

**3.0 FINANCIAL RESPONSIBILITY DEMONSTRATION**  
**40 CFR 146.85**

**CLECO DIAMOND VAULT PROJECT**

**Facility Information**

Facility name: DIAMOND VAULT

Facility contact:

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Well name: CLDV-IW2

Well location: RAPIDES PARISH, LOUISIANA

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### **3.0 Demonstration of Financial Responsibility**

Pursuant to 40 CFR 146.85(a), Cleco Power, LLC will demonstrate and maintain financial responsibility as determined by the Underground Injection Control (UIC) Director using one of the qualifying instruments listed in 40 CFR 146.85(a)(1).

Pursuant to 40 CFR 146.85(a)(2)(3), the selected instrument(s) will be sufficient to protect underground sources of drinking water (USDWs) and cover corrective actions (per 40 CFR 146.84), injection well plugging (per 40 CFR 146.92), post-injection site care/site closure (per 40 CFR 146.93), and the emergency and remedial response plan (per 40 CFR 146.94).

#### **3.1 Cost Estimate (40 CFR 146.85(c))**

Cost estimates are for the entire Diamond Vault facility. Table 3.1 provides the total cost estimates for each of the five areas of financial responsibility: corrective action, injection well plugging, post-injection site care, post-injection site closure, and emergency and remedial responses. A more detailed discussion follows to offer more clarity on the calculations behind the cost estimates.

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##### **3.1.1 Corrective Action on Wells in AoR**

Corrective action on wells in the area of review (AoR) includes modeling and establishing an AoR, performing surveys and database searches to compile wells within the AoR, and any necessary testing and/or remediation of wells within the AoR. Table 3.2 provides the activities and cost estimates for any corrective action that needs to be completed on wells located within the AoR.

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Table 3.2: Estimated costs for corrective actions on wells in the AoR.

### 3.1.2 Plugging Injection Wells

The injection wells will be plugged per the outline described in the Injection Well Plugging Plan (Permit Section 8.0). Cost estimates for the plugging work include flushing of the injection well, pressure testing, mechanical integrity tests (MITs), service rig costs, circulating fluid costs, cement costs, and any associated labor. Table 3.3 provides the activities and cost estimates for plugging the 6 injection wells.

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Table 3.3: Estimated costs for plugging the injection well.

### 3.1.3 Post Injection Site Care (PISC)

PISC includes the post-injection monitoring that will be performed to verify that the carbon dioxide (CO<sub>2</sub>) plume has stabilized and demonstrates non-endangerment of USDWs. Specific monitoring and testing to be performed as well as the alternative timeframe are provided in the PISC document (Permit Section 9.0). Cost estimates for this work include labor for gathering field data (e.g., fluid sampling, surface seismic acquisition, and wireline logging), data analysis,

modeling, and reporting. Table 3.4 provides the activities and cost estimates for 10 years of the PISC. Geophysical surveys taken in year 5 and year 10.

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Table 3.4: Estimated costs for post injection site care.

#### 3.1.4 Post Injection Site Closure

Site closure refers to the plugging and abandonment of both shallow and deep monitoring wells. Per the PISC Plan, the monitoring wells will be plugged and abandoned when the UIC Director approves the closure of the site (Permit Section 9.0). Cost estimates for this work include preparation of a non-endangerment demonstration report, service rig costs, circulating fluid costs, cement costs, and any associated labor. Table 3.5 provides the activities and cost estimates for site closure. Includes plugging of 6 deep monitor wells and 4 above confining zone wells.

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Table 3.5: Estimated costs for site closure.

#### 3.1.5 Emergency and Remedial Response

In the Emergency and Remedial Response Plan, six scenarios are described that could present potential emergency responses. Since the scenarios are broad, a representative situation was assigned to each scenario to facilitate the cost estimate (Table 3.6).

- Injection or monitoring well integrity failure
- Injection well equipment failure (e.g., shut-off valve or pressure gauge, etc.)
- A natural disaster (e.g., earthquake, tornado, lightning strike)
- Fluid (e.g., brine) leakage to a USDW
- CO<sub>2</sub> leakage to USDW or land surface
- Induced seismic event

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Table 3.6: Scenarios, the associated example situation, and estimated cost for well remediation and emergency response.

### **3.2 Financial Instrument (40 CFR 146.85(a)(4)(5)(6)(d)(e)(f))**

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