

Legislation Text

File #: 2017-0383, Version: 1

DATE: October 10, 2017

SUBJECT:

ORDINANCE RESCINDING SAN DIEGO UNIFIED PORT DISTRICT CODE ARTICLE 12, REQUIRED REPORTING OF UTILITY USE ON TIDELANDS

EXECUTIVE SUMMARY:

The presentation provides the Board of Port Commissioners (Board) with an update on the implementation of the San Diego Unified Port District Code Article 12, Required Reporting of Utility Use on Tidelands (Port Code Article 12) and the results from the Utility Usage Report for Calendar Year 2016. Staff recommends rescinding Port District Code Article 12, because the costs outweigh the benefits for continued implementation. The District can utilize valuable aggregated utility data analysis from the first two years of implementation, continue to collect data through complementary resources, and focus its limited resources on high potential efforts

The Board adopted Port Code Article 12 in December 2015 to obtain annual utility usage data to measure progress toward achieving the Climate Action Plan (CAP) greenhouse gas (GHG) reduction goals and encourage reductions in utility usage (energy and water) through utility benchmarking and reporting. Attachment A is a copy of Article 12 adopted by Ordinance No. 2844 in December 2015. Port Code Article 12 requires all Utility Account Holders¹ to report the prior calendar year utility data by September 2016 for the first year, and April for subsequent years.

Over the course of implementing Port Code Article 12, many challenges were identified and the reporting deadlines were revised to March 2017 (for 2015 data) and August 2017 (for 2016 data) to address these challenges. Continued implementation challenges were previously presented to the Board on January 5, 2017 and April 11, 2017² and included the following:

- Identifying Utility Account Holders and development of a tracking database;
- Inconsistencies with SDG&E's Automated Benchmarking Service;
- Developing comprehensive resources on necessary compliance steps;
- Assisting Utility Account Holders within the confines of a third party Data Aggregator arrangement; and
- The introduction of a new tool that is more complicated than initially perceived.

Extensive outreach, targeted one-on-one assistance to potentially larger businesses, refinement of the Utility Account Holder database, and the development of technical resources resulted in an increase of Utility Account Holders' participation from the 2015 to 2016 calendar year reports.

The Utility Usage Report for Calendar Year 2016 (Attachment B) highlights 122 Utility Account Holders reporting utility usage data that account for 93% of total District-wide energy usage. This is a significant improvement from the 2015 Utility Usage Baseline Report³, where 27% of total District-wide energy use was reported under Port Code Article 12. While there is no estimate of total District-wide water consumption, increased participation resulted in a significant increase in reported water usage. Lessons learned from two years of implementation include that District-wide utility usage is highly concentrated among the top decile of Utility Account Holders and the costs outweigh the benefits of capturing the final 7% of District-wide of energy usage reporting under the Port Code Article 12.

RECOMMENDATION:

Adopt an ordinance rescinding San Diego Unified Port District Code Article 12, Required Reporting of Utility Use on Tidelands.

FISCAL IMPACT:

The item is a presentation and a request for Board direction. The respective costs for the CAP and implementation Port Code Article 12 are included in the approved FY 2017/2018 Planning & Green Port - Energy budget.

The recommended rescission of Port Code Article 12 is estimated to save the Port approximately \$250,000 per year. That is, an estimated \$100,000 in personnel expenses and \$150,000 in non-personnel expenses.

COMPASS STRATEGIC GOALS:

This agenda item supports the following Strategic Goal(s).

- A Port that the public understands and trusts.
- A thriving and modern maritime seaport.
- A Port with a healthy and sustainable bay and its environment.
- A Port with a comprehensive vision for Port land and water uses integrated to regional plans.
- A Port with an innovative and motivated workforce.

DISCUSSION:

Background

As an overview, Port Code Article 12 is a requirement that all Utility Account Holders⁴ on District tidelands report utility usage (energy and water) through the U.S. Environmental Protection Agency's ENERGY STAR Portfolio Manager (Portfolio Manager) and share that information with the District's selected third party Data Aggregator - Edison Energy (Document No. 65277, filed on July 18, 2016).

Throughout the continued evaluation and implementation of Port Code Article 12, it is important to note the goals:

- 1. To encourage reductions in utility usage through utility monitoring and benchmarking among Utility Account Holders. Buildings that consistently benchmark energy performance actually save energy. As an example, according to a 2012 EPA analysis, average savings from energy benchmarking is 2.4% per year and 7% over 3 years.⁵
- 2. To obtain accurate and timely utility usage data to measure progress towards our CAP GHG goals. Analysis on aggregated usage by sector, geography, utility type, and trends over time can help inform policy measures and focus areas for implementation under the CAP.

Key milestones for the implementation of Port Code Article 12 include:

- 1. December 2015: Adoption of Port Code Article 12 Required Reporting of Utility Use on Tidelands
- 2. February 2016: Memorandum of Understanding was filed with the San Diego Port Tenants Association (SDPTA) regarding the retention of the Data Aggregator⁶
- 3. June 2016: Edison Energy selected as the Data Aggregator and agreement signed with Edison Energy⁷
- 4. August 2016: Edison Energy became ENERGY STAR Service and Product partner, which enables Utility Account Holders to connect and share data through the Portfolio Manager online tool and comply with the requirements of Port Code Article 12
- 5. September 1, 2016: Utility Account Holders required to report and share utility usage for calendar year 2015
- 6. January 2017: Staff prepared a Board memo update on the implementation of Port Code Article 12 and requested additional time to share the Utility Usage Baseline Report for Calendar Year 2015.
- 7. April 2017: Staff presented an update to the Board on the Utility Usage Baseline Report for Calendar Year 2015.
- 8. August 1, 2017: Utility Account Holders required to report and share utility usage for calendar year 2016 (extended from the original April 1, 2017 deadline).
- 9. October 2017: Staff presentation and update to the Board on the Utility Usage Report for Calendar Year 2016.

Additionally, extensive outreach and educational initiatives have been ongoing since January 2016. Attachment C summarizes the initiatives and resources from staff, the SDPTA, the Center for Sustainable Energy (CSE), and Edison Energy.

Actions Update Since April 2017 Staff Report

The following actions were taken since April 2017 to improve the implementation of Port Code Article 12:

- 1. All participating Utility Account Holders received a letter from the District with information on their compliance status.
- 2. In addition to overall Utility Account Holder compliance, staff began tracking implementation progress as the percentage of energy usage reported under Port Code Article 12 compared to the total District-wide energy usage estimate from SDG&E.
- 3. Recent outreach focused on assisting the larger businesses in reaching compliance and participating Utility Account Holders, which had not yet completed all the necessary

compliance steps, to reach compliance.

- 4. Staff collected feedback from Utility Account Holders and other stakeholders on the effectiveness of Port Code Article 12.
- 5. To obtain access to additional energy data, staff submitted a Privacy GreenLight request with SDG&E for tracking annual electric and natural gas usage, as well as energy efficiency reductions by business sectors.⁸
- 6. Maintain ongoing collaboration with member cities to understand benchmarking policy development at other agencies.
- 7. Continued tracking of Assembly Bill (AB) 802 rulemaking (new statewide building energy use benchmarking and public disclosure) and conducted a comparative analysis between the local and state policy (Attachment D).

Summary of Report Results for Calendar Year 2016

The Utility Usage Report for Calendar Year 2016 (Attachment B) highlights 122 Utility Account Holders reporting utility usage data, which accounts for 93% of total District-wide energy usage.⁹ This is a significant improvement from the Utility Usage Baseline Report for Calendar Year 2015, whereby 27% of total District-wide energy use was reported under Port Code Article 12. Table 1 shows a summary of the report results with a comparison to the Utility Usage Baseline Report for Calendar Year 2015.

The modest increase in compliance numbers and substantial increase in percentage of energy usage reported under Port Code Article 12 indicate the success of outreach and assistance focusing on potential larger utility users.

For calendar year 2015 in the baseline report, 50% of the total annual electricity usage and 27% of the total energy usage was reported under Port Code Article 12. In the current report for 2016 usage data, 86% of the total annual electricity usage and 93% of the total annual energy usage was reported under Port Code Article 12. With over 90% of the District-wide energy usage reported under Port Code Article 12, analysis of this large sample size represents the total energy usage.

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	2015 Reporting Year	2016 Reporting Year
Natural Gas Usage Reported Annually (therms/year)	3,680,456 24,920,335	
Percentage of Estimated Total Natural Gas Use in Buildings at the Port	14% 97%	
Electricity Usage Reported Annually (kWh/year)	202,195,384	291,147,838
Percentage of Estimated Total Electricity Use in Buildings at the Port	50%	86%
Total Energy Usage Reported Annually (MMBTU/year)	1,057,965	3,485,430
Percentage of Estimated Total Energy Use in Buildings at the Port	27%	93%
Total Greenhouse Gas Emissions Reported Annually (MT CO2e/year)	79,055	206,553
Water Usage Reported Annually (gallons/year)	429,305,000	915,922,229
Total number of Utility Account Holders Identified (as of 8/2/17)	340	326
Number of Utility Account Holders Reporting Utility Data	91	122

Table 1Summary of Utility Usage Report Calendar Year 2016 Results(As Reported In the Utility Usage Report for Calendar Year 2016)

Sectoral analysis of utility usage reported under Port Code Article 12 for 2016 calendar year data indicates that the energy and water usage is concentrated in the industrial and hotel business sectors. A decile analysis shows how concentrated the electricity, natural gas, and water usage is across District-tidelands (see Attachment B, pages 17 and 23). The report shows that the top decile of reporting Utility Account Holders make up 75% of the 2016 reported electricity usage (see Attachment B, page 17, chart 2). SDG&E confirmed that the top 15 customers make up 80% of the total electricity usage. Therefore, programs and policies partnering with the larger utility users can result in the greatest port-wide GHG reduction impact.

Cost/Benefit Analysis

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The District, SDPTA, CSE and Edison Energy, have invested in outreach efforts, provided education to Utility Account Holders, and prepared two reports for calendar years 2015 and 2016. Between February 2016 - August 2017, staff and non-personnel resources required to implement Port Code Article 12 are estimated to be at least 1.0 District Full Time Equivalent (FTE) - equivalent to approximately 1,600 hours/year, 0.5 a SDPTA FTE (equivalent to approximately 800 hours/year), and approximately \$200,000 in consultant expenses to-date. Given conservative estimates, this equates to an annual implementation cost of approximately \$300,000. Additional cost estimates not included in this analysis is the time invested by Utility Account Holders to comply.

Numerous studies highlight the benefits from benchmarking and show that buildings that consistently benchmark energy performance actually save energy. As an example, according to a 2012 EPA analysis, average savings from benchmarking is 2.4% per year and 7% over 3 years.¹⁰ In context to the Port, the 2.4% estimated energy reduction potential associated with 100% compliance with Port Code Article 12 would equate to an estimated reduction of 5,000 metric tons of carbon dioxide equivalent (MTCO2e) per year.¹¹ However, discussions with tenants show that this is an over estimation, as many of the industrial and hotel Utility Account Holders have historically tracked and benchmarked utility usage with either Portfolio Manager or more sophisticated Energy Management Systems prior to the adoption of Port Code Article 12. Therefore these Utility Account Holders have already captured reduction benefits from energy monitoring and tracking. Additionally, given the aggregation requirements of Port Code Article 12, Staff is not able to directly to track achieved GHG reductions from benchmarking.

The best case scenario results in a cost per MTCO2e of approximately \$60, as summarized in Table 2. Market price is approximately \$13 per MTCO2e.¹². Additionally, energy efficiency and solar projects can have a negative \$/MTCO2e value. The opportunity cost of Port Code Article 12 is estimated at 1 solar installation per year (a 2 MW installation would equate to a 1,000 MT CO2 reduction). That is, if resources from implementing Port Code Article 12 were reallocated to renewable energy projects, staff predicts that 1 additional solar project could be installed each year.

Table 2
Estimated Annual Cost/Benefit Analysis of District's Benchmarking Ordinance

Annual Implementation Costs	Maximum GHG Reduction Potential (MTCO2e)	\$/MTCO2e
\$300,000	5,000	\$60

Given limited resources and ambitious GHG reduction goals beyond 2020, Staff must continually evaluate the cost effectiveness of each project under implementation. While Port Code 12 shows proven value in data acquisition and potential GHG reduction, Staff recommends that resources could be better allocated to implementing high GHG reduction potential projects across District-tidelands.

Achieving Goals without Port Code Article 12

1. To encourage reductions in utility usage through energy monitoring and benchmarking among Utility Account Holders.

Industrial and Hotel Utility Account Holders have historically tracked and benchmarked utility usage with either Portfolio Manager or more sophisticated Energy Management Systems and many are already reducing energy usage from investing in energy efficiency projects.

The other potentially 204 Utility Account Holders currently not reporting under Port Code Article 12 only represent collectively 7% of total District-wide energy use and therefore, a much lower energy reduction potential through benchmarking. The remaining energy usage from the potentially 204 Utility Account Holders represents an annual reduction potential of less than 400 MTCO2e.¹³ This questions the cost effective value in continued implementation and enforcement of a utility benchmarking and reporting ordinance.

Staff will continue to offer Portfolio Manager training to interested tenants and collaborate on energy savings opportunities with all tenants. Some examples of ongoing collaboration include:

- The Green Business Network quarterly trainings, incentives, web-portal, marketing videos, knowledge sharing, and award recognition;
- Energy evaluations at the National Distribution Center (underway); and
- Continued collaboration and support to tenants interested in pursuing grant funding opportunities and rebates/incentives to offset the costs of energy and water efficient technologies.
- 2. To obtain accurate and timely utility usage data to measure progress towards our CAP GHG goals.

Staff acknowledges the high value in collecting timely and granular utility usage data. However, the costs of continued collection of this data need to be weighed. The lessons learned from the first two years of implementation can be applied to future policy development. Additionally, there are many other resources that collect complementary data that the Port can utilize without significant additional resource investment.

SDG&E provides the District with annual district-wide natural gas and electricity usage.¹⁴ District Staff filed a request this August through Privacy GreenLight¹⁵ to receive more granular data by business sector and city to measure CAP progress and inform policies. Staff shared District GIS parcel data with SDG&E to correctly identify SDG&E customers to be included in District-wide data. Additionally, Staff is collaborating with local government representatives on the CPUC's Energy Data Access Committee (EDAC), whose function is to provide advice regarding a utility's protocols for reviewing data requests and to act as an on-going forum to discuss and review changes in protocols in response to changing technological abilities.

Furthermore, the District's Green Business Network recently launched an online reporting tool to regularly collect data from its 88 members on ongoing sustainability projects and metrics on energy and water savings achieved. The portal allows members to report achievements in the following categories: energy efficiency, water conservation, waste diversion, transportation, employee engagement, and miscellaneous.

The SDPTA has recently completed its second annual Green Report and will be publicly released by year end. The Green Report highlights qualitative case studies from over 43 tenants regarding

energy efficiency, renewable energy, clean transportation, waste, and water projects implemented to date. It also includes recommended future projects and opportunities for collaboration with the District.

State policy and rules being developed after the passage of Assembly Bill 802 (AB 802) provides building owners with the right to access whole building aggregated energy usage information, providing certain aggregation thresholds are met, directly from utilities starting January 1, 2017. AB 802 will also require benchmarking and public disclosure of energy usage for commercial, residential (with 17 or more units), and mixed-use buildings over 50,000 square feet, but excludes properties with more than 50 percent of the gross floor area dedicated to industrial or controlled environment uses. The first reporting deadline for commercial properties is June 1, 2018, and for residential properties June 1, 2019. Public disclosure begins one year after reporting begins and will not include the first year of reported data. This will be a complementary data set to the District's continued energy usage tracking and reporting.

Other additional academic resources are under development, which highlight utility usage by census track and region. For example, the LA Energy Atlas,¹⁶ developed by the UCLA California Center for Sustainable Communities, is a free interactive website with building energy use data and across the county. It enables stakeholders and researchers to analyze and understand energy consumption by sociodemographic characteristics, climate, building attributes, building use and other variables. The Energy Atlas is also expanding its platform to the San Diego Region. Likewise, the San Diego Association of Governments is working with the Energy Policy Initiatives Center of the University of San Diego to develop a Framework for CAPs within the San Diego region to help facilitate the streamlining of CAP-related monitoring and reporting.

Summary of Lessons Learned and Next Steps

Staff have learned a lot from the first two years of implementing Port Code Article 12 and resolved significant start-up challenges. However, the costs outweigh the benefits for continuing implementation. To reach the District's ambitious GHG reduction goals beyond 2020, the District must focus its limited resources on high potential efforts. While valuable, continued effort to capture the remaining small and medium commercial Utility Account Holders (7% of total energy usage) under Port Code Article 12 would be costly with little GHG reduction benefit.

Going forward, resources will be reallocated from Port Code Article 12 to collaborative project implementation. Staff recommends that Portfolio Manager training continues as an offering to interested tenants and promotes the value in utility monitoring and benchmarking. Continued collaboration will also be ongoing to collect complementary utility data through SDG&E, state and local policies, the GBN members, and the SDPTA. Furthermore, staff will be in contact with the water utilities to identify a reporting process similar to that used with SDG&E to see of aggregate water data is possible. Staff will communicate to all known Utility Account Holders of the adoption of an ordinance rescinding San Diego Unified Port District Code Article 12, Required Reporting of Utility Use on Tidelands. Additionally, a process will be established to transfer and archive all data from Edison Energy while maintaining the privacy of individual account holder data.

General Counsel's Comments:

The Office of the General Counsel has reviewed and approved the agenda and proposed ordinance

as to form and legality.

Environmental Review:

This item rescinds the District's Utility Reporting Ordinance. This action does not constitute an "approval" or a "project" under the definitions set forth in California Environmental Quality Act (CEQA) Guidelines Sections 15352 and 15378 because no direct or indirect changes to the physical environment would occur as the ordinance only required reporting of utility usage. CEQA requires that the District adequately assess the environmental impacts of its projects. Further, while the Board may request certain project components be analyzed or alternatives studied, such direction to staff will not bind the District to a definite course of action prior to CEQA review. Full CEQA analysis will be completed prior to any approval or binding commitment to a project. Moreover, the Board reserves its discretion to adopt any and all feasible mitigation measures, alternatives to a project, including a no project alternative, a statement of overriding consideration, if applicable, and approve or disapprove a project and any permits or entitlements necessary for the same. Those decisions may be exercised in the sole and absolute discretion of the Board. Based on the totality of the circumstances and the entire record, the Board's action and direction do not commit the District to a definite course of action prior to CEQA review is required.

In addition, this action allows for the District to implement its obligations under the Port Act and/or other laws. The Port Act was enacted by the California Legislature and is consistent with the Public Trust Doctrine. Consequently, this presentation is consistent with the Public Trust Doctrine.

Finally, rescinding the District's Utility Reporting Ordinance does not allow for "development," as defined in Section 30106 of the California Coastal Act, or "new development," pursuant to Section 1.a. of the District's Coastal Development Permit (CDP) Regulations because it will not result in, without limitation, a physical change, change in use or increase the intensity of uses. Therefore, issuance of a Coastal Development Permit or exclusion is not required. However, the District's projects require processing under the District's CDP Regulations. If a project is formulated as a result of the work plan, the Board will consider approval of the project and any improvements associated after the appropriate documentation under District's CDP Regulations has been completed and authorized by the Board, if necessary. The Board's direction in no way limits the exercise of the District's CDP Regulations.

Equal Opportunity Program:

Not applicable.

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Attachment(s):	
Attachment A: Attachment B:	Port Code Article 12, Required Reporting of Utility Use on Tidelands Utility Usage Report for Calendar Year 2016 (Prepared by Edison Energy, Dated September 20, 2017)
Attachment C:	September Summary of Outreach and Educational Initiatives Completed for Port Code Article 12 since January 2016
Attachment D:	Infographic of State and Local Policy Comparison (Prepared by the Center for Sustainable Energy)

¹ Capitalized terms are defined in Port Code Article 12.

- ² January 5, 2017 Board of Port Commissioners Memorandum: Update on the Utility Usage Reporting Ordinance and April 11, 2017 Board of Port Commissions Staff Report File Number 2017-0073.
- ³ Attachment A to Agenda File No. 2017-0073, Utility Usage Baseline Report for Calendar Year 2015 (Prepared by Edison Energy, Dated March 20, 2017) https://www.greenportnetwork.org/sites/default/files/Utility%20Usage%20Baseline%20Report% 20Calender%20Year%202015.pdf
- ⁴ "Utility Account Holder" means an entity or person, as defined by California Public Resources Code Section 25116 or any successor legislation, who has an account with any provider of Utilities that is separately metered.
- ⁵ https://www.energystar.gov/sites/default/files/buildings/tools/DataTrends_Savings_20121002.pdf
- ⁶ Clerks Document No. 64466 Memorandum of Understanding between the San Diego Unified Port District and the San Diego Port Tenants Association Regarding Retention of Data Aggregator for Required Reporting of Utility Use on Tidelands
- ⁷ Clerks Document No. 65277 Agreement between San Diego Port Tenants Association, and Edison Energy, LLC for Utility Data Aggregator and Related Services Agreement No. 110-2016RH
- ⁸ https://energydata.sdge.com/showDataRequestLog
- ⁹ SDG&E provides the District with annual district-wide natural gas and electricity usage. For 2016, SDG&E was able to provide all natural gas data however, SDG&E had to remove customer consumption for the electric data set for those customers that did not meet the aggregation standard and did not provide consent. SDG&E used a proxy to fill the gap for the omitted data. The proxy methodology is based on publicly available information on energy intensity by industry type that yields a reasonable result. California utilities are obligated to abide by the Energy Data Access Decision (D.14-05-016) by the CPUC here: http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M090/K845/90845985.PDF See pages 33-34.
- ¹⁰ https://www.energystar.gov/sites/default/files/buildings/tools/DataTrends Savings 20121002.pdf
- ¹¹ Assumptions include: all Utility Account Holders actively manage their Portfolio Manager account and did not have a Portfolio Manager account prior to the Port Code Article 12; 2.4% reduction in each electricity and natural gas is achieved from benchmarking; using 2016 reported energy; and, 2016 emissions factors of .005321 MTCO2e/therm and .254 MTCO2 e/ MWh.
- ¹² http://calcarbondash.org/
- ¹³ Assumptions include: 2016 unreported electricity usage of 47,472,599 kWh/year and unreported natural gas usage of 773,444 therms/year; 2.4% reduction in each electricity and natural gas is achieved from benchmarking; and, 2016 emissions factors of .005321 MTCO2e/therm and .254 MTCO2 e/ MWh.
- ¹⁴ For 2016, SDG&E was able to provide all natural gas data however, SDG&E had to remove customer consumption for the electric data set for those customers that did not meet the aggregation standard and did not provide consent. SDG&E used a proxy to fill the gap for the omitted data. The proxy methodology is based on publicly available information on energy intensity by industry type that yields a reasonable result. California utilities are obligated to abide by the Energy Data Access Decision (D.14-05-016) by the CPUC, see pages 33-34: http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M090/K845/90845985.PDF
- ¹⁵ https://energydata.sdge.com/showDataRequestLog
- ¹⁶ http://energyatlas.ucla.edu/