NYHEP Customer Report Mapping

Page 1 – Summary

• The opening paragraph will **auto-fill** based on the program, contractor, and customer information.

Congratulations on taking an important first step! An energy assessment through NYSERDA's **Residential Energy Assessments** Program can help improve your home's energy usage.

Test Contractor has completed a thorough energy assessment at the home of **Customer Name**, located at **Customer Address**, **Albany**, **NY 12210**. The energy assessment report will help you understand your energy usage. This report lists recommendations to help you save money on your energy bills, improve energy efficiency, and make your home safer and more comfortable. The energy assessment report will also help you understand which parts of your home are working well already.

• **Summary** section will match what is modeled at the conclusion of the Existing Conditions Tab.

| Summary of Your Home's Current Energy Assessment | | | | |
|--|-------------------|------|--------------|--|
| Category | Needs Improvement | Fair | Good | |
| Building Envelope (Page 2) | \checkmark | | | |
| Heating and Cooling (Page 3) | | 1 | | |
| Water Heating (Page 4) | | | \checkmark | |
| Appliances and Lighting (Page 5) | | | \checkmark | |

Based on your existing energy usage, you could save **1103.7** therms in energy usage by following the recommendations in this report. The details are on the following pages. A therm is a standard unit used to measure energy use.

| Summary | | | |
|--------------------------------------|----|----------------------------------|---|
| **Building Envelope | | **Heating and Cooling | |
| Needs Improvement | w. | Fair | v |
| | | | |
| **Water Usage and Water Heating Good | Ŧ | **Appliance and Lighting Good | ¥ |

- The Therm Savings will reflect the total savings for all measures that appear on the report.
- **Contractor Information** will auto-fill based on your contractor profile.
 - If this needs to change, add the auditor as the primary to the 'Trade Allies' table on the Applicant Information tab.

Assessment Prepared By:

Company Name: Test Contractor

Assessor Name: One Employee

Assessor Email:

Company Phone:

Company Website:

Completed Date: February 6, 2023

Page 2 – Building Envelope – Insulation Measures

Recommendations for your home:

| Category | Existing Condition | Existing Condition Rating | Recommendation |
|-----------------------|---------------------|---------------------------|--|
| Attic Insulation | 6" Fiberglass-Batts | Needs Improvement | 5" Open Cell Foam |
| Wall Insulation | 1" Fiberglass-Batts | Needs Improvement | 4" Dense pack |
| Foundation Insulation | 0" NONE | Needs Improvement | 1" Foam Board |
| Air Leakage | Very Leaky | Needs Improvement | Air Seal - Attic Plane, Plumbing Penetrations |
| Dominant Window Type | Single-Pane | Needs Improvement | Upgrade to ENERGY STAR Windows |

Annual Savings Potential of Building Envelope Recommendations: 97.1 therms.

- Therm Savings will only reflect the total savings for the 5 measures listed above.
- Foundation Insulation will pull all information from the Rim Joist existing conditions and measures.
- Insulation Existing Condition will auto fill based on information from the Existing Conditions tab.



• Insulation Existing Condition Rating will auto fill based on the existing condition selection from the Insulation Grade chart listed below.

| Less than 10% Voids or Compression | Good |
|------------------------------------|-------------------|
| 10% to 25% Voids or Compression | Fair |
| More than 25% Voids or Compression | Needs Improvement |

• Insulation Recommendation will auto fill based on information entered in the Measures tab.

| 2 ^ X Ir | sulation - Attic 1 (INS_A1) | | Each | 1 | \$0.00 |
|-------------------------------|---|---------------|------|---|--------|
| | mended for the nly (no incentives or | Yes | | • |) |
| **Insulation | Location: | Slopes | | • |] |
| Existing Insul | ation Type: | Fiberglass-Ba | tts | | |
| Existing Insul | ation Depth: | 6 | | | |
| Existing Insul | ation Area: | 500 | | | |
| **Insulation | Condition: | Fair | | • |) |
| Is the existing removed?: | g insulation being | No | | • |] |
| New Insulatio | on Area: | 500 | | |] |
| **New Insula | tion Type: | Open Cell Fo | am | • |) |
| **New Insula added insulat | tion Depth (This is the ion): | 5 | | • |) |

Page 3 Building Envelope – Air Leakage

Recommendations for your home:

| Category | Existing Condition | Existing Condition Rating | Recommendation |
|-----------------------|---------------------|---------------------------|--|
| Attic Insulation | 6" Fiberglass-Batts | Needs Improvement | 5" Open Cell Foam |
| Wall Insulation | 1" Fiberglass-Batts | Needs Improvement | 4" Dense pack |
| Foundation Insulation | 0" NONE | Needs Improvement | 1" Foam Board |
| Air Leakage | Very Leaky | Needs Improvement | Air Seal - Attic Plane, Plumbing Penetrations |
| Dominant Window Type | Single-Pane | Needs Improvement | Upgrade to ENERGY STAR Windows |

• Air Leakage Existing Condition and Rating will auto fill based on the Estimated Air Leakage existing condition selection and chart below.

| Shell - Air Infiltration **Blower Door Test Complete? Yes | **Attic Air | Sealing v | ** Estimated Air Leaka Very Leaky | ge v |
|---|----------------------|---------------|---|---------|
| F | Very Leaky Leaky | Needs Improve | ment | |
| | Average | Fair | | |
| - | Faily Tight Tight | Good | | |

• Air Leakage Recommendation will auto fill based on information entered in the Measures tab.

| 1 🔨 🗙 Air Sealing (AS) | Home 1 |
|--|----------|
| Is this recommended for the assessment only (no incentives or loans)?: | Yes |
| Number of Stories Above Grade: | 1.5 |
| Number of Bedrooms: | 3 |
| Exposure To Wind: | Shielded |
| Blower Door Test Completed?: | Yes |
| Pre Air Sealing Air Infiltration (CFM50): | 3000 |
| **Post Air Sealing Air Infiltration (CFM50): | 2,500.0 |
| Pre Air Sealing Air Infiltration (ACH50): | 7.5 |
| Post Air Sealing Air Infiltration (ACH50): | 6.25 |
| Attic Plane: | |
| Basement: | |
| Canned/Recessed Lighting: | |
| Cantilever: | |
| Electrical Penitrations: | |
| Knee Wall: | |
| Living Spaces: | |
| Plumbing Penetrations: | |

Page 4 Building Envelope – Windows

Recommendations for your home:

| Category | Existing Condition | Existing Condition Rating | Recommendation |
|-----------------------|---------------------|---------------------------|--|
| Attic Insulation | 6" Fiberglass-Batts | Needs Improvement | 5" Open Cell Foam |
| Wall Insulation | 1" Fiberglass-Batts | Needs Improvement | 4" Dense pack |
| Foundation Insulation | 0" NONE | Needs Improvement | 1" Foam Board |
| Air Leakage | Very Leaky | Needs Improvement | Air Seal - Attic Plane, Plumbing Penetrations |
| Dominant Window Type | Single-Pane | Needs Improvement | Upgrade to ENERGY STAR Windows |

• **Dominant Window Type Existing Condition** will auto fill based on information from the Existing Conditions tab and the chart below.

| Shell - Windows | |
|--------------------------|---|
| **Existing Window Type 1 | |
| Single-Pane | v |

| Single-Pane | Needs Improvement | |
|--------------------|-------------------|--|
| Failed Double-Pane | | |
| Intact Double-Pane | Fair | |
| Code | Good | |

• **Dominant Window Recommendation** will always auto fill to Upgrade to ENERGY STAR Windows.

Page 5 – Heating and Cooling Systems – Primary Heating System (ASHP)

| Category | Existing Condition | Existing Condition Rating | Recommendation |
|------------------------|-------------------------------------|---------------------------|---|
| Primary Heating System | Boiler Hot Water, 80% Efficiency | Fair | Air Source Heat Pump - Central Ducted, 15 HSPF |
| Primary Cooling System | Central Air Conditioner, 15 SEER | Fair | Air Source Heat Pump - Central Ducted, 15 HSPF |
| Thermostat | Programmable | Fair | Wi-Fi Thermostat |
| Duct Work | Attic - poorly vented | Needs Improvement | Comprehensive Duct Sealing |

Annual Savings Potential of Heating and Cooling Recommendations: 951.8 therms.

- Therm Savings will only reflect the total savings for the 4 measures listed above.
- Heating System Existing Condition and Rating will auto fill based on the information from the existing conditions tab and the chart below.

| | Forced Air Furnace, Boiler | Needs Improvement | .79 or lower |
|--|-----------------------------|-------------------|---------------------|
| | Hot Water, Boiler Steam | Fair | .8090 |
| | Hot Water, Boller Steam | Good | .90 or higher |
| HVAC - Primary Heating **Heating System Status | Electric Baseboard | Needs Improvement | Always |
| Safe to Operate | Air Source Heat Pump | Needs Improvement | HSPF2 below 6 |
| | | Fair | HSPF2 6-7.4 |
| **Heating System Primary Boiler Hot Water | | Good | HSPF2 7.5 or higher |
| **Heating Efficiency Primary | Ground Source Heat Pump | Good | Always |
| 0.80 | Wood or Pellet Stove, Other | Needs Improvement | Always |

• Heating System Recommendation will auto fill based on information entered in the Measures tab.

| 3 | ^ | × | Air Source Heat Pump (ASHP) | | Each | 1 | \$0.00 |
|--|-------------|-------------------|---|--|------------|---|--------|
| Is this recommended for the assessment only (no incentives or loans)?: | | Yes | | | • | | |
| Heat Pump Information Form: | | Interest | ted in a | full house air heating syste escribe other | m with low | | |
| *: 1 | *Wi 20% | ill thi 6 of t | s ASHP project satisfy 90- the load?: | Yes | | × | • |
| *: | *AS | HP C | onfiguration Type: | Central Due | cted | | • |
| *: | *AS | HP C | ontrols: | Separate | | | • |
| *: | *Ma | ke: | | test | | | |
| *: | *Mo | del: | | test | | | |
| * | *Eff | ficier | cy Rating Standard: | SEER/HSPF | : | | • |
| | *Re EER | | ement Cooling Efficiency - | 20.0 | • | | |
| | *Re SPF | | ement Heating Efficiency - | 15.0 | | | |
| | *AS tu/l | | ize (rated cooling capacity) | 25000 | | | |
| | | iximi ees: | um Heating Capacity 5 | 5 | | | |
| | *Bu tu/l | | g Heating Load (Manual J) | 25000 | | | |
| | | imbe illed: | r of Outdoor Units | 1 | | | |
| | *Ov bad | | le Heating and Cooling | No | | | • |
| h | eate | | supplemental electric strip ing installed in the air | | | | |
| D | uct | Wor | k Cost: | | | | |
| D | olla | r Sav | /ings: | \$0.00 | | | |
| Li | feti | me S | Savings: | \$0.00 | | | |

Page 6 – Heating and Cooling Systems – Primary Cooling System

| Category | Existing Condition | Existing Condition Rating | Recommendation |
|------------------------|-------------------------------------|---------------------------|---|
| Primary Heating System | Boiler Hot Water, 80% Efficiency | Fair | Air Source Heat Pump - Central Ducted, 15 HSPF |
| Primary Cooling System | Central Air Conditioner, 15 SEER | Fair | Air Source Heat Pump - Central Ducted, 15 HSPF |
| Thermostat | Programmable | Fair | Wi-Fi Thermostat |
| Duct Work | Attic - poorly vented | Needs Improvement | Comprehensive Duct Sealing |

Annual Savings Potential of Heating and Cooling Recommendations: 951.8 therms.

• **Cooling System Existing Condition and Rating** will auto fill based on the information from the existing conditions tab and the chart below

| HVAC - Primary Cooling | Room Air Conditioner | Needs Improvement | Always | |
|---|-------------------------|-------------------|--------------------|-------------------|
| **Cooling System | | Needs Improvement | SEER2 12 or below | EER2 8 or lower |
| Central Air Conditioner **Cooling System Type Packaged **Cooling Efficiency | Central Air Conditioner | Fair | SEER2 13-14 | EER2 9-10 |
| | | Good | SEER2 15 or higher | EER2 11 or higher |
| | | Needs Improvement | SEER2 12 or below | EER2 8 or lower |
| | Air Source Heat Pump | Fair | SEER2 13-14 | EER2 9-10 |
| |] | Good | SEER2 15 or higher | EER2 11 or higher |
| 15.0 | Ground Source Heat Pump | Good | Always | |

• Cooling System Recommendation will auto fill based on information entered in the Measures tab.

| 3 ^ | × | Air Source Heat Pump (ASHP) | | Each | 1 | \$0.00 |
|-------------|-------------------------------|---|-------------|-----------|---------------|---------------|
| Is th | his rea | commended for the | | | | |
| asse | | ent only (no incentives or | Yes | | | • |
| Hea | t Pum | p Information Form: | 🗌 No pre- | existing | full house ai | r conditionin |
| | | | _ | | heating syste | |
| | | | U Other: I | Please d | escribe other | r Heat Pump |
| | | s ASHP project satisfy 90- the load?: | Tes | | × | • |
| 120 | /0 01 | | | | | |
| A | SHP C | configuration Type: | Central Due | cted | | • |
| **A | SHP (| Controls: | Separate | | | • |
| **M | ake: | | test | | | |
| **M | odel: | | test | | | |
| **Ef | **Efficiency Rating Standard: | | SEER/HSPF | SEER/HSPF | | • |
| | - | ement Cooling Efficiency - | 20.0 | | | |
| SEE | к: | | | | | |
| **R HSP | | ement Heating Efficiency - | 15.0 | | | |
| **A Btu/ | | Size (rated cooling capacity) | 25000 | | | |
| | laxim rees: | um Heating Capacity 5 | 5 | | | |
| **B Btu/ | uildin /h: | g Heating Load (Manual J) | 25000 | | | |
| | umbe alled: | r of Outdoor Units | 1 | | | |
| **0 Load | | le Heating and Cooling | No | | | • |
| heat | | supplemental electric strip ing installed in the air | | | | |
| Duc | t Wor | k Cost: | | | | |
| Doll | ar Sav | vings: | \$0.00 | | | |
| Life | time S | Savings: | \$0.00 | | | |

Page 7 – Heating and Cooling Systems – Thermostat

| Category | Existing Condition | Existing Condition Rating | Recommendation |
|------------------------|--|---------------------------|---|
| Primary Heating System | Primary Heating System Boiler Hot Water, 80% Efficiency | | Air Source Heat Pump - Central Ducted, 15 HSPF |
| Primary Cooling System | Central Air Conditioner, 15 SEER | Fair | Air Source Heat Pump - Central Ducted, 15 HSPF |
| Thermostat | Programmable | Fair | Wi-Fi Thermostat |
| Duct Work | Attic - poorly vented | Needs Improvement | Comprehensive Duct Sealing |

Annual Savings Potential of Heating and Cooling Recommendations: 951.8 therms.

• **Thermostat Existing Condition and Rating** will auto fill based on the information from the existing conditions tab and the chart below.

| Appliances - Thermostat | | |
|-------------------------|------------------|-------------------|
| **Thermostat Type | Manual | Needs Improvement |
| Programmable | Programmable | Fair |
| | WiFi or Learning | Good |

• Thermostat Recommendation will auto fill based on information entered in the Measures tab.

| 7 🔨 🗙 Programmable Thermostat (P | T) Each | 1 |
|--|---------|---|
| Is this recommended for the assessment only (no incentives or loans)?: | No | • |
| Programmable Setback Thermostat Units Installed: | 0 | |
| Wi-Fi Connected Thermostat Installed: | 1 | |
| | | |

Page 8 – Heating and Cooling Systems – Duct Work

| Category | Existing Condition | Existing Condition Rating | Recommendation |
|--|-------------------------------------|---------------------------|---|
| Primary Heating System | Boiler Hot Water, 80% Efficiency | Fair | Air Source Heat Pump - Central Ducted, 15 HSPF |
| Primary Cooling System Central Air Conditioner, 15 SEER | | Fair | Air Source Heat Pump - Central Ducted, 15 HSPF |
| Thermostat | Programmable | Fair | Wi-Fi Thermostat |
| Duct Work Attic - poorly vented | | Needs Improvement | Comprehensive Duct Sealing |

Annual Savings Potential of Heating and Cooling Recommendations: 951.8 therms.

• Duct Work Information will pull from Primary Heating System. If the Primary Heating System has no duct work the report will pull from the Primary Cooling System. Duct Work Existing Condition will auto fill based on the information below from the Existing Conditions tab.

| **Primary Cooling Duct Location (Supply and Return) | | | | | |
|---|---|--|--|--|--|
| Attic - poorly vented | • | | | | |
| | | | | | |

• Duct Work Existing Condition Rating will auto fill based on the information below from the Measures tab.

| 13 ^ 🗙 | C Duct Sealing & Insulation (| OUCTSI) | Each | 1 | | |
|--|---------------------------------|------------|----------|-------------|-----------------------|-------------|
| Is this recommended for the assessment only (no incentives or loans)?: | | | • | | | |
| **Heatin Configura | ng and Cooling System ation: | AC/Heat Pu | mp Capao | tity <650 🔻 | | |
| Total Len | ngth of Ductwork (Feet): | 0 | | | 159/ 209/ 259/ 209/ | Needs |
| Uncondit (Feet): | tioned Ductwork Length | 0 | | | 15%, 20%, 25%, 30% | Improvement |
| Heating (| Capacity BTU/h: | 150000 | | | 8% | Fair |
| **Duct L | ct Leakage: 15% | | 15% | | Ducts Modeled with No | |
| **Duct L | ocation: | Attic | | • | Recommendation Good | |

• Duct Work Recommendation will always auto fill to Upgrade to Comprehensive Duct Sealing.

Page 9 – Appliances and Lighting

| Category | Existing Condition | Recommendation |
|----------------------|---------------------------------------|---------------------------|
| Primary Refrigerator | Needs Improvement | Upgrade to ENERGY STAR |
| Dehumidifier | ENERGY STAR | No Recommendation |
| Lighting | 30% Incandescent, 30% CFL, 40% LED | Replace with LED Lighting |

Annual Savings Potential of Appliances and Lighting Recommendations: 167.9 kWh

• **kWh Savings** will only reflect the total savings for the 3 measures listed above.

Refrigerator/Dehumidifier Existing Conditions and Recommendation will auto fill based on the information from the existing conditions tab and the chart below.

| **Is t | he Primary Refrigerator | ENERGY STAR/CEE Rated? |
|--------|-------------------------|------------------------|
| No | | v |
| | | |
| Yes | ENERGY STAR | No Recommendation |
| No | Needs Improvement | Upgrade to ENERGY STAR |

Lighting Existing Conditions will auto fill based on the information below from the Existing Conditions tab.

| Appliances - Bulbs | | | | | |
|--------------------|---|----------|---|----------|---|
| % of Incandescent | | % of CFL | | % of LED | |
| 30 | % | 30 | % | 40 | % |
| | | | | | |

Lighting Recommendation will always auto fill to Replace with LED Lighting

Page 10 – Water Heating System

| Category | Existing Condition | Existing Condition Rating | Recommendation | |
|----------------------|-------------------------------|---------------------------|------------------------------------|--|
| Water Heating System | 0.70 UEF Standard DHW Tank | Needs Improvement | 0.92 UEF Heat Pump Water Heater | |
| Pipe Insulation | 1 inch Copper | Needs Improvement | 6 Feet Fiberglass | |

Annual Savings Potential of Water Heating Recommendations: 41.7 therms

** Therms Savings will only reflect the total savings for the 2 measures listed above.

Water Heating System Existing Condition and Rating will auto fill based on the information from the existing conditions tab and the chart below.

| **Water Heater System (Existing) |
|----------------------------------|
| Standard DHW Tank |
| **Water Heater Efficiency (UEF) |
| 0.70 |
| |

| Electric Standard DHW Tank | Needs Improvement | Always |
|---|-------------------|----------------|
| Fossil Fuel - Standard DHW Tank, Indirect | Needs Improvement | .79 or lower |
| Water Heater, Power-Vented Tank | Fair | .8086 |
| Water Heater, Power-Vented Tank | Good | .86 or higher |
| | Needs Improvement | .87 and lower |
| Gas On Demand Water Heater | Fair | .8795 |
| | Good | 0.95 or higher |
| Heat Pump Water Heater | Good | Always |

Water Heating System Recommendation will auto fill based on information entered in the Measures tab.

| 6 🔨 🗙 Water Heater - DHW Tank (I | DHW) Each 1 | | | | |
|--|------------------------|--|--|--|--|
| Is this recommended for the assessment only (no incentives or loans)?: | No | | | | |
| **Make: | 123 | | | | |
| **Model #: | 123 | | | | |
| Mobile Home Rated?: | No | | | | |
| **Replacement Water Heater Efficiency (UEF) Enter as a Decimal: | 0.92 | | | | |
| **Replacement Water Heater System: | Heat Pump Water Heater | | | | |

Page 11 – Water Heating - Pipe Insulation

| Category | Existing Condition | Existing Condition Rating | Recommendation | |
|----------------------|-------------------------------|---------------------------|------------------------------------|--|
| Water Heating System | 0.70 UEF Standard DHW Tank | Needs Improvement | 0.92 UEF Heat Pump Water Heater | |
| Pipe Insulation | Insulation 1 inch Copper N | | 6 Feet Fiberglass | |

Annual Savings Potential of Water Heating Recommendations: 41.7 therms

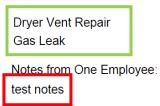
Pipe Insulation will only display if it is modeled on the Measures tab as a recommendation.

When recommended, **Existing Condition Rating** will always display as Needs improvement.

| 11 | ^ | × | DHW Pipe Insulation (PI) | | Linear Foot | 6 |) | \$0.00 |
|--|------|----------|------------------------------|--------|----------------|---|---|--------|
| Is this recommended for the assessment only (no incentives or loans)?: | | | | Yes | | | • | |
| ** | Pipe | е Тур | e: | Copper | | | • | |
| **Insulation Type: | | on Type: | Fiberglass | | | • | | |
| **Pipe Diameter (inches): | | | meter (inches): | 1 | | | • | |
| ** (in | | | ulation Thickness | 1 | | | • | |
| Lin | ear | Fee | t of Pipe Insulation (feet): | 6 | | | | |

Health, Safety, and Other Considerations

The conditions listed below were seen during your home energy assessment. Although they may not have a direct effect on your energy use, you may want to consider upgrades to maintain the overall condition of your home.



Health and Safety recommendations will be listed based on information for the Measures Tab.

| 12 | ~ | × | Dryer Vent Repair (DVREPAIR) |) | Unit(s) | |
|----|---|---|-------------------------------|------|---------|--|
| 13 | ~ | × | Duct Sealing & Insulation (DU | Each | 1 | |
| 14 | ~ | × | Gas Leak (KED_GASL) | | Each | |

To create a note for your customer, navigate to the Notes tab, and select New Note

| Applicant Information | | | | | | | |
|--------------------------|---|-----|----------------|----------------|------------|--|--|
| Usage & Fuel Information | Accoremont | Cub | mission Workfl | ow Stop - Nota | | | |
| Existing Conditions | Assessment Submission Workflow Step - Notes | | | | | | |
| Partner Information | 🛅 New Note 🚯 Close | | | | | | |
| Notes (1) | | | | | | | |
| Documents (0) | Date | | Origin | Created By | Notes | | |
| Measures (14) | | | | | | | |
| Overrides | | Y | Y | | | | |
| Reports (20) | 4/20/2023 | | Assessment S | Wagner, Steve | test notes | | |
| Application History | | | | | | | |

Fill in the Notes section then select This is an Interaction and select Customer Report from the drop down menu.

| Assessment Submission Workflow Step - Note | | | | | | |
|--|--|--|--|--|--|--|
| 🚼 <u>S</u> ave 🔀 <u>D</u> elete | e 🚱 Close 🛅 New Email | | | | | |
| Origin Assessment Subm | ission | Note Date | | | | |
| Notes test notes | | | | | | |
| | | | | | | |
| 0 | is note? ess to this enrollment ess to this workflow step | | | | | |
| This is an Inter Interaction Ty Customer Rep | уре | Interaction Reason No options available | | | | |

Navigate to the **Reports** tab.

| Workflow Step Detail |
|--------------------------|
| Usage & Fuel Information |
| Existing Conditions |
| Partner Information |
| Notes (1) |
| Contact Attempts (0) |
| Documents (0) |
| Overrides |
| Reports (18) |
| Workflow Step History |

Click **Generate Report**, then select **Customer Report** from the drop-down menu.



Your report will generate as a PDF with the naming convention:

Customer Report – Enrollment # - Date – Time

| Vorkflow Step - Reports | | |
|---|-------------|---------------|
| 🔆 🖸 Qose 🦓 Generate Report | | |
| Name | Create Date | Created By |
| | | |
| Customer Report-1001198 20230413 1511.pdf | 4/13/2023 | Wagner, Steve |

After the report is generated, it should be reviewed with the customer and sent via email or printed out for their records, and consideration.