TABLE 4.3.2.1–1.—*Projected Utility Consumption Rates and Capacities*[1]

WEAPONS LEVELS	STEAM Mkg/yr (Mlb/yr)	ELECTRICITY MWh/yr	NATURAL GAS Mm^3/yr (Mft^3/yr)	WATER Mliters/yr (Mgal/yr)	WASTEWATER TREATMENT Mliters/yr (Mgal/yr)
2,000[2]	181 (398)	90,400	16.2 (573)	1011 (267)	647 (171)
1,000[3]	145 (319)	68,200	13.0 (458)	791 (209)	522 (138)
500[4]	73 (160)	57,100	6.5 (229)	689 (182)	439 (116)
System Capacity[5]	596 (1,314)	201,480	289 (10,220)	1,893 (500)	829 (219)

M = million

[1]Table represents total consumption rates of all Pantex Plant operations.
[2]Based on 1993 consumption rates. Rates include a 10% margin to provide a conservative estimate.
[3]Based on 2005 projected consumption rates. Rates include a 10% margin.
[4]Prorated reduction of electricity, water, and wastewater based on straight-line reduction utilizing 2,000 and 1,000 weapons consumption rates. Reduction of steam and natural gas consumption rates for the 500 weapons level are based on the use of an existing, auxiliary, 25,000 lb rated boiler instead of the 50,000 lb rated boiler. Rates include a 10% margin.
[5]Capacity based on *FY1995 Pantex Plant Site Development Plan* (DOE 1995j).
Sources: DOE 1994f:7; DOE 1995j:10

currently planned needs for FY 2005 (plus 10 percent) (DOE 1995j:10; Pantex 1996b:App A). The 500 weapons level consumption rates were prorated using straight-line reductions based on 2,000 weapons and 1,000 weapons level scenarios.

Data in Table 4.3.2.1–1 show a proportional straight-line decrease in utility consumption rates as the level of activities decreases from the 2,000 weapons level to the 500 weapons level. For example, electricity consumption ranges from 90,400 to 57,200 megawatthours per year; inversely, the system capacity remaining would increase from 111,280 to 144,480 megawatthours per year.

Two exceptions to proportional decrease in utility consumption exist for the 500 weapons level. Steam and natural gas consumption during the 500 weapons level scenario are reduced by 50 percent instead of a 26 percent straight-line reduction in steam and 15 percent straight-line reduction in natural gas. This is because an existing smaller natural gas boiler would be utilized in the 500 weapons level scenario.

Pit Storage Activities

Currently, all existing Modified Richmond and SAC magazines have the necessary utility support and material access control, and are supported by existing plant facilities and infrastructure. SAC magazines are used to stage nuclear assemblies and nuclear components, and require similar levels of infrastructure support as the Modified Richmond magazines (Pantex 1996a:3.2). No new construction of plutonium storage magazines is required as a result of increasing interim storage to 20,000 pits. Therefore, current levels of infrastructure and utility support are expected to continue (DOE 1994w:6-1).

Pit Repackaging Operations

The repackaging of pits from AL-R8 containers into AT-400A containers is expected to begin in late 1996 or early 1997. This operation would be performed in existing bays within Zone 12