Project Name and Address	**Authority Having Jurisdiction**
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip: City, Zip Code	Permit Application Date: Date

Building: Enter Value	Floor: Enter Value	Room: Enter Value	Control/tag: Value

☐ Construction inspection and functional testing comply ☐ Does not comply	Date Submitted to AHJ: Date

Intent:	This acceptance test is intended for Thermal Energy Storage (TES) Systems that are used in conjunction with chilled water air conditioning systems as limited under Eligibility Criteria in Table A-2. Submit one Certificate of Acceptance for each system that must demonstrate compliance. References: §120.5(a)~~15~~14, §160.3(d)1N, and NA7.5.14.

Table A-1: Construction Inspection

Prior to functional testing, verify access to the following documentation:

Step	Entry	Item	Code Reference
1	☐ Pass ☐ Fail	Designs, plans, schematics, and schedules as approved by the authority have jurisdiction.	§10-103(a)
2	☐ Pass ☐ Fail	Using a California Energy Commission approved compliance software; software inputs and output results for the TES system as approved by the authority having jurisdiction.	NA7.5.14.1
3	☐ Pass ☐ Fail	Manufacturer specifications or tear sheets for the installed TES system as available.	NA7.5.14.1

Table A-2: Construction Inspection

Verify system eligibility (check one):

Step	Entry	Item	Code Reference
1	☐	Chilled Water Storage	NA7.5.14.1(a)
2	☐	Ice-on-Coil Internal Melt	NA7.5.14.1(b)
3	☐	Ice-on-Coil External Melt	NA7.5.14.1(c)
4	☐	Ice Harvester	NA7.5.14.1(d)
5	☐	Brine	NA7.5.14.1(e)
6	☐	Ice-Slurry	NA7.5.14.1(f)
7	☐	Eutectic Salt	NA7.5.14.1(g)
8	☐	Clathrate Hydrate Slurry (CHS)	NA7.5.14.1(h)
9	☐	Cryogenic	NA7.5.14.1(i)
10	☐	Encapsulated (e.g., Ice Balls)	NA7.5.14.1(j)

Table A-3: Construction Inspection

Compare the installed unit to the documentation from Table A-1, Step 2 (Check all of the following):

Step	Entry	Item	Code Reference
1	No Entry	TES System Chiller	NA7.5.14.1
1.1	☐ Pass ☐ Fail	Brand and Model	NA7.5.14.1(k)
1.2	☐ Pass ☐ Fail	Type (Centrifugal, Reciprocating, Other)	NA7.5.14.1(l)
1.3	☐ Pass ☐ Fail	Heat Rejection Type (Air, Water, Other)	NA7.5.14.1(m)
1.4	☐ Pass ☐ Fail	Charge Mode Capacity (Tons)	NA7.5.14.1(n)
1.5	☐ Pass ☐ Fail	Discharge Mode Capacity (Tons)	NA7.5.14.1(o)
1.6	☐ Pass ☐ Fail	Discharge Mode Efficiency (kW/Ton or EER)	NA7.5.14.1(p)
1.7	☐ Pass ☐ Fail	Charge Mode Efficiency (kW/Ton or EER)	NA7.5.14.1(q)
1.8	☐ Pass ☐ Fail	Fluid Type and Percentage	NA7.5.14.1(r)
2	No Entry	TES System Storage	NA7.5.14.1
2.1	☐ Pass ☐ Fail	Brand and Model	NA7.5.14.1(s)
2.2	☐ Pass ☐ Fail	Number of Tanks	NA7.5.14.1(t)
2.3	☐ Pass ☐ Fail	Storage Capacity per Tank (ton-hours)	NA7.5.14.1(u)
2.4	☐ Pass ☐ Fail	Storage Rate (tons)	NA7.5.14.1(v)
2.5	☐ Pass ☐ Fail	Minimum Charging Temperature	NA7.5.14.1(w)
2.6	☐ Pass ☐ Fail	Discharge Rate (tons)	NA7.5.14.1(x)
3	☐ Pass ☐ Fail	Indicate that the Construction Inspection complies with **ALL** requirements.	NA

Table B: Functional Testing

Acceptance testing should be conducted in two parts: TES System Verification (Part 1) and TES System Controls and Operation (Part 2).

Step	Entry	Functional Test	Code Reference
1	☐ Pass ☐ Fail	Chiller(s) start-up procedure has been completed.	NA7.5.14.2~~(a)~~ ~~(~~Part 1~~)~~(a)
2	☐ Pass ☐ Fail	System fluid test and balance has been completed.	NA7.5.14.2~~(b)~~ ~~(~~Part 1~~)~~(b)

Step	Entry	Functional Test	Code Reference
3	☐ Pass ☐ Fail	Air separation and purge has been completed.	NA7.5.14.2~~(c)~~ ~~(~~Part 1~~)~~(c)
4	☐ Pass ☐ Fail	Fluid (e.g., glycol) has been verified at the concentration and type indicated on the design documents.	NA7.5.14.2~~(d)~~ ~~(~~Part 1~~)~~(d)
5	☐ Pass ☐ Fail	The TES system has been fully charged at least once and the charge duration noted.	NA7.5.14.2~~(e)~~ ~~(~~Part 1~~)~~(e)
6	☐ Pass ☐ Fail	The system has been partially discharged at least once and the discharge duration noted.	NA7.5.14.2~~(f)~~ ~~(~~Part 1~~)~~(f)
7	☐ Pass ☐ Fail	The system is in a partial charge state in preparation for ~~step 2 tests~~the TES System Controls and Operation Verification.	NA7.5.14.2~~(g)~~ ~~(~~Part 1~~)~~(g)
8	☐ Pass ☐ Fail	The schedule of operation has been activated as designed.	NA7.5.14.2~~(h)~~ ~~(~~Part 1~~)~~(h)
9	☐ Pass ☐ Fail	Mode documentation describes the state of system components in each mode of operation.	NA7.5.14.2~~(i)~~ ~~(~~Part 1~~)~~(i)
10	☐ Pass ☐ Fail	Verify that the TES system and the chilled water plant is controlled and monitored by an energy management system (EMS).	NA7.5.14.2~~(a)~~ ~~(~~Part 2~~)~~(a)
11	☐ M ☐ E	Indicate one of the following methods of simulation that will be used during the test. Manual selection (M) or use of an EMS by inputting the schedule as indicated by the designer or manufacturer (E).	NA7.5.14.2~~(b)~~ ~~(~~Part 2~~)~~(b)
12	☐ Pass ☐ Fail	Storage/charge mode. Verify that TES system stores energy.	NA7.5.14.2~~(c)~~ ~~(~~Part 2~~)~~(c)
13	☐ Pass ☐ Fail	End of charge signal. Simulate a full storage charge by changing the (manufacturer recommended) thermal storage end of charge output sensor to the EMS. Verify that the storage charging has stopped.	NA7.5.14.2~~(d)~~ ~~(~~Part 2~~)~~(d)
14	☐ Pass ☐ Fail	Discharge mode. Generate a call for cooling. Verify that the storage starts discharging with the compressors off. Return to the off/secured mode.	NA7.5.14.2~~(e)~~ ~~(~~Part 2~~)~~(e)
15	☐ Pass ☐ Fail	Mechanical cooling only mode. Generate a call for cooling. Verify that the storage does not discharge, and the cooling load is met by the compressor only. Return to the off/secure mode.	NA7.5.14.2~~(f)~~ ~~(~~Part 2~~)~~(f)
16	☐ Pass ☐ Fail	Discharge and mechanical cooling mode. Generate a call for cooling. Verify that the TES system discharges with the compressor sharing the load.	NA7.5.14.2~~(g)~~ ~~(~~Part 2~~)~~(g)
17	☐ Pass ☐ Fail	Off/storage-secured mode. Verify that the storage does not discharge and all compressors are off, regardless of the presence of calls for cooling.	NA7.5.14.2~~(h)~~ ~~(~~Part 2~~)~~(h)

Step	Entry	Functional Test	Code Reference
18	☐ Pass ☐ Fail	Charge plus cool mode. If provisions for this mode have been made by the system designer, then verify that the tank(s) can be charged while serving an active cooling load; or, ~~.~~ ~~Else~~ verify that the energy storage is disallowed or discontinued while an active cooling load is present.	NA7.5.14.2~~(~~i~~)~~ ~~(~~Part 2~~)~~(i)

Declaration Statement	Signatory
Document Author I assert that this Certificate of Acceptance documentation is accurate and complete.	Name Company Name Author Signature Date Signed
Field Technician I certify the following under penalty of perjury, under the laws of the State of California: The information provided on this Certificate of Acceptance is true and correct. I am the person who performed the acceptance verification reported on this Certificate of Acceptance (Field Technician). The construction or installation identified on this Certificate of Acceptance complies with the applicable acceptance requirements indicated in the plans and specifications approved by the enforcement agency and conforms to the applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7. I have confirmed that the Certificate(s) of Installation for the construction or installation identified on this Certificate of Acceptance has been completed and signed by the responsible builder/installer and has been posted or made available with the building permit(s) issued for the building.	Name Company Name ATT No.: ATT Cert. No. Title Phone Signature Date Signed
Responsible Person I assert the following under penalty of perjury, under the laws of the State of California: I am the Field Technician, or the Field Technician is acting on my behalf as my employee or my agent and I have reviewed the information provided on this Certificate of Acceptance. I am eligible under Division 3 of the Business and Professions Code in the applicable classification to accept responsibility for the system design, construction or installation of features, materials, components, or manufactured devices for the scope of work identified on this Certificate of Acceptance and attest to the declarations in this statement~~(responsible acceptance person)~~. The information provided on this Certificate of Acceptance substantiates that the construction or installation identified on this Certificate of Acceptance complies with the acceptance requirements indicated in the plans and specifications approved by the enforcement agency and conforms to the applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7. I have confirmed that the Certificate(s) of Installation for the construction or installation identified on this Certificate of Acceptance has been completed and is posted or made available with the building permit(s) issued for the building. I understand that a completed, signed copy of this Certificate of Acceptance shall be posted, or made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections, and I will take the necessary steps to ensure this requirement is accomplished. I understand that a signed copy of this Certificate of Acceptance is required to be included with the documentation the builder provides to the building owner at occupancy, and I will take the necessary steps to ensure this requirement is accomplished.	Name Company Name Lic. No.: License No. Title Phone Signature Date Signed