

Summary of Replacing Old Coal-fired Units with New “Plant Washington Clone” Units

Unit Size	>50MW	>100MW	>200MW
On-line Years	1950/60/70	1950/60/70	1950/60/70
No. Old Units	727	590	353
No. New Units	244	233	193
New MWs	207,400	198,050	164,050
Investment x \$B	\$585.6	\$559.2	\$463.2
No. Workers	390,400	372,800	308,800
Labor Wages x \$B	\$61.0	\$58.2	\$48.2

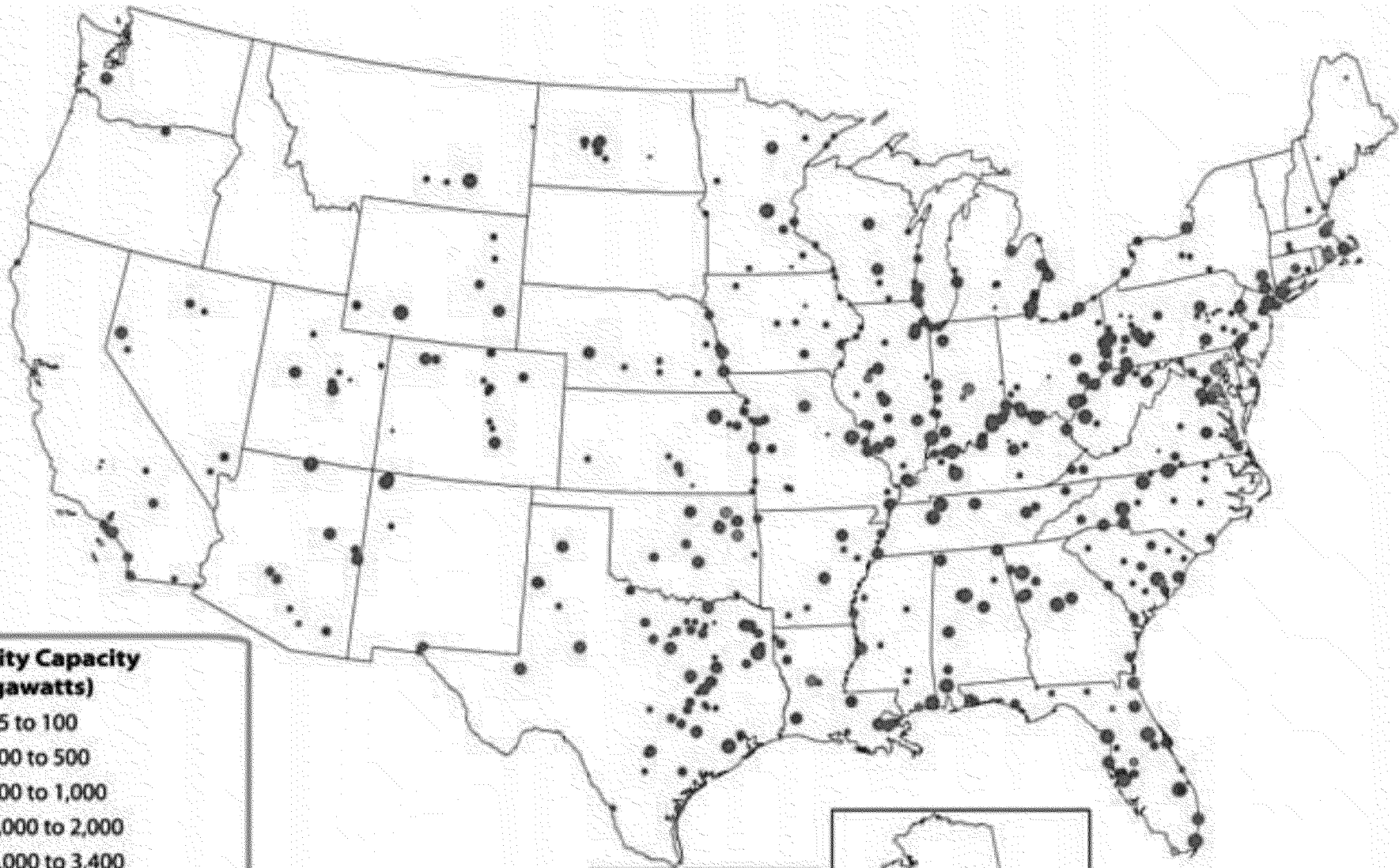
- We could replace the capacity of 727 power generation units (>50MW) built in 1950-60-70s with 244 “Plant Washington clones”.
- This would require an investment of \$585.6B.
- And would create 390,400 new jobs and \$61.0B in construction wages.

Reduction in Emissions Resulting from Replacing 727 Old Units with 190 New “Clone” Units

AFTER –Reduction in Emissions (Tons by Decade)							
Year On-Line	No. Clone Units	SO2 Tons		NOx Tons		CO2 Tons	
		Reduction by Decade	% Reduction by Decade	Reduction by Decade	% Reduction by Decade	Reduction by Decade	% Reduction by Decade
1950	27	1,003,928	96.1%	208,995	85.7%	21,205,017	11.4%
1960	49	1,192,358	94.1%	323,750	83.8%	30,416,689	9.3%
1970	115	1,363,514	88.6%	501,069	77.2%	65,884,349	8.6%
AFTER –Reduction in Emissions (Cumulative)							
Year On-Line	No. Clone Units	Total SO2 Tons Reduction	% Reduction of Total (1950-2000)	Total NOx Tons Reduction (1950-2000)	% Reduction of Total	Total CO2 Tons Reduction	% Reduction of Total
1950	27	1,003,928	20.6%	208,995	11.3%	21,205,017	1.1%
1950+60	76	2,196,286	45.0%	532,745	28.9%	51,621,705	2.7%
1950+60+70	190	3,559,799	73.0%	1,033,813	56.1%	117,506,054	6.1%

Replacing 727 old units with 190 new “clone” units would remove from the atmosphere:

- 3.6 million tons SO2,
- 1.0 million tons NOx
- 117.5 million tons CO2.



**Facility Capacity
(megawatts)**

- 25 to 100
- 100 to 500
- 500 to 1,000
- 1,000 to 2,000
- 2,000 to 3,400

Facility has coal units

Facility has oil units

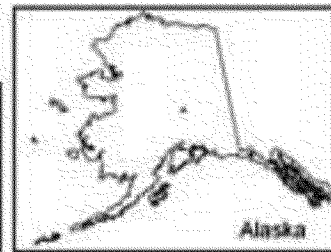
Facility has coal and oil units



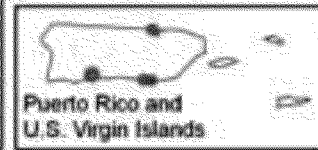
Guam



Hawaii



Alaska



Puerto Rico and
U.S. Virgin Islands