WUTC DOCKET: UE-230172 & UE-210852

EXHIBIT: LDK-7

ADMIT ☑ W/D ☐ REJECT ☐

Exhibit LDK-7
Docket UE-230172 & UE-210852

Witness: Lance D. Kaufman

## **BEFORE THE**

### WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,

DOCKET UE-230172 (Consolidated)

Complainant,

v.

PACIFICORP d/b/a PACIFIC POWER AND LIGHT COMPANY,

Respondent.

In the Matter of

ALLIANCE OF WESTERN ENERGY CONSUMERS'

Petition for Order Approving Deferral of Increased Fly Ash Revenues

DOCKET UE-210852 (Consolidated)

### **EXHIBIT LDK-7**

EXCERPT OF WASHINGTON COST OF SERVICE COLLABORATIVE PRODUCTION AND TRANSMISSION CLASSIFICATION SCENARIOS (FEB. 21, 2019)



# Washington Cost of Service Collaborative Production and Transmission Classification Scenarios February 21, 2019















# Scenario 3 - Renewable Future Peak Credit

- Based upon a hypothetical scenario where marginal load is served with batteries and wind
- Capacity need met with battery
- Energy need met with wind
- Wind cost reduced for its anticipated capacity contribution multiplied by the fixed cost of a battery
- Produces a classification of 71% demand and 29% energy

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	PacifiC	огр	
State of Washington Classification of Production and Transmission Costs			
	Lithium Ion Battery S	<u> </u>	ay)
1	Fixed Cost per KW	\$345.21	
2	Cost per MWH to Charge	\$22.02	
3	Hours of Operation	200	
4	Storage Efficiency	85%	
5	Total Cost of Charging	\$5.18	Line 2 / 1000 / Line 4 X Line 3
6	Total Cost 1 KW, 200 Hours	\$350.39	Line 1 + Line 5
	2.0 MW Turbine 38% (		PTC)
7	Fixed Cost per kW	\$141.70	
8	Average Output Requirement @ 53.6% Load Factor	4,695	8,760 X 53.6%
9	Output @ 38% Capacity Factor	3,329	8,760 X 38%
10	Total kW Capacity Required	1.41	Line 8 / Line 9
11	Total Fixed Costs	\$199.87	Line 7 X Line 10
12	Demand Related Cost @ 11.8% Capacity Contribution	\$57.46	Line 10 X 11.8% X Line 1
13	Total Energy Related Cost	\$142.41	Line 11 - Line 12
14	Demand Component	71%	Line 6 / (Line 6 + Line 13)
15	Energy Component	29%	100% - Line 14

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