15 FAM 640 APPROVALS REQUIRED FOR REPAIRS AND IMPROVEMENTS

(CT:OBO-5; 03-21-2006) (Office of Origin: OBO)

15 FAM 641 POST ACTIONS REQUIRING PRIOR APPROVAL

- a. Posts must obtain prior approval of the Bureau of Overseas Buildings Operations (OBO) or of USAID's Overseas Management Support Office in the Bureau for Management, USAID/Washington (USAID/W M/OMS) for the types of post actions *listed below that involve* U.S. Government-owned/long-term leased (GO/LTL) real property, regardless of cost or funding source. As noted in 15 FAM 645, approval includes a review to ensure that the project conforms to building codes adopted by the Department. If the project complies with such building codes, OBO (or USAID/W) issues a building permit to be posted at the project site. Actions that require prior approval include the following:
 - (1) Demolition of structures or other facilities;
 - (2) Interior alterations affecting public spaces *or* materially affecting space functions or design;
 - (3) New, relocated or substantially altered driveways, walls, parking areas, landscaping or other exterior works;
 - (4) Replacement of, or alterations to, roof structure, including placement or erection of any structures, equipment, or devices on the roof;
 - (5) Construction of any facility or placement of any heavy equipment on roofs or on balconies;
 - (6) Removal, replacement, or alteration of structural support members, (e.g., beams, trusses, columns, and load-bearing walls, including cutting new openings in load-bearing walls);
 - (7) Excavation below, or adjacent to, existing building and wall foundations; and

(8) Repairs due to structural failures, except temporary emergency repairs.

NOTE: The list is not all-inclusive. For clarification, contact OBO or USAID/W (M/OMS); (see also 15 FAM 643 for alterations in State-held buildings by or for tenant agencies).

b. Posts may not incur financial obligations or make commitments, orally or in writing, to architects, engineers, contractors, or other parties in connection with proposals and recommendations without specific prior authorization from appropriate Washington, DC offices (see 15 FAM 420).

15 FAM 642 APPROVAL REQUIRED FOR SPECIAL MAINTENANCE AND *IMPROVEMENT* (M&I) PROJECTS

- a. The single real property manager (SRPM) must clear all proposed special maintenance and improvement (M&I) projects in Department of State-owned/long-term leased (LTL) or short-term leased (STL) property. The SRPM also must obtain approval and funding from the Bureau of Overseas Buildings Operations (OBO) before work commences (see 15 FAM 645 for approval requirements). Projects executed in STL properties also require approval and funding by the regional bureau (if State-occupied) and written permission from the landlord of the property. For residential properties, posts may not make alterations solely to meet the personal desires of the occupant(s). Proposals for alterations to OBO buildings to meet another agency's requirements must have technical review and approval from OBO and must be funded by the occupying agency (see 15 FAM 643 and 15 FAM 645).
- b. Special maintenance and improvement (M&I) projects for short-term leased (STL) real property managed by USAID must be approved in advance by the Overseas Management Support Office in the Bureau for Management, USAID/Washington (USAID/W M/OMS) and funded by USAID.
- c. Proposals involving telephone or other communications matters must include the concurrence and recommendation of the director of the regional information management center and, if appropriate, the area telecommunications officer, since the Bureau of Information Resource Management (IRM) funds the equipment. This is not applicable to USAID-managed property.
- d. Proposals involving computer-related equipment, space, cables, or

- electrical connections must include the concurrence of the post information systems officer or other officer responsible for word or data processing operations.
- e. Any project that involves technical or physical security requires the concurrence of the regional security officer/post security officer (RSO/PSO) and the cognizant security office of the parent agency.

15 FAM 643 TENANT AGENCY MEMORANDUM OF UNDERSTANDING (MOU)

- a. Tenant agencies seeking to alter Department of State-owned/long-term-leased (LTL) or short-term leased (STL) buildings must follow the procedures in the memorandum of understanding (MOU) between the parent agency and the Department of State. Each of the principal agencies present at missions abroad has signed a Tenant Agency MOU (see 15 FAM Exhibit 643). These MOUs ensure that all construction, renovation, or upgrade work planned for or by tenant agencies in State-controlled buildings is made known to the post, approved by the Bureau of Overseas Buildings Operations (OBO) and, if necessary, certified or confirmed by the Bureau of Diplomatic Security (DS) before any work is initiated. The MOU applies to any work or installation that in any way alters or affects the design, construction, functional use, and/or systems or structural components of a Department of State-managed building.
- b. The chief of mission/principal officer (COM/PO) is responsible for ensuring *prior Departmental approval before* construction, renovation, or upgrade work covered by an MOU *is* undertaken.
- c. By agreement, each principal tenant agency will forward to its senior representative at post a copy of the MOU along with any addenda covering special circumstances. The Department of Justice (DOJ), as parent agency, has signed the MOU for the Federal Bureau of Investigation (FBI) and the Drug Enforcement Administration (DEA). The former Immigration and Naturalization Service (INS) of the Department of Justice is now the Bureau of U.S. Citizenship and Immigration Services of the Department of Homeland Security (DHS). Any agency that has not signed its own Tenant Agency MOU with the Department is subject to the terms of the generic MOU (see 15 FAM Exhibit 643).
- d. Questions regarding the MOU should be addressed to the Area Management Division in the Operations and Maintenance Office of the Bureau of Overseas Buildings Operations (OBO/OM/AM), Attention: Interagency Liaison Officer (AM/LIA).

15 FAM 644 SECURITY REQUIREMENTS

15 FAM 644.1 Construction Security Plan (CSP)

(CT:OBO-5; 03-21-2006) (Uniform State/USAID/Commerce/Agriculture/DIA)

- a. As defined in 12 FAM, special maintenance and *improvement* (*M&I*) projects occurring at a facility abroad that are intended for the storage of classified materials or the conduct of classified activities require a project construction security plan (CSP). The CSP ensures security integrity of repairs, improvements, or renovations involving a controlled access area (CAA) or adjacent areas. Proponents of such projects (the post, Department organization, or tenant agency) must provide project information, as set forth in 12 FAM 360, to the Security Management Division of the Project Execution Office in the Bureau of Overseas Buildings Operations (OBO/PE/SM) for CSP preparation.
- b. The CSP *must* consider the secure or random procurement of necessary materials, secure storage of materials, and the escort and surveillance of uncleared U.S. citizen or foreign national workers and *must* include annotations of the CAA maintenance log. Once approved by the regional security officer (RSO), *forward* the CSP to OBO/PE/SM and to Physical Security Programs in the Physical Security Division of the Bureau of Diplomatic Security (DS/PSP/PSD) or to USAID, Office of Security (SEC), as appropriate. *Direct* any questions regarding building security systems (*e.g.*, structural, electrical, mechanical) to *OBO/PE/SM* for coordination within OBO and response to post prior to project initiation.

15 FAM 644.2 Emergency Repairs in a Controlled Access Area (CAA) or to a Public Access Control (PAC)

(CT:OBO-5; 03-21-2006) (Uniform State/USAID/Commerce/Agriculture/DIA)

Emergency repairs may be made in a controlled access area (CAA) or to a public access control (PAC) without prior Department notification in the event of an emergency that threatens national security activities or information, life, or safety, including structural damage to a building. These repairs will be limited to those necessary to remove the immediate danger. Further details and reporting requirements for *these* emergency repairs are in 12 FAM 360.

15 FAM 645 BUREAU OF OVERSEAS BUILDINGS OPERATIONS (OBO) ASSISTANCE AND APPROVAL

15 FAM 645.1 Project Design and Management Assistance

(CT:OBO-5; 03-21-2006) (Uniform State/USAID/Commerce/Agriculture/DIA)

The Bureau of Overseas Buildings Operations (OBO) assists posts with their special maintenance and *improvement* (*M&I*) projects in ways ranging from standard designs to design/technical assistance to on-the-job project management by an OBO project director. Assistance may also include *providing* cleared U.S. citizen employees to oversee and/or perform construction work. The type of assistance available depends on the scope, complexity, and physical location of the project within the property.

15 FAM 645.1-1 Emergency Project Assistance

(CT:OBO-5; 03-21-2006) (Uniform State/USAID/Commerce/Agriculture/DIA)

Posts should contact OBO or the Overseas Management Support Office in the Bureau for Management, USAID/Washington (USAID/W - M/OMS) regarding immediate assistance in *emergencies where* buildings sustain damage from fires, earthquakes, etc.

15 FAM 645.1-2 Technical Review, Approval, and Permit Issuance

(CT:OBO-5; 03-21-2006) (Uniform State/USAID/Commerce/Agriculture/DIA)

If OBO deems the project feasible and funding is available, OBO issues specific guidance in a cable to post regarding the design review and permit requirements for each project. Those requirements vary. 15 FAM 645 provides elementary guidance (using monetary thresholds) on the general requirements for each type of project. However, there are exceptions to the rule. For example, structural and electrical work, regardless of dollar value, can seriously jeopardize life safety if performed improperly. Likewise, historically significant buildings require special attention to protect cultural assets. Proposed projects are reviewed in detail each year to determine the appropriate categorization. Each project will be categorized as an "A," "B," or "C" type project:

- (1) Type "A" projects are managed by posts and are estimated to cost less than \$50,000. These projects require no review by the Design and Engineering Division in the Project Execution Office of the Bureau of Overseas Buildings Operations (OBO/PE/DE) and are exempt from permit requirements; however, technical assistance is available upon request;
- (2) Type "B" projects are the most common and are valued between \$50,000 and \$250,000. These projects require a technical review when the design reaches the 90% completion stage (see 15 FAM 645.1-3). OBO reviews the 90% design for code compliance and provides feedback to post. Upon receipt of OBO's feedback, post must incorporate the comments, finalize the design, and submit it to OBO for approval. OBO performs a final review, ensures comments are adequately incorporated, and approves the design by issuing a building permit;
- (3) Type "C" projects are larger, greater than \$250,000, and more complex. This work requires the services of professional design and construction firms. OBO/PE/DE staff, with other OBO professionals, assists post with all aspects of the work, including project planning, design, construction, and commissioning. These projects require a technical review when the design reaches the 35% completion stage and when the design reaches the 90% completion stage. OBO reviews the designs and works with posts as in Type "B" projects.

15 FAM 645.1-3 Design Review Guidance

- a. Projects submitted to OBO for design review should include this list of key documents:
 - (1) Provide a site plan, drawn to scale, showing location of the work in proximity to property boundary lines, roadways, other structures, and utility runs;
 - (2) Provide demolition plans if existing structures are being removed;
 - (3) Provide floor plans depicting the extent of the work and clearly indicating changes in the architectural, structural, mechanical, electrical, and security features of the building(s). Spaces and dimensions should be clearly labeled and drawn to a metric scale of 1:100. Provide elevations (side views) to explain horizontal components of the work. Include specifications containing written descriptions of the materials and equipment being installed (manufacturers' catalogue cuts will often suffice); and

- (4) Provide a construction-cost estimate evaluating the adequacy of the project budget.
- b. Post must properly classify all design documents in accordance with the Security Classification Guide for Design and Construction Projects Overseas (SCG) and obtain required local permits and permissions. For procurement guidance and assistance, post should refer to the Office of the Procurement Executive (A/OPE) Web site to review models and procurement instructions in the "Cookbook." For codes and design guidelines, post should refer to OBO's Web site.

15 FAM 645.1-4 As-Built Drawings

(CT:OBO-5; 03-21-2006) (Uniform State/USAID/Commerce/Agriculture/DIA)

After completion of any OBO-approved and funded type "B" or "C" project, post must submit a complete set of as-built drawings to the Area Management Division in the Operations and Maintenance Office of the Bureau of Overseas Buildings Operations (OBO/OM/AM).

15 FAM 645.2 Changes to Capital Construction Projects

(CT:OBO-5; 03-21-2006) (Uniform State/USAID/Commerce/Agriculture/DIA)

For at least two years after completion, no major alterations or improvements (including addition of annex buildings or other structures, or changes in the initial furniture, furnishings, appliances, and equipment) should be made to any OBO capital construction project without prior OBO approval. The correction of problems with installed equipment and systems; safety, health, and environmental problems; and emergency work requests are exempt.

15 FAM 645.3 Emergency Generators and Uninterruptible Power Systems (UPS)

15 FAM 645.3-1 Detailed Requirements for Emergency Generators

(CT:OBO-5; 03-21-2006) (Uniform State/USAID/Commerce/Agriculture/DIA)

a. Posts may not purchase, scrap, install, sell, or transfer generators without prior approval of the Facilities Management Division in the Operations and

- Maintenance Office of the Bureau of Overseas Buildings Operations (OBO/OM/FAC). Proceeds from generator sales must be reimbursed directly to OBO as a "Proceeds of Sale" transaction. For appropriate procedures, contact the post financial management officer or the Financial Management Division in the Resource Management Office of the Bureau of Overseas Buildings Operations (OBO/RM/FM).
- b. Posts must submit emergency power requirements to OBO/OM/FAC for review, approval, and funding. 15 FAM Exhibit 645.3-1A lists the information needed for requests for new or replacement equipment and upgrades. OBO/OM/FAC will determine whether its engineers or a contracted commercial firm will conduct an on-site systems assessment, and if any design effort is needed to implement the project.
- c. Emergency Generator Program funds can be used to:
 - (1) Survey and design a new generator project;
 - (2) Modify or construct a room, structure, or housing for the generator;
 - (3) Crate, ship, and install the generator and all ancillary equipment; and
 - (4) Replace electrical equipment connected to the generator if increased output capacity is necessary.
- d. The following project costs may be funded as part of a generator project:
 - (1) Generator set and all required accessories, including manufactured and third-party options, panel boards, breakers, cables, fuel pump, batteries and charger, fuel (day) tanks, and sound-attenuated winterized enclosures;
 - (2) Automatic transfer switch (ATS) and generator controls;
 - (3) New or modified generator buildings and all associated fixtures and fittings;
 - (4) New or larger fuel storage tank and fuel lines, pumps, filters, etc.;
 - (5) Taxes, export packing, shipping costs, and storage (short-term);
 - (6) Installation and testing for commissioning of complete generator set; and
 - (7) Initial set of spare parts (2000 hours) for new generator set installations.
- e. Whenever there is a change of equipment, posts must submit an updated emergency generator inventory list to OBO/OM/FAC (see 15 FAM Exhibit 645.3-1B for required information).
- f. General requirements for generators:
 - (1) Generator installations will use electronic governors and be

- automatic-start with automatic transfer switches for unattended automatic operation, unless local conditions warrant otherwise and prior approval is given by OBO/OM/FAC; and
- (2) Only diesel-fueled engine generators will be installed (gasoline-fueled generators are prohibited at posts abroad).

15 FAM 645.3-2 Uninterruptible Power Systems

(CT:OBO-5; 03-21-2006) (Uniform State/USAID/Commerce/Agriculture/DIA)

- a. The uninterruptible power system (UPS) equipment provides designated, approved loads with a no-break power source. Certain mission-critical electronic equipment (demonstrated as subject to damage during power fluctuations or periods of transfer from one power source to another) may be approved by OBO/OM/FAC for UPS equipment. A UPS provides a sufficient period of time to allow users an orderly shutdown of equipment based on an engine-generator nominal start-up time of 15 to 20 seconds. Requests for UPS support should be made only after it has been determined that voltage regulators cannot solve the problem.
- b. If a UPS appears to be necessary, post should contact OBO/OM/FAC and provide a list of mission-critical equipment, security systems, and communications and other electronic equipment. OBO/OM/FAC will:
 - (1) Validate actual need at each designated load;
 - (2) Determine the type and size of equipment/load;
 - (3) Provide engineering and design support; and
 - (4) Determine whether conditions warrant multiple-zone type UPS.

15 FAM 646 THROUGH 649 UNASSIGNED

15 FAM EXHIBIT 643 MEMORANDUM OF UNDERSTANDING (MOU) TEXT

(CT:OBO-5; 03-21-2006)

between the United States Department of State and the [Tenant Agency]

This Memorandum of Understanding (MOU) (insert, if appropriate, including certain clarifications and modifications appended hereto as an addendum) is made and entered into by and between the United States Department of State and the [Tenant Agency (TA)].

WITNESSETH: The parties hereto agree as follows:

Whereas the Foreign Service Buildings Act of 1926 (the Act) as amended, authorizes the Secretary of State to acquire sites and buildings abroad and, among other things, to maintain, repair, improve and refurbish these properties, the Secretary of State has delegated this authority to the *Director/Chief Operating Officer*, Bureau of Overseas Buildings Operations (OBO) *who*, notwithstanding source of funding, acts as the Single Real Property Manager (SRPM) for nonmilitary U.S. Government property abroad (with the exception of certain facilities used exclusively by the United States Agency for International Development (USAID) and which are covered by separate legislative authority, and short-term leased facilities of other agencies). Implementing regulations are contained in Volume 15, Foreign Affairs Manual.

This Act renders the Department of State accountable for various property management functions, including new construction, acquisition, maintenance, modification, and disposal. Because even a small project may have a critical impact on the Department of State's responsibility with respect to function use; architectural, structural, and construction issues; building systems (mechanical, electrical, civil, etc.); fire and life safety; security safeguards; Congressional certification, and other concerns extending to the construction, operation and function of the property, the TA agrees it will not undertake any work, project, or installation that in any way alters or affects a building's design, construction, functional use, systems or structural components in Department of State-managed facilities without prior OBO approval. Further, the Department of State and the TA agree that prior planning and written OBO authorization must be obtained to ensure that all proposed projects are accomplished in a cost-effective and efficient

manner, with minimal disruption to ongoing post activities, and with due regard for normal foreign mission responsibilities and the security of sensitive operations.

Accordingly, and in furtherance of these objectives, OBO, on behalf of the Department of State, and the TA agree to designate representatives who will develop and implement appropriate, mutually acceptable procedures for introducing, scheduling, developing, and tracking proposed new and/or rehabilitation projects; determine whether the TA or OBO will be responsible for design and/or construction; provide for OBO review and approval of proposed projects, plans, inspection of work in progress, and completed projects; resolve funding aspects and initiate certification or confirmation procedures before commencement of work; develop procedures to expedite the issuance of any special access or security clearances which may be required of identified OBO personnel and its contractors to carry out their functions; and address other related issues in a timely manner.

Although documentation requesting structural changes to the building ultimately must be approved by OBO, in keeping with current procedures, the Department of State's *Bureau of Information Resource Management must* remain the designated point of contact for consolidation and coordination of all requirements for building alterations, additions, or new construction related to communications and computer systems of all building tenants.

Subject to clearance criteria, the TA agrees to issue any special security clearance that OBO-designated representatives may require in order to participate fully in the development, implementation, and performance of those procedures that are the subject of this document, and which will be appended to, incorporated in, and made an integral part of this Memorandum of Understanding.

In particular, the TA shall, when seeking design, construction or physical changes in U.S. Government-owned or long-term leased property:

- (1) Provide OBO with all of its operational and functional requirements with respect to new construction or any proposed changes before the statement of work is finalized and approved and included in the architect or engineer design or construction contract.
- (2) Process all requests for design changes, construction change orders, change in construction materials, and special maintenance and *improvement* projects to existing buildings through OBO in sufficient time to receive OBO's review and written approval.
- (3) Provide OBO with valid funding citations at the time that the change is requested. Valid funding citations will be received prior to issuance of written approval of the job by OBO.
- (4) If necessary for access, grant any special security clearances for

- OBO-designated personnel and its contractors during the construction of a building *that* contains areas designated for use by the TA so that the on-site OBO project director and his or her project staff will have access to those spaces when, where and as appropriate and necessary to carry out technical inspections of completed work or work in progress and to perform fire prevention and safety inspections. For new embassy buildings, this access will continue until the building is commissioned and officially turned over to the post.
- (5) To ensure that there will be no unauthorized changes to any previously agreed upon contractual scope of work in which the Department of State is the contracting office for a specific project, the TA agrees that its employees or contractors will not have any contact or discussions of any type with Department of State construction contractors or material vendors except through the Department of State contracting officer (CO) or the contracting officer's representative (COR), or at the construction site, the OBO project director.
- (6) If necessary for access to TA spaces, grant special access or security clearances for OBO-designated personnel and its contractors to expedite their entry into space occupied by the TA when, where, and as appropriate and necessary to carry out technical inspections of completed work or work in progress, or to perform routine maintenance, fire prevention and safety inspection functions.
- (7) Have the right to, and should conduct operation checks of, systems completed by OBO prior to acceptance of such systems.
- (8) To the extent it is agreed that project authority will be exercised by the TA, introduce, schedule, develop, track and otherwise conduct the project in strict accordance with a project plan, which is to include provisions of all relevant architectural and engineering designs, plans and documents to OBO for review and approval prior to implementation. The TA will keep responsible OBO offices, post administrative officers and security personnel informed of progress during implementation and shall immediately bring to the attention of responsible OBO offices, post administrative officers, and security personnel, deviations or changes to the approved project plan that have arisen during implementation.
- (9) Distribute this MOU to appropriate TA field personnel for their information and compliance.

OBO as the representative of the Department of State shall:

- (1) Determine, in concert with the TA, which agency will be responsible for a project. To the extent that OBO is responsible for a project, make every effort to comply with TA requests for special maintenance and improvement projects in a timely fashion. Prepare, or where appropriate, assist in preparing a Project Authorization Memorandum (PAM), using operational and functional requirements received from the TA, to document the scope and planned funding of the project. The PAM must be evaluated by elements of OBO and must establish the project's baseline scope, budget and schedule. OBO also will assign Project Identification Numbers (PINs) to approved requests in order to prioritize and expedite handling.
- (2) Initiate clearances or approvals required by law or regulation.
- (3) Identify, by position or individually, those OBO personnel or contractors requiring special access clearance and initiate such action as may be necessary to obtain the appropriate level or type of clearance.
- (4) Where required by established internal operating procedures of the TA, provide advance notice of pending inspections/inspectors to designated headquarters liaison staff, who will act to facilitate access to TA space.
- (5) Encourage TA participation and assistance, as required, in planning and conducting surveys based upon the *Project Authorization Memorandum (PAM)* schedule.
- (6) Provide TA proponents with the names of liaison office(r)s in OBO, and a reporting program for the project to respond to TA information and scheduling needs.
- (7) Be responsible for certifying compatibility with existing building systems of any new equipment or systems, such as chillers, power generators, upgraded power suppliers, and radio frequency (RF) shielding, from general subcontractors or U.S. Navy Construction Battalion (Seabee) personnel.

Director/Chief Operating Officer Bureau of Overseas Buildings Operations U.S. Department of State	[Tenant Agency]
Date	

15 FAM EXHIBIT 645.3-1A SUBMITTING REQUESTS FOR SUPPORT FROM THE FACILITIES MANAGEMENT DIVISION IN THE OPERATIONS AND MAINTENANCE OFFICE OF THE BUREAU OF OVERSEAS BUILDINGS OPERATIONS (OBO/OM/FAC)

(CT:OBO-5; 03-21-2006)

Posts should submit, whenever possible, the information below with a request for new (or replacement) generators, fuel tanks, generator buildings, and emergency electrical distribution systems. The Facilities Management Division in the Operations and Maintenance Office of the Bureau of Overseas Buildings Operations (OBO/OM/FAC) must maintain and update post information annually. If the information is not available, post should notify OBO/OM/FAC.

Send information to OBO/OM/FAC via telegram, FAX (703) 452-8768, or pouch to the Facilities Management Division in the Operations and Maintenance Office of the Bureau of Overseas Buildings Operations, SA-18, Suite 200, WASHDC 20522-0611. All correspondence on generator matters must include OBO/OM/FAC and program TAGS "KPWR."

- (1) Provide property identification (PropID), type of property (e.g., OBC, COB, EMR, WHE, RES/STD), and gross and net floor space to be served by new generator (see 15 FAM Exhibit 238A, 15 FAM Exhibit 238B, and 15 FAM Exhibit 238C for definitions of net and gross floor space). Indicate if the generator will be, or is, the designated emergency power source for either the post communication center (PCC) and/or safe-haven or other safe area. Post preliminary assessment of voltage fluctuations and city power outages weekly also should be provided to OBO/OM/FAC, to assist in selecting the most appropriate equipment ratings.
- (2) Provide information on any existing generator(s) and associated transfer switches (in the format of 15 FAM Exhibit 645.3-1B) as well as information on the intended disposition or reuse of existing generators.
- (3) If the building to be served by the new generator is air-conditioned, list the number of units installed. For each unit, indicate the type of unit (e.g., split-pack or window unit), three-phase or single-phase, and its rating in tons or other power unit, to include kilowatt (KW) and kilovolt Amp (KVA), horsepower (HP), or British thermal units

- (BTUs), if appropriate.
- (4) If the building to be served by the new generator is connected to a separate transformer station for commercial power, provide the nameplate information consisting of:
 - (a) Power rating in KVA;
 - (b) Single- or three-phase;
 - (c) Secondary voltage (phase-phase and phase-neutral);
 - (d) Oil filled or dry type; and
 - (e) Location (i.e., the distance between the transformer and the proposed location of the generator).
- (5) Provide the following information for the main electrical service switch or circuit breaker:
 - (a) Size in amps;
 - (b) Whether one- or three-phase;
 - (c) Voltage;
 - (d) Whether three- or four-wire service;
 - (e) Size in square millimeters or American Wire Gauge (AWG) of the service cable connecting the transformer or commercial power connection point and the service switch; and
 - (f) Disconnect type (switch or circuit breaker).
- (6) Estimate the number and average duration of each city power outage during the last 12 months and note other unusual circumstances regarding the stability of local commercial power.
- (7) Itemize the building loads by size, type, and characteristics (such as KW, KVA, or HP, and whether single- or three-phase). Where elevators exist, indicate the number and, for each, the number of floors they serve, whether passenger or freight, electrical load in KW, voltage, and whether single- or three-phase. Also supply information (number, load in KW, KVA, etc.) on the following typical equipment:
 - (a) Electric heat;
 - (b) Food service refrigerators;
 - (c) Food service freezers;
 - (d) Ranges (specify electric or gas);
 - (e) Ovens (specify electric or gas);
 - (f) Microwave ovens;

- (g) Clothes dryers (specify electric or gas);
- (h) Hot water heaters (specify electric or gas);
- (i) Water pumps;
- (j) Security lighting (number of fixtures, watts per lamp);
- (k) Interior lighting (number of fixtures, maximum watts per lamp); and
- (I) Other special function facilities.
- (8) Describe proposed location of the new generator, including interior room dimensions and number of exterior walls. Note the following:
 - (a) Generators must be located on ground or basement levels where ventilation (intake and exhaust) requirements can be accommodated;
 - (b) Outdoor generator installation units in weatherproof enclosures are appropriate where security and corrosive atmospheric conditions are not a problem; and
 - (c) Appropriate sound attenuation, vibration, and exhaust provisions are incorporated into the weatherproof enclosure.
- (9) If there is a fuel-oil tank, describe capacity, location, whether it also serves another diesel generator or heating system, and the type of heating oil used. If a new fuel tank is required, indicate the proposed location.
- (10) Identify the diesel generator manufacturers represented in the country or region, and indicate whether generator maintenance capability exists locally.
- (11) If a local vendor is available, provide the following cost data listed below:
 - (a) Cost for proposed generator set (genset) and associated equipment. (The basis for cost comparison should include the size of the prime or continuously rated KVA and/or KW, type of generator set, and all required accessories, equipment and options. Options include critical muffler, vibration isolators, weather-protective housing protective circuit breaker, instrument panel, fuel tank, day tank, battery and battery rack, battery charger, fuel pump, electronic governor, jacket water heater, extended generator winding for single- or three-phase operation without derating, and service manuals);
 - (b) Cost for shipping;
 - (c) Cost for constructing or modifying the generator room; and

- (d) Cost for complete installation of the equipment (electrical and mechanical).
- (12) Whenever possible, for lower costs, the facility generator main fuel tank should be procured locally. To reduce fuel tanker activity, this tank should be sized for a minimum of eight (24-hour) days at continuous full-load operation or greater, depending on local site conditions. Thus, oil-fired boilers that are also supplied from this main tank should be considered when sizing the main tankage. OBO/OM/FAC may provide engineering guidance and support to posts that request assistance in calculating requirements for fuel. Prior to making any procurement decisions, posts must contact OBO/OM/FAC and request technical standards necessary to meet Federal and Department storage tank requirements.
- (13) Construction of new, or rehabilitation of existing generator rooms, requires drawings and technical specifications development. Posts should advise OBO/OM/FAC of local expertise available, including electrical, mechanical, and other engineers to perform survey and design work, and local electrical contractors for installation and commissioning.

15 FAM EXHIBIT 645.3-1B GENERATOR INVENTORY DATA SHEET

(CT:OBO-5; 03-21-2006)

The information listed below should be completed for each generator, including stored units and those supporting non-State Department facilities. Send information to the Facilities Management Division in the Operations and Maintenance Office of the Bureau of Overseas Buildings Operations (OBO/OM/FAC) via telegram, FAX (703) 452-8768, or pouch to the Utility Management Program Office, SA-18, Suite 200, WASHDC 20522-0611. All correspondence on generator matters must include OBO/OM/FAC and program TAGS "KPWR."

Α. LOCATION A.1 Post A.2 Facility name A.3 Facility property number A.4 Facility lease type (GO, LTL, STL/DOS, STL/NON-DOS) A.5 Areas of building served (if not entire building) A.6 Occupant of building (if Department of State is not present) В. GENERATOR SET B.1 Manufacturer B.2 Model number B.3 Serial number B.4 Prime or continuous rating in kilovolt Amp (KVA) B.5 Prime or continuous rating in kilowatts (KW) B.6 Standby rating in KVA B.7 Standby rating in KW B.8 *Number of phases (single- or three-phase)* B.9 Output voltage (phase-phase) B.10 Output voltage (phase-neutral) Frequency (50 or 60 Herz (Hz)) B.11 B.12 Engine fuel type (diesel, gasoline, etc.) B.13 *Installation date (if known)* B.14 Run-time hours and date of reading

General assessment of condition (good, fair, poor, etc.)

Estimated annual run-time hours

B.15

B.16

C. TRANSFER SWITCH C.1 Automatic or manual transfer switch (ATS or MTS) C.2 TS manufacturer *C.3* TS model number TS serial number C.4 TS ampere rating (maximum rated amps) C.5 C.6 TS voltage rating (maximum rated volts) TS number of poles (one, three, or four) C.7