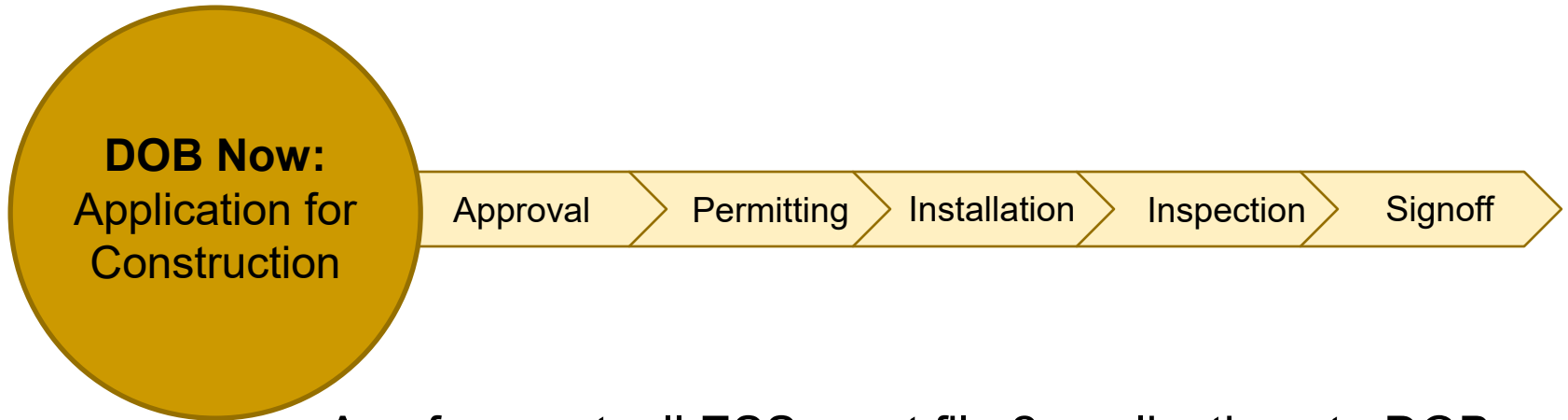


Stationary Energy Storage Systems: Filing Requirements and Upcoming Policies

presented by

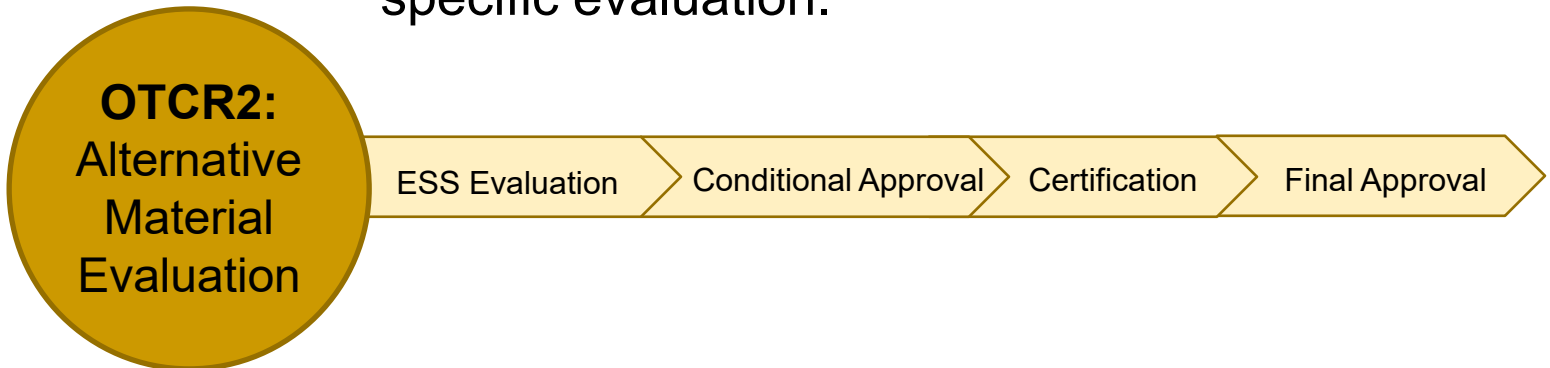
Alan Price, PE, Director of OTCR and OAE
Steven Hong, RA, Deputy Director of OAE

March 20, 2024



As of current, all ESS must file 2 applications to DOB:

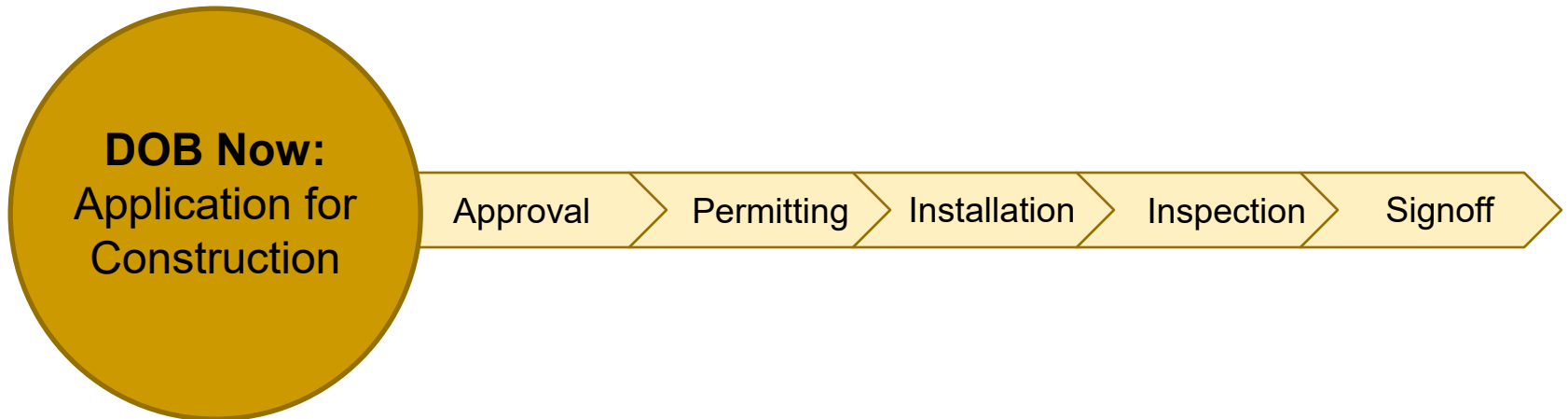
1. **DOB Now** application for construction.
2. **OTCR2** application for alternative material site-specific evaluation.



New !

For DOB Now application:

ESS shall file as ‘GC’ work type with **Electric Energy Storage Equipment (EESE)** subcategory per **10/27/2023 Service Notice**. All ESS applications will be reviewed under full plan examination by the **Central Plan Examination Unit**. Filing under Professional Certification Program (Pro-Cert) is not permitted.

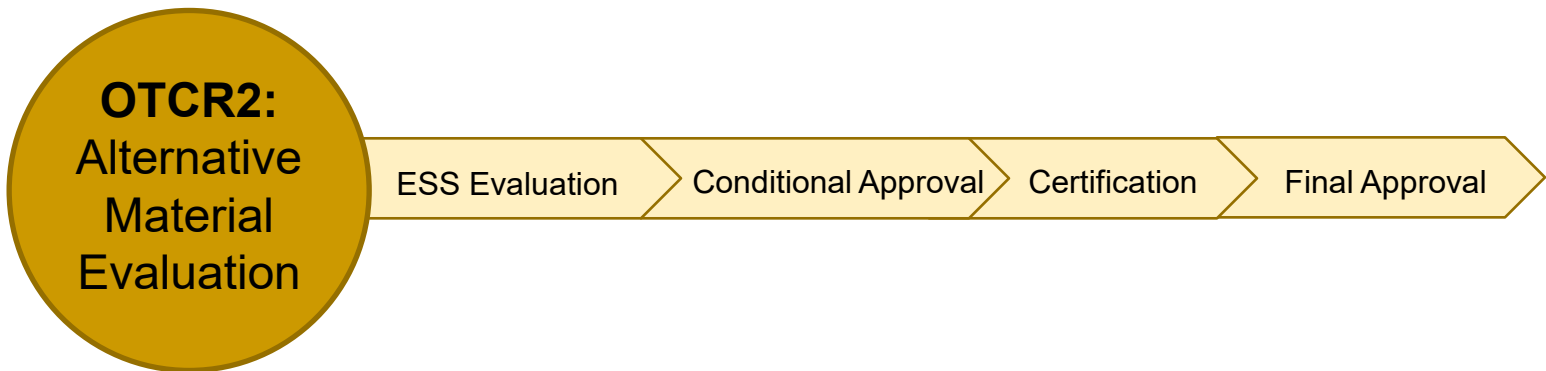


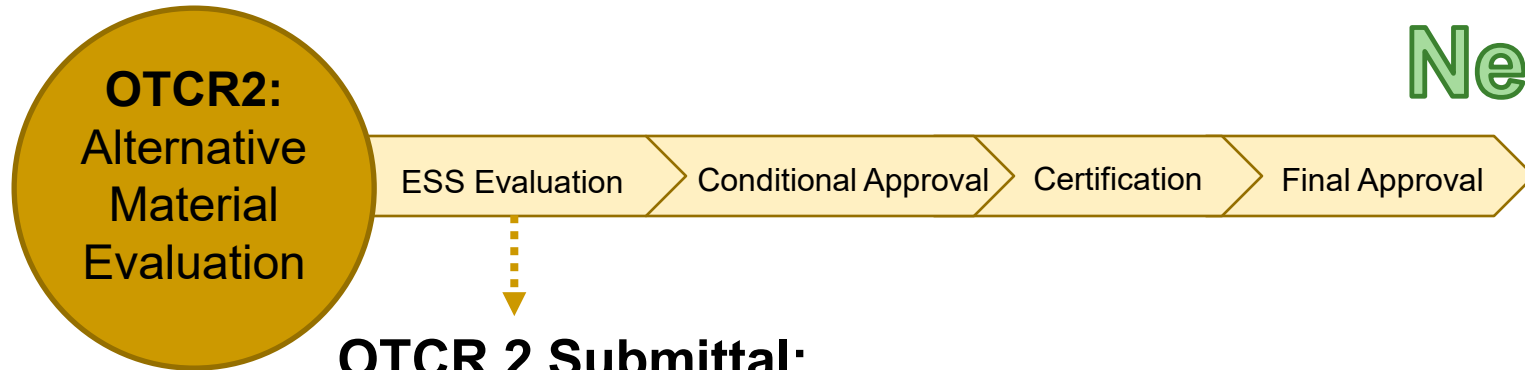
New !

For OTCR2 application:

Documents required for the alternative material site-specific evaluation is posted on the OAE website.

(<https://www.nyc.gov/site/buildings/codes/energy-storage-system.page>)



New !

OTCR2:
Alternative
Material
Evaluation

ESS Evaluation

Conditional Approval

Certification

Final Approval

OTCR 2 Submittal:

- a. OTCR2 Application Form with \$600 processing fee.
- b. OTCR Battery Application Checklist / Spreadsheet
- c. ESS listing
- d. ESS full-scale testing
- e. FDNY Certificate of Approval
- f. Battery Plan Set
- g. Approved Zoning Plan Set (by DOB plan examiner)
- h. Approved Food Zone Plan Set (by DOB plan examiner)
- i. FDNY Letter of Conditional Acceptance (as required per FDNY code and rule)

New !

OTCR2 Application Instructions												
As a part of the OTCR2 application process, applicants must provide specific information and documentation outlined within this checklist.												
This checklist document is split into three tabs, "Project Info", "Certs, Reports", and "Plans (Project Guidelines)". Guidance on how to use this checklist appropriately is found below. Additionally, a Required Documents Checklist is available below for use as a reference to understand and collate all requested documentation. When submitting the documents for review, please indicate in the file name which tab/letter they apply to. For example, "2a_UL 9540 certificate".												
The "Project Info" tab contains general information that OTCR requires as a part of the approval process. Please type in the appropriate information in the "Applicant Responses" column, Column D. OTCR will then review and date when approved.												
The "Certs, Reports" tab requires specified documentation for OTCR review and approval. Please see the Required Documents Checklist or review the tab to understand which documents are required for review. OTCR will review and either provide objections/comments and request a resubmittal or indicate the document has been approved. You are not required to fill anything out in this tab, however you can add comments to column E (format: Date mmdd: COMMENT).												
The "Plans" tab contains specific plan sheets that are required for OTCR review and approval. These include the Battery Plan, Fire Protection Plan, and Zoning Plan sets. <u>Each page of the plan set must be signed and sealed.</u> Specific guidelines for what each plan sheet needs to include are outlined within the tab. This tab also contains requirements for flood zone analysis and the commissioning plan. OTCR will review the provided documents and either provide objections/comments and request a resubmittal or indicate that the document has been approved. You are not required to fill anything out in this tab, however you can add comments to column E (format: Date mmdd: COMMENT).												
Required Documents Checklist												
Document Name	OTCR Requirement Reference	✓										
UL 9540 Certificate	2a											
UL 9540A Test Report (cell)	2b											
UL 9540A Test Report (module)	2b											
UL 9540A Test Report (unit)	2b											
FDNY Certificate Of Approval (COA)	2c											
FDNY Letter of Conditional Acceptance (LCA) as required per the FDNY code and rule	2d											
Battery Plan Set	3a											
Zoning Plan Set approved by the DOB plan examiner	3b											
Flood Zone Plan Set approved by the DOB plan examiner	3c											
Commissioning Plan	3d											

Instructions | 1 - Project Info | 2 - Certs, Reports | 3 - Plans (Project Guidelines)

ESS Listing:

- Provide **UL 9540** listing certificate.
- For applications submitted prior to 4/15/2022, UL 9540 1st or 2nd Ed. is acceptable. For applications submitted after 4/15/2022, ESS must be certified to UL 9540 2nd ed.

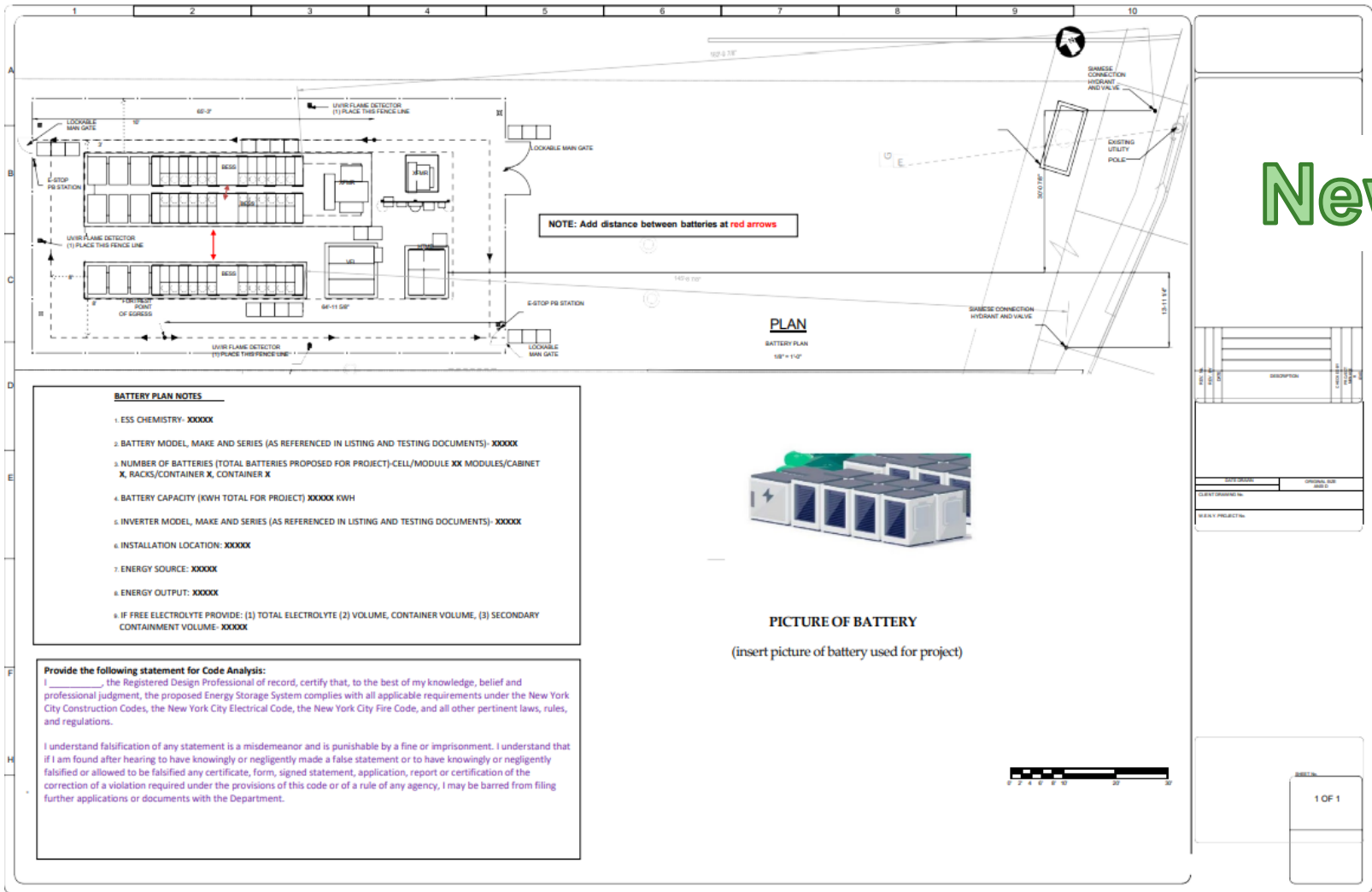
ESS Full Scale Testing:

Provide **UL 9540A** (4th ed.) test report; including all applicable levels (cell, module, unit, and installation levels).

Battery Plan Set shall include but not limited to the following (see OTCR Battery Application Checklist / Spreadsheet):

1. Design layout.
2. Distances to the exposures.
3. Security features and impact protections.
4. Manufacturer specifications, product dimensions, and pictures.
5. A general note box that provides description of the system.
6. Certifications by the Registered Design Professional of record.
7. Callouts of horizontal and vertical assemblies with fire rating when installed indoor or on the roof.
8. Signage locations.
9. Locations of ventilation and exhaust devices.
10. Application numbers of all pertinent fire protection systems filings.
11. Dunnage / structural support.

New !



New !

- BATTERY PLAN NOTES**
1. ESS CHEMISTRY- XXXXXX
 2. BATTERY MODEL, MAKE AND SERIES (AS REFERENCED IN LISTING AND TESTING DOCUMENTS)- XXXXXX
 3. NUMBER OF BATTERIES (TOTAL BATTERIES PROPOSED FOR PROJECT)-CELL/MODULE XX MODULES/CABINET X, RACKS/CONTAINER X, CONTAINER X
 4. BATTERY CAPACITY (KWH TOTAL FOR PROJECT) XXXXX KWH
 5. INVERTER MODEL, MAKE AND SERIES (AS REFERENCED IN LISTING AND TESTING DOCUMENTS)- XXXXXX
 6. INSTALLATION LOCATION: XXXXXX
 7. ENERGY SOURCE: XXXXXX
 8. ENERGY OUTPUT: XXXXXX
 9. IF FREE ELECTROLYTE PROVIDE: (1) TOTAL ELECTROLYTE (2) VOLUME, CONTAINER VOLUME, (3) SECONDARY CONTAINMENT VOLUME- XXXXXX

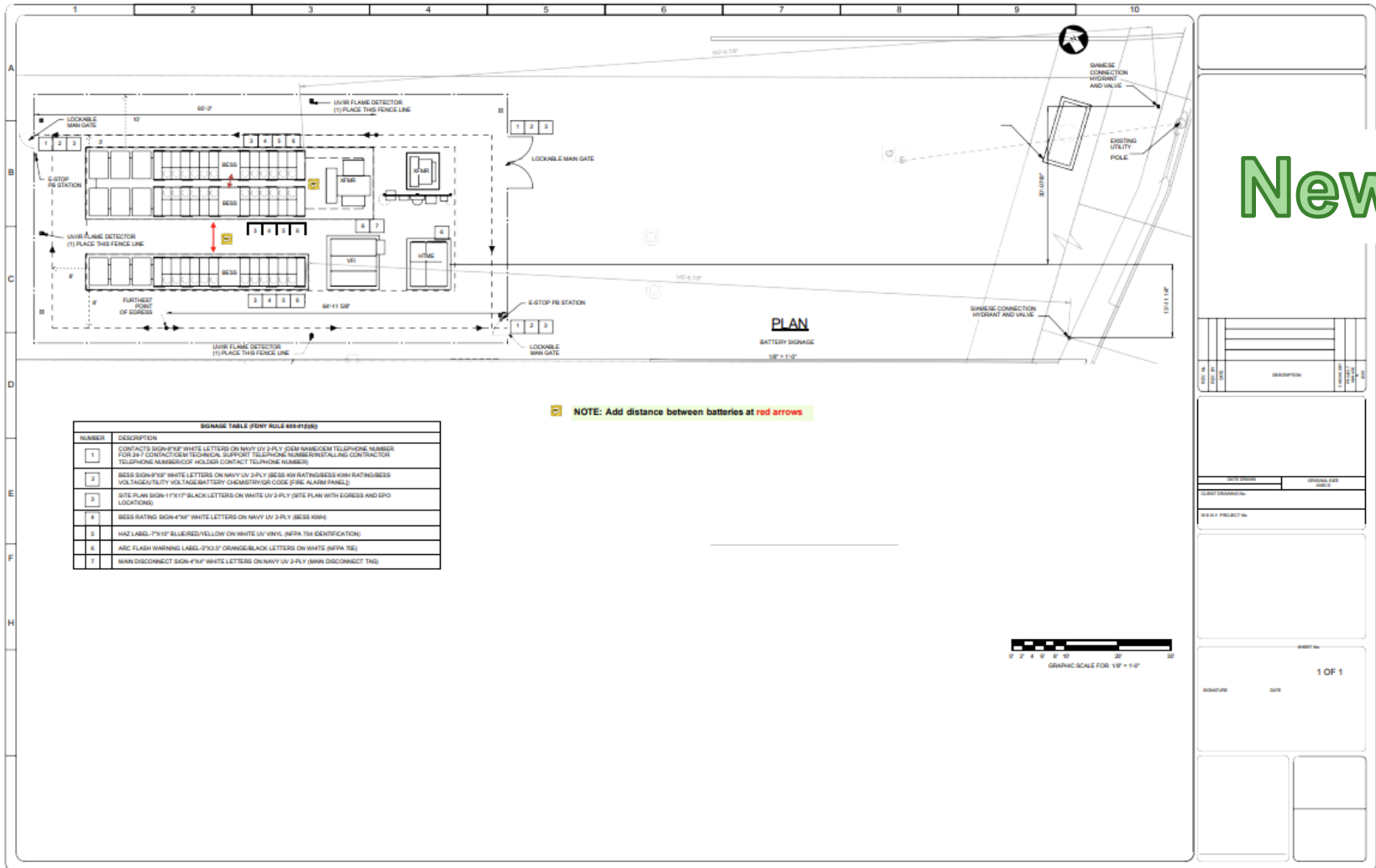


PICTURE OF BATTERY
(insert picture of battery used for project)

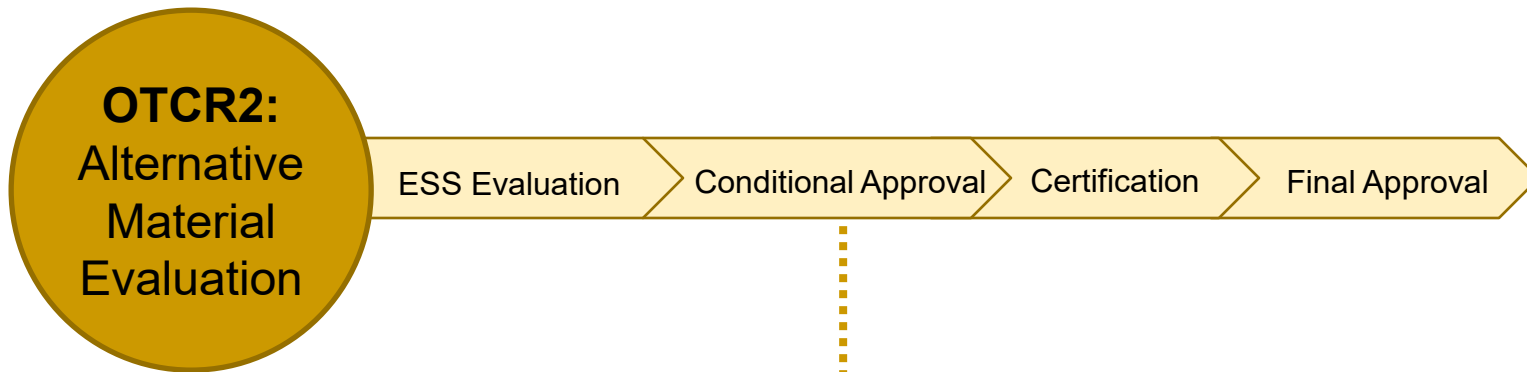
Provide the following statement for Code Analysis:
 I, _____, the Registered Design Professional of record, certify that, to the best of my knowledge, belief and professional judgment, the proposed Energy Storage System complies with all applicable requirements under the New York City Construction Codes, the New York City Electrical Code, the New York City Fire Code, and all other pertinent laws, rules, and regulations.
 I understand falsification of any statement is a misdemeanor and is punishable by a fine or imprisonment. I understand that if I am found after hearing to have knowingly or negligently made a false statement or to have knowingly or negligently falsified or allowed to be falsified any certificate, form, signed statement, application, report or certification of the correction of a violation required under the provisions of this code or of a rule of any agency, I may be barred from filing further applications or documents with the Department.



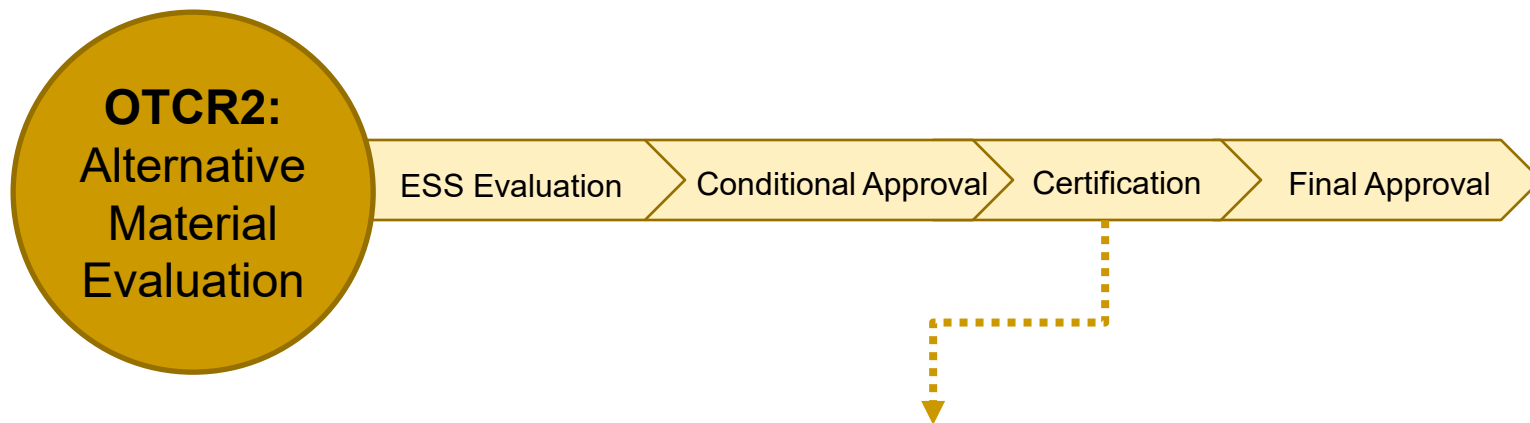
1 OF 1



New !



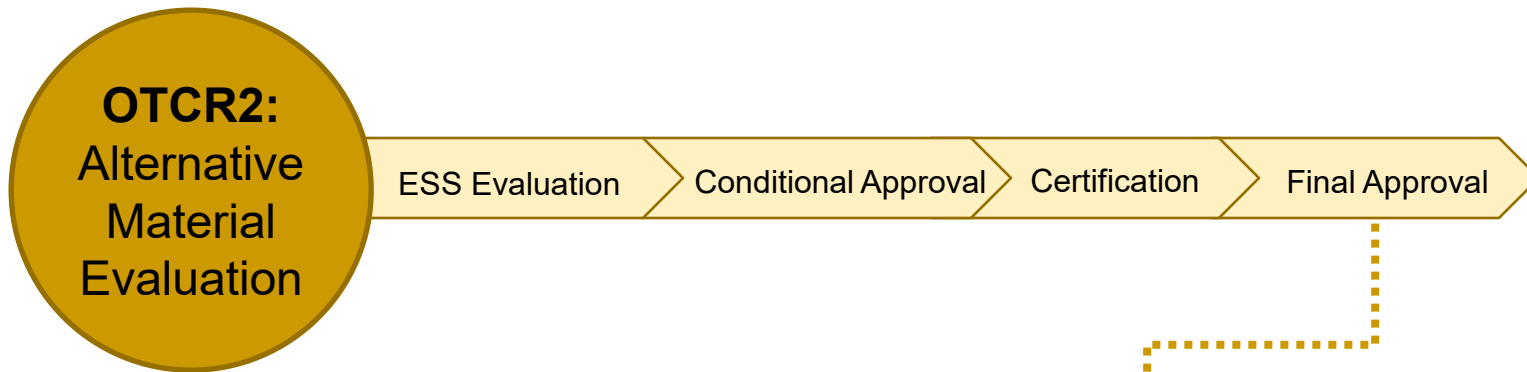
OTCR will issue a **Conditional Acceptance Letter** upon completion of the site-specific evaluation. Such document must be recorded in the DOB Now portal as a required document prior to the construction document approval.



RDP Final Certification:

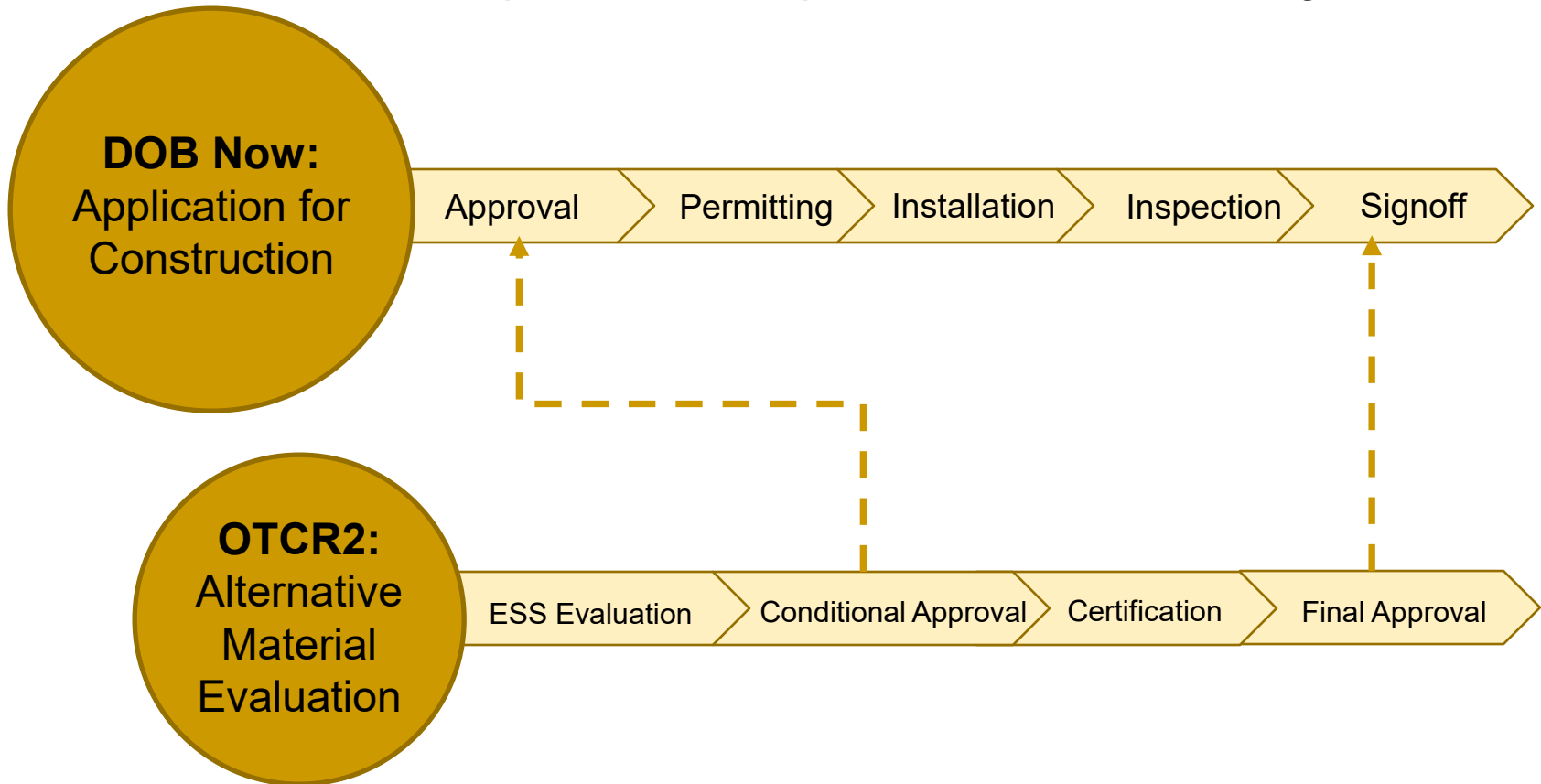
RDP shall certify the work complies with the OTCR's Conditional Acceptance Letter; and FDNY's Certificate of Approval, and Letter of Conditional Acceptance or Letter of No Objection as applicable.

For medium and large systems, a Commissioning Report shall be submitted to OTCR for review.



OTCR will issue a **Final Acceptance Letter** after review and acceptance of the RDP certification. Such document must be recorded in the DOB Now portal as a required document prior to the construction signoff.

The applicant must obtain OTCR Conditional Acceptance Letter prior to Construction Document Approval, and OTCR Final Acceptance Letter prior to Construction Signoff.



INITIATIVE #108 OF THE BLAST REPORT:

“DOB will issue updated rules removing regulatory barriers to the development of Energy Storage Systems. DOB Code requirements should be made consistent with national standards for design, permitting and installation of battery storage systems. To meet its green energy goals, the City will need to dramatically increase the rate of installation of storage systems at both the building and grid infrastructure scale.”



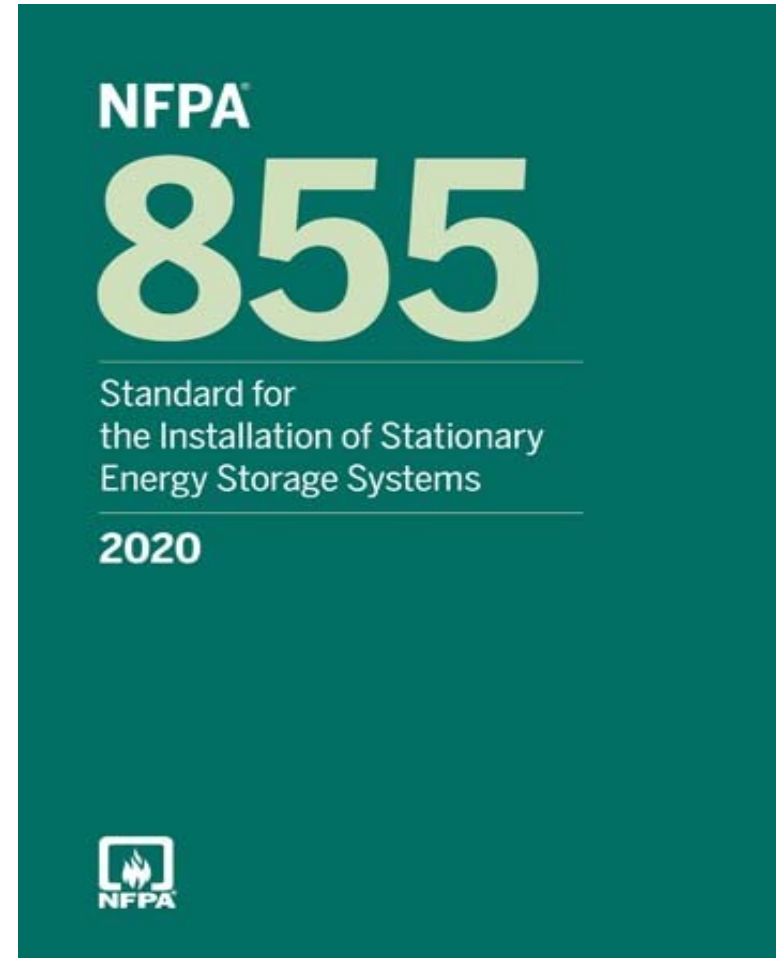
Establish 1- and 2-Family Dwelling Program:

- Small ESS unit no more than 20 kWh.
- ESS to be designed and installed under the criteria established by the CUNY, FDNY, and DOB working group.
- OTCR2 Site-specific Evaluation is not required.
- Pro-cert allowed.



Publication of the ESS Rule:

ESS to be designed and installed under the national standards, including NFPA 855, UL 9540, and UL 9540A.



OAE's Mission

In the effort to catalyze New York City's transition to a clean, resilient, and equitable energy future, the **Office of Alternative Energy (OAE)** was established to streamline the process for obtaining the necessary approvals to install and maintain alternative energy projects, from the Department and other relevant agencies.



OAE's Policy Development Pipeline

1. Renewable Natural Gas
2. Mobile ESS
3. Carbon Capturing Technologies
4. Heat Pump Systems
5. Hydrogen Technologies
6. Building-integrated Photovoltaics
7. Wind Turbines
8. Cogeneration Systems
9. Charging Stations
10. Innovative Technologies for Appliances (technologies that address the City's mandate for electrification)

Office of Technical Certification and Research (OTCR) Office of Alternative Energy (OAE)

Webpage:

<https://www.nyc.gov/site/buildings/codes/alternative-energy.page>

Address:

280 Broadway, 7th Floor
New York, NY 10007

Phone:

(212) 393-2626

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OAE@Buildings.nyc.gov

