Accelerating Transportation Electrification

Carine Dumit | Director, Market Development

April 8, 2021
Develop | Finance | Own | Operate

America’s Largest Public Fast Charging Network

We build, own, & operate the nation’s largest network of public DC fast chargers

- Sustainable: Powered by 100% Renewable Energy
- Reliable: 98% uptime
- Nationwide: 800+ Fast Charging Locations in 400+ cities across 34 states
- EV Compatible: Serves all fast charging standards - including Tesla
- 130 MM: People live within a 10-mile drive of an EVgo station

220,000+ EV customers

Nationwide

EVgo FAST CHARGING
Different Types Of EV Charging

The EVgo network is designed to give drivers the confidence to go electric with charging sessions that happen in minutes, not hours and built on *easily accessible and reliable public DC fast chargers.*

<table>
<thead>
<tr>
<th>Level</th>
<th>Power Rating</th>
<th>Use Case</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level 1</strong></td>
<td>~1-2 kW</td>
<td>Long Term Parking. Home, Workplace, Airports, etc.</td>
</tr>
<tr>
<td><strong>AC</strong></td>
<td>Plugs straight into wall (120V Circuit)</td>
<td>Can charge Plug-In Hybrids (PHEV) &amp; Battery Electric Vehicles (BEV)</td>
</tr>
<tr>
<td></td>
<td>Charge Time: 15-30 hours for full charge</td>
<td>Use Case: Long Term Parking. Home, Workplace, Airports, etc.</td>
</tr>
</tbody>
</table>

| Level 2     | ~3 – 19 kW            | Long Dwell Destinations - Work, Overnight Home, Amusement Parks, Destinations |
| **Level 2** | Uses a 240V Circuit   | Can charge PHEVs & BEVs                                                   |
|             | Charge Time: 6-9 hours for full charge | Use Case: Long Dwell Destinations - Work, Overnight Home, Amusement Parks, Destinations |

| Level 3 (DCFC) | 50 – 350 kW          | Use Case: Short Dwell time – Retail Locations, Restaurants, Grocery Stores, Light Duty Fleet Charging, Serving MUDs |
|               | Connects to the grid – 480V or 208V | Charges Fast Charging compatible BEVs                                    |
|               | Charge Time: 15 minutes to 1 hour for 80% of charge | Use Case: Short Dwell time – Retail Locations, Restaurants, Grocery Stores, Light Duty Fleet Charging, Serving MUDs |
Fast Charging is Critical to Serve MUD Residents

52 – 81% of apartment dwellers with battery electric vehicles rely solely on public charging.

Tariff Reform is Critical to Fleet Electrification

Lower electric rate expected soon for RTD's mall buses, EV fleets in Colorado

A new Xcel rate structure for commercial electric vehicle should become final Tuesday

By JOHN ARELLANO | jarellano@denverpost.com | The Denver Post

Published: October 24, 2019 - 6:00 a.m. | Updated: October 24, 2019 - 2:30 a.m. (M)
Electric Rates Are the Largest Operating Costs for DCFC

Traditional rates do not account for the unique load profile of EV charging

+ Demand charges end up as a significant portion of electricity costs, skewing the effective $/kWh rate.
### Commercial EV rates and technology neutral rates are both possible

<table>
<thead>
<tr>
<th>Utility</th>
<th>Exemplar Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southern California Edison, CA</td>
<td>TOU – EV – 8</td>
</tr>
<tr>
<td></td>
<td>+ All volumetric TOU rates for first 5 years, with demand charges phased back in years 6-10</td>
</tr>
<tr>
<td></td>
<td>+ TOU volumetric energy charges increased to recover costs</td>
</tr>
<tr>
<td>Eversource, CT</td>
<td>EV Rate Rider Pilot (EVRRP)</td>
</tr>
<tr>
<td></td>
<td>+ Demand charges of the applicable commercial rates are converted to an equivalent $/kWh charge for all kWh utilized by the DCFC customer during each billing period</td>
</tr>
<tr>
<td>SDG&amp;E, CA</td>
<td>TOU – M (Interim Rate)</td>
</tr>
<tr>
<td></td>
<td>+ While the EV rate is finalized, sites can temporarily switch onto this rate with a $2.50/kW demand charge and the 40 kW demand cap waived</td>
</tr>
<tr>
<td>Dominion, VA</td>
<td>GS – 2 (Non-Demand)</td>
</tr>
<tr>
<td></td>
<td>+ Low usage sites (&lt;200 kWh per kW) qualify for this non-demand general service rate</td>
</tr>
<tr>
<td>Madison Gas &amp; Electric, WI</td>
<td>Low Load Factor Provision</td>
</tr>
<tr>
<td></td>
<td>+ Commercial customers on rate schedules Cg-4, Cg-2, or Cg-2A; annual electric load factor &lt;15%. On-Peak Demand Reduction of 50%</td>
</tr>
<tr>
<td>DTE Energy, MI</td>
<td>GS – D3</td>
</tr>
<tr>
<td></td>
<td>+ The 1000 kW demand cap for this non-demand general service rate is waived for DCFCs through June 1, 2024</td>
</tr>
</tbody>
</table>
S. 3929 (Kennedy) / A. 3876 (Cusick)
Electric vehicle charging commercial tariff

- Calls for electric utilities to develop and propose electricity rate designs for evaluation and public comment at the PSC
- Considers full range of vehicle classes: light, medium, heavy-duty, and fleets
- Gets New York on the same path as 20+ states where commercial EV rates have been adopted
- Complements and is central to the suite of EV related policy tools that NY has enabled. Core to success of transportation electrification
  - PSC Make-Ready Order, Climate Leadership and Community Protection Act, NYSERDA VW Settlement grants etc...
Questions?

Carine.Dumit@EVgo.com

@EVgoNetwork
Green Transit, Green Jobs
Background

- **ElectrifyNY**: A coalition of environmental justice, environmental, and labor advocates helped draft the legislation to ensure stakeholder input.

- The **Green Transit, Green Jobs bills** are a package of bills that maximize the benefits of government spending by ensuring that electric bus purchases not only help reduce carbon emissions in New York State but also create good manufacturing jobs in the state.

- First introduced in 2020 Legislative session and reintroduced in 2021.
Overall Goals of Legislation

● The **Green Transit bill** *(A3090/S3535)* would help NY State reach the zero emission goals set by the Climate Leadership and Community Protection Act (CLCPA) passed in 2019.

● The **Green Jobs bill** *(A2083/S3405)* would prioritize state funds towards hiring of disadvantaged communities, good job creation and just transition for fossil fuel industry workers.

● **Green Transit, Green Jobs Senate Sponsor:** Tim Kennedy

● **Green Transit, Green Jobs Assembly Sponsor:** Jeffrey Dinowitz
Implementation

- The **Green Transit bill** *(A3090/S3535)* would require every public transit authority in New York, by 2029, to purchase only new zero-emission buses as they replace their aging buses.

- The **Green Jobs bill** *(A2083/S3405)* would require a “best value” purchasing framework to incentivize bidders to submit proposals with good wages, benefits, training and retraining, the usage of registered apprenticeship programs, and job creation for underrepresented individuals in manufacturing. Bidders are also encouraged to create jobs in New York State when possible.
Policy Ideas in the Legislation

U.S. Employment Plan
- Uses a “best value” framework in individual Request for Proposals (RFP)
- Gives extra credit for good jobs & community benefits
- Creates a clear evaluation criteria and incentivizes bidders to “compete up”
- Proposers voluntarily commit to USEP
- Approved by the U.S. Dept. of Transportation: Can use Federal funds

Example: Proterra won an L.A. Metro contract with USEP commitments.
- Local job creation
- Community Benefits Agreement
- Apprenticeship program
Challenges to Consider

- **Cost**: Upfront cost to NY transit agencies to transition to electric buses

- **Alternative fuels**: Some NY transit agencies have already committed to alternative fuel buses such as CNG
Status of the Bill

Referred to Transportation Committee

Next Steps:
- In transportation calendar for both Senate and Assembly
- Move to floor vote by June

Support from:
- 40 Legislators
- 12 organizations
Take Action: Show your Support!

- **Send a letter to your legislator**: Co-sponsor both bills
- **Write Letters to the Editor**: Target your local news outlet
- **Send a memo of support** (see electrifyny.org for example)
New York State Climate Goals

- Climate Leadership and Community Protection Act (CLCPA) requires the state to achieve a carbon-free electricity system by 2040 and commits the goals of a 40% reduction in greenhouse gas emissions from 1990 levels by 2030, and 85% by 2050.

Progress:

- Despite aggressive investments in charging and incentive programs, New York has achieved 3% of the 2030 EV deployment target of 2,000,000 announced by Governor Cuomo in 2014
- Direct sales account for ~80% of the BEV sales in New York

Opportunity: Most underserved market globally

- The New York Tesla team does more deliveries/week/employee than any other state—more than double that of CA, where Tesla has sold ~230,000 cars over the last three years.
- More cars delivered through each delivery location every quarter than an average dealership does in a year.

S1763/A4614 removes the cap on direct-to-consumer sales for EV manufacturers in New York increasing consumer access to EVs, creating jobs, and improving air quality by stimulating EV adoption statewide
Historical Context: 2013 NY Supreme Court Case

The Greater New York Auto Dealers Association’s fight against Tesla goes back to 2009. They took that case to the New York Supreme Court and lost in a 2011 decision.

Two years later, they again took their case to the New York Supreme Court and lost, this time with the Court not only dismissing the petition but affirming that New York law allowed Tesla to sell directly.

In Greater New York Automobile Dealers Association vs Department of Motor Vehicles of the State of New York (2013), the auto dealers made several claims:

- Tesla stores are operating unlawfully under section 415 of the Vehicle and Traffic Law
- DMV acted unlawfully in granting Tesla sales licenses
- The franchise law exists “to prevent the opening of factory stores owned by a franchisor,” and Tesla should be defined as a “franchisor” despite never having entered into a franchise agreement with a dealer
- That New York auto dealers will suffer “competitive economic injury if they must compete in the marketplace” against Tesla

New York DMV and Tesla were both parties to the case. Tesla argued that its stores were fully consistent with New York Law. New York DMV’s response affirmed that it had followed the law correctly in granting Tesla three licenses between 2009 and 2012:

- DMV maintained that the franchise law was designed to provide protections to motor vehicle dealers operating under franchise agreements with manufacturers. Because Tesla is not a ‘franchisor,’ the franchise law is not applicable to this situation.

The New York Supreme Court sided with Tesla and New York DMV, and in its opinion confirmed the law allowed Tesla to sell directly:

- “The Franchised Dealer Act regulates the relationship between a car company (manufacturer) and its franchised dealers.” For the franchise law to apply, “there must be a franchise relationship between the franchisor and the franchisee.”
- “Manufacturers and dealers cannot utilize the Franchised Dealer Act as a means to sue their competitors…[T]he only potential injury suggested in the record is an increase in business competition.”
- The case was dismissed, and Tesla opened two more stores, for a total of 5, before the law was changed the following year.
GENESIS OF CURRENT LAW

After losing in the New York Supreme Court for the second time, the dealers sought to change the law.

• “NY dealers have Tesla ban in their sites”, March 2014 New York Post headline

S6797, originally filed by Lee Zeldin and later taken up by Republican Deputy Majority Leader Tom Libous, would have closed all 5 Tesla stores. Rep. Gantt sponsored in the Assembly.

After a long and costly fight, the final bill allowed Tesla’s existing licenses to be renewed, but it banned future licenses for Tesla or any other company.

The law prior 2014 was specific to “franchisors”:

• 415(f). The commissioner shall not issue any certificate of registration authorized by this section to any franchisor, as such term is defined in section 462 of this title.

• 462.8 “Franchisor” means any manufacturer…which enters into or is presently a party to a franchise with a franchised motor vehicle dealer.

The 2014 law added “manufacturer” to the prohibition, which banned Tesla from obtaining more licenses. The current five store limit for Tesla is in (iii), which allows the commissioner to renew licenses issued to Tesla prior to March 26, 2014:

• §415 (i) The commissioner shall not issue any certificate of registration authorized by this section to any franchisor, manufacturer, distributor, distributor branch or factory branch, as such terms are defined in section 462 of this title, or to any subsidiary, affiliate or controlled entity thereof[.]

• (iii) [T]he commissioner may renew any certificate of registration that was issued to a…manufacturer...prior to March twenty-sixth, two thousand fourteen; provided, however, that such...manufacturer...is a manufacturer that manufactures or assembles exclusively zero emissions vehicles[.]
BEV sales in NY over last three years:
- 5 Tesla stores: 25,189
- 848 franchised dealerships: 7,392
LAGGING BEHIND DESPITE AGGRESSIVE EV POLICY

Florida
- No ZEV rule or EV deployment targets
- No emissions reductions targets
- No EV incentives
- 16 stores
- 2020 sales tax revenue: $55 million

New York
- ZEV state, target of 850k by 2025
- CLCPA target of 100% ZEV by ’50
- $2k EV rebate
- 5 stores
- 2020 sales tax revenue: $23.5 million
THE CAP HURTS EV ADOPTION

• Downstate: delivery volume is starting to exceed capacity
  • All title transfers must take place at licensed location or customer’s home/business
  • Longer delivery timelines
  • Logistics extremely challenging

• Western NY/Upstate: significant travel required
  • COVID has exacerbated this challenge

• Industry-wide impacts
  • Rivian, Lucid, and Lordstown are unfairly excluded from the entire New York market
  • To purchase from these new EV manufacturers New Yorkers are forced to travel out-of-state
ELECTRIC VEHICLES ARE A NEW MARKET

Economic development and job creation:

- Historically: $1 million in direct investment in the first year for each new store
- 25-50 jobs per sales, service, and delivery location
- Immediate impact:
  - Expand or relocate locally existing service centers and galleries into fully staffed sales, service, and delivery locations
  - Develop three new sales, service, and delivery locations

Tesla sells direct in 25 states, uncapped in 19

- Top 20 states for franchised dealer job growth since 2012:
  - 17 allow direct sales
- 25 states where Tesla has a sales presence:
  - Average franchised dealer job growth in those states: 21%
  - Exceeds the national average of 18%.
- Direct sales has had no discernible impact on franchised dealers in these states

<table>
<thead>
<tr>
<th>State</th>
<th>Job Growth since 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado</td>
<td>21%</td>
</tr>
<tr>
<td>Florida</td>
<td>31%</td>
</tr>
<tr>
<td>Georgia</td>
<td>20%</td>
</tr>
<tr>
<td>Hawaii</td>
<td>29%</td>
</tr>
<tr>
<td>Idaho</td>
<td>35%</td>
</tr>
<tr>
<td>Indiana</td>
<td>19%</td>
</tr>
<tr>
<td>Kentucky</td>
<td>19%</td>
</tr>
<tr>
<td>Maine</td>
<td>20%</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>23%</td>
</tr>
<tr>
<td>Michigan</td>
<td>25%</td>
</tr>
<tr>
<td>Nevada</td>
<td>19%</td>
</tr>
<tr>
<td>New Jersey</td>
<td>24%</td>
</tr>
<tr>
<td>New York</td>
<td>22%</td>
</tr>
<tr>
<td>North Carolina</td>
<td>25%</td>
</tr>
<tr>
<td>Ohio</td>
<td>23%</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>19%</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>33%</td>
</tr>
<tr>
<td>South Carolina</td>
<td>21%</td>
</tr>
<tr>
<td>Utah</td>
<td>35%</td>
</tr>
<tr>
<td>Vermont</td>
<td>26%</td>
</tr>
</tbody>
</table>
Buffalo / WNY
- Alliance for the Great Lakes
- WNY Environmental Alliance
- Grassroots Gardens WNY

Finger Lakes
- Color Brighton Green
- Genesee Valley Audubon Society
- Empire State Consumer Project, Inc.
- Climate Solutions Accelerator

Southern Tier
- Friends of the Upper Delaware River (FUDR)
- NY Nest

Central New York
- Clean Communities of Central New York
- Alliance of Communities Transforming Syracuse
- Atlantic States Legal Foundation
- Climate Change Awareness & Action
- CNY Solidarity Coalition
- Energy in the 21st Century

North Country
- Adirondack Council
- Protect the Adirondacks
- Tug Hill Tomorrow Land Trust
- Adirondack Mountain Club
- Champlain Area Trails
- Northern New York Audubon

Mohawk Valley
- Delaware-Otsego Audubon Society
- Catskill Center
- Indivisible Mohawk Valley

Capital Region
- Green Education and Legal Fund Inc.
- Columbia Land Conservancy
- Sustainable Saratoga

Capital Region (cont.)
- Capital Roots
- Clean & Healthy New York
- Capital District Clean Communities
- ECOS New York

Mid-Hudson
- Save the Sound
- Sustainable Westchester
- Teatown
- Orange County Land Trust
- Sustainable Warwick
- Bedford 2030
- Groundwork Hudson Valley
- New Yorkers for Clean Power
- Mianus River Gorge
- Hudson Highlands Land Trust
- Pace Energy and Climate Center
- New Paltz Climate Action Coalition
- Sustainable Hudson Valley
- Oblong Land Conservancy
- Sustainable Putnam
- Woodstock Land Conservancy

New York City
- 350 NYC
- Rebuild By Design
- Human Impacts Institute
- New Yorkers For Parks
- RETI Center
- Waterfront Alliance
- Bronx River Sound Shore
- Drawdown NYC
- Les Ecology Center
- NYC H2O
- Climate Reality Project NYS Coalition
- Bronx River Alliance
- Jewish Climate Action Network NYC
- North Brooklyn Neighbors
- Empire Clean Cities
- Mission Electric

New York City (cont.)
- Bronx Land Trust (BLT)
- RISE Rockaway Initiative for Sustainability and Equity
- E2

Long Island
- Nassau Hiking and Outdoor Club
- All Our Energy
- Vision Long Island
- Seatuck Environmental Association
- Peconic Baykeeper
- North Fork Audubon Society Inc.
- Peconic Green Growth
- Defend H2O
- HUMuS: Huntington Mobilization for Sustainability
- Transition Town Port Washington
- Committee for a Sustainable Waterfront
- Long Island Progressive Coalition
- Greater Long Island Clean Cities Coalition
- North Shore Audubon Society
- Drive Electric Long Island

Statewide
- Citizens' Climate Lobby New York

Regional
- Be Outdoors Appalachian MTN Club
- NY/NJ Baykeeper
- Healthy Schools Network
- NY NJ Trail Conference
- Delaware Highlands Conservancy

National
- Our Climate
- Greening USA
- National Wildlife Federation