
**STATE OF ILLINOIS
ILLINOIS COMMERCE COMMISSION**

Commonwealth Edison Company	:	
	:	
Petition for Approval of Beneficial Electrification Plan under the Electric Vehicle Act, 20 ILCS 627/45 and New EV Charging Delivery Classes under the Public Utilities Act, Article IX	:	22-0432
	:	
	:	
Illinois Commerce Commission On Its Own Motion	:	(cons.)
	:	
-vs-	:	
	:	
Commonwealth Edison Company	:	22-0442
	:	
Investigation into Commonwealth Edison Company Beneficial Electrification Plan Filing pursuant to 20 ILCS 627/45.	:	

DIRECT TESTIMONY OF T.J. BROOKOVER

ON BEHALF OF

THE BUILDING OWNERS AND MANAGERS ASSOCIATION OF CHICAGO

September 22, 2022

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1 **I. INTRODUCTION AND QUALIFICATIONS**

2 **Q: Please state your name and business address.**

3 A: My name is TJ Brookover. My business address is One East Wacker Drive, Suite 1200,
4 Chicago, IL 60603.

5 **Q: By whom are you employed and in what capacity?**

6 A: I am the Regional Manager for AmTrust Realty Group. I also serve on the Board of
7 Directors of the Building Owners and Managers Association of Chicago
8 (“BOMA/Chicago”) and its Energy and Sustainability Committee.

9 **Q: Can you explain what BOMA/Chicago is and who they are comprised of?**

10 A: BOMA/Chicago is a trade association that has represented the interests of the Chicago
11 office building industry since 1902. Membership includes 240 commercial office,
12 institutional and public buildings and 200 companies that provide commercial building
13 services to support operational excellence. BOMA/Chicago members constitute
14 approximately 80 percent of all rentable office space in downtown Chicago. These valuable
15 assets are the core of one of the world’s greatest central business districts.

16 BOMA/Chicago has long played a role in drafting new building codes, advancing fire and
17 life safety measures, negotiating mutually beneficial labor agreements, and enhancing
18 energy efficiency and sustainability practices. BOMA/Chicago is a major contributor to
19 the economic livelihood of the city and region, housing nearly 647,000 employees and over
20 18,000 local businesses in our member buildings. It is estimated that BOMA/Chicago
21 buildings inject more than \$4.6B into the Central Business District Economy and are a
22 major supporter of local schools and public services with over a billion dollars paid in
23 annual property taxes.

24 **Q: What are your duties and responsibilities as Regional Manager of AmTrust Realty?**

25 A. Generally, I oversee AmTrust Realty's Chicago building portfolio of seven buildings. This
26 primarily entails the upkeep, operations and maintenance of these commercial office
27 buildings. Prior to this position, I was the director of property management for The John
28 Buck Company. I hold a B.A. in Business Administration from the University of
29 Pittsburgh.

30 **Q. What are your duties and responsibilities as a member of BOMA/Chicago's Board of**
31 **Directors?**

32 A: In my role on BOMA/Chicago Board of Directors, I am responsible for helping guide the
33 strategic direction of the organization and creating a wide range of initiatives that advance
34 the commercial real estate industry in downtown Chicago. For approximately 15 years, I
35 have also served as either Chairman or Board Liaison to BOMA/Chicago's Energy and
36 Sustainability Committee.

37 **Q: Have you ever testified before the Illinois Commerce Commission?**

38 Q: Yes. I previously provided testimony in ICC Docket Nos. 05-0159, regarding defining a
39 competitive electric supply procurement process; 05-0597, regarding Commonwealth
40 Edison Company's (ComEd) proposed general increase in rates, 07-0166, regarding an
41 investigation into ComEd's Rate Design, and in 20-0872, regarding ComEd's proposed
42 modifications to Rider NS.

43 **II. PURPOSE AND CONCLUSIONS OF TESTIMONY**

44 **Q: What is the purpose of your testimony?**

45 A: The purpose of my testimony is to support beneficial electrification and specifically the
46 effort to put 1 million electric vehicles on the road by 2030. To accomplish this, it is critical

47 we have a solid infrastructure of electric vehicle chargers in strategic locations, especially
48 in the Central Business District which serves as the central hub for all communities within
49 the city and metropolitan region. As a customer group, BOMA/Chicago seeks to support
50 the adoption of electric vehicles by providing convenient, central locations where residents
51 can safely and economically charge their electric vehicles while working in or visiting the
52 Central Business District of Chicago.

53 **Q: How does BOMA/Chicago view the current situation?**

54 A: Supporting transportation electrification involves not only deploying new electric
55 vehicles, but also ensuring that EV owners have access to adequate options to charge their
56 vehicles. Just as internal combustion engine (“ICE”) drivers rely on ubiquitous access to
57 gas stations to refuel their cars, EV drivers need to be confident that they can recharge
58 their vehicles battery relatively easily. Unlike ICE drivers, many – but not all – EV drivers
59 have the option to charge their vehicles at home. For other occasions when charging is
60 needed, EV drivers rely on private or public networks of EV chargers.¹

61 According to the Office of the Illinois Secretary of State’s Electric Vehicles in Illinois
62 August 2022 report, there are currently 48,917 electric vehicles across the state, including
63 over 32,000 electric vehicles in the Chicagoland area.² To reach the goal of putting
64 1,000,000 electric vehicles on the road by 2030 requires an increase of electric vehicles by
65 2,000 percent in less than eight years. Supporting growth of this magnitude requires a
66 strategic plan that includes a comprehensive electric vehicle charging infrastructure. The

¹ ComEd Ex. 1.01 page 13 of 60.

² <https://www.ilsos.gov/departments/vehicles/statistics/electric/2022/electric081522.pdf>
<https://www.ilsos.gov/departments/vehicles/statistics/lpcountycounts/home.html>

67 infrastructure we propose would serve as a central hub for all communities within the city
 68 and metropolitan region, incorporating convenience, safety, and economy of scale. Table
 69 1 below details the number of electric vehicles and the number of passenger vehicles
 70 statewide, and the Chicago collar counties.

71

County	EV Count 8/15/22	Total Active Registration - Passenger 8/12/22	Percent EV
COOK	13,364	1,632,175	0.82%
DUPAGE	7,656	654,132	1.17%
LAKE	5,943	479,490	1.24%
WILL	3,087	460,728	0.67%
KANE	1,970	335,332	0.59%
Subtotal	32,020	3,561,857	0.90%
Statewide	48,917	7,446,105	0.66%

72 *Illinois Secretary of State*

73 **III. BOMA/CHICAGO’S EV INFRASTRUCTURE PROPOSAL**

74 **Q: What are you advocating for on behalf of BOMA/Chicago?**

75 A: Providing EV charging infrastructure in the heart of the City that serves as a central hub
 76 for all neighborhoods, including Environmental Justice and Restore, Reinvest, and Renew
 77 Communities, is essential to the successful adoption of electric vehicles in the State of
 78 Illinois. To accomplish this, BOMA/Chicago seeks ICC approval to modify

79 Commonwealth Edison Company’s (ComEd) Beneficial Electrification Plan (BE Plan) to
80 develop electric vehicle infrastructure in downtown Chicago.

81 **Q: What is BOMA/Chicago’s solution?**

82 A: BOMA/Chicago proposes its (“BOMA/Chicago Beneficial Electrification Program” or
83 “Program”) to provide incentives for Electric Vehicle Charging Stations in
84 BOMA/Chicago buildings. As real estate and business leaders, BOMA/Chicago plays an
85 important role in adopting EV infrastructure to encourage downtown workers and visitors
86 to purchase electric vehicles and have a safe and convenient place to park. BOMA/Chicago
87 is seeking dedicated funding of \$10 million each year of the five-year Beneficial
88 Electrification Plan (through a new Commercial and Private Sector EV Charging
89 Infrastructure Sub-Program). This dedicated fund would allow BOMA/Chicago member
90 buildings to support the installation of 11,000 EV charging stations in parking spaces for
91 people working in and visiting the Central Business District to charge their vehicles. As
92 stated in the workshops and given ComEd’s awareness that the Beneficial Electrification
93 landscape is emerging, electric vehicle infrastructure should be kickstarted in a way that
94 allows for “a multi-pronged, “all of the above” deployment strategy across a wide range of
95 electric vehicle types and Beneficial Electrification applications.”³ BOMA/Chicago
96 buildings and garages offer convenient, safe, and economic locations for electric vehicle
97 chargers. As workers and tourists from all neighborhoods visit downtown, having electric

³ ComEd Ex. 1.01, Page 5 of 60.

Figure II-1: 2019 Illinois CO2 emissions by sector and Figure II-2: 2021 U.S. CO2 emissions by sector in ComEd Exhibit 1.1,

2 <https://www.ilsos.gov/departments/vehicles/statistics/electric/2022/electric081522.pdf>

98 vehicle charging stations available will support existing electric vehicles already on the
99 road, and also incentivize car owners to purchase electric vehicles.

100 **Q: Why does BOMA/Chicago seek to modify ComEd’s BE Plan by advocating for**
101 **electric vehicle infrastructure in its buildings?**

102 A: Under BOMA/Chicago’s proposal, the centrally located commercial core of 1.58 sq. miles
103 is not only the business hub of the City of Chicago and the State of Illinois, but the Midwest
104 region. It is the second largest commercial business district in North America and contains
105 the headquarters and regional offices of several global and national businesses. It serves as
106 a central hub for all neighborhoods both culturally and economically. Additionally,
107 Chicago was ranked the second-best city in the world and the only US city that made the
108 top 10 in Time Out’s Best Cities in the World list in July 2022. Chicago’s tourism industry
109 not only attracts national and international tourists, it also creates a wealth of jobs that
110 support residents from all neighborhoods. Providing EV charging stations across the
111 Central Business District will support both residents and tourists with existing electric
112 vehicles and serve as motivation for others to purchase.

113 **Q: Why is BOMA/Chicago seeking assistance to develop electric vehicle infrastructure**
114 **in its buildings?**

115 A: In addition to addressing rising demand of electric vehicle charging points and the barriers
116 to mass adoption, the City of Chicago recently adopted changes to its Chicago Zoning
117 Ordinance to require that at least 20% of new parking spaces be either Electric Vehicle
118 Supply Equipment (EVSE)-Ready or EVSE-Installed. According to the City of Chicago’s
119 Zoning Ordinance Section 17-10-1011-B. Nonresidential Buildings. “New construction of
120 a building containing uses other than residential uses where 30 or more parking spaces are

121 provided shall install equipment so that at least 20 percent of the parking spaces are
122 either *EVSE-Ready* or *EVSE-Installed*.” As more electric vehicles are purchased there will
123 be a similar demand for electric vehicle charging stations as more people return to offices
124 and visit our city. Additionally, the installation costs are significant, with charging stations
125 ranging from \$5,000 to \$10,000, in addition to related consulting, electrical and
126 infrastructure costs. These costs are in addition to current costs of maintaining and
127 operating a building in a historically unprecedented market reeling from the effects of the
128 COVID-19 pandemic.

129 **Q: What is BOMA/Chicago’s Beneficial Electrification Program proposal?**

130 A: BOMA/Chicago seeks a modification to ComEd’s proposal to allow ComEd to provide
131 BOMA/Chicago and its buildings with \$10M annually in EV Charging Infrastructure
132 Rebates to facilitate the installation in the central business district of Chicago. According
133 to Section 627/45, the Commission has the authority to modify ComEd’s submitted plan.
134 BOMA/Chicago will work with ComEd to identify the building garages, the amount of
135 stations per garage, and facilitate the adoption of electric vehicle infrastructure in
136 downtown Chicago by promoting the program to our building members and help connect
137 them to the program. BOMA/Chicago seeks to optimize significant adoption of electric
138 vehicles, and the confidence that people can drive and park in the city safely.

139 **Q: How does BOMA/Chicago justify \$10M annually?**

140 A: In order to reduce emissions to achieve long-term climate change goals, assisting the
141 sector where people work with a large density of population goes a long way to helping
142 achieve Illinois’ long-term climate goals. Currently, nothing exists in ComEd’s current
143 proposal to address this sector.

144 In addition, BOMA/Chicago estimates that the minimal cost of \$7,500 per unit for 11,000
145 chargers in the various locations around the central business district is \$82,500,000. These
146 initial costs are only the beginning, as discussed in the cost categories Q and A below.

147 **Q: How can BOMA/Chicago facilitate its Program?**

148 A: BOMA/Chicago can work with ComEd and can manage its buildings in priority, number
149 of spaces and provide the people necessary from each building to optimize the efficient
150 implementation.

151 **Q: How can ComEd's proposed program accommodate BOMA/Chicago's Proposal?**

152 A: Given the alignment of BOMA/Chicago's Program with ComEd's proposed Beneficial
153 Electrification Plan, we note several areas in ComEd's proposal that can be modified or
154 supplanted, all in compliance with the EVA. For example, ComEd proposes significant EV
155 rebate programs, but such rebates also come from other sources like the Illinois
156 Environmental Protection Agency; However, ComEd's expertise is in the delivery of
157 power, which provides benefits to the Illinois workforce as well. BOMA/Chicago's
158 Program effectively creates high-skilled, clean energy jobs for local residents through the
159 installation of multiple chargers in garages. ComEd will also benefit by working to attach
160 the chargers to their vaults and panels, including likely increasing the capacity in garages
161 that weren't anticipated to be required the extra load. Rebates for purchasing vehicles do
162 not stimulate the Illinois workforce. Installing charging stations does, and this constitutes
163 a win-win for the City and State to accomplish the goals of the EVA.

164 **Q: How does BOMA/Chicago envision paying for monthly electricity services from**
165 **ComEd and an applicable electric supplier?**

166 A: BOMA/Chicago is not taking a formal position on the specifics of ComEd's proposed
167 rate(s) at this time; However, BOMA/Chicago supports a separate delivery class for EV
168 chargers that will be on a separate account, where the load from the chargers does not affect
169 the existing building load and its direct costs. Furthermore, by keeping charging load
170 separate from building load, building managers can more effectively manage their EPA
171 Energy Star Portfolio Manager Score.

172 **Q: What are the cost categories for installing electric vehicle charging stations in**
173 **downtown building garages.**

174 A: The installation of electric vehicle supply equipment includes capital expenses and
175 operating expenses. Capital expenses normally included permitting and consulting fees,
176 electrical distribution infrastructure including transformers where applicable, panels, pipe
177 and wire, a ComEd connection, and the electric vehicle supply equipment (EVSE). There
178 are also design, engineering and construction costs. Operating expenses include the kWh
179 usage, demand and delivery costs, and operations and maintenance.

180 It should be noted that many garages will not have the electric load available to support
181 electrical vehicle chargers as this level of electric output was not anticipated at the time of
182 construction. Reconstructing the electrical load, if necessary, will contribute to additional
183 costs. Determining a consistent installation for building garages is difficult given the many
184 variants, such as the proximity of the charging space to the electric panel.

185 **Q: What is your estimation of number of parking spaces in BOMA/Chicago buildings?**

186 A: In a recent survey of BOMA/Chicago buildings with one-third of building members
187 responding, 62% of buildings had parking garages representing 18,817 parking spaces, or
188 an estimated total 56,000 parking spaces across all member buildings. While 63% of

189 buildings with garages have electric vehicle charging stations, the vast majority (74%) have
190 5 or less charging stations in their garages, certainly not enough to meet anticipated demand
191 or compliance with anticipated ordinances.

192 **Q: How does BOMA/Chicago feel its program complies with the EVA?**

193 A: BOMA/Chicago's proposal aligns with section 627/45 by supporting and promoting
194 Beneficial Electrification. BOMA/Chicago's proposal increases access to electrification
195 for all consumers who would have a place to charge while visiting the business and civic
196 centers of the City; provides for widespread adoption and acceleration of electric vehicles
197 in Illinois; and helps stimulate innovation, competition and increased choices in charging
198 equipment while attracting private capital investment and creating high quality jobs in
199 Illinois. From a practical standpoint, providing options for charging in the most densely
200 populated area in Chicago provides mobility to everyone, including environmental justice,
201 low income, and restore, reinvest and renew communities, a place to charge their vehicles
202 while working, shopping, and enjoying the various cultural options downtown Chicago has
203 to offer.

204 **Q: Who do you anticipate will be installing, maintaining and repairing electric vehicle**
205 **charging stations in BOMA/Chicago building garages?**

206 A: BOMA/Chicago buildings use professional, typically union contractors. While I am not a
207 lawyer, any work done in a BOMA/Chicago facility would seem to comply with the
208 requirements of 20 ILCS 627/25.

209 **Q: Does this conclude your direct testimony?**

210 A: Yes.