

Subject: Feedback on IP 2024-0806 - Water Distribution System Resilience Review

Dear Mayor and Councillors,

On behalf of the CPCIA we are writing to provide comprehensive feedback on IP 2024-0806, specifically attachment 1. While we appreciate the initiative to review the water distribution system's resilience, we have several concerns and suggestions:

1. Purpose and Terminology:

- The term "resilience" is ambiguous. We recommend replacing it with "reliability." After all, the goal is to ensure that Calgary's water service remains dependable.
- Similarly, in the proposed scope of work (Item 3), consider using "reliability" instead of "resilience."

2. Scope of Review:

- It seems counterintuitive that water efficiency and water loss are considered "out of scope." Given that this review focuses on water loss and service interruptions, including leakage rates is crucial.
- Water main leaks often escalate to breaks, impacting service reliability. Therefore, leakage rates and mitigation efforts should be within the review's scope.

3. Benchmarking:

- Rather than comparing Calgary to mediocre performers, let's aim higher. We propose benchmarking our water mains losses and breaks against the best-performing municipalities, such as Edmonton.
- Striving for excellence will benefit Calgarians and enhance our water system's reliability.

4. Transparency and NDA:

- The Non-Disclosure Agreement (NDA) requirements (Item 8) raise concerns. Transparency is essential for public trust.
- We recommend limiting confidentiality to commercially sensitive information only. The review panel should be accessible to the media, promoting openness.

5. Public Review and Questioning:

- The Review Panel should conduct its review and questioning of the Administration in public. Transparency is essential, and members of the public should have the opportunity to participate.
- We recommend allowing written questions from the public, followed by oral discussions during a public hearing conducted by the panel.
- A permanent record and transcript of this hearing should be made publicly accessible.

6. Assistance from the Internal Auditor:

- The Office of the City of Calgary Internal Auditor should be available to assist the review panel. Their expertise can help ensure that the panel obtains all necessary information.
- Collaboration between the review panel and the Internal Auditor will enhance the thoroughness and effectiveness of the review process.

7. Integral Water Service Availability:

- Consider assessing the integral water service availability as part of the resilience metrics¹. This measure accounts for the overall availability of water services.

8. System's Average Recovery Rate:

- Include the system's average recovery rate in the assessment². This metric provides insights into how quickly the system can recover after disruptions.

Thank you for your attention to these matters. We believe addressing these points will strengthen the review process and benefit our community.

Sincerely,

The CPCIA Board of Directors

PO Box 1521, Station T, Calgary, AB, Canada T2H 3A3



Source: [Attach 1 - Bearspaw South Feeder Main Break - Independent Review Draft Guidelines - IP2024 - 0806.docx \(livewirecalgary.com, 2024-07-05](#)

(1) Systems Measures of Water Distribution System Resilience.

https://cfpub.epa.gov/si/si_public_record_report.cfm?dirEntryId=305772&fed_org_id=1253

(2) Systems Measures of Water Distribution System Resilience - US EPA.

https://cfpub.epa.gov/si/si_public_file_download.cfm?p_download_id=521634.

(3) Do resilience metrics of water distribution systems really assess

<https://tuprints.ulb.tu-darmstadt.de/26544/>.

(4) Do Resilience Metrics of Water Distribution Systems Really Assess

<https://arxiv.org/pdf/2306.13113.pdf>.

(5) Do resilience metrics of water distribution systems really assess

<https://tuprints.ulb.tu-darmstadt.de/26544/1/1-s2.0-S0043135423012605-main.pdf>.