

# T&D Deferral



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# T&D Deferral Value

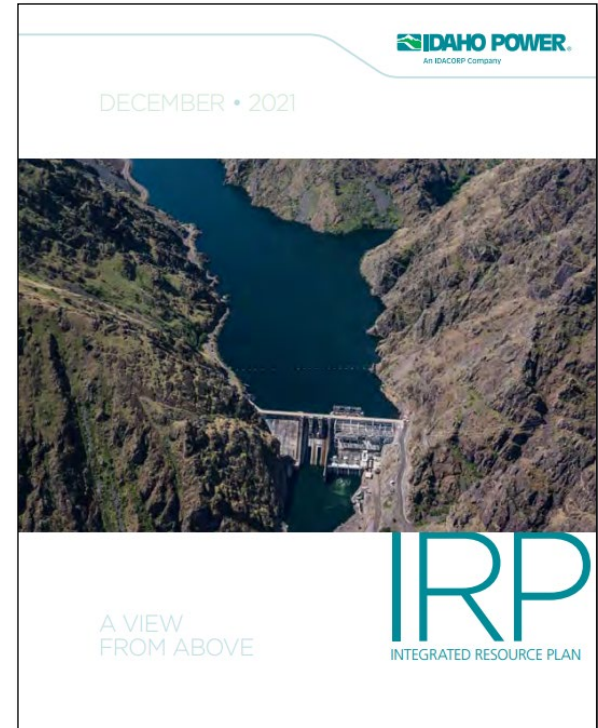


# T&D Deferral — IRP



**Deferral  
Value**

**Capacity  
Resource**





\*Not an Idaho Power transformer

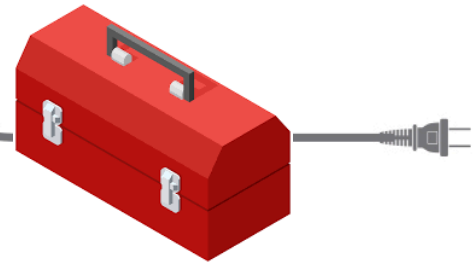


## Solution Considerations

Asset Replacement Grid Needs don't typically work well with NWS.



# Solution Development Toolbox



## Traditional Solutions



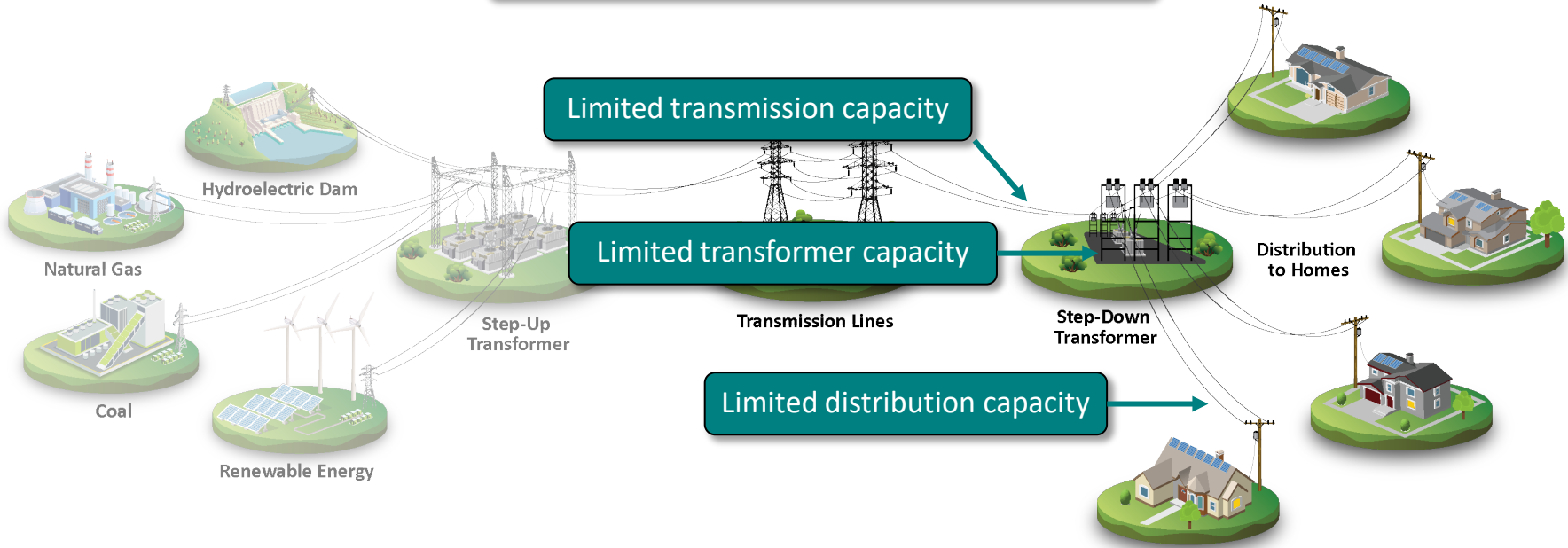
## Non-wires Solutions (NWS)



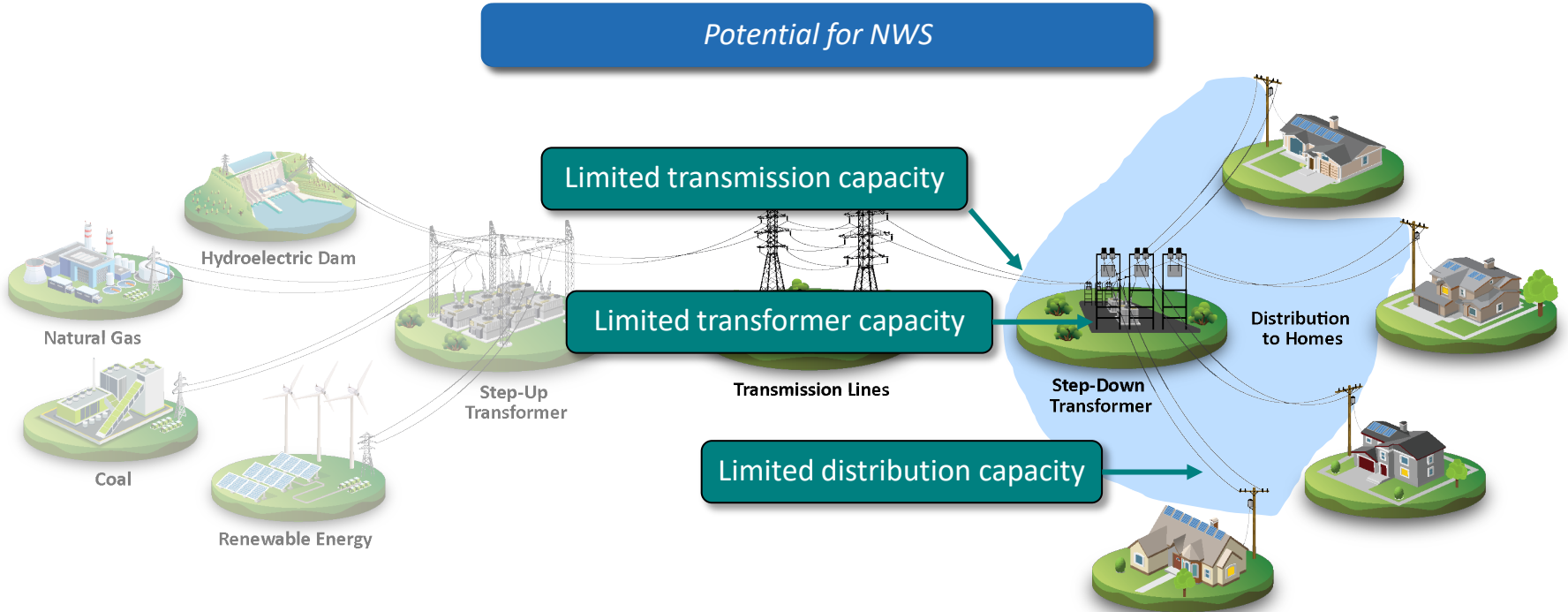
# Capacity Solutions



Traditional solutions (larger transformers/wires)



# Capacity Solutions





Meet load  
growth or  
other need

Net  
low-cost  
alternative

High-cost  
traditional  
project

**Non-wires  
Solutions  
Screens**



# MOON42 End of Feeder PV Project



# Battery Storage Considerations



## Large Scale

- Economies of Scale
- System Peak/Local Peak

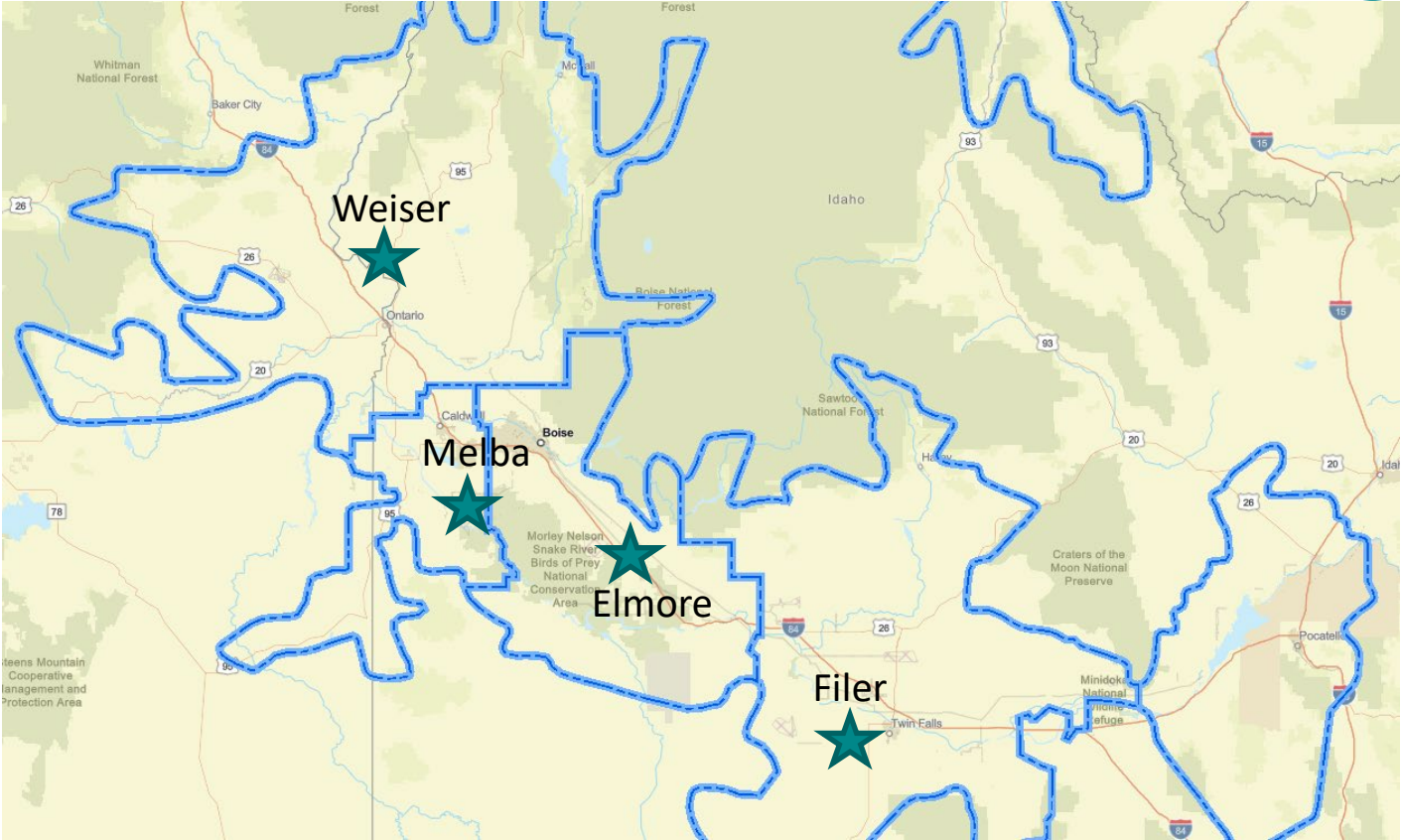
vs.

## Distributed

- Deferral Benefit
- Local Peak/System Peak



# Distributed Battery Projects





Peak occurs summer at 9 p.m.

Modest growth <0.85% per year

High cost for traditional solution

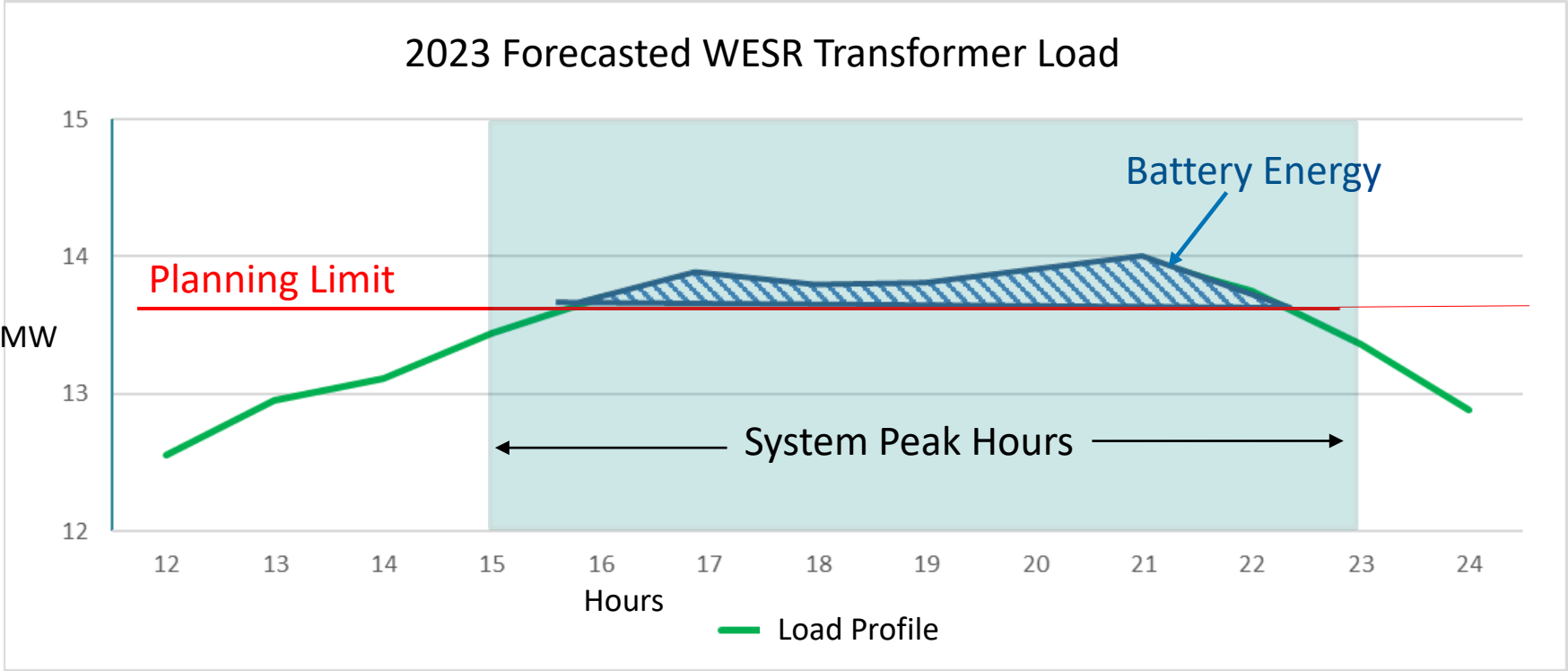
# Storage Resource Needs



**Table 1.1 Preferred Portfolio additions and coal exits (MW)**

Base B2H (MW)									
Year	Gas	Wind	Solar	Storage	Trans.	DR	Coal Exits	EE Forecast	EE Bundles
2021	0	0	0	0	0	0	0	23	0
2022	0	0	0	0	0	300	0	24	0
2023	0	0	120	115	0	20	-357	24	0
2024	357	700	0	5	0	0	0	25	0
2025	0	0	300	105	0	20	-308	27	0
2026	0	0	215	0	500	0	0	28	0
2027	0	0	250	5	0	0	0	27	0
2028	0	0	120	55	0	0	-175	27	0
2029	0	0	100	255	0	0	0	26	0
2030	0	0	0	55	0	0	0	24	0
2031	0	0	0	55	0	0	0	24	0

# Weiser Storage Peak Shaving



# WESR Battery System



## Battery Project Details

- 3 megawatt (MW) capacity 4-hour battery (12 megawatt-hour [MWh])
- Expandable to 4 MW capacity 4-hour battery (16 MWh)
- Expected to defer traditional project for 8 years



# T&D Deferral IRP Modeling



- T&D Deferral Value is modeled as a capital cost decrease to distributed storage in the IRP.
- 5 MW of grid-distributed storage is allowed to be built in any given year of the IRP.