

Treating Efficiency As A Resource

An Integrated Resource Planning
Perspective

IRP Framework

- Rationale for developing EE is to defer the need for more expensive and/or higher risk resources and reduce environmental impacts of the “power system”
 - It’s not a “societal goal” – it’s an economic goal
- PNW Framework pre-dated (by about a decade) the invention of “net” and “gross” program impact concepts
 - When Council adopted its approach there were few if any “non-utility” programmatic drivers for efficiency
 - First two plans were adopted prior to first federal energy efficiency standards
 - Energy Star didn’t exist
 - There were only very limited federal and/or state efficiency programs

Basic Components -1

Internal Consistency Between Load Forecast and Conservation Potential Assessment

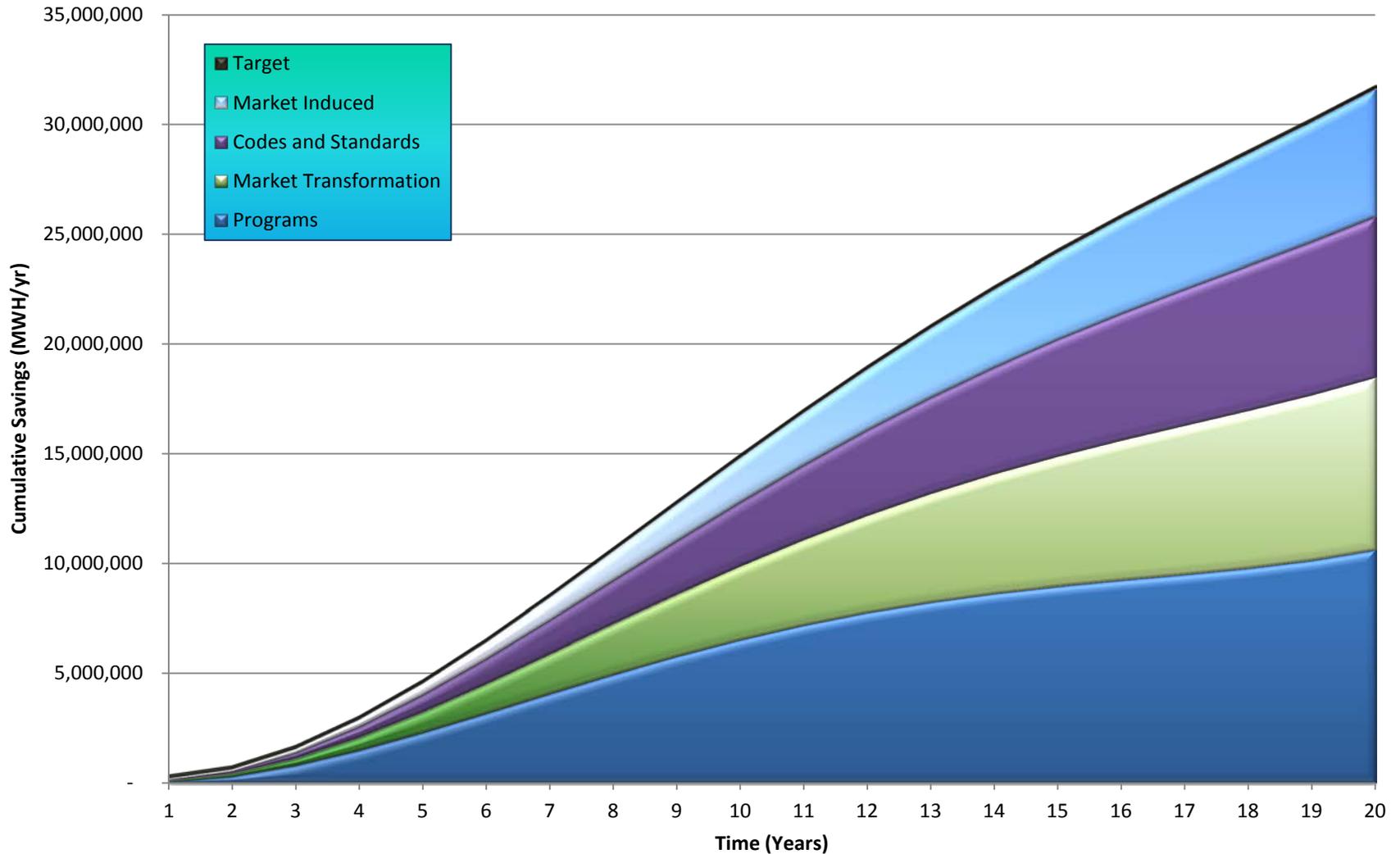
- All potential efficiency improvements are treated as “resource” options
 - Load forecast does not assume any improvements in efficiency beyond those resulting from know codes and standards and stock turnover
 - Both “baseline” and “efficient” states are internally consistent with load forecast
 - Base case forecast EUIs are the “baselines” for conservation potential assessment
 - Post-efficiency EUIs are the “loads” used to determine need for additional generation/power purchases

Basic Components - 2

Conservation Targets Are “Relative to Frozen Efficiency” Baseline Forecast

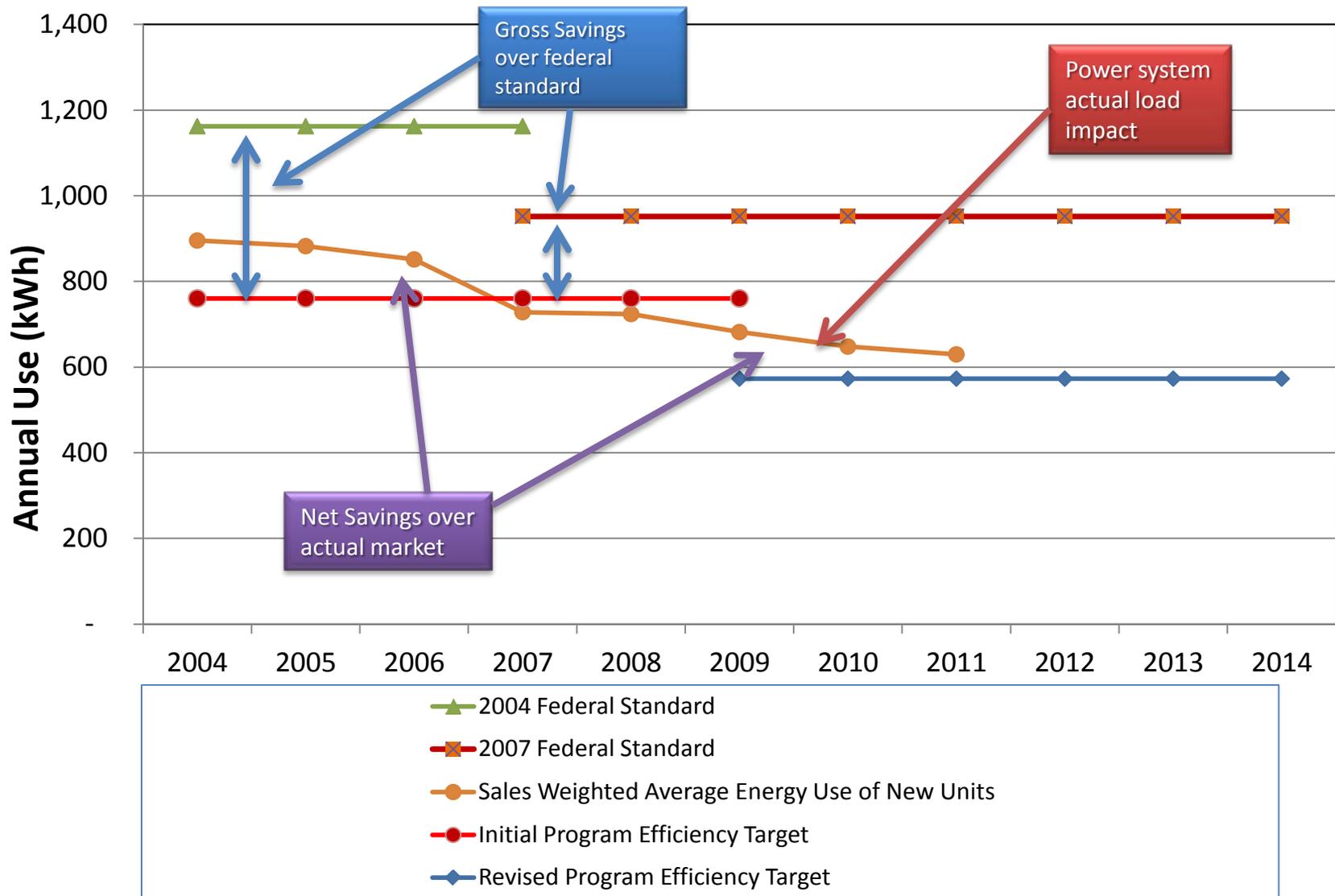
- Savings are tracked against fixed baseline
 - All sources of savings count toward target
 - No “attribution” of savings is needed for resource planning, only an reliable estimate to today impact
- Accounting for both Programmatic & Non-programmatic market effects is required
- “Attribution” (NTG, MT/ME impacts) evaluations are still needed for determining “program efficacy” (and

“All Source Accounting”



My View of “Conventional” Savings Tracking Through Time

Example: Residential Clothes Washer



PNW Approach to Tracking Savings Through Time

Example: Residential Clothes Washer

