2021-2023 TRANSPORTATION ELECTRIFICATION PLAN

REPORT ON PROCESS AND SITING FOR XCEL ENERGY DCFC STATIONS

PROCEEDING NO. 20A-0204E

December 2021

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OVERVIEW

Public Service Company of Colorado ("Public Service" or the "Company") files this report to update the Colorado Public Utilities Commission ("Commission") and interested stakeholders on program details for the Public Service Direct Current Fast Charging ("DCFC") Program. The Company's DCFC program was approved by the Commission as part of its 2021-2023 Transportation Electrification Plan ("TEP" or "2021-2023 TEP") in March 2021.

The Company worked collaboratively with stakeholders during two dedicated workshops in August 2021, in addition to considering written feedback from stakeholders, to further refine (a) the process and timeline in which the Company will conduct siting analyses, confirm such processes and timelines with stakeholders, and subsequently construct a limited number of public DCFC stations in 2022 and 2023 and (b) specific inputs, outputs, and constraints that will be included in siting analyses to identify good locations for both "market" stations and "connector" stations throughout the Company's service area. Importantly, the siting analyses will be conducted by a third-party vendor selected through a competitive solicitation process.

The Company sincerely appreciates all of the engagement and input provided by stakeholders throughout this process. The Company will examine the results of the siting analyses and site host applications closely and will work with stakeholders if any adjustments or additions to the processes outlined in this report are necessary to ensure a successful program implementation over the duration of the 2021-2023 TEP.

INTRODUCTION AND BACKGROUND

In approving the Company's 2021-2023 TEP, the Commission approved Company investment in a limited number of public DCFC stations,[1] throughout its service area, in order to help meet the public charging needs of customers and drivers when traveling within and between communities.

While approving the Company's DCFC Program, the Commission also directed the Company to "work with stakeholders to develop specific criteria for evaluating public DCFC applications and require the Company to file a report in this instant proceeding by April 30, 2021 that describes the stakeholder process related to this issue, provides details on the chosen criteria, and explains the process for how they will be used to identify gaps in service."[2] In its subsequent Decision on Applications for Rehearing, Reargument, or Reconsideration, the Commission further directed the Company to "work with stakeholders to identify and develop siting metrics, including metrics related to some stated distance between Company-owned DCFCs and privately-owned chargers. We expect this stakeholder engagement to last through 2021."[3]

The Company, therefore, conducted stakeholder engagement in August 2021[4] to present a draft process for program implementation in 2022 and 2023 and draft siting metrics. During and after the two stakeholder workshops, the Company collected feedback from interested stakeholders on the proposed process and metrics and made modifications to incorporate that feedback for the final Public Service DCFC Program design presented herein. The Company is filing this report to update the Commission and any other interested parties on the discussions with stakeholders and on the final program design.

[1] *See* Commission Decision No. C21-0017, ¶ 153, stating "the Commission approves Public Service's proposal to develop 13 'connector stations' in rural areas with lower traffic volume and 11 'market stations' in areas that feature the lowest traffic volume."
[2] *See* Commission Decision No. C21-0017, ¶ 153.
[3] *See* Commission Decision No. C21-0117, ¶ 40.
[4] The Company had discussions with individual stakeholders, and there were larger stakeholder meetings on August 5, 2021 and August 20, 2021.

PUBLIC SERVICE DCFC PROGRAM DETAILS

PROCESS AND TIMELINES

Per the Commission's directive, the Company worked with stakeholders this year to define with more granularity how the Public Service DCFC Program works. From a process perspective, the Company and stakeholders discussed and agreed upon the sequence of conducting siting analyses, soliciting site host applications, and building stations. Table 1 below summarizes these steps.

The Company and stakeholders continued to discuss the idea of two distinct sets of Company-owned public DCFC stations – "market" stations and "connector" stations – as initially discussed during the TEP proceeding. Market stations intend to help serve the public fast charging need for EV drivers primarily within communities to meet local demand for fast charging and for commuter trips, whereas connector stations focus more on enabling intercommunity travel where there may be no access, or limited access, to public fast charging, such as travel between cities and communities. The specific outputs and constraints to the separate siting analyses for each type of station are discussed in more detail in the next section of this report.

Table 1: Public Service DCFC Program Process

Year	Process
2021	**Stakeholder engagement**
2022	**Analyze sites, solicit and review site host applications, and build stations** • Identify underserved locations in early 2022 based on agreed upon siting metrics, after commercial/electric vehicle supply infrastructure ("EVSI") TEP program application rounds are held (i.e. September 2021 and January 2022 application rounds) • Solicit applications from site hosts in or near identified areas in the Spring of 2022 • Share site selections with stakeholders to confirm no new public/private investments have been announced that would conflict with identified locations • Build 10-12 stations, prioritizing connector stations (subject to adequate site host applications for connector stations)
2023	**Repeat the same process outlined for 2022**

As proposed and approved in the TEP, the Company will seek to install approximately 20-25 public DCFC stations in its service area and will limit investment to no more than $5 million[5] for this program over the duration of the 2021-2023 TEP.

Several stakeholders provided meaningful input on the process, expressing an interest that the Company first host competitive applications for other approved TEP programs that offer EVSI support in multi-family, commercial, and public contexts; focus on developing connector stations when possible; and share siting analysis results with stakeholders prior to building public charging stations. As shown above in Table 1, these components have been incorporated into the Company's process.

In its final decision, the Commission recognized the need "to engage in a collaborative process to determine the number and siting of these [market and connector] stations" and that the illustrative counts of each type of station presented in the TEP "were hypothetical and not intended to be final."[6] The Company believes the process outlined above, following its work with stakeholders, will achieve this result.

SITING ANALYSIS

The Company and stakeholders also discussed at length the various inputs, outputs, and constraints that would inform siting analyses that identify good locations for Company-owned DCFC stations in underserved areas.

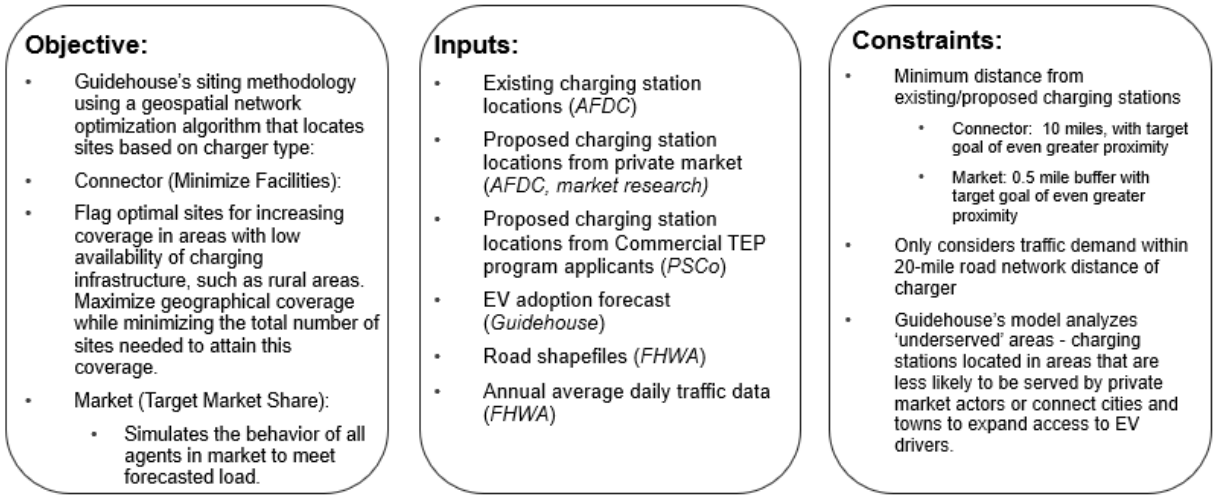
As stated previously, in its final order the Commission directed "the Company to work with stakeholders to identify and develop siting metrics, including metrics related to some stated distance between Company-owned DCFCs and privately-owned chargers."[7] As a result, the Company and stakeholders worked to develop the following specifics regarding the inputs, outputs, and constraints to guide the siting analysis to be conducted in 2022 and again in 2023.

As shown below in Figure 1, the siting methodology will identify station locations in underserved areas and establishes minimum distances from other existing or publicly proposed DCFC station locations – setting a minimum distance of 10 miles for "connector" station types and of 0.5 mile for "market" station types. However, taking the site host application review process below into account, the Company will seek to maximize the distance from other stations in both the siting analyses and in the site host application and review process so that the average distances achieved after installing a limited number of public DCFC stations is greater than the minimum distances discussed with

[5] See the Company's approved 2021-2023 Transportation Electrification Plan, filed April 1, 2021, pg. 14. https://www.xcelenergy.com/company/rates_and_regulations/filings/transportation_electrification_plan.
[6] See Commission Decision No. C21-0117, ¶ 39.
[7] *Id*, ¶ 40.

stakeholders. The Company believes this siting methodology achieves the considerations and market balance that the Commission highlighted in its orders approving the TEP.

Figure 1: Objective Functions, Inputs, and Constraints for Siting Analyses



Note: The siting analysis will treat all publicly accessible DCFC stations as public stations, but the Company and the third-party siting vendor will monitor this moving forward. The Company is in the process of finalizing the vendor for the siting analyses following a competitive solicitation in recent months. AFDC refers to the Alternative Fuels Data Center within the United States Department of Energy, and FHWA refers to the Federal Highway Administration within the United States Department of Transportation.

SITE HOST APPLICATIONS AND REVIEWS

The Company and stakeholders also discussed the process by which the Company will solicit and review applications from interested communities to host the charging equipment on their property.

After a siting analysis is conducted each year, the Company will then work to identify and engage with interested site hosts in the area or region surrounding the location identified from the siting analysis. Interested site hosts will then submit an application to the Company to host a Company-owned DCFC station. In reviewing applications from site hosts, the Company will not only consider the public policy goals codified in Senate Bill 19-077, as other TEP program applications for EVSI support will consider[8], but will also consider several additional factors:

- Distribution costs and constraints (distribution line extension and EVSI costs)

[8] Please see the Company's report on how it will evaluate applications for EVSI support from various approved TEP programs, filed on August 30, 2021, in Proceeding No. 20A-0204E.

- Site readiness (parking spaces, Americans with Disabilities Act accessibility, proximity to amenities, application quality, public access, safety)
- Located within general area of an identified charging station gap from the siting analysis
- Distance from other existing public charging stations

The Company will review site host applications comprehensively based on the statutory goals and these additional factors. The Company believes these considerations help to achieve the overall goal of maximizing the benefits and minimizing the costs of supporting widespread transportation electrification.

NEXT STEPS

The Company will implement the processes and siting metrics detailed in this report as it prepares to launch the Public Service DCFC Station program in 2022. The Company will monitor any customer or stakeholder feedback and will discuss with stakeholders any updates to these processes, siting details, or site host application evaluation criteria in the future, as needed.