

AR 654 – Division 87 Rulemaking

Public Workshop: Transportation Electrification Portfolio Budgeting

March 16, 2022

Operating Agreements

- 1. Be energy efficient. (Allow room for multiple perspectives. Leave time for everyone.)
- 2. Stay engaged (connected) without tripping the circuit breaker. (Don't overheat.)
- 3. Consider environmental conditions. (Mute when not speaking.)
- 4. Seek understanding. (Listen to understand, not to respond.)
- 5. Group Norms. (Suggestions from participants.)



Who's Who

Hosts and Presenters (OPUC)

Sarah Hall, Resource & Programs Development Manager Ezell Watson, Director of Diversity, Equity and Inclusion Eric Shierman, Senior Utility Analyst Jill Goatcher, Assistant Attorney General, DOJ





Please introduce yourselves in chat.

Name and any organizational affiliation



Today's Agenda

| Section | Time |
|---|------------------|
| Welcome and Operating Agreements Sarah Hall, Resource & Programs Development Manager, OPUC Ezell Watson, Director of Diversity, Equity, and Inclusion, OPUC | 11:00 – 11:10 am |
| Staff Presentation and Discussion – | |
| Utility TE Portfolio Budget, Methodology and Assessment | 11:10 – 12:30 pm |
| Proposed Biennial TE Planning Cycle | 12:30 - 12:45 |
| Eric Shierman, Senior Utility Analyst, OPUC Sarah Hall Jill Goatcher, Assistant Attorney General, DOJ | |
| Additional Comments | 12:45 - 12:55 |
| Next Steps and Closing | 12:55 – 1:00 |

Orego Public Utility Commission

AR 654 Docket Schedule

| Date | Description |
|------------------|---|
| March 17, 2022 | First informal written comments due on draft Division 87 rules |
| Week of March 28 | Revised draft rules posted to docket |
| Week of March 28 | Public workshop to discuss revised draft rules |
| April 8, | Second informal written comments due |
| April 27 | Staff Report published with recommended draft rules and request to open formal rulemaking |
| May 5 | Staff Report presented to Commission at Public Meeting |
| May – July | Formal Division 87 rulemaking phase |
| August 2022 | Revised Division 87 rules effective |



Staff's Recommended TE Investment Framework

TE Portfolio Plan and Budget with broad scope, holistic process

Infrastructure Guardrail sets "upper bounds" for utility infrastructure investment in public charging ODOT's *Transportation Electrification Infrastructure Needs Analysis* (TEINA) based on State's EV adoption targets for light-duty EVs (SB 1044).

- Produces maximum need of chargers and ports per use case
- Utilities associate reasonable costs

| Portfolio Performance Areas Direct focus and reporting in key areas | Environmental benefits including greenhouse gas emissions impacts; Electric vehicle adoption; (Underserved community inclusion and engagement; Equity of program offerings to meet underserved communities; Distribution system impacts and grid integration benefits; Program participation and adoption; Infrastructure performance including charging adequacy; Learnings for readiness to advance innovation and efficiency. |
|---|---|
| Benefit/Cost Analysis Applied to portfolios to improve transparency, inform decision-making | Non-binding costs tests – 2022-2024 Jurisdiction-Specific Test developed for binding approval (2025 – onward) |

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Staff's Approach to TE Portfolio Budgets

- For TE programs, promoting EV adoption
- For infrastructure measures, **meeting the need** to fuel expected EV adoption
- Identify
 - Limit of the need, cost of need
 - External funding available, subsidy needed
- Not a mandated level of spending
- TE portfolio funded by
 - HB 2165 monthly meter surcharge
 - Clean Fuels Program
 - Division 87 ratepayer funds



Utility TE Portfolio Budget – Scope Sample

| TE Investment Framework | Type of TE Activity | Examples | Delivery | Expenditure | Cost Categories | Examples | Examples Expenditure | |
|----------------------------|------------------------|---|-------------------------|--------------------|---|---------------------------------------|--------------------------|--|
| | | Distribution system | Utility owned | Capital Expense | Capital Expenditure | Extension Allowance | No forecast available | |
| | | infrastructure that supports | | | Capital Carrying Cost | | | |
| | | transportation electrification | | | Administrative | | | |
| | | | | | O&M on the Investment | | | |
| | | | | Capital | Capital Expenditure | - | | |
| | | Communication and control | Utility-owned | | Capital Carrying Cost Administrative | DCE Desidential EV | | |
| Infrastructure | Infrastructure | technologies that support | | Expense | O&M on the Investment | PGE Residential EV Demand Response | \$ 516,000 | |
| | | transportation electrification | L | | Administrative | Demand Response | | |
| Need | Measure | | Customer-owned | Expense | Incentive | | | |
| | | | | | Capital Expenditure | | | |
| | | | | Capital | Capital Carrying Cost | - | | |
| | | Behind the meter | Utility-owned | | Administrative | PGE Schedule 56 Fleet | | |
| | | infrastructure that supports | | Expense | O&M on the Investment | Make-Ready | \$ 595,772 | |
| | | transportation electrification | | | Administrative | | | |
| | | | Customer-owned | Expense | Incentive | | | |
| | | Outreach and education rogram Technical assistance EV purchase assistance | Utility Provided | Capital | Capital Expenditure | PAC Dealer Engagement | | |
| | | | | | Capital Carrying Cost | | | |
| | | | | Expense | Administrative | | ¢ 25.000 | |
| | | | | | O&M to Deliver Service | | \$ 25,000 | |
| | | | Third-party Provided | Expense | Administrative | | | |
| | | | | | Grant | | | |
| | | | Utility Provided | Capital | Capital Expenditure | PAC Electric Mobility | | |
| | | | | | Capital Carrying Cost | | | |
| EV Adoption | Brogram | | | Evnanca | Administrative | | \$ 28,103 | |
| EV Adoption | Program | | | Expense | O&M to Deliver Service | | \$ 28,105 | |
| | | | Third-party Provided | Expense | Administrative | | | |
| | | | | LAPEIISE | Grant | | | |
| | | | Utility Provided | Capital | Capital Expenditure | | | |
| | | | | Capitai | Capital Carrying Cost | | | |
| | | | | Expense | Administrative | | \$ 1,025,000 | |
| | | | | Expense | O&M to Deliver Service | | ÷ 1,023,000 | |
| | | | Third-party Provided | Expense | Administrative | | | |
| | | | | | Grant | | L | |

Assumption: Examples reflect approved 2021 filings 10

Utility TE Portfolio Budget – Scope Sample

| | TE Investment Framework | Type of TE Activity | Examples | Delivery | Expenditure | Cost Categories | Examples | Examples Expenditure | | | | |
|--------------------------|----------------------------|------------------------|--|-------------------------|-------------------------|--|--|-------------------------|-------------------------|--|--|--|
| | | | Distribution system infrastructure that supports | Utility owned | Capital | Capital Expenditure Capital Carrying Cost | Extension Allowance | No forecast | | | | |
| TEINA data | | | transportation electrification | | Expense | Administrative O&M on the Investment | (ADV 1148) | available | | | | |
| informs | | | | | Capital | Capital Expenditure Capital Carrying Cost | | | | | | |
| calculation of | Infrastructure | Infrastructure | Communication and control technologies that support | Utility-owned | Expense | Administrative O&M on the Investment | PGE Residential EV Demand Response | \$ 516,000 | | | | |
| naximum | Need | Measure | transportation electrification | Customer-owned | Expense | Administrative Incentive | | | | | | |
| illowable | →→ | | | | Capital | Capital Expenditure Capital Carrying Cost | | | | | | |
| oudget | | | Behind the meter infrastructure that supports transportation electrification | | Expense | Administrative | PGE Schedule 56 Fleet Make-Ready | \$ 595,772 | | | | |
| | | | | Customer-owned | Expense | Administrative Incentive | | | | | | |
| Monthly | | | | | Capital | Capital Expenditure Capital Carrying Cost | - | | | | | |
| neter charge, | - | | Outreach and education | Utility Provided | Expense | Administrative O&M to Deliver Service | PAC Dealer Engagement | \$ 25,000 | | | | |
| Division 87 | | | | | | | Third-party Provided | Expense | Administrative Grant | | | |
| atepayer | | | | | | | | | Capital | Capital Expenditure Capital Carrying Cost | | |
| unds, and Clean Fuels | EV Adoption | Program | Program Technical assistance | Utility Provided | Expense | Administrative O&M to Deliver Service | PGE Nonresidential Technical Assistance | \$ 28,103 | | | | |
| Program | | | | Third-party Provided | Expense | Administrative Grant | 1 | | | | | |
| redits may | | | EV purchase assistance | Utility Provided | Capital | Capital Expenditure Capital Carrying Cost | | | | | | |
| und both | | | | | Expense | Administrative O&M to Deliver Service | PAC Electric Mobility Grant Fund | \$ 1,025,000 | | | | |
| ypes of ctivity | | | | | Third-party Provided | Expense | Administrative Grant | 1 | | | | |

Assumption: Examples reflect approved 2021 filings ¹¹

TE Portfolio Budget Scope

Not in scope - Capacity cost already in general rates

- Generation
- Distribution

In scope - Added expenditures beyond "general customer" policies

- PAC transportation line extension allowance
- PGE residential EV transformer upgrade exemption
- Fleet electrification

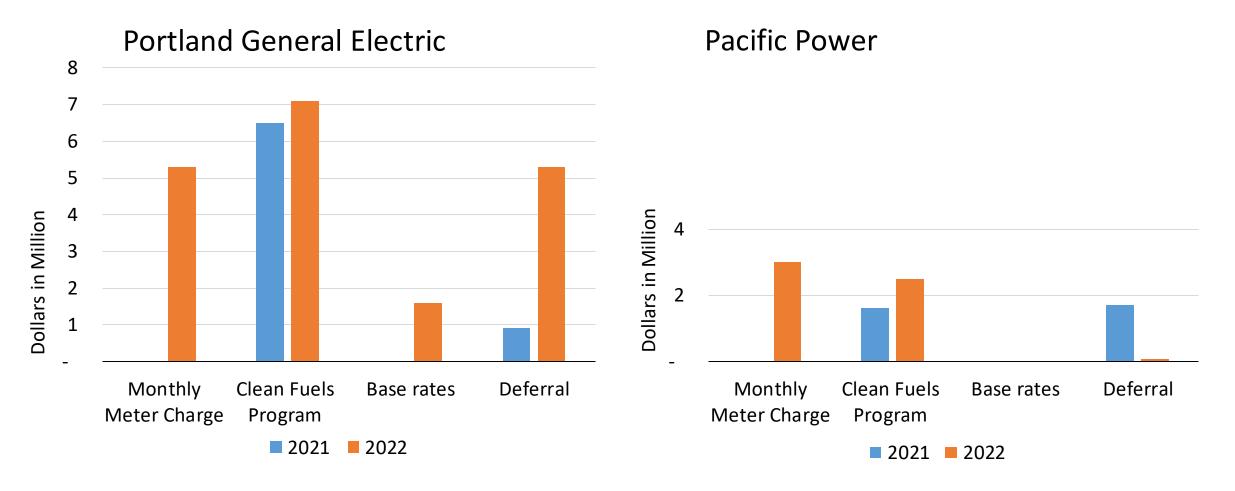


TE Portfolio Budget Components

- Expenditures and funding
- Capital
 - Amortization
 - Capital carrying cost
- Expenses
 - Administration
 - O&M on investments
 - Incentives
 - Other categories that may become appropriate
- Underserved communities



Baseline Estimates - TE Budgets



Assumptions:

Utility 2022 tariffs for Monthly Meter Charge forecasts Approved Clean Fuels Program budgets Approved TE pilots and deferrals

Establishing Infrastructure Need

ODOT's "Transportation Electrification Needs Analysis" Methodology (TEINA)

Most rigorous method of estimating number of public charging ports needed, by use case, for service territory and Census track level

TEINA establishes the **estimated # of ports** to meet SB 1044 targets. Stakeholders, utilities, and OPUC own **the budget creation process**.

Utilities should use:

- Updated forecasts of achievable EV adoption in service territory to drive infrastructure investments
- TEINA's methodology, or alternative method if better
- Utility's current cost data



About TEINA: Use Cases

| Publi | c in TEINA |
|-----------------|--|
| t Duty Privat | ie X |
| t Duty Public | c X |
| t Duty Public | x x |
| t Duty Privat | ie X |
| t Duty Public | x x |
| t Duty Public | x X |
| t Duty Public | x X |
| ium Duty Public | c X |
| /y Duty Privat | x X |
| t Duty Public | x x |
| /y Duty Public | x x |
| t Duty Public | x x |
| t Duty Privat | ie in the second s |
| able Privat | e |
| | t Duty Public t Duty Public t Duty Privat t Duty Privat t Duty Public t Duty Public t Duty Public t Duty Public vy Duty Privat t Duty Public t Duty Public t Duty Public |



Annualized Estimated Total Construction Costs for Public Charging -**Based on TEINA 2025 Ports for Light Duty Vehicles**

Commission

| Use Case | Ports | | | Cost | | |
|-------------------------------------|-------|-----|-------------|---------------|---------------|--------------|
| | PGE | PAC | Idaho Power | PGE | PAC | Idaho Power |
| Rural Workplace Charging | 86 | 32 | 13 | \$ 1,300,000 | \$ 500,000 | \$ 200,000 |
| Urban Workplace Charging | 943 | 214 | 0 | \$14,000,000 | \$ 3,200,000 | \$0 |
| Rural Public Level 2 | 288 | 215 | 16 | \$4,300,000 | \$ 3,200,000 | \$ 200,000 |
| Urban Public Level 2 | 324 | 17 | 0 | \$4,800,000 | \$ 300,000 | \$ O |
| Rural Public DCFC | 274 | 131 | 9 | \$26,900,000 | \$ 12,900,000 | \$ 900,000 |
| Urban Public DCFC | 131 | 7 | 0 | \$12,900,000 | \$ 700,000 | \$0 |
| Transportation Network Companies | 6 | 2 | 0 | \$ 600,000 | \$ 200,000 | \$0 |
| Corridor | 229 | 59 | 1 | \$ 22,500,000 | \$ 5,800,000 | \$ 100,000 |
| t Total | | | | \$ 87,300,000 | \$ 26,800,000 | \$ 1,400,000 |

- Illustrative purposes only
- Estimated cost assumptions
- Not mandated level of spending
- Budgets subject to stakeholder and Commission review
- TEINA Business as Usual scenario

TEINA Use Case Example – 2025 Need Level 2 Light-Duty Vehicle Public Charging

Oregon

Public Utility

Commission

| Census Tract | Workplace Level 2 | Public Level 2 | Public DCFC | Urban Tract | Urban Workplace | Urban L2 | Urban DCFC |
|--------------|-------------------|----------------|-------------|-------------|-----------------|----------|------------|
| 32609 | 6 | 4 | 1 | 1 | 6 | 4 | 1 |
| 32610 | 8 | 5 | 1 | 1 | 8 | 5 | 1 |
| 32700 | 15 | 9 | 3 | 1 | 15 | 9 | 3 |
| 32800 | 3 | 2 | 1 | 1 | 3 | 2 | 1 |
| 32901 | 16 | 10 | 3 | 1 | 16 | 10 | 3 |
| 32902 | 19 | 11 | 4 | 1 | 19 | 11 | 4 |
| 33000 | 15 | 9 | 3 | 1 | 15 | 9 | 3 |
| 33101 | 7 | 4 | 1 | 1 | 7 | 4 | 1 |
| 33102 | 10 | 6 | 2 | 1 | 10 | 6 | 2 |
| 33200 | 17 | 10 | 3 | 1 | 17 | 10 | 3 |
| 33302 | 15 | 9 | 3 | 1 | 15 | 9 | 3 |
| 33400 | 6 | 3 | 1 | 1 | 6 | 3 | 1 |
| 33500 | 11 | 6 | 2 | 1 | 11 | 6 | 2 |
| 33600 | 6 | 3 | 1 | 1 | 6 | 3 | 1 |
| 30101 | 21 | 12 | 4 | 1 | 21 | 12 | 4 |
| 30102 | 17 | 10 | 3 | 1 | 17 | 10 | 3 |
| 30201 | 9 | 7 | 7 | 0 | - | - | - |
| 30202 | 8 | 6 | 6 | 0 | - | - | - |
| 30301 | 14 | 10 | 10 | 0 | - | - | - |
| 30302 | 3 | 2 | 2 | 0 | - | - | - |
| 30400 | 11 | 9 | 8 | 0 | - | - | - |
| 30501 | 13 | 8 | 2 | 1 | 13 | 8 | 2 |
| 30502 | 9 | 5 | 2 | 1 | 9 | 5 | 2 |
| 30602 | 8 | 6 | 6 | 0 | - | - | - |
| 30900 | 14 | 8 | 3 | 1 | 14 | 8 | 3 |
| 31000 | 6 | 4 | 4 | 0 | - | - | - |
| Total | 3,286 | 2,653 | 1,383 | | | | |
| Urban | | | | | 3,028 | 1,789 | 561 |
| Rural | | | | | 258 | 864 | 822 |

Source and Inputs: PGE's Census Tracts ODOT TEINA "Business as Usual" scenario LDV (Urban and Rural) model V4

Reducing Risk of Utility Overinvestment

Investment risk mitigation bounded by need, and by:

- External funding
- Two-year assessment
- Two-year approval

Benefit/cost analysis

- Development of "jurisdiction-specific test" with stakeholders
- Pilots set to expire in 2024
- TE Plan review

Commissioner discretion



Review of Proposed Biennial TE Planning

Section 30

- Program application moves from advice filings to TE Plan
- Sets the program element of HB 2165
- Separate portion for infrastructure measures

TE Budget

- All TE activities
- Two-year budgets
- Filed as an appendix to TE Plan

Section 40

• Replaces ad hoc program assessment to become part of TE Plan



Add to HB 2165's TE Report

Submitting Public Comments

- By email <u>PUC.FilingCenter@puc.oregon.gov</u> Include "COMMENTS DOCKET NO. AR 654" in subject line
- By Mail Oregon Public Utility Commission, Attn: AR 654 Public Comment, PO Box 1088, Salem, OR 97308-1088
- By Phone 503-378-6600 or 800-522-2404 or TTY 800-648-3458, weekdays from 8 a.m. - 5 p.m. Pacific Time



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