DDRP v0.2 — Structural Review of Demonstration Run

Test Subject: California-2025-AB853-Introduced.pdf
Run Date (UTC): 2026-02-01
Protocol Version: DDRP v0.2.0

1. Purpose of This Review

This document accompanies the DDRP walkthrough and provides a structured review of the completed deterministic run shown therein. Its purpose is to explain **what the run demonstrates**, **what was detected**, and **how the resulting artifacts should be read**, without interpreting legal meaning or assessing compliance.

This review describes **execution behavior and structural outputs only**.

2. Execution Integrity and Continuity

The demonstration run is bound by a single transaction record that establishes execution identity and continuity:

- A unique transaction identifier links the run to its inputs and outputs.
- The input document is recorded with format, length, and cryptographic hash.
- Output artifacts (operator detections and obligations) are similarly hashed.
- The transaction chain begins from a zeroed previous hash, indicating a genesis run.
- An explicit disclaimer states that the record documents execution continuity only and does not assert correctness, compliance, or legal validity.

Together, these elements establish that the run is **auditable, isolated, and reproducible**.

3. Operator Detection Overview

The operator detection artifact records the raw structural signals extracted deterministically from the canonicalized text.

3.1 Requirement Operators (REQ)

The following requirement operators were detected:

- **“shall”** — detected three times
- **“shall not”** — detected once

Each detection is recorded with:

- Operator type
- Pattern identifier
- Matched text
- Exact character start and end offsets
- Metadata indicating requirement strength and negation status

These detections serve as **obligation triggers**, not as interpretations of meaning.

3.2 Scope Operators (SCOPE)

A single scope-bounding operator was detected:

- **“Except as”**

This operator introduces conditional or bounding logic and is treated as a distinct structural signal.

3.3 Universal Quantifiers (UNIV)

Multiple universal quantifiers were detected, including:

- “no”
- “all”
- “any”
- “only”

These operators contribute to obligation breadth and constraint structure but do not, by themselves, resolve obligations.

3.4 Anchors (ANCHOR)

Anchor operators were detected, including:

- URL references
- “pursuant to” phrases
- Literal citation placeholders

Anchors provide structural linkage and provenance signals within the document.

4. Obligations Instantiated

From the detected operators, DDRP instantiated **five obligations**:

4.1 Requirement Applicability Obligations

Four obligations of type **REQ_APPLICABILITY** were instantiated, each triggered by a detected requirement operator.

For each of these obligations:

- The required structural fields are **"who"** and **"what"**.
- These fields were **not deterministically present** in the extracted signal set.
- As a result, all four obligations remain in **OPEN** status.

OPEN status indicates **structural incompleteness only**. It does not imply legal ambiguity, invalidity, or non-compliance.

4.2 Scope Bounding Obligation

One obligation of type **SCOPE_BOUNDING** was instantiated from the detected "Except as" operator.

- The required field ("scope") was present.
- The obligation is marked **SATISFIED**.
- Evidence links directly back to the triggering scope operator and its character range.

This demonstrates successful deterministic resolution where required structure is present.

5. Structural Field Propagation

Although the four requirement obligations remain OPEN, the run demonstrates limited field propagation:

- The detected scope signal is recorded as evidence for multiple requirement obligations.
- This shows that structural signals can be reused across obligations without asserting semantic resolution.

The system exposes partial structure while preserving uncertainty where required fields are missing.

6. Status Summary

The final obligation status distribution for this run is:

- **SATISFIED:** 1
- **OPEN:** 4
- **CONTRADICTED:** 0
- **AMBIGUOUS:** 0

This distribution reflects the structural characteristics of the source document as processed deterministically.

7. What This Run Demonstrates

This demonstration run shows that DDRP:

- Reliably detects obligation-triggering language.
- Separates scope bounding from requirement applicability.
- Instantiates obligations only when structural criteria are met.
- Refuses to infer or complete missing fields.
- Preserves uncertainty explicitly through OPEN obligation states.
- Produces complete, auditable artifacts bound to a single execution.

8. What This Run Does Not Claim

This run does **not**:

- Interpret legal meaning or intent.
- Assess regulatory compliance.
- Determine enforceability or correctness.
- Resolve obligations beyond deterministic structure.
- Substitute for legal, policy, or human analysis.

Any downstream conclusions drawn from these artifacts are the responsibility of the analyst or authority using them.

9. Why This Document Is a Suitable Demonstration Case

The source document contains realistic regulatory features:

- Hard requirements (“shall”, “shall not”)
- Scope carve-outs
- Universal quantifiers
- Cross-references and anchors

This combination produces a **non-trivial but traceable** signal surface, making it well-suited for illustrating DDRP’s design principles and execution boundaries without overloading the reader.

End of Companion Review