

**DOCKETED**

<b>Docket Number:</b>	24-IEPR-03
<b>Project Title:</b>	Electricity Demand Forecast
<b>TN #:</b>	256420
<b>Document Title:</b>	Presentation - Electric Load Growth
<b>Description:</b>	Ken Schiermeyer and Matt Belden, SDG&E
<b>Filer:</b>	Raquel Kravitz
<b>Organization:</b>	SDG&E
<b>Submitter Role:</b>	Public Agency
<b>Submission Date:</b>	5/16/2024 8:17:36 AM
<b>Docketed Date:</b>	5/16/2024



## Electric Load Growth



# Electric Load Growth



- SDGE is putting more company focus on data collection to enhance grid planning into the future.
- Forecasted load growth continues to drive changes to our business, one of which includes heightened company focus on proactive data collection initiatives centered around:
  - transportation electrification
  - anticipated large customer electrification projects.
- Initiating data collection through targeted outreach and other innovative measures will further refine our approach to grid planning, improve forecasting and enable electrification growth in the region.

# Anticipating Large Customer Electrification

- As part of our company's focus on data collection, SDG&E created a dedicated resource in Design & Project Management (DPM) who proactively engages large developers and proposed large developments to understand potential load requirements early in project development, long before they would approach SDG&E with a service request.
- Through this early engagement process, we have identified very large proposed developments in the San Diego region including:
  - San Diego Sports Arena Redevelopment
  - Redevelopment of Seaport Village along the Port of San Diego
  - Naval Information Warfare Systems Command (NAVWAR) Old Town Campus Revitalization.
- In February 2024, as part of our effort to engage customers and developers early and often in their growth plans, SDG&E sent out a communication to assigned customers and developers that provided an outline of DPM timelines for projects and outlined SDG&E's commitment to integrating customer growth plans into our grid planning efforts.

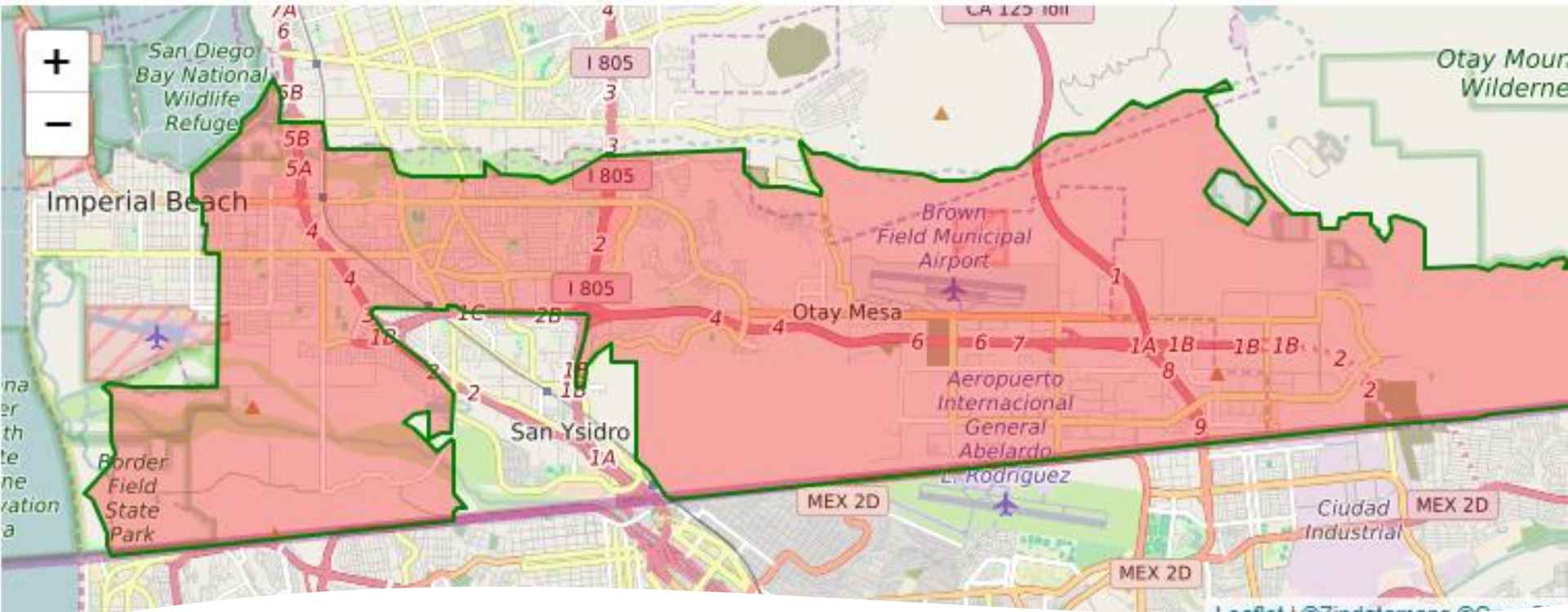
# Anticipating Large Customer Electrification (Continued)

- SDG&E regularly engages Electric Vehicle Service Providers (EVSP's) to understand long term plans for charging infrastructure deployment.
- SDG&E Proactively engages large commercial & industrial customers that have large fleets to understand long term building and fleet electrification plans.
- SDG&E continues to evaluate how to engage and collect data from a broader customer group. In March and April 2024, SDG&E conducted a Pilot Electrification Outreach effort with a very small number of our assigned customers that have dedicated SDG&E Account Executives. The pilot effort was concentrated on gathering information about these customer's sustainability goals and electrification plans. The effort provided some initial insights.
- Of the small number of customers surveyed (11 customers):
  - 82% said electrification is a company focus and the majority of them are focused on both Building & Fleet Electrification.
  - They expressed concerns including Medium/Heavy Duty EV range, number of public charging stations and cost/availability of EVs

# Otay Mesa Study



- SDG&E partnered with Quanta Technologies to study the Otay Mesa region to quantify the anticipated load impacts of medium and heavy-duty vehicle electrification over time.
- The study performed three key activities to quantify anticipated loads:
  - Identify facilities, types of businesses, number of vehicles, vehicle classifications, vehicle annual mileages, and likely vehicle usage patterns
  - Determine criteria per facility such as electrification likelihood, electrification timing, and charging behaviors
  - Develop load shapes per facility and calculate MW load growth

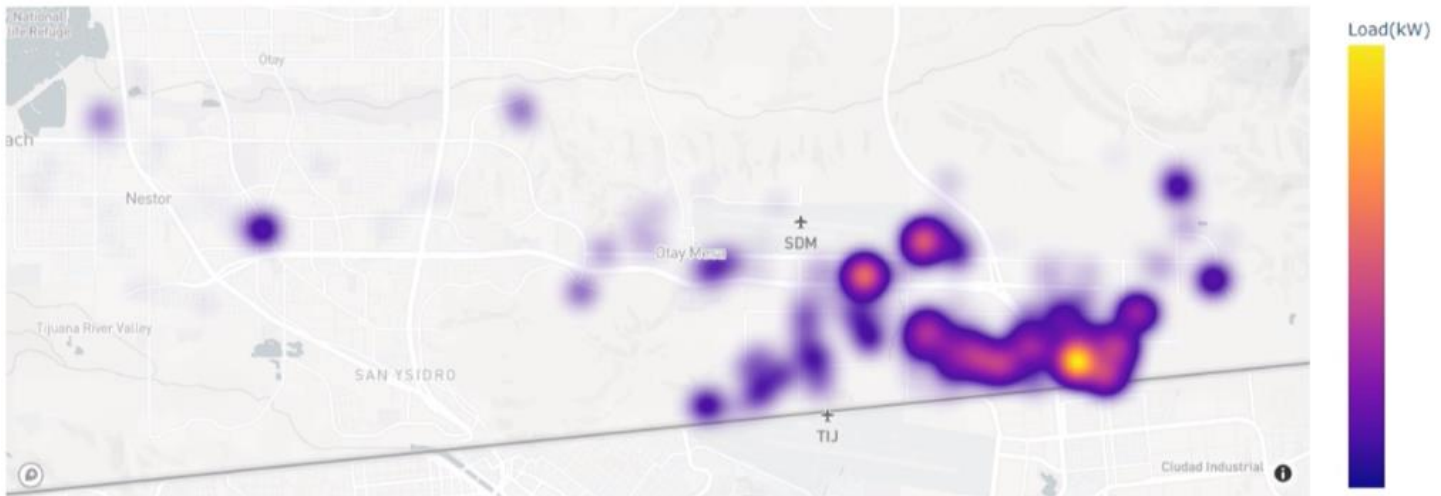


## Region Information

- The study focused on the 92154 zip-code which is home to the Otay Mesa border crossing.
- This port of entry is the third busiest commercial border crossing along the Mexico-United States border and boasts 1M annual freight truck crossings and \$60B in annual cross border trade activity.
- Many fleets subject to Advanced Clean Fleets (ACF) regulations are domiciled within this region and perform daily crossing carrying goods between nations.

# Initial Pilot Takeaways

- The study confirmed that the MDHD population density within the Otay Mesa region is significant:
  - More than 30% of service territory MD vehicles
  - More than 50% of service territory HD vehicles
- Quanta highlighted that varying the charging time window can have large impacts on the overall load occurring on the system. Compressing the charging period to super off-peak has a significant impact on peak load.
- By 2040, a large portion of the TE load allocated by IEPR for MDHD across the entire SDG&E service territory will be consumed within the Otay Mesa region.





# Next Steps



- SDG&E is not at a point where we can share details on the initial pilot study until we've had an opportunity to validate the findings against other data sources.
- The Otay Mesa pilot study generated interest within SDG&E's leadership to understand anticipated MDHD loads at this level of granularity for the entire SDG&E service territory. As a result, a service territory study with Quanta is currently underway.
- Pending results of this study, and validation of the results, SDG&E would be happy to share the findings with the CEC in the future.