A Return Engagement With Eversource and United Illuminating

Commercial and Multi-Family Residential Is the Focus

The two major Connecticut electric distribution companies (EDCs), Eversource and United Illuminating, will speak to the club at a virtual meeting to be held on May 10th at 7 PM. (EDC is now the term of art, supplanting utility.) This applies to business fleets, businesses providing workplace charging, municipalities, nonprofits, and apartments/condos with 5+ units.

These incentives are part of the program called the EV Rate Design that was developed by the Public Utilities Regulatory Authority.

Free registration is required at this link: https://us02web.zoom.us/meeting/register/tZ0kdOysqDgoH9X_1SiBnVxnb75LuntzhG-_

The meeting is open to the public.

Recap of EV Charging

Incentive Meeting

EV Charging Incentives

Public Utilities Regulatory Authority (PURA) and United Illuminating presented virtually on Jan. 25th. The program took effect on Jan 1, 2022. It includes residential, commercial, workplace, and fleet incentives. There are a lot of moving parts and that is why we invited these folks to present to us. Not everything was cleared up in the meeting and we are following up on additional details.

Several attendees asked why UI was there and not Eversource. The answer is that since, outside of a few details, the programs are identical, this was just a matter of how best to manage the meeting. We ran long as it was.

The meeting was recorded: https://www.youtube.com/watch?v=mpwbnCkD2E0

The presentation decks have been posted to the website: PURA and UI

Tesla Participation

As was explained by UI, the rate of charge in a Tesla is controlled by the vehicle. Even in the case of the "Gen 3" wall charger, the utility has to communicate with the car's "brain." They can't use the charger to throttle charge. Consequently, participation has to be through telematics. From an incentive perspective, that means the Tesla wall charger would not be eligible for a subsidy, but the installation of it would still be eligible. (Again, all hardware-related incentives are for hardware installed in 2022 and not before.) From there, the $100 enrollment incentive for telematics would apply, along with the ongoing $200 annual demand response

incentive.

We are hearing that folks are running into roadblocks when trying to enroll for telematics. We have a call with Eversource and UI and we will ask them about this. We did learn at the meeting that not everything is fully baked yet. As a practical matter, as long as one enrolls before June, there will be no loss from the perspective of the demand response incentives.

Chat String from Jan. 25th Meeting

Keep in mind that people were entering questions in the chat, many of which were answered by the presenters (and thus won't appear below). The chat has been scrubbed of emails and DMs.

From Analiese Mione to Everyone 06:58 PM

Enjoy our blog: https://evclubct.com/blog/electric-vehicles/

From Paul Braren to Everyone 07:01 PM

Nice to see https://www.courant.com/business/hc-biz-connecticut-electric-vehicles-20220124-hzd4angslnevhpp3vtgdprzpyq-story.html at the Hartford Courant today, "Connecticut and its two biggest utilities launch a broad build-out of electric vehicle chargers"

From Analiese Mione to Everyone 07:06 PM

Welcome everyone and thanks for joining us. This will be recorded.

From Jay Gustafson to Everyone 07:06 PM

We are finishing dinner and listening. joining soon!

From Paul Roszko to Everyone 07:12 PM

Glad UI is here speaking to us this evening. Where is

Eversource?

From Analiese Mione to Everyone 07:13 PM

“The program is identical for both utilities” Barry Kresch, EV Club of CT President.

From Ilene Mirkine to Everyone 07:14 PM

Was Eversource invited tonight? Or just UI.

From Tyra Peluso to Everyone 07:14 PM

Will the presentation be made available to attendees?

From Analiese Mione to Everyone 07:15 PM

It’s being recorded.

From

Paul Braren to Everyone 07:16 PM

Single Family Residential Charging Incentives

https://evclubct.com/single-family-residence-charging-incentives/

Charging Incentives for Condos and Apartments

https://evclubct.com/charging-incentives-for-condos-and-apartments/

From Steven Mueller to Everyone 07:18 PM

How many ICE vehicles are registered in CT?

From Matt Griswold to Everyone 07:18 PM

Our wholesale perennial farm in Old Lyme has four Tesla Semis on order to replace our aging fleet of class 7 diesels. We are

interested in more info on commercial charging incentives and demand charge mitigation. Our trucks will charge on-site, at night, with level 2 chargers. If all four trucks are charging at the same time, our demand will spike. How can we minimize demand charges here?

Mark Scribner, Energy New England here. Thanks to Barry K. for inviting me tonight. My organization (ENE) primarily serves the CT public utility territories, such as Wallingford, and collaborates with the IOUs, including Eversource.

From Analiese Mione to Everyone 07:22 PM

Welcome Mark and others from ENE.

From Paul Braren to Everyone 07:22 PM

Eversource:

Rebates for Connecticut Home Charging

https://www.eversource.com/content/ct-c/residential/save-money-energy/clean-energy-options/electric-vehicles/charging-station-rebates

UI:

Find the Best Electric Vehicle Charging Options for Your Business

https://www.uinet.com/wps/portal/uinet/smartenergy/!ut/p/z1/vZNdb4IwFIZ_DZeklS-5RcOUjY-pINCbpmLFGlqwonP_frhsLssyWZZlvTvpOW-fvOctQCADSJATK0nLakGqrs6RhfVB4E6NMQxtzzDhLFoE4YMfa9DXQHqzwdIB-sk8_OY4sG9-CRBAhWibdgvyIxO0JaXEB05kSwWV5bMCPxW0okUrWYFPdMuKih4U2Mi6lIQf8KaW-Lk-SrytOb3oNgVbg3xjmxq19IFqUGKqhqkP1ZW1JqoBTUosbWOtjNfudBzgiR-NHB-

PozB2sxjkCky80I2dyRyHV18VOKVkTaUCFxc09w3NfUdbXtEeq2OJPYG_XPX43hmDbtuaXoh7NtenkXcMww8FuPQGnUJwZ8xGkWb7Q5CeGH0Ciagl77K0-J2ls8Sddy_9q7tTCO77ktd9Dbbb75HT5a8WLT23IPvTADY8SbitczWDO7Pk9lmdpC8hRy_-/?1dmy&current=true&urile=wcm%3apath%3a%2FUINETAGR_SmartEnergy%2FSmartEnergy%2FElectric_Vehicles%2FEV_Programs_For_Your_Business%2F

From Frank Hall to Everyone 07:25 PM

If someone has a solar array unit on their home does that disqualify them?

From Andrew to Everyone 07:30 PM

I have a question… (Raising hand)

From Paul Braren to Everyone 07:31 PM

https://ct.gov/pura

From john pecora to Everyone 07:35 PM

With grid modernization is there any allowance for Virtual Power Plants (VPP) like what Tesla is doing in California with it's PowerWall and software to supply the grid with power when needed

From Paul Braren to Everyone 07:35 PM

I have a question… (after Frank and Andrew and John)

From Analiese Mione to Me (Direct Message) 07:35 PM

Please type it to everyone so I can put it in the queue. Thanks.

From Bruce Becker to Everyone 07:36 PM

There is no way to select the "Rate 7" time of use residential rate with EverSource. How can this change be made?

From Analiese Mione to Everyone 07:36 PM

Please type your questions here to everyone so they can be added to the queue.

From Michael Flatto to Everyone 07:36 PM

Right now on the UI website, there are a handful of EVSEs listed as eligible. How do we know which cars are eligible for telematics?

From Jay Gustafson to Everyone 07:36 PM

Will we be able to get a copy of the chat?

From Barry Kresch to Everyone 07:39 PM

Yes, we'll send out a chat, and the recording will be posted on the EV Club YouTube channel.

From Paul Braren to Everyone 07:45 PM

Question for Eversource (or UI): I see the Eversource document https://www.eversource.com/content/docs/default-source/save-money-energy/ct-ev-program-guide-resi.pdf?sfvrsn=a72baf62_0 page 7 section 4.0 Device Eligibility says "INSERT LINK Note: For a complete list of qualifying EV chargers, check our website on or about January 20, 2021." Do you happen to know whether support is planned for the new third generation Tesla Wall Connector https://shop.tesla.com/product/wall-connector ? It's a Wi-Fi connected charger with smart features coming, details at https://www.tesla.com/support/installation-manuals-wall-connector

"Find the Best Electric Vehicle Charging Options for Your Home"

https://www.uinet.com/wps/portal/uinet/smartenergy/electric_ve

hicles/evprogramsforhome/!ut/p/z1/vZPbcpswEIafpRdcYq052KR3xENst4Dr2JjDDYPJcsggRIRip29fMXWbZNKGTqdT3Wln_38_rXZJQiKStNmpLjNRszZr5D1OZqk-9ZyVsQDfWhsmbDc7z__s7jVwNRK-mzDTSfInevjNsWFMfyAJSfJWdKIi8WPdoshKnj6_QYEKszvkCvQ04wJb5OVXBbDBXPA6T09Y1XmDvQydOs5KntG-YLxiFAfnLq_vSFyYV0WGx0LNZ1NdNQqYq0cDTdUq0NQNuAILtCE7XHjp0t1c22662Ph7J9qTWIFg7Tt7e3mb-i-oVheq3UDlXKicH1SHn1TO4cuF6obx1UAVjn1J8n5Dw4F05M_GPGLJMH92gMN6Kh28G2N7vdEsd07CU41nErSMUzlFu79r5TZwbmWl_9LVFZBPY7Mml6G-f3hIbDlxrBX4JEj0j0dOltC4t_BK2a9MVGrdFoxEb6Qy9EYq8cuGHb8vrd0edUuacCyQI588chmuhOj6jwoocD6fJyVjZYOTnFEFfiWpWC_f9zqTdDQIqKVTNYJ7s6TWk7oMrb7whBl_-AbLierc/dz/d5/L2dBISEvZ0FBIS9nQSEh/?WCM_GLOBAL_CONTEXT=%2FUINETAGR_Navigation%2FHeader%2FSmartEnergy%2FElectric_Vehicles%2FEVProgramsForHome

From Paul Braren to Everyone 07:46 PM

Connecticut Electric Vehicle Charging Program

2022 Participation Guide for Residential EV Drivers

January 1, 2022

https://www.uinet.com/wps/wcm/connect/www.uinet.com-7188/531e8139-4402-4f7f-95a7-770baa2c85c4/Final+UEVC002+UI+Residential+EV+Managed+Charging+Participant+Guide.1.6.22.pdf?MOD=AJPERES&CACHEID=ROOTWORKSPACE.Z18_J092I2G0N01BF0A7QAR8BK20A3-531e8139-4402-4f7f-95a7-770baa2c85c4-nV62hKv

(sorry those UI URLs are sooo long, I’m just the messenger

From Bruce Becker to Everyone 07:46 PM

Rate 7 is about 6 cents/kwh less for off peak use! See https://www.eversource.com/content/ct-c/residential/account-billing/manage-bill/about-your-bill/rates-tariffs/time-of-day-rate-7#

From Jay Gustafson to Everyone 07:46 PM

How far off is CT from using Smart Meters? We just moved back from CA where we had that and it was the only way we could implement EV rates.

From Andrew to Everyone 07:47 PM

Does anyone have the qualified products list URL?

From Michael Flatto to Everyone 07:49 PM

https://www.uinet.com/wps/wcm/connect/www.uinet.com-7188/72bd45e8-8561-4ccc-bab2-ea012928541d/Final+UEVC007+EO+Home+Electric+Vehicle+Charger+Qualified+Product+List.1.20.2022-v2.pdf?MOD=AJPERES

From Andrew to Everyone 07:49 PM

Thanks!

From Paul Braren to Everyone 07:51 PM

same very short list of EV charging equipment for Eversource

https://www.eversource.com/content/ema-c/residential/save-money-energy/clean-energy-options/electric-vehicles/ev-charger-demand-response#:~:text=Eligible%20Chargers,Fi%20connectivity%20prior%20to%20enrollment.

but see my question above, maybe new info is coming soon, fingers crossed

From Michael Flatto to Everyone 07:52 PM

Can someone get a wiring rebate now and opt to purchase a smart charger at a later date and still get that rebate?

From Bruce Becker to Everyone 07:52 PM

If you have two cars in your home with telematics, can you get

double the incentive?

From Richard Heckbert to Everyone 07:53 PM

This is the new larger approved charger list for Eversource. Unfortunately the Tesla Wall Connector Gen 3 is still not on the list

https://www.eversource.com/content/docs/default-source/save-money-energy/ct-ev-charger-list-resi.pdf?sfvrsn=d5b18262_2

From Edward Wazer to Everyone 07:54 PM

I have a “dumb” 240V home charge. Does a 2019 Bolt have telematics?

From Jq Abellard to Everyone 07:55 PM

now I am confused, “Tesla can join” so what is the rebate that Tesla Gen 3 Wall Charger is qualified for?

From Michael Flatto to Everyone 07:56 PM

Tesla can join by telematics, not by smart charger. So we can only get the wiring rebate, not the charger one

(unless we get one of the other smart chargers on the list)

From Jq Abellard to Everyone 07:58 PM

@Michael Flatto, so I just had the Tesla wall charger installed in December, no rebate at all, or the $100 one-time enrollment incentive?

From Michael Flatto to Everyone 07:58 PM

That’s my understanding

From Analiese Mione to Everyone 07:59 PM

This question is in the queue. Thanks.

From Paul Braren to Everyone 07:59 PM

Question for Eversource: The link Bruce sent above https://www.eversource.com/content/ct-c/residential/account-billing/manage-bill/about-your-bill/rates-tariffs/time-of-day-rate-7 for Rate 7 sure sounds promising to me, seems I call the number, and Eversource then swaps their meter on my house, and I then schedule my 2 Model 3s in my garage for charging after 8pm via the simple App. Seems simple, maybe too good to be true. What am I missing? I know I don't get additional cost benefits of curtailment via telemetatics where Eversource would lower my charge rate during unusual high demand events, but hey, 6 cents/kWh off peak sure sounds good for my needs. With one car at 18,000 miles a year primarily charged at home, this sounds great. Is there a catch, such as higher cost of power during the day?

From J M Eskin to Everyone 08:00 PM

Can a HUD facility in Bridgeport offer charging and get these benefits to the OCCUPANTS?

From Christine Rogers to Everyone 08:00 PM

If I don't apply by then of quarter one does that make me ineligible ?

From Kate Zod to Everyone 08:02 PM

We have solar panels, which we own. Can we still participate in the incentive programs?

From Analiese Mione to Everyone 08:03 PM

The program is 9 years. Incentives drop down each year is my understanding.

Question is in the queue. Thanks.

From Susan Miller to Everyone 08:03 PM

How many years are incentives paid?

From Anthony Pavia to Everyone 08:08 PM

Will any of these incentives be for retroactive installation of a 240v smart charger?

From Analiese Mione to Everyone 08:09 PM

New installations only. Please refer to UI website and program guide online for additional guidelines.

From Anthony Pavia to Everyone 08:09 PM

ty

From Bruce Becker to Everyone 08:11 PM

Is the cost of a transformer and the utility's installation cost part of the dollar amount subject to the dollar cap?

From Kate Zod to Everyone 08:12 PM

If I have 2 EVs, am I eligible for double the incentives?

From Michael Flatto to Everyone 08:13 PM

Is the forthcoming online application portal for commercial only?

From Evan Finchler to Everyone 08:14 PM

Does anything change if you are signed up with a 3rd party supplier?

From Paul Braren to Everyone 08:14 PM

Barry, I'll put this zoom on the EV Club of CT's YouTube Channel https://youtube.com/EVClubCT, but will you be able to share the actual decks with links?

From Andrew to Everyone 08:15 PM

Can someone paste the residential home links that were shown on the last side…

From Paul Braren to Everyone 08:21 PM

Question: I realize I composed my 2 questions primarily to Eversource (I'm near Hartford), but they're not on this agenda tonight. Perhaps somebody can get me in touch with somebody at Eversource who can assist me with my questions? I've tried to do so, but have failed.

From Mark Scribner, Energy New England (ENE) to Everyone 08:21 PM

To clarify, any vehicle charging Level 2 (2.x KW to 11+ kW?) with a non-smart EVSE can still enroll in a passive program using their existing whole home residential AMI meter, via disaggregation analytics. Is this correct?

From Guy Mannino to Everyone 08:23 PM

The final mounting and wiring of the station itself is not included in make ready, correct?

From Richard Heckbert to Everyone 08:25 PM

Hosting Capacity Map

https://www.arcgis.com/apps/webappviewer/index.html?id=4a8523bc4d454ddaa5c1e3f9428d8d8f

From Stefanie Keohane to Everyone 08:25 PM

links to hosting capacity maps

Eversource – https://eversource.maps.arcgis.com/apps/webappviewer/index.htm

l?id=6853bd7a3f714868bda7fee7c24d8c59

UI – https://www.arcgis.com/apps/webappviewer/index.html?id=b5fe4d1060b14b14893a880ddb1e10c8

From Richard Madonna to Everyone 08:27 PM

I joined late, I'm the CFO at Connecticut College, how can we leverage this to deploy more chargers on campus

From Analiese Mione to Everyone 08:28 PM

210917 docket for media and heavy duty fleets at PURA. Please participate if you own a business.

*medium

From Kate Zod to Everyone 08:29 PM

This is a very valuable organization—encouraging and helping people to switch to EVs.

Does anyone know if there is a similar organization to encourage people to put solar panels on their homes, either purchased or leased?

From Paul Braren to Everyone 08:29 PM

Opinion/Thought: Seems likely some sort of (Tesla MegaPack for example) timeshifting might be needed to smooth out those punishing high peak load costs for overnight L2 charging those 4 Tesla Semis at once.

From Analiese Mione to Everyone 08:33 PM

171203REO2 smart meter docket at PURA

From Andrew to Everyone 08:34 PM

Did I miss the times for time of use service? (Residential)

From Stefanie Keohane to Everyone 08:35 PM

Summary of all Eversource electric rate components, including Residential TOU (Rate 7) https://www.eversource.com/content/docs/default-source/rates-tariffs/ct-electric/ct-electric-rates.pdf?sfvrsn=2d9afe62_46

From Paul Braren to Everyone 08:36 PM

I'll call Eversource tomorrow to see how it goes, to get this 7 cent after 8pm residential rate https://www.eversource.com/content/ct-c/residential/account-billing/manage-bill/about-your-bill/rates-tariffs/time-of-day-rate-7# If anybody wants to learn how it goes, I'll tweet whatever happens from both https://twitter.com/paulbraren and https://twitter.com/EVClubCT, follow either/both to get auto-notified.

From Kate Zod to Everyone 08:38 PM

What is a PHEV?

From Barry Kresch to Everyone 08:39 PM

plug-in hybrid

From Andrew to Everyone 08:39 PM

Plug-in Hybrid Electric Vehicle..

From Kate Zod to Everyone 08:39 PM

Thanks.

From Paul Braren to Everyone 08:40 PM

https://en.wikipedia.org/wiki/Plug-in_hybrid (so gas, with a little electric range, and it can charge in your garage to

avoid using gas if the daily trips are shorter)

From Mark Scribner, Energy New England (ENE) to Everyone 08:40 PM

Since PHEVs often charge daily, and drivers tend to plug in as soon as they get home without incentivized charge management, PHEVs may actually present a greater concern for impacting grid demand than BEVs.

From Michael Flatto to Everyone 08:41 PM

Can someone get a wiring rebate now and opt to purchase a smart charger at a later date and still get that rebate?

From Michele Frankie to Everyone 08:42 PM

Thank you for this information Zoom meeting!

From john pecora to Everyone 08:42 PM

With grid modernization is there any allowance for Virtual Power Plants (VPP) like what Tesla is doing in California with it's PowerWall and software to supply the grid with power when needed

From Paul Braren to Everyone 08:43 PM

I just had Eversource replace the main wiring from the pole to my house last month, and I asked the installer if he was using a smart meter in my town of Wethersfield CT yet, the answer was no. Just one data point/anecdotal, based on the one Eversource employee I asked. He didn't even mention this 7 cents time of use meter, thanks to this club meeting, now I know! I hadn't seen that URL anywhere before. Thank you!

https://www.eversource.com/content/ct-c/residential/account-billing/manage-bill/about-your-bill/rates-tariffs/time-of-day-rate-7

From William Cross to Everyone 08:43 PM

Thank you to everyone! This was great!

From Analiese Mione to Everyone 08:43 PM

Thank you all for attending and asking excellent questions.

From Dwight Stover to Everyone 08:43 PM

Thank you.

From Michael Flatto to Everyone 08:43 PM

Very cool, thanks to everyone who presented

From Edward Wazer to Everyone 08:44 PM

Thank you

From Vacek Miglus to Everyone 08:45 PM

thank you all. looking forward to reviewing all was covered tonight

From Paul Braren to Everyone 08:45 PM

Hoping this chat (minus the email addresses) can be published or at least shared, thank you for a great meeting!

Residential Application – Eversource:

https://www.eversource.com/content/docs/default-source/save-money-energy/eversource-ct-ev-resi-application.pdf

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Public Utilities Regulatory Authority Overview Presentation On EV Charging Incentives

CT PURA EV Club of CT 012522 (1)

PURA and United Illuminating to Review New EV Charging Incentives with Club

Post by Barry Kresch

All are welcome to our virtual meeting on **January 25th at 7 PM** to hear and ask questions about the new incentive program for EV charging to be offered by the EDCs (utilities, or electricity distribution companies).

With us that evening will be Stefanie Keohane of the Public Utilities Regulatory Authority (PURA), which initiated this program as part of its grid modernization efforts, along with Charles Spence and Marriott Dowden of United Illuminating. Charles and Marriott are the consumer-facing individuals for the residential and commercial aspects of the program respectively.

Two recent blog posts discussed the single family and multi-unit residential parts of the program. There are also incentives targeted to workplace, commercial, and fleets,

encompassing both level 2 and level 3 charging. Incentives include subsidies for charging hardware, installation (including make ready), and electricity costs (including demand charge mitigation).

This is a statewide program. Even though our speakers are from United Illuminating, Eversource customers have access to the identical program.

This meeting is being recorded and will be uploaded to the club YouTube channel.

The meeting is free but registration is required: https://us02web.zoom.us/meeting/register/tZYrcuutrzguGdd3O4Z_k9pqFUXrxPwSBK1b

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Single Family Residential Charging Incentives

Post by Barry Kresch

Charging Incentives Via The Utilities

The incentives drafted by the Public Utilities Regulatory Authority that will be made available through Eversource and United Illuminating (commonly referred to as utilities, but in regulatory parlance known as EDCs or electric distribution companies) have been mostly finalized. There are a number of parts to them and we will be writing about them periodically over the next few weeks. There are subsidies for residential, commercial, municipal, and fleets. The residential charging

program includes incentives for multi-unit dwellings (MUD) as well as single family. Incentives include subsidized charging stations, installation, make-ready, discounts on electricity, and demand charge mitigation.

The grid at the top and the explanation below cover the incentives for single family residences, which became effective on January 1, 2022.

The incentives for charging stations require the purchase of utility approved hardware. Incentives are not retroactive. **The list of approved chargers will be published on January 20, 2022.** Approved chargers will be smart chargers. Taking the subsidy requires enrollment in the demand-response charging program.

Residential Single Family Incentives

- Up to a $500 incentive for purchase of a level 2 smart charging station. Smart = WiFi connected at a minimum of 25 MBPS or cellular service, 4G minimum.
- Up to a $500 incentive to bring a 240 volt line to the garage, if needed.
- Owners give the utility permission to see charging data.
- Up to $200 per year for participating in demand-response charging events. Two year commitment required.

It is possible to get charging incentives for a non-networked (i.e. dumb) charging station that may have been previously installed or even for one that is bought new. In this case the charging information can be obtained either via vehicle telematics (if the vehicle has that capability), or the utility can send a device that will enable a dumb charger to access WiFi. There will be no charge for this device. The EDCs will be publishing a list of which vehicles qualify for telematics.

A $100 enrollment incentive is offered to people who

participate using either telematics or a charger upgrade device.

- An owner buying a new dumb charger is not eligible for the hardware subsidy, but is eligible for the installation subsidy.

The managed charging program in year one is limited to a demand response program. **EV owners can get up to $200 per year** ($50/month over 4 months) for their participation, whether that participation comes via a smart charger, telematics, or upgraded dumb charger. The demand response program is in effect from June 1 through September 30. During high demand periods, the utilities are permitted to reduce the rate of charge going to your vehicle. The vehicle will charge at roughly the rate of a level 1 charger during these periods. Typically, an event will last up to 3 hours and occur between 3:00 – 9:00 PM. There can be up to 15 events per month. Customers will be notified in advance of these events and be permitted to opt-out. If a customer opts out of 2 or fewer events and is plugged in at least once per month, they still qualify for the $50 monthly incentive. A 2-year commitment is required. Event notifications are to be communicated via smartphone app, web portal, email, or text message, usually the day before the event, but sometimes the day of the event. If you are not home and therefore not plugged in during an event, and have not opted-out, that counts as participation.

The demand-response incentives will be paid off-bill after the end of September.

There is no incentive for those who trickle-charge (level 1).

If a home does not have enough space in its panel to accommodate an EV charger and wishes to upgrade electric service, that is out of scope of the program. Service upgrades can run $5000 or more. Before doing that, it may pay to find out how much room you have or whether you can share a circuit.

Perhaps you can install a lower-powered unit than you originally planned.

An Advanced Managed Charging program will be offered beginning in 2023. Details have not yet been finalized.

If someone uses the hardware and installation incentives, but then does not allow the demand-response throttling, and therefore will not collect any of the $200 incentive, it is not known if the EDC will try to claw back the hardware and installation incentives.

Note: Eversource is maintaining its Connected Solutions branding and migrating existing customers into the new program.

We are planning a virtual meeting for January 25th at 7:00 PM, which will include speakers from PURA and UI.

This is the Eversource splash page with links to apply for the incentives. This is the UI page. There is still being work done on the back end and the application portals will be open by the end of Q1 2022.

Incentives available to Eversource and UI customers only.

First Look at Managed Charging Incentives

Utility EV Rate Design – Proposed

Details for Single Family Residences

The grid at the top of this post comes from a filing by Eversource for its proposed EV charging incentive structure for single family residential homes. It is one piece of the many-legged creature that is the new EV Rate Design Adjudication that was released by the Public Utilities Regulatory Authority (PURA). In turn, the EV Rate Design is but one facet of PURA's larger grid modification docket. To be clear, these incentives come from the utilities.

When the adjudication was released in mid-July, not all of the incentive levels and implementation details had been determined. Working groups were set up to address the unfinished work. This is the month when a lot of the submissions are required.

The EV Rate Design is a big program that includes incentives for residential, commercial, workplace, fleet, and public charging. The incentives include hardware and installation subsidies, make ready, demand charge mitigation, and financial incentives to avoid charging during peak periods. The grid up above is only the single family residential part. This is not final. It has been submitted by Eversource to PURA for approval. There is a comment period and there could be changes. It is our expectation that changes will likely be at the margin. For that reason, we thought it worthwhile to tease it and these are the provisions.

Please note that this program begins in January 2022 and the subsidies for hardware and installation only apply to purchases after the start of the program. The first set of bullet points are for hardware and installation.

- A household can receive a $500 subsidy to offset the purchase of a smart charger. It has to be a smart

charger, meaning WiFi enabled, in order to be able to participate in the program because the utility, or Electric Distribution Company (EDC) as they are referred to, has to be able to see the charger/charging activity. Taking this subsidy requires participation in the demand response or managed charging program. $500 is a meaningful amount as there are smart chargers out there in the $6-700 range. Only approved equipment is eligible. The approval list has not yet been released. This is necessary because the EDC has to know that the unit will function in its particular software environment.

- There is an additional $500 subsidy to offset the cost of bringing a 240 volt line from the panel to the garage. The total cost of this will vary with each residence based on the amperage of the line being pulled and the difficulty and distance in getting from the panel to the garage.
- If your panel does not have enough capacity for an EV charger, or the charger you want, you would have to upgrade your electric service. There is no provision to offset that expense, which can be $5000 or more.
- There is an installed base of dumb chargers among existing EV owners and the program has a provision for these folks to participate.
    - If the vehicle has telematics access, GM and Tesla being the specific examples cited in the filing, the utility can capture the data via the car without needing the smart charger.
    - If there is not telematics access, the utility will send a device to track it.
- There may be an installed base of smart chargers. The filing doesn’t address this. It may be an omission. If the program wants to treat these differently than a dumb charger, then one would have to wait for a determination of whether this equipment is approved.

The next incentives are for participation. The idea is to offer discounts to get customers to charge their EVs during periods of lower electricity demand. This will help load balance the grid.

- For those accepting the hardware and installation incentive, since that comes with the obligation to participate, there is no enrollment incentive.
- For telematics participants, there is a $200 enrollment incentive. For non-telematics “device” participants, the enrollment incentive is $150.
- Charging incentives for smart charger and non-smart charger participants are capped at $200 annually.
    - The program is intended to have 2 levels of participation: demand response and managed charging. Only demand response will be rolled out for 2022. Managed charging will follow 12 months later.

Demand response means that the utility will alert customers when a high demand period is coming. The alert will typically happen 24 hours prior to the event. These events will generally be 3 hour blocks of time occurring between 3 – 9PM in June through September on days when demand spikes. Customers with smart chargers will be opted-in by default but have the ability to opt-out for a given event in response to an alert. Being opted-in means that the car will either have its charging rate curtailed or will temporarily not be able to charge during the high-demand block of time. If a car is simply not plugged-in, that counts as being opted-in. Customers are permitted up to 2 opt-out events per month to remain eligible for the incentive. Telematics customers will work similarly, except it is up to the customer not to plug-in during these times (since the utility can’t control the charger). The incentive is structured as $50 per month for each of the 4 months, paid annually after the summer.

The minimum participation requirement is 24 months. After 24

months, participation continues unless affirmatively withdrawn by the customer. Participation may be terminated prior to 24 months if there are extenuating circumstances, such as customer no longer owning an EV or moving to a new residence.

The more advanced demand charge level allows the utility to throttle the rate of charge as needed. There are no discreet events as with demand response. Customers can switch between tiers in either direction, but must participate for 6 months before switching and then another 6 months before switching again. The EDCs have proposed that a higher incentive be made available to participants in the more advanced managed charging program but have not yet specified how much it will be.

As noted at the start of the post, this plan is not final. We will publish updates as events unfold.

New EV Rate Design Released by PURA

Public Utilities Regulatory Authority (PURA) Directs Utilities to Offer EV Charging Incentives

The final rate design adjudication was released on July 14th. Even though it is the final version, it actually isn’t quite final yet. We now know a lot about the program, but the document creates working groups to fill in unfinished gaps on

some important details, such as some rates, approved equipment, etc. The PURA doc is uploaded to the website as a blog post here. It doesn't exactly read like Jurassic Park, but we need this kind of thing if we are to wean ourselves off "dino juice."

The program is quite comprehensive, containing incentives for residential and commercial, the latter including workplace charging and fleets, and which also applies to municipalities. The incentives cover hardware, service upgrades, make-ready, demand charge mitigation, and discounted electric rates.

It is important to note that this program takes effect in January 2022. It is not retroactive. If you purchase a charger tomorrow, it will not be eligible for the subsidies.

Below is a summary of the incentives referenced in the chart at the top of the blog post. These are hardware and installation-related discounts:

- A residential incentive of up to $500 for the cost of an EV charger. This incentive is for a smart charger, which is a WiFi-connected charger. EV charger prices vary, in part depending upon how many amps are drawn by the charger, but according to MYEV.com, the range for a smart charger is $600-$800. If you take advantage of this incentive, you are required to participate in a managed charging program. The point of the connected charger is to enable the utility (which is also known as an Electric Distribution Company or EDC) to see and communicate with the charging unit.
- Also for a residence, there is a subsidy to help with the cost of an electric service upgrade if that is necessary if your current panel does not have the capacity to accommodate the added amperage of an EV charger. The amount of the subsidy is not yet determined.
- There is no mention in the chart of a subsidy

specifically for installation, so we assume for now that the $500 applies to both hardware and installation. Installation costs can vary considerably depending on how far your panel is from your garage. It could be as much as $1,000.

- There are similar incentives offered for multi-unit dwellings (MUD), workplace chargers, and make-ready. The incentive is 50% of the cost of the charger subject to a cap for the site and a minimum number of charging ports. Note that this is ports, not chargers. There are dual-port charging units. There are higher site caps for MUDs, public level 2, and DCFC charging in underserved communities.
- There is a 100% make-ready incentive, which means the EDC will pay to bring the power to where the chargers will be installed. This is a big deal.
- Finally, there is a subsidy of 50% for the installation of a DCFC charger, which is short for DC current fast charger, also known as a level 3 charger. These are commercial, high voltage units that can quickly charge an EV capable of accepting a fast charge, which applies to most battery electric vehicles.
- There will be a list of specific approved charging equipment. This is necessary for the utilities to be sure they are able to get the information they need from the charger. This list will be finalized later in the year.

Residential Incentives for Electricity Usage

As noted in the first bullet about residential charging, a household can receive an incentive for participating in a managed charging program. There are 2 levels, called basic and advanced. As mentioned earlier, receiving the incentives for the hardware require participation, along with giving the EDC

permission to capture data from the charger.

- Basic incentive. In this program, a consumer will be notified of an upcoming demand response event (i.e. when the EDC is expecting there to be a high demand for electricity and they need to take measures to avoid brownouts or blackouts). The consumer has the option to decline participation. However, the default setting is opt-in. Incentives are awarded for participation. The particulars are still being developed, but there is a cap of $200 per year, which will be sent as a direct payment to the consumer.
- Advanced (direct load control). The consumer will set charging sessions (via app, web portal, email or text) and the EDC has the right to throttle the rate of charge. The particulars of the incentive are still under development. Your participation level will influence the size of your incentive. We hope this is not too burdensome a level of admin for the consumer.
- The Authority has directed the EDCs to submit recommendations for EV rates for MUDs, which could involve sub-metering.

Note: A common way of protecting the grid, which is used in other places but is not part of this program, is time of use (TOU) charging. We are disappointed that this isn’t part of the program because it is a very simple, easy to understand, no maintenance approach. If you charge during off-peak hours, you get a lower rate. Easy. The adjudication specifically states that it doesn’t foreclose moving that way at some future point. There are regular evaluation points built into this 9-year program. And there is nothing to say that TOU can’t be combined with managed charging. Theoretically, if every EV (assuming many more of them than there are today) started a charging session at the first minute of the off-peak period, there could be a demand surge, but managed charging could mitigate that.

There is an existing installed base of EV chargers, and many of these, my guess is almost all of them, are so-called dumb chargers. They are not WiFi enabled so the EDC can't see or interact with them. The program tasks the utilities to develop a workaround to include these chargers as it could jumpstart program participation. There are existing programs at other utilities, Con-Ed comes to mind, that do just that. With Con-Ed, the driver gets a flash-drive type device to install in the car's USB port, or with some manufacturers, there is the ability to connect directly to the telematics of the vehicle with the owner's permission, and incentives will be developed to reward off-peak charging. This actually comes a little closer to time of use. Finally, a recent development is that there is equipment coming on the market that can add connectivity to a dumb charger. PURA is aware of this, as well as developments in better accessing vehicle telematics, and there is the potential for this part of the program to evolve.

The $200 cap on residential demand response rebates seems low to us. The concern is the lack of differentiation between one and two (or more) EV households. We want to see all vehicles participating.

Demand Charges

Demand charges affect commercial establishments. If the demand for electricity spikes for a period of time above normative levels, electric rates increase substantially. Demand charges have been a barrier to the installation of level 3 charging stations. The adjudication directs the EDCs to maintain a temporary rate-rider to mitigate demand charges while taking the time to develop a more permanent and sustainable solution. Demand charges were originally developed so that those putting the most strain on the grid contribute disproportionately to necessary upgrades. These rules were developed long before the modern EV and definitely need to be re-thought.

Outreach

On balance, this is a strong program. We look forward to seeing, and if possible, being a part of, how it evolves. We intend to keep our members informed and hope the outreach, in general, is effective so it hits the ground running in January!

New EV Rate Design – Final Adjudication from PURA

The Public Utilities Regulatory Authority has released the final version of the EV Rate Design

This program provides incentives for off-peak and managed charging, subsidies for EV chargers, and make-ready (bringing the electricity to where the chargers will be located). This is a dense document and we will be doing in the coming months to explain the details. Also, even though it is the final version, there are still some portions that aren't finished. Working groups have been assigned to do that and report to PURA by Oct. 15th. The plan will take effect in January 2022.

Final EV Rate Design 171203RE04-071421

PURA Straw Proposal for Statewide EV Program

This is a copy of the statewide EV Program straw proposal that the Public Utilities Regulatory Authority has released. Public comments are being accepted until Jan. 29. Sorry, but this is not downloadable from our website.

17-12-03RE04 Straw Proposal

EV Coalition Principles on Electrification and Grid Modernization

The Electric Vehicle Coalition of CT has sent an open letter to the Public Utilities Regulatory Authority that communicates key principles with respect

to EVs and grid modernization.

Bruce Becker, President of the EV Club of CT, stated, “A study by Natural Resources Defense Council (NRDC) indicates EV adoption will reduce utility bills for all CT customers by $500 million by 2050 while reducing vehicle operating costs for EV owners by $1.9 billion. Therefore, PURA must incentivize EV adoption to make energy cheaper and cleaner for CT residents.”

The full text of the letter is below:

September 26, 2018

Jeffrey R. Gaudiosi, Esq. Executive Secretary

Public Utilities Regulatory Authority

10 Franklin Square

New Britain, CT 06051

Re: Docket No. 17-12-03: PURA Investigation into Distribution System Planning of the Electric Distribution Companies, Electric Vehicle Coalition Principles on Grid Modernization and Electric Vehicles

Dear Mr. Gaudiosi:

The CT Electric Vehicle Coalition,a diverse group of clean

energy advocates, organized labor, and environmental justice groups, commends PURA for including electric vehicles in its scope of the Grid Modernization proceeding. Electric vehicles (EVs), which encompass not just passenger vehicles, but medium-and heavy-duty vehicles, are critical technologies Connecticut must deploy to meet its greenhouse gas (GHG) reduction requirements and Zero Emission Vehicle Memorandum of Understanding commitments. EVs have zero tailpipe emissions, and even with New England's electricity mix today, these vehicles cut GHG emissions as much as 75% compared to conventional vehicles.(1) These emissions savings will only increase as the region continues to clean and modernize the electric system. Importantly, EVs also reduce harmful air pollution, create economic development opportunities, and reduce reliance on imported petroleum fuels. Recognizing these benefits, the state has committed with other Northeast and West Coast states to put 3.3 million of these vehicles on the road by 2025.

Utilities could help spur the advancement of EVs through a range of new policies and programs. Smart integration of EVs into the grid can help maximize GHG emissions reductions by optimizing grid utilization. Through appropriate customer signals, the flexible load of EVs can better integrate renewable resources or shift load by charging at periods of low demand. These changes improve the efficiency of the grid and reduce costs for all ratepayers, while at the same time improving the economics of operating an EV. Broad deployment of EVs also hinges on widely available charging infrastructure, which utilities have a role in supporting. Utility investment in make-ready infrastructure, for example, can complement the competitive market, address coordination problems, and help to overcome barriers to entry in important market segments, including low- income communities and multi-family housing.

Utility programs and investments to support EVs must align

with broader principles of utility regulation, including grid modernization and rate design. As such, the CT EV Coalition requests PURA to consider the following principles, particularly how they impact EV deployment, within the Grid Modernization docket.

(1) Acadia Center, Energy Vision 2030, available here: http://2030.acadiacenter.org/

PRINCIPLES ON GRID MODERNIZATION AND ELECTRIC VEHICLES IN CONNECTICUT

- Rate design must be improved. Granular, efficient, and technology-neutral pricing must be developed to support new technologies and promote Connecticut's public policy goals. Demand charges are a major barrier for several EV charging applications, and Connecticut has a beneficial pilot that eliminates demand charges for certain types of EV charging stations. Further reforms to rate design, including broader adoption of time of use rates without demand charges, can simultaneously accelerate EV adoption and incentivize EV charging at optimal times.
- Equity and access should be incorporated into a wide range of EV programs. This includes rate design and programs to increase access to electric transportation and EV charging stations in underserved and marginalized communities.
- Education and outreach strategies are needed to support well-designed programs. Consumer awareness and understanding are crucial to adoption rates and achievement of program goals.
- Distribution system planning must be improved to include local clean energy alternatives to traditional infrastructure. Methods must be developed for a stronger consideration of clean, local resources, including EVs as flexible load and distributed storage.
- Promotion of interoperability and data disclosure should be conditions of participation in utility investment

programs. Connecticut should generally apply consumer-friendly regulations to all public EV charging stations, notably pricing disclosure, measurement accuracy, and open access. In addition, key charging station objectives can be included conditions of participation in utility investment programs, such as interoperability of charging connectors and data disclosure.

- The utility business model must be changed to incentivize policy-driven outcomes. Utilities must shift their business model to rely less on return on capital investment and more on performance incentives for consumer and environmental outcomes.
- Utility benefit-cost calculations must be updated to reflect the public interest. These calculations should be applied to all types of new utility investments, including those that facilitate EVs. Through this proceeding, PURA could explore options for including GHG reductions and petroleum fuel savings in benefit-cost calculations.
- Robust stakeholder input and processes are needed to inform any utility programs.

The Connecticut EV Coalition respectfully requests that this multi-phase grid modernization proceeding include a track to carefully evaluate regulatory mechanisms to ensure smart integration of EVs into the grid, which takes into consideration the grid modernization principles above, and addresses the appropriate roles for utilities with respect to EV acceleration and deployment of EV charging infrastructure. We look forward to engaging with PURA on these important topics.

Respectfully submitted,

The Connecticut Electric Vehicle Coalition

- Acadia Center*†
- Connecticut Fund for the Environment*
- Connecticut Nurses Association
- Connecticut Roundtable on Climate & Jobs*
- Connecticut Citizen Action Group
- ConnPIRG
- Conservation Law Foundation
- ChargePoint*
- Chispa-CT*
- Clean Water Action*
- CT League of Conservation Voters
- Drive Electric Cars New England
- Eastern CT GreenAction
- Electric Vehicle Club of Connecticut*
- Energy Solutions, LLC
- Environment Connecticut*
- Greater New Haven Clean Cities Coalition, Inc.
- Hamden Land Conservation Trust
- Hartford Climate Stewardship Council
- International Brotherhood of Electrical Workers*
- Interreligious Eco-Justice Network
- New Haven Climate Movement
- Northeast Clean Energy Council
- People’s Action for Clean Energy
- Proton On Site
- Plug In America
- RENEW Northeast
- Sierra Club*
- Solar Connecticut, Inc.
- Tesla, Inc.
- Union of Concerned Scientists

* Connecticut EV Coalition Steering Committee Membership