TIP SHEET: REVIEW OF MONTHLY ENERGY USAGE AND COST FOR BILLING OR DATA ANOMALY
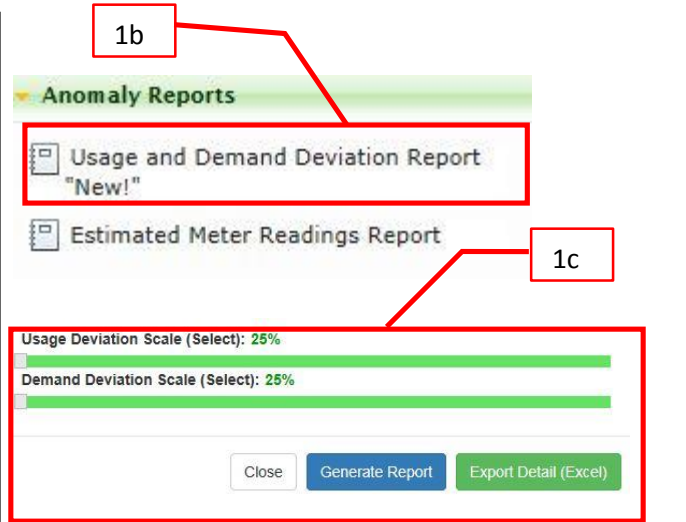
1) Extract report for anomaly review:

a) Log in to EC3

b) Go to "Anomaly Reports" section on navigation bar (tab) and select "Usage and Demand Deviation Report"

c) Slide usage and demand deviation scale to desired values (25% default is recommended). Select agency and press Export Detail (Excel)

d) Separate accounts by energy types with the header information into separate tabs or into distinct sections of the same tab. This enables unit price comparison of each energy type and other comparable units' analysis.

Review of Multiple Anomaly Indicators

2) Review each energy type separately for initial flagging of anomalies. Custom Sort in order of "CY_Usage_Deviation_%" magnitude (highest to lowest). Note the degree days comparison of the season under review in relation to % deviation, then identify and flag account(s) if:

a) "CY_$/Unit_Usage" (column T) has large deviations from month's average unit cost. (Initially focus on larger accounts.)

b) "CY_Usage_Deviation_%" – (column AB) are very high in relation to degree days comparisons of the month under review. (Eliminate accounts with very low "CY_Adj_30Day_Usage").
-For electric tab, flag accounts with very high % in "CY_DMD_Deviation_%" (column AC)

c) Identify if "CY_AE" current year (Column Q) or "PY_AE" (previous year) – (Column Y) is marked Actual (ACT) or Estimate (EST) for meter read. If any or both is/are marked EST, then flag account(s) for further review in relation to under/over estimation. *You can also go to "Estimated Meter Reading Report" (under EC3 – Anomaly Report Tab) for information on past consecutive reads. If "# of Months Since Last Meter Reading" is higher than 3, contact utility company for meter reading. Keep account(s) under watch for subsequent review, when actual read is reported.*

3) Now review flagged accounts (from step 2); eliminate those whose anomalies are explained by agency conditions or special circumstances in period under review, and/or degree days difference. Follow up on the remaining flagged accounts.

4) In a facility with multiple accounts for an energy type, a flagged account is further evaluated in the context of the entire facility: Check other accounts (including other energy types) for the facility. Compare previous total energy from all accounts to the current usage (and demand for electricity). This broader view may explain the anomaly; if not, continue the review.

5) *Electric only: Extract and review Load Factor Report in EC3 (under "Energy Report tab" – "Agency Level") for the following:*
   a) *If load factor of >1, meter read label is actual & the demand reported is >10kw, flag account(s) for further reviews.*
   b) *If load factor (column M) is close to 1 (greater than 0.9) or very low for the facility type, flag account(s) for further review, following steps below.*

Review of Specific Account(s) flagged in 1-5 above: Perform steps 6 – 9 to eliminate clarified/explained anomalies or to further review account(s) for data or billing related anomalies.

6) **To eliminate anomalies due to previous estimated billing, use "Meter Billing History Report" under "Energy Report tab" – Account/Meter Level. Input OECID, export excel report and identify the # of consecutive periods that meter(s) on the account has been estimated. If high deviation is due to utility catch up from previous under-estimation, eliminate account(s) from anomaly list.**

7) **Use "Account & Meter Bill Detail Report" (under "Energy Report tab", Account/Meter Level. Input OECID) to review and flag specific account for anomaly for irregularities in:**
   a) **Meter read dates (especially in revision of current month)**
   b) **From and to meter reads, multiplied by meter constant (pay attention to demand meter read additions on electric account).**
   c) **Subtraction error in the difference in from and to meter reads.**
   d) **Consistency in meter constant if billing is revised.**

8) **Other reports under "Energy Reports tab" – "Account/Meter Level" that may point to particular irregularities in seasonal and facility pattern are:**
   a) **"Get Monthly Facility Data by Account" – Select facility, generate report and export to excel – Report shows long history of all accounts in the facility.**
   b) **"Monthly Account Cost and Usage Report" – Input account number and search: Report shows three years usage and cost chart**

9) **Email* flagged accounts identified with notes of observed irregularities to DCAS DEM for:**
   a- **Anomaly resolution with the utilities on account(s) identified with specific data or billing irregularities.**
   b- **DEM's detailed bill review on accounts with unexplained irregularities, for further data/billing verification & audit.**
   Ongoing observation of flagged accounts may be required in subsequent months.

* send email to: energy@dcas.nyc.gov
Subject: Anomaly Review [Account#; OECID#]