HOLTEC INTERNATIONAL

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NON-PROPRIETARY VERSION

Holtec International & Eddy Lea Energy Alliance (ELEA) Underground CISF - Financial Assurance & Project Life Cycle Cost Estimates

Holtec Report No: HI-2177593

Holtec Project No: 5025

Sponsoring Holtec Division: NPD

Report Class : NOT SAFETY RELATED

COMPANY PRIVATE

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REVISION LOG

Revision No.	Revision Changes
0	Initial revision.
1	Section 2.1 revised to reflect more accurate operational cost estimate. Table 2.1 revised to correct Site Work cost estimate.

HI-STORE CIS Facility Financial Assurance & Project Life Cycle Cost Estimates

1.0 FINANCIAL PROFILE OF HOLTEC INTERNATIONAL

Holtec International is a US -headquartered energy Technology Company with ongoing operations in 16 countries. Supply of systems, structures and components (SSCs) along with associated engineering, licensing, construction and site services to nuclear power plants (which number well over a hundred worldwide is a core business activity of the Company. Holtec provides SSCs to a great majority of US nuclear plants. Figures 2.1 and 2.2 in this report indicate the global footprint of Holtec's used fuel wet storage projects. Figure 2.3 provides a pictorial illustration of the Company's global dry storage and transport clients. Because of its geographically diversified theaters of operation and the long term tenure of the Company's undertakings, Holtec International maintains a robust multi-billion dollar backlog at all times, minimizing cyclicity to its financial performance. The Company has a strong balance sheet since its inception in the mid-1980s and has reported a continuously upward trend in EBIDTA and asset base.

Some succinct facts:

- Holtec has been profitable in *every* year of operation since the Company's inception over 30 years ago.
- Holtec has no long-term debt, financing expansion projects without any long term borrowing. The latest example of a massive expansion is the 51 acre, [PROPRIETARY INFORMATION WITHHELD PER 10CFR2.390] Holtec Technology Campus that has been commissioned in early-2017. This project, like others in the past, has been funded by the Company without external borrowing. Another indicator of the Company's financial strength and fortitude is the SMR-160 reactor development program which is the only known new reactor development program in the world financed by a private company without any government contribution or subsidy. The HI-STORE CIS in New Mexico, the subject of this report, is also funded by Holtec in its entirety. All are voluntary company initiatives for future growth.
- Large and diversified customer base in the US and 16 foreign countries; 140+ contracts active at this time; most large contracts are long term giving the Company a predictable stable cash flow.
- A loyal client base; no client has *ever* cancelled any project for cause.
- Company maintains a [PROPRIETARY INFORMATION WITHHELD PER 10CFR2.390] senior credit facility *without* any collateral requirement and has the ability to increase capacity if needed. Historically, the credit line is used only to support international letters-of-credit.
- Borrowing rate @ [PROPRIETARY INFORMATION WITHHELD PER 10CFR2.390] speaks to the Company's financial health as seen by the lending institutions; the fee paid for LC has been [PROPRIETARY INFORMATION WITHHELD PER 10CFR2.390]. No LC has ever been called against the Company.
- Company's performance profile is so stout and re-assuring that even governmental entities (that are required by their charter to require performance bonds) have ofttimes secured internal waiver to save insurance costs.
- Company has been operated with a long-term view; Company's Board has not permitted Wall Street's financial legerdemain and short term thinking to permeate the Company's

culture. The proof of long term commitment can be found in the Consolidated Interim Storage Facility in New Mexico (the focus of this report) and the SMR-160 reactor development program, mentioned above, which are both being funded *entirely* by the Company. Table 1.1 provides overview financial data on the Company.

Another key feature of Holtec's business profile is the vertical integration of the required resources to carry out projects in its areas of core competence. This resource base is undergirded by a highly skilled corps of engineers with advanced education and decades of industrial experience in mechanical, civil, structure, thermal hydraulics, nuclear physics and related disciplines. The Company's manufacturing prowess is underlain by three of the largest nuclear component manufacturing plants (in Camden, NJ; Pittsburgh, PA and Orrville, Ohio) and a special-purpose fabrication plant in Dahej, India. The third leg of the Company's turn-key supply triad is site construction services organization which has garnered an enviable record of QA-compliant performance over the past two decades. The fully resourced capability infrastructure maintained by the Company, imputes Holtec with a unique profile of predictable performance within the nuclear industry, much appreciated by the Company's globally dispersed clients.

As can be inferred from the above narrative, Holtec International is well positioned to provide the financial assurance for the construction and oversight of Phase 1 of the CISF facility to include 500 HI-STORM UMAX canisters for the storage of Spent Nuclear Fuel (SNF) and Greater-than-Class C (GTCC) waster from commercial reactors. Our commitment is based on the willingness and capability of Holtec to fund the construction efforts of the CISF estimated to be in the range of ~$180 million.

However, as stated in Chapter 1 of the HI-STORE CIS SAR, Holtec will abide by the provisions of 72.22 which requires the Company to secure NRC's permission before launching the site construction work effort. Additionally, as a matter of financial prudence, Holtec will require the necessary user agreements in place (from the USDOE and/or the nuclear plant owners) that will justify the required capital expenditures by the Company. However, if the NRC approves and the necessary contractual instruments are established insuring the minimum revenue stream needed to justify the facility, then Holtec will launch the construction using its own resources so as to bring the interim storage solution to the industry in the shortest possible time.

HI-STORE CIS Facility Financial Assurance & Project Life Cycle Cost Estimates

Table 1.1: **LATEST FINANCIAL DATA ON HOLTEC INTERNATIONAL**	
Net Assets - December 31, 2016	[PROPRIETARY INFORMATION WITHHELD PER 10CFR2.390]
EBIDTA – Fiscal Year 2016	[PROPRIETARY INFORMATION WITHHELD PER 10CFR2.390]
Projected cumulative EBIDTA in five years (2016-2020)	[PROPRIETARY INFORMATION WITHHELD PER 10CFR2.390]

2.0 LIFE CYCLE COST ESTIMATES

The Cost Estimates for the HI-STORE CIS were developed following the guidance of NUREG-1757 Vol. 3, Rev. 1 "Consolidated Decommissioning Guidance". Holtec is positioned, thanks to the Company's financial strength & proven durability and a long track record of nuclear construction, to self-perform the construction of the first phase of the HI-STORE program.

2.1 Annual Operating Costs

Anticipated operating costs for the HI-STORE facility are $27.3 million annually. This is based off of scaled cost information provided in Appendix G of Holtec Report HI-2167521. All financial commitments related to annual operations will be tied to the sponsoring party's agreement with Holtec (viz., DOE settlement agreement).

2.2 Decommissioning Funding Assurance

The method of financial assurance as specified in 10 CFR 72.30(e)(3) will be met by Holtec International. Expected decommissioning costs for Phase 1 of the HI-STORE CISF are presented in Table 2.2. A decommissioning fund will be established by setting aside $840 per MTU stored at the HI-STORE facility. These funds, plus earnings on such funds calculated at not greater than a 3 percent real rate of return over the 40-year license life of the facility, will cover the estimated cost to complete decommissioning.

2.3 Site Specific Decommissioning Cost Estimate

The decommissioning cost estimate for radiological surveys and decontamination activities were prepared for Phase 1 of the CISF in accordance with the guidelines provided in Section A.3 of Appendix A of NUREG-1757 Volume 3. The radiological surveys and decontamination cost estimate is based on the removal of the facility components to the extent that the NRC license may be terminated and the remaining facility and site may be released for unrestricted use in accordance with 10 CFR 72.30(b)(2)(iii).

HI-STORE CIS Facility Financial Assurance & Project Life Cycle Cost Estimates

Table 2.1: **ESTIMATED PROJECT CONSTRUCTION EXPENDITURES (IN -000'S)**	
Cost Elements (Presented in transaction year dollars, un-escalated)	**Cost**
(1) Land Acquisition	$1,000
(2) Security Building	$35,410
(3) Administrative Building	$4,090
(4) Storage Building	$2,510
(5) Cask Transfer Building	$25,900
(6) Batch Plant	$1,010
(7) Rail Lines	$12,780
(8) Site Work	$51,200
(9) UMAX Manufacturing	$89,400
Total Construction Cost Estimate, Phase 1	**$223,300**

Table 2.2: **ESTIMATED PROJECT DECOMMISSIONING EXPENDITURES (IN -000'S)**	
Cost Elements (Presented in transaction year dollars, un-escalated)	**Cost**
(1) Planning and Preparation	$410
(2) Decontamination or Dismantling of Radioactive Facility Components	$672
(3) Packaging, Shipping, and Disposal of Radioactive Waste	$14,082
(4) Final Radiation Survey	$2,700
(5) Site Stabilization and Long-Term Surveillance	$356
(6) Security	$750
Subtotal Decommissioning Costs	**$18,973**
(7) Contingency	$4,743
Total Decommissioning Cost Estimate	**$23,716**

HI-STORE CIS Facility Financial Assurance & Project Life Cycle Cost Estimates

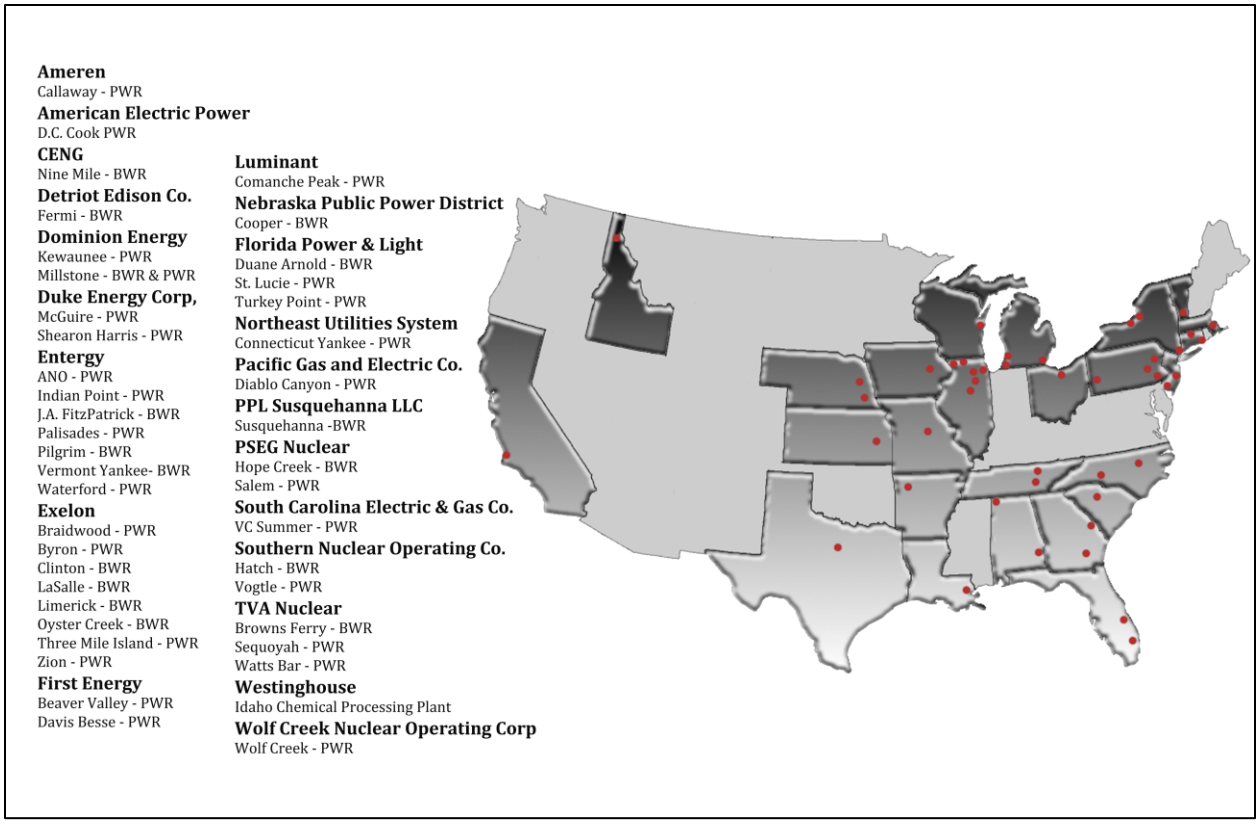

Figure 2.1: Holtec's Domestic Wet Storage Completed Projects

HI-STORE CIS Facility Financial Assurance & Project Life Cycle Cost Estimates

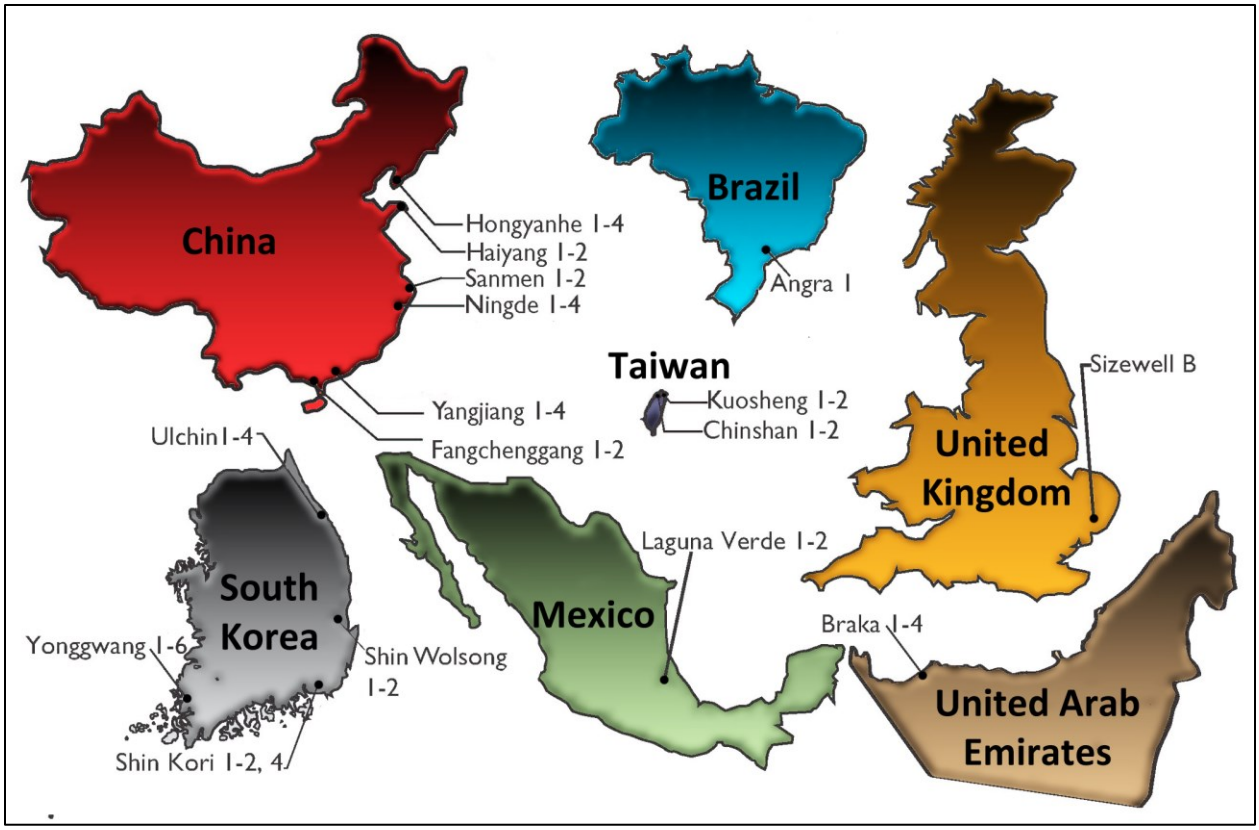

Figure 2.2: Holtec's International Wet Storage Projects Excluding the United States

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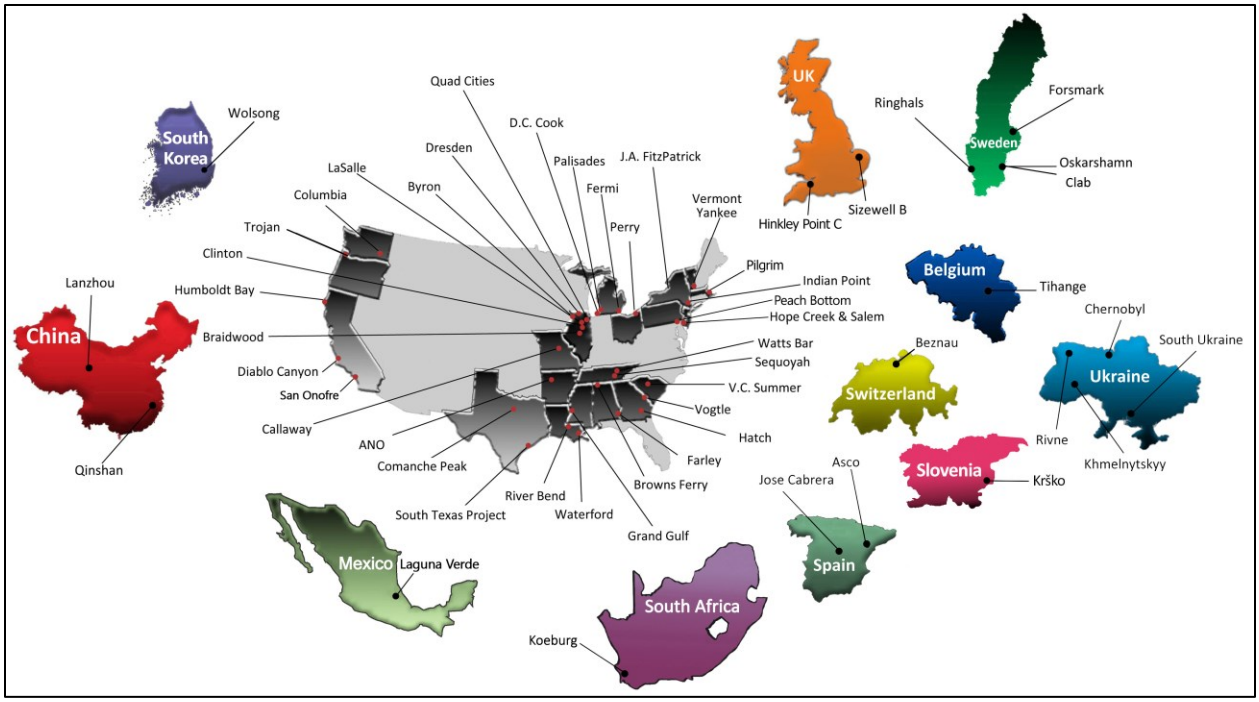

Figure 2.3: Holtec's Global Footprint of Dry Storage and Transport Projects