



HDI PNP 2023-001

March 13, 2023

Mr. Bo Pham
Director, Division of Operating Reactor Licensing
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Palisades Nuclear Plant
Docket No. 50-255
Renewed Facility Operating License No. DPR-20

Subject: Regulatory Path to Reauthorize Power Operations at the Palisades Nuclear Plant

Holtec Decommissioning International, LLC (HDI), on behalf of Holtec Palisades, LLC (Holtec Palisades), is submitting to the US Nuclear Regulatory Commission (NRC), a regulatory path for the reauthorization of power operations at the Palisades Nuclear Plant (PNP) under the current regulatory framework. The regulatory path considers the ability of the reactor to resume operations safely and in conformance with NRC licensing requirements for operating reactors. The viability of HDI pursuing reauthorization of power operations at PNP is dependent on several key regulatory assumptions. HDI is providing the NRC Staff with this information ahead of formal licensing submittals and applications to raise awareness and maintain transparent communications.

By letter dated October 19, 2017, Entergy Nuclear Operations, Inc. (Entergy) certified under 10 CFR 50.82, *Termination of license*, paragraph (a)(1) that it planned to permanently cease power operations no later than May 31, 2022 (Reference 1). By letter dated June 13, 2022, Entergy certified to the NRC, under 10 CFR 50.82(a)(1)(i), that power operations ceased at PNP on May 20, 2022, and, in accordance with 10 CFR 50.82 (a)(1)(ii), that the fuel was permanently removed from the PNP reactor vessel and placed in the spent fuel pool on June 10, 2022 (Reference 2). In accordance with 10 CFR 50.82(a)(2), *Upon docketing of the certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel, or when a final legally effective order to permanently cease operations has come into effect, the 10 CFR part 50 license no longer authorizes operation of the reactor or emplacement or retention of fuel into the reactor vessel.* Also, Amendment 272 to the PNP Renewed Facility Operating License (RFOL) was issued on May 13, 2022, to reflect a permanently defueled status, where operation of the reactor is not permitted (Reference 3). Thus, the PNP current licensing basis does not authorize operation of the reactor.

On June 28, 2022, Entergy transferred the PNP RFOL to Holtec Palisades, the licensed owner, and HDI as the licensed operator, as approved by NRC Commission Order EA-21-158,

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Palisades Nuclear Plant and ISFSI and Big Rock Point and ISFSI – Order Approving Direct and Indirect Transfers of Licenses and Draft Conforming Administrative License Amendments (Reference 4). PNP is currently executing the Post Shutdown Decommissioning Activities Report (PSDAR) submitted to the NRC on December 23, 2020 (Reference 6).

While NRC regulations do not prescribe a specific regulatory path for reinstating operational authority following docketing of the 50.82(a)(1) certifications, the NRC has recognized that its existing regulatory framework—namely the process of reviewing and approving exemption and license amendment requests prescribed by 10 CFR 50.12 and 50.90—provides adequate flexibility to accommodate reauthorization of operations (Reference 5). This is the first key regulatory path assumption. Likewise, there is also not a prescribed path for the transition from operations to permanently-shutdown status; hence, the NRC relies on a series of exemptions and license amendments to modify the licensing basis over time to fit the lower risk profile of a shutdown reactor. The regulatory path described in this letter apply the same principle to restore the PNP operational licensing basis through a series of licensing actions. Enclosure 1 to this letter describes the regulatory path HDI envisions to support the restoration of the previous PNP licensing basis and reauthorization of power operations at PNP. The NRC review of these submittals, along with reinstatement of the oversight process applicable to operating reactors, will ensure that PNP will only be authorized to resume operations if the NRC has reasonable assurance that it can do so safely, in conformance with its operational licensing basis, and without posing any significant safety hazards.

The second key regulatory path assumption is that the reauthorization of power operations for PNP will require a one-time exemption from 10 CFR 50.82(a)(2). With this exemption, the PNP licensing basis in effect prior to the 10 CFR 50.82 certifications can be restored through the 10 CFR 50.90, *Application for amendment of license, construction permit, or early site permit*, license amendment request (LAR) process for the PNP RFOL, Technical Specifications (TS), and Emergency Plan.

Plant programs and regulatory requirements, conforming to PNP's operating licensing basis will be reinstated. PNP NRC Order actions that were not completed due to PNP decommissioning, will be evaluated for applicability, and docketed for completion, as appropriate. PNP NRC commitments closed due to 10 CFR 50.82 certifications will be evaluated and reinstated as appropriate.

Exemptions specific to a plant undergoing decommissioning, granted for PNP by the NRC and no longer applicable to an operating reactor will be rescinded. Finally, the Defueled Safety Analysis Report (DSAR) will be restored to the Updated Final Safety Analysis Report (UFSAR) effective prior to the 10 CFR 50.82 certifications. This will include the safety reclassification of systems, structures, and components (SSCs) to support an operating reactor.

Because HDI is currently only authorized to perform spent fuel management, decommissioning, and site-maintenance activities authorized by the shutdown licensing basis (see Reference 2), HDI intends to [

assumption. [] 4.a,4.b,4.c This is the third key regulatory path

] 4.a,4.b,4.c

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]4.a,4.b,4.c

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] 4.a,4.b,4.c

The three key regulatory path assumptions - the reauthorization of power operations at Palisades is permitted within the existing regulatory framework, a one-time exemption from 10 CFR 50.82(a)(2) would allow the restoration of the pre-decommissioning licensing basis, and [4.a,4.b,4.c – are fundamental to our decision to restart Palisades from a regulatory perspective. We believe that since this regulatory path is authorized by NRC regulations, and submittals will require NRC review and approval, there is reasonable assurance that HDI can safely restore PNP to power operations within the reactor's previous licensing basis (as updated to permit operation) and pose no significant safety hazards.

Sections of this letter and Enclosure 1 contains information associated with HDI's regulatory path to reauthorize power operations at PNP and are considered proprietary information. Therefore, HDI requests that the NRC withhold certain information in accord with 10 CFR 2.390, *Public inspections, exemptions, requests for withholding*.

Enclosure 2 provides the affidavit signed by Holtec which supports withholding the proprietary information.

This letter contains no new regulatory commitments.

Should you have any questions or require additional information, please contact me at (856) 797-0900 ext. 3578.

Sincerely,

Jean A. Fleming

Digitally signed by Jean A.

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Date: 2023.03.13 14:56:14 -04'00'

Jean A. Fleming
Vice President of Licensing, Regulatory Affairs & PSA
Holtec International

Enclosure 1: Regulatory Path to Reauthorize Power Operations at the Palisades Nuclear Plant – Proprietary

Enclosure 2: Withhold Information Per 10 CFR 2.390 Affidavit

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References:

1. Letter from Entergy Nuclear Operations, Inc. to the U.S. Nuclear Regulatory Commission, *Supplement to Certification of Permanent Cessation of Power Operations*, (ADAMS Accession No. ML17292A032), dated October 19, 2017
2. Letter from Entergy Nuclear Operations, Inc. to the U.S. Nuclear Regulatory Commission, *Certifications of Permanent Cessation of Power Operations and Permanent Removal of Fuel from the Reactor Vessel*, (ADAMS Accession No. ML22164A067), dated June 13, 2022
3. Letter from the U.S. Nuclear Regulatory Commission to Entergy Nuclear Operations, Inc., *Palisades Nuclear Plant – Issuance of Amendment No. 272 RE: Permanently Defueled Technical Specifications (EPID L-2021-LLA-0099)*, (ADAMS Accession No. ML22039A198), dated May 13, 2022
4. Letter from the U.S. Nuclear Regulatory Commission to Entergy Nuclear Operations, Inc., *Palisades Nuclear Plant and Big Rock Point Plant – Order Approving Transfer of Licenses and Draft Conforming Administrative License Amendments (EPID L-2020-LLM-0003)*, (ADAMS Accession Package No. ML21292A155), dated December 13, 2021
5. U.S. Nuclear Regulatory Commission SECY-20-01110, Enclosure 1, *Federal Register Notice – Denial of Petition for Rulemaking on Criteria to Return Retired Nuclear Power Reactors to Operations (PRM-50-117; NRC-2019-0063)*, (ADAMS Accession No. ML20205L307), dated December 7, 2020
6. Letter from Holtec Decommissioning International, LLC to the U.S. Nuclear Regulatory Commission, *Post Shutdown Decommissioning Activities Report*, (ADAMS Accession No. ML20358A232), dated December 23, 2020

cc: NRC Region III Regional Administrator
NRC Deputy Director, Reactor Safety Programs & Mission Support
NRC Lead Decommissioning Inspector – Palisades Nuclear Plant
NRC NMSS Project Manager – Palisades Nuclear Plant

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ENCLOSURE 1

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**Regulatory Path to Reauthorize Power Operations at the Palisades Nuclear Plant
Proprietary**

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Enclosure 1

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**Regulatory Path to Reauthorize Power Operations
at the Palisades Nuclear Plant**

This enclosure provides a regulatory path to allow the reauthorization of power operations at Palisades Nuclear Plant (PNP) within current U.S. Nuclear Regulatory Commission (NRC) regulations. Also included are Holtec Decommissioning International, LLC (HDI) plans for personnel training, site staffing, supporting the restoration of the NRC reactor oversight process (ROP), returning systems, structures, and components (SSCs) to operability/functionality, restoration of PNP power operations licensing basis, and other actions. In addition, the plan will provide a preliminary milestone schedule. Since this regulatory path is within current NRC regulations, and will require NRC review and approval, it provides reasonable assurance that HDI can safely return PNP to power operations with no significant safety hazards.

Background

On June 13, 2022, Entergy Nuclear Operations, Inc. (Entergy) certified to the NRC, in accordance with 10 CFR 50.82, *Termination of license*, paragraph (a)(1)(i), that power operations ceased at PNP on May 20, 2022, and, in accordance with 10 CFR 50.82 (a)(1)(ii), that the fuel was permanently removed from the PNP reactor vessel and placed in the PNP spent fuel pool on June 10, 2022 (Reference 1). These certifications formed the basis for amending the PNP Renewed Facility Operating License (RFOL) to no longer authorize the operation of the PNP reactor. Additionally, on June 28, 2022, as approved by NRC Commission Order EA-21-158, *Palisades Nuclear Plant and ISFSI and Big Rock Point and ISFSI – Order Approving Direct and Indirect Transfers of Licenses and Draft Conforming Administrative License Amendments*, Entergy transferred the PNP RFOL to Holtec Palisades, LLC (Holtec Palisades), as the licensed owner, and HDI as the licensed operator (Reference 2). No major decommissioning activities, as defined by 10 CFR 50.2, have been initiated at PNP since the 10 CFR 50.82 certifications were submitted.

Regulatory Path

The regulatory path to the reauthorization of power operations is supported by a one-time exemption from 10 CFR 50.82(a)(2), *Upon docketing of the certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel, or when a final legally effective order to permanently cease operations has come into effect, the 10 CFR part 50 license no longer authorizing operation of the reactor or emplacement or retention of fuel into the reactor vessel*, for PNP. With this supporting exemption, the pre-decommissioning PNP licensing basis can be restored through the 10 CFR 50.90, *Application for amendment of license, construction permit, or early site permit*, license amendment request (LAR) process for the PNP RFOL, Technical Specifications (TS), and Emergency Plan. These submittals include:

- An exemption request from 10 CFR 50.82(a)(2), per 10 CFR 50.12, *Specific exemptions*, to allow fuel to be loaded into the reactor vessel and to reauthorize reactor operation;
- A LAR, per 10 CFR 50.90, to amend the PNP RFOL to allow the resumption of power operations;
- A LAR per 10 CFR 50.90, to reinstate the PNP TS to support power operations;

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- A LAR to reinstate TS Administrative controls (Including Licensed Operator Requirements) to support power operations;
- A LAR to reinstate the PNP Emergency Plan and Emergency Action Levels for an Operating Reactor.

Additionally, plant regulatory programs and TS programs for an operating reactor will be revised/reinstated as appropriate. Examples of these programs are:

- NFPA-805 Fire Protection Program – evaluate transition modifications that were deferred due to decommissioning;
- Steam Generator Inspection Program – Per reinstated PNP TS;
- Containment Isolation Program – Per reinstated PNP TS, including consideration to conduct an integrated leak rate test;
- Emergency Operating Procedures – Per reinstated PNP TS;
- Quality Assurance Program – Revise scope applicable to an operating reactor per 10 CFR 50.54(a);
- Inservice Inspection Program – Revise scope applicable to an operating reactor per 10 CFR 50.55a, *Codes and standards*, and submit supporting Relief Requests;
- Physical Security Plan – Revise scope applicable to an operating reactor per 10 CFR 50.54(p);
- Cyber Security Plan – Revise scope applicable to an operating reactor per 10 CFR 50.54(p);
- Maintenance Rule Program – Revise scope applicable to an operating reactor per 10 CFR 50.65, *Requirements for monitoring the effectiveness of maintenance at nuclear power plants*;
- Aging Management Program – Revise scope applicable to an operating reactor per NUREG 1871, *Safety Evaluation Report Related to the License Renewal of Palisades Nuclear Plant*.

Due to PNP decommissioning, several actions associated with NRC orders and industry initiatives were not applicable after shutdown. These actions will be reviewed for applicability to resumed operations, with docketing of plans to complete the actions, as appropriate. Examples of these actions are:

- Beyond Design Basis Seismic PRA – Evaluate Closure Actions
- Beyond Design Basis Flooding – Evaluate Closure Actions

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- Generic Safety Issue (GSI)-191 – Evaluate Closure Actions
- Open Phase Condition – Evaluate Closure Actions
- Withdrawal of Interim Compensatory Measure B.1.a in EA-02-026, *Order for Interim Safeguards and Security Compensatory Measures*, – Reinstate Action

PNP NRC commitments applicable to power operations were closed based on 10 CFR 50.82 certifications. PNP will evaluate all closed regulatory commitments that used cessation of operations as a basis for closure to determine what commitments will require reinstatement. This will be completed per the guidance in NEI 99-04, *Guidelines for Managing NRC Commitment Changes*.

Exemptions specific to a plant undergoing decommissioning, that were granted for PNP by the NRC, and are no longer applicable to an operating reactor, will be rescinded. Examples of exemptions that are no longer applicable to an operating reactor are:

- Certified Fuel Handlers Severe Weather Authority
- Record Keeping
- Use of Decommissioning Funds for Spent Fuel Management

Finally, the Defueled Safety Analysis Report (DSAR) will be restored to the Updated Final Safety Analysis Report (UFSAR) that was effective prior to the 10 CFR 50.82 certifications, with the addition of the reauthorization of power operations actions. This will include the safety reclassification of SSCs to support an operating reactor. This restoration is expected to be accomplished under the 10 CFR 50.59, *Changes, tests, and experiments*, process.

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Personnel Training

Regulatory-required training programs scope will be revised to ensure qualified personnel are available to support reactor operations.

- Senior Reactor Operator and Reactor Operator License training [] 4.a,4.b,4.c This will include NRC

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support for examination and license issuance;

- Emergency Planning response personnel training and drill performance. This will include NRC support for graded exercises;
- Radiation Protection and Chemistry Technician training;
- Maintenance personnel training;
- Security personnel training.

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] 4.a,4.b,4.c

Site Staffing

HDI recognizes that additional site staffing will be required to support an operating reactor. [

] 4.a,4.b,4.c

NRC Oversight

In addition to licensee actions, it is assumed that the NRC will reestablish the reactor oversight process (ROP) at PNP. HDI anticipates that this will be facilitated by the NRC forming a Coordination Panel per Inspection Manual Chapter (IMC) 0375, *Implementation of the Reactor Oversight Process at Reactor Facilities in an Extended Shutdown Condition for Reasons not Related to Performance*. PNP staff will perform self-assessments consistent with industry standards to support this transition. Deficiencies requiring correction will be entered into the Corrective Action Program (CAP).

SSC Operability/Functionality

Systems, Structures, and Components (SSCs) will be tested and maintained to support TS operability and licensing basis functionality. Each required SSC (large motors, transformers, turbines, fuel handling equipment, main generator and generator controls, emergency diesel generators, etc.) where configuration control was not maintained due to decommissioning, will be included in a return-to-service plan. These plans will use risk insights to prioritize inspections, testing, and corrective and preventative maintenance. System configuration control will be verified through the performance of system checklists. Surveillance testing will be performed as required by TS before entering the TS mode of applicability. Outstanding procedure changes will be prioritized using risk insights to support required SSC inspections, maintenance, operation, and testing.

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Administrative Programs

Since shutdown and transition to decommissioning HDI has continued to maintain regulatory administrative requirements for a facility in decommissioning. For example:

- Record Retention Program
- Corrective Action Program
- Nuclear Safety Culture Program

HDI plans to revise these programs to support the PNP transition back to an operating reactor, as required.

Conclusion

Since this regulatory path is within current NRC regulations, and submittals will require NRC review and approval, it provides reasonable assurance that HDI can safely return PNP to power operations with no significant safety hazards.

Preliminary Schedule

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] 4.a,4.b,4.c

Communications Plan

Holtec intends to communicate progress towards finalizing plans to pursue reauthorization of power operations at PNP through meetings with NRC Nuclear Reactor Regulation (NRR) management and staff, NRC Region III management, licensing action pre-submittal meetings, and bi-weekly PNP NRC Project Manager status meetings. Additionally, the following communications will be docketed:

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- Regulatory Path to Reauthorize Power Operations at Palisades Nuclear Plant
- Intention to Pursue Reauthorization of Power Operations at Palisades Nuclear Plant
- Implementation Date of Reauthorization of Power Operations at Palisades Nuclear Plant

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Enclosure 2

ENCLOSURE 2

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Withhold Information Per 10 CFR 2.390 Affidavit

AFFIDAVIT PURSUANT TO 10 CFR 2.390

I, Jean A. Fleming, being duly sworn, depose and state as follows:

- 1) I have reviewed the information provided in letter HDI PNP 2023-001, *HDI's Regulatory Path Forward to Reauthorize Power Operations at the Palisades Nuclear Plant*, in which certain information is sought to be withheld, and I am authorized to apply for its withholding.
- 2) The information sought to be withheld is portions of the cover letter and Enclosure 1 in its entirety. This information documents a regulatory strategy to reauthorize power operations for a licensee who has permanently ceased power under 10 CFR 50.82(a)(1)(i). This information included in the documents is proprietary to Holtec Decommissioning International, LLC (HDI).
- 3) In making this application for withholding of proprietary information of which it is the owner, HDI relies upon the exemption from disclosure set forth in the Freedom of Information Act ("FOIA"), 5 USC Sec. 552(b)(4) and the Trade Secrets Act, 18 USC Sec. 1905, and NRC regulations 10 CFR Part 9.17(a)(4), 2.390(a)(4), and 2.390(b)(1) for "trade secrets and commercial or financial information obtained from a person and privileged or confidential" (Exemption 4). The material for which exemption from disclosure is here sought is all "confidential commercial information", and some portions also qualify under the narrower definition of "trade secret", within the meanings assigned to those terms for purposes of FOIA Exemption 4 in, respectively, Critical Mass Energy Project v. Nuclear Regulatory Commission, 975F2d871 (DC Cir. 1992), and Public Citizen Health Research Group v. FDA, 704F2d1280 (DC Cir. 1983).
- 4) Some examples of categories of information which fit into the definition of proprietary information are:
 - a. Information that discloses a process, method, or apparatus, including supporting data and analyses, where prevention of its use by HDI's competitors without license from HDI constitutes a competitive economic advantage over other companies;

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- b. Information which, if used by a competitor, would reduce its expenditure of resources or improve its competitive position in the design, manufacture, shipment, installation, assurance of quality, or licensing of a similar product.
- c. Information which reveals cost or price information, production, capacities, budget levels, or commercial strategies of HDI, its affiliates, customers, or its suppliers;
- d. Information which reveals aspects of past, present, or future HDI customer-funded development plans and programs of potential commercial value to HDI;
- e. Information which discloses patentable subject matter for which it may be desirable to obtain patent protection.

The information sought to be withheld is considered to be proprietary for the reasons set forth in paragraphs 4.a, 4.b and 4.c. above.

- 5) The information sought to be withheld is being submitted to the NRC in confidence. The information (including that compiled from many sources) is of a sort customarily held in confidence by HDI, and is in fact so held. The information sought to be withheld has, to the best of my knowledge and belief, consistently been held in confidence by HDI. No public disclosure has been made, and it is not available in public sources. All disclosures to third parties, including any required transmittals to the NRC, have been made, or must be made, pursuant to regulatory provisions or proprietary agreements which provide for maintenance of the information in confidence. Its initial designation as proprietary information, and the subsequent steps taken to prevent its unauthorized disclosure, are as set forth in paragraphs (6) and (7) following.
- 6) Initial approval of proprietary treatment of a document is made by the manager of the originating component, the person most likely to be acquainted with the value and sensitivity of the information in relation to industry knowledge. Access to such documents within HDI is limited on a "need to know" basis.

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- 7) The procedure for approval of external release of such a document typically requires review by the staff manager, project manager, principal scientist or other equivalent authority, by the manager of the cognizant marketing function (or his designee), and by the Legal Operation, for technical content, competitive effect, and determination of the accuracy of the proprietary designation. Disclosures outside HDI are limited to regulatory bodies, customers, and potential customers, and their agents, suppliers, and licensees, and others with a legitimate need for the information, and then only in accordance with appropriate regulatory provisions or proprietary agreements.
- 8) The information classified as proprietary was developed and compiled by HDI at a significant cost to HDI. This information is classified as proprietary because it contains detailed descriptions of analytical approaches and methodologies not available elsewhere. This information would provide other parties, including competitors, with information from HDI's technical database and the results of evaluations performed by HDI. A substantial effort has been expended by HDI to develop this information. Release of this information would improve a competitor's position because it would enable Holtec's competitor to copy our technology and offer it for sale in competition with our company, causing us financial injury.
- 9) Public disclosure of the information sought to be withheld is likely to cause substantial harm to HDI's competitive position and foreclose or reduce the availability of profit-making opportunities. The information and its commercial value extends beyond the original development cost. The value of the technology base goes beyond the extensive physical database and analytical methodology, and includes development of the expertise to determine and apply the appropriate evaluation process.

The research and development comprise a substantial investment of time and money by HDI.

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The precise value of the expertise to devise an evaluation process and apply the correct analytical methodology is difficult to quantify, but it clearly is substantial.

HDI's competitive advantage will be lost if its competitors are able to use the results of the HDI experience to normalize or verify their own process or if they are able to claim an equivalent understanding by demonstrating that they can arrive at the same or similar conclusions.

The value of this information to HDI would be lost if the information were disclosed to the public. Making such information available to competitors without their having been required to undertake similar expenditure of resources would unfairly provide competitors with a windfall, and deprive HDI of the opportunity to exercise its competitive advantage to seek an adequate return on its large investment in developing these very valuable tools.

