No. 1 in this docket, except that PSE will conduct at least one more leak survey in the area of the Spiritridge neighborhood (some time between June 20, 2006 and September 20, 2006) for all remaining steel pipe served by the Vasa Park Rectifier. PSE has communicated to its customers served by the Vasa Park Rectifier the results of its investigations into the explosion, and has complied in all other respects with the agreed action items under paragraph 16 of Order No. 1.

Following the leak survey referred to in the preceding paragraph, PSE's future leak surveys in the Spiritridge neighborhood will be evaluated consistent with the protocols developed herein. WUTC Staff and PSE assert there is no information that would indicate PSE's distribution system is currently unsafe.

#### **Other Matters**

- The Parties stipulate that the Commission will admit into evidence the testimony and exhibits filed on behalf of Commission Staff on July 21, 2005, and on behalf of PSE on August 12, 2005.
- The standard for cathodic protection prescribed by 49 C.F.R. § 192.463(a) and Appendix D to 49 C.F.R. Part 192 was not met during the limited time the rectifier was cross-wired, but PSE promptly remediated that condition upon discovery, and within 90 days, as required under applicable regulations. According to the testimony filed in this case, Commission Staff calculated a \$125,000 maximum penalty for PSE's failure to meet the standards for cathodic protection prescribed by 49 C.F.R. § 192.463(a) and Appendix D to 49 C.F.R. Part 192. PSE will stipulate to a penalty of \$90,000. The \$90,000 amount reflects several mitigating factors, including: 1) PSE took prompt action to correct the cross-wired rectifier; 2) how the rectifier became cross-wired remains unknown; 3) the Parties' experts investigating this matter all concluded that the cross-wired rectifier had little or no bearing on the leak or the explosion; 4) PSE's good faith compliance with

Commission Order No. 1 in this docket; 5) PSE's cooperation in the investigation; and 6) PSE's cooperation in working with the Staff and City in instituting the other operational changes and programs outlined in this Agreement. PSE shall make such payment within 10 working days from the date the Commission approves this Agreement.

- 27 This docket will be closed but the WUTC will retain jurisdiction of this matter.
- 28 Staff and PSE will coordinate efforts going forward to ensure disclosure of analysis and issues to assure the process is productive and efficient.
- 29 PSE will undertake the aforementioned action items upon approval of this Agreement by the WUTC in a good faith and expedited manner. PSE currently estimates a completion date of September 1, 2006. PSE with provide interim, quarterly updates to the WUTC Staff, Commissioners, and the City of Bellevue.
- 30 The Parties understand the standards and conditions enumerated herein are compatible with existing Commission rules. Should the standards or conditions enumerated herein be superseded by stricter language in future rules, the stricter standards will apply.

## VI. GENERAL PROVISIONS

#### Nature of the Agreement

The Parties agree that this Agreement is an appropriate resolution of all contested issues between them in this proceeding, given the unique facts and circumstances surrounding this matter and the risks of litigation. The Parties understand that this Agreement is subject to Commission approval and it is not effective unless and until it is approved by the Commission.

- 32 Nothing in this Agreement is intended to limit or bar any other entity from pursuing legal claims, or to limit or bar PSE's ability to assert defenses to such claims.
- The Parties recognize that this Agreement represents a compromise of the Parties' positions. As such, conduct, statements, and documents disclosed during negotiations of this Agreement shall not be admissible as evidence in this or any other proceeding, except in any proceeding to enforce the terms of this Agreement or any Commission Order fully adopting those terms. This Agreement shall not be construed against any Party because it was a drafter of this Agreement.

#### **Integrated Terms of Settlement**

The Parties have negotiated this Agreement as an integrated document to be filed with the Commission only upon execution. Once the Agreement is executed, the Parties agree to support the Agreement in its entirety. The Agreement supersedes any prior oral and/or written agreements on issues addressed herein, if any.

#### **Manner of Execution**

This Agreement is considered executed when all Parties sign the Agreement. A designated and authorized representative may sign the Agreement on a Party's behalf.
 The Parties may execute this Agreement in counterparts. Parties my also authorize a party to sign on its behalf. If the Agreement is executed in counterparts, all counterparts shall constitute one agreement. An Agreement signed in counterpart and sent by

facsimile or email is as effective as an original document. A faxed or emailed signature page containing the signature of a Party is acceptable as an original signature page signed by that Party. Each Party shall indicate the date of its signature on the Agreement. The date of execution of the Agreement will be the latest date indicated on the signatures.

## Procedure

- Once this Agreement is executed, the Parties agree to cooperate in promptly filing this Agreement with the Commission for approval. The Parties agree to support approval of this Agreement in proceedings before the Commission, through testimony and/or briefing. However, if there is a Commission order, rule or policy statement issued after the date this Agreement is executed but before it is approved, and that order, rule or policy statement, changes the posture of the Agreement in any Party's view, comments may be made to the Commission as to how the Agreement should be viewed in light of that order, rule or policy statement. The Parties have agreed to request from the Commission a suspension of the existing remaining procedural schedule in these dockets. The Parties understand that the Commission will decide the appropriate procedures for presentation and consideration of the Agreement.
- In the event that the Commission rejects all or any portion of this Agreement, each Party reserves the right to withdraw from this Agreement by written notice to the other Parties and the Commission. Written notice must be served within 10 business days of the date of the Commission order rejecting all or any portion of this Agreement. In such event, no Party will be bound or prejudiced by the terms of this Agreement. The Parties will

jointly request a prehearing conference for purposes of establishing a procedural schedule to complete the case.

# **No Precedent**

38 No Party shall be deemed to have agreed that this Agreement is precedent for resolving any issues in any other existing or future proceeding, other than a proceeding for enforcement of this Agreement.

For Commission Staff:

ROB McKENNA Attorney General Donald T. Trotter Assistant Attorney General For Puget Sound Energy, Inc.:

Susan McLain Senior Vice President of Operations

Date signed:

Date signed:

For City of Bellevue:

LORI RIORDAN City Attorney Cheryl A. Zakrzewski Assistant City Attorney

Date signed: