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# Impacts of a 25-Percent Renewable Electricity Standard as Proposed in the American Clean Energy and Security Act Discussion Draft

**Table ES-1. Summary Results**

| | 2007 | 2020 | | | 2025 | | | 2030 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Generation (billion kilowatthours)** | **Reference** | **Reference** | **RESFEC** | **RESNEC** | **Reference** | **RESFEC** | **RESNEC** | **Reference** | **RESFEC** | **RESNEC** |
| Coal | 2021 | 2198 | 2160 | 2090 | 2202 | 2076 | 2005 | 2311 | 2129 | 2054 |
| Petroleum | 66 | 49 | 49 | 49 | 49 | 50 | 49 | 50 | 50 | 50 |
| Natural Gas | 892 | 714 | 709 | 672 | 908 | 839 | 774 | 976 | 921 | 826 |
| Nuclear | 806 | 876 | 876 | 869 | 882 | 881 | 872 | 890 | 876 | 859 |
| Conventional Hydropower | 248 | 299 | 298 | 297 | 299 | 298 | 297 | 300 | 298 | 298 |
| Geothermal | 15 | 22 | 23 | 26 | 22 | 25 | 28 | 24 | 25 | 31 |
| Municpal Waste | 16 | 24 | 26 | 28 | 24 | 27 | 28 | 24 | 28 | 28 |
| Wood and Other Biomass | 39 | 139 | 178 | 263 | 197 | 359 | 460 | 218 | 438 | 577 |
| Solar | 1 | 20 | 20 | 20 | 21 | 22 | 23 | 23 | 30 | 31 |
| Wind | 32 | 203 | 204 | 227 | 207 | 207 | 248 | 208 | 208 | 249 |
| Other | 22 | 28 | 28 | 28 | 29 | 29 | 28 | 29 | 29 | 28 |
| Total Generation | 4159 | 4573 | 4571 | 4571 | 4840 | 4813 | 4813 | 5055 | 5032 | 5031 |
| | | | | | | | | | | |
| **Prices (cents per kilowatthour)** | | | | | | | | | | |
| Credit Price | 0.0 | 0.0 | 0.6 | 1.7 | 0.0 | 5.0 | 5.0 | 0.0 | 2.5 | 3.5 |
| Electricity Price | 9.1 | 9.3 | 9.3 | 9.3 | 9.5 | 9.7 | 9.8 | 10.1 | 10.1 | 10.1 |
| | | | | | | | | | | |
| **RPS Compliance** | | | | | | | | | | |
| Total Electricity Sales (billion kilowatthours) | 3747 | 4127 | 4124 | 4125 | 4348 | 4327 | 4320 | 4527 | 4500 | 4495 |
| Covered Baseline[1] | NA | NA | 3355 | 3357 | NA | 3358 | 3352 | NA | 3731 | 3727 |
| Credits Required (percent of total sales) | 0.0 | 0.0 | 11.4 | 14.2 | 0.0 | 16.5 | 20.6 | 0.0 | 16.5 | 20.7 |
| Credits Achieved (percent of total sales) | 0.0 | 0.0 | 11.2 | 14.0 | 0.0 | 14.9 | 18.3 | 0.0 | 16.3 | 20.4 |
| Eligible Generation Achieved (percent of total electricity sales) | 0.0 | 0.0 | 10.9 | 13.7 | 0.0 | 14.8 | 18.2 | 0.0 | 16.2 | 20.4 |
| | | | | | | | | | | |
| Electricity Sector Carbon Dioxide (million metric tons) | 2,433 | 2,466 | 2,426 | 2,341 | 2,533 | 2,382 | 2,287 | 2,639 | 2,444 | 2,333 |

[1]Defined as total electricity sales minus sales from exempt small retailers, minus hydroelectric generation and minus non-landfill gas municipal solid waste generation.
Source: Energy Information Administration, National Energy Modeling System runs, STIMULUS.D041409A, WAXRPS.D041609A, AND WAXRPSNE.D041609C.