

### ESTIMATED GAS SAVINGS

#### ThermWise® Appliance Rebates

#### SINGLE FAMILY

| Measure                                     | Annual Savings | Source  |
|---|----------------|---|
| Natural Gas Furnace - 95% AFUE              | 11.77 Dth/unit | 2017 Nexant Energy Model Estimate                                       |
| Natural Gas Furnace - 98% AFUE              | 13.85 Dth/unit | 2017 Nexant Energy Model Estimate                                       |
| Gas Storage Water Heater                    | 2.86 Dth/unit  | 2019 Illinois Statewide Technical Reference Manual v7                   |
| Tankless Gas Water Heater                   | 9.37 Dth/unit  | 2019 Illinois Statewide Technical Reference Manual v7                   |
| Condensing Gas Storage Water Heater         | 8.68 Dth/unit  | 2019 Illinois Statewide Technical Reference Manual v7                   |
| Hybrid Gas Water Heater                     | 8.68 Dth/unit  | 2019 Illinois Statewide Technical Reference Manual v7                   |
| Gas Boiler Tier 1                           | 18.7 Dth/unit  | 2019 Illinois Statewide Technical Reference Manual v7                   |
| Gas Boiler Tier 2                           | 25.2 Dth/unit  | 2019 Illinois Statewide Technical Reference Manual v7                   |
| Solar Assisted Gas Water Heating (domestic) | 17.5 Dth/unit  | DOE - Estimating the Cost and Energy Efficiency of a Solar Water Heater |
| Solar Assisted Gas Water Heating (pool)     | 68.9 Dth/unit  | DOE - Estimating the Cost and Energy Efficiency of a Solar Water Heater |
| Direct Vent Gas Fireplace                   | 10.8 Dth/unit  | 2020 Nexant Model Estimate  |
| Smart Thermostat                            | 8.6 Dth/unit   | 2020 Nexant Model Estimate  |
| Boiler Reset Control                        | 5.4 Dth/unit   | 2017 Nexant Energy Model Estimate                                       |
| Combined Space and Hot Water                | 19.0 Dth/unit  | 2017 Nexant Energy Model Estimate                                       |
| Smart Water Heater Controller               | 2.5 Dth/unit   | 2019 Nexant Energy Model Estimate                                       |
| Energy Recovery Ventilation                 | 10.4 Dth/unit  | State of Minnesota Technical Reference Manual v3                        |
| Dual-Fuel Heating System                    | 26.0 Dth/unit  | 2020 Nexant Model Estimate  |

#### MULTIFAMILY

| Measure                        | Annual Savings | Source  |
|--------------------------------|----------------|---|
| Natural Gas Furnace - 95% AFUE | 8.8 Dth/unit   | 2017 Nexant Energy Model Estimate                     |
| Natural Gas Furnace - 98% AFUE | 10.4 Dth/unit  | 2017 Nexant Energy Model Estimate                     |
| Gas Storage Water Heater       | 2.15 Dth/unit  | 2019 Illinois Statewide Technical Reference Manual v7 |
| Tankless Gas Water Heater      | 6.0 Dth/unit   | 2019 Illinois Statewide Technical Reference Manual v7 |

\*See Cadmus Phase II Evaluation

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|---|-----------------------|--|
| Condensing Gas Storage Water Heater           | 5.4 Dth/unit          | 2019 Illinois Statewide Technical Reference Manual v7  |
| Hybrid Gas Water Heater                       | 5.4 Dth/unit          | 2019 Illinois Statewide Technical Reference Manual v7  |
| Gas Boiler Tier 1                             | 12.08 Dth/unit        | 2019 Illinois Statewide Technical Reference Manual v7  |
| Gas Boiler Tier 2                             | 16.11 Dth/unit        | 2019 Illinois Statewide Technical Reference Manual v7  |
| Solar Assisted Gas Water Heating (domestic)   | 8.6 Dth/unit          | DOE - Estimating the Cost and Energy Efficiency of a Solar Water Heater  |
| Solar Assisted Gas Water Heating (pool)       | 68.9 Dth/unit         | DOE - Estimating the Cost and Energy Efficiency of a Solar Water Heater  |
| Direct Vent Gas Fireplace                     | 4.1 Dth/unit          | 2020 Nexant Model Estimate   |
| Smart Thermostat                              | 4.0 Dth/unit          | State of Minnesota Technical Reference Manual v3   |
| Combined Space and Hot Water                  | 14.1 Dth/unit         | 2017 Nexant Energy Model Estimate  |
| Smart Water Heater Controller                 | 1.75 Dth/unit         | 2019 Nexant Energy Model Estimate  |
| Energy Recovery Ventilation                   | 5.3 Dth/unit          | State of Minnesota Technical Reference Manual v3   |
| Dual-Fuel Heating System                      | 15.0 Dth/unit         | 2020 Nexant Model Estimate   |
| <b>ThermWise® Business Rebates</b>            |                       |  |
| <b>Measure</b>                                | <b>Annual Savings</b> | <b>Source</b>  |
| Gas Storage Water Heater                      | 2.92 Dth/unit         | 2019 Illinois Statewide Technical Reference Manual v7  |
| Gas Storage Water Heater (>75 kBtu)           | 0.29 Dth/unit         |  |
| Tankless Gas Water Heater                     | 0.14 Dth/unit         | 2019 Illinois Statewide Technical Reference Manual v7  |
| Commercial Tankless Water Heater >200kBtu 90% | 0.250 Dth/unit        | 2019 Illinois Statewide Technical Reference Manual v7  |
| Commercial Clothes Washer                     | 6.5 Dth/unit          | Assume 14 pound capacity – Illinois TRM v6   |
| Low Flow Pre-Rinse Spray Valve                | 10.8 Dth/unit         | California Energy Wise Pre-Rinse Spray Valve Tool 2019 methodology, Assuming 3 gpm existing valve replaced with 1.25 gpm unit. |
| Natural Gas Furnace - 95% AFUE                | 17.60 Dth/unit        | 2019 Illinois Statewide Technical Reference Manual v7  |
| Natural Gas Furnace - 98% AFUE                | 21.10 Dth/unit        | 2019 Illinois Statewide Technical Reference Manual v7  |
| Gas Boiler (Hot Water) Tier 1                 | 0.13 Dth/unit         | 2019 Illinois Statewide Technical Reference Manual v7  |

\*See Cadmus Phase II Evaluation

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| Gas Boiler (Hot Water)<br>Tier 2 ≥ 300,000 <<br>2,500,000      | 0.160 Dth/unit     | 2019 Illinois Statewide Technical Reference Manual v7 |
| Gas Boiler (Hot Water)<br>Tier 3 ≥ 300,000 <<br>2,500,000 95%+ | 0.244 Dth/unit     | 2019 Illinois Statewide Technical Reference Manual v7 |
| Gas Boiler (Hot Water) ≥<br>2,500,000 BTU/h                    | 0.159 Dth/unit     | 2019 Illinois Statewide Technical Reference Manual v7 |
| Gas Boiler (Hot Water) ≥<br>2,500,000 BTU/h                    | 0.206 Dth/unit     | 2019 Illinois Statewide Technical Reference Manual v7 |
| Gas Boiler (steam)   | 0.163 Dth/unit     | 2019 Illinois Statewide Technical Reference Manual v7 |
| Gas Boiler(Steam)<br>(Except Natural Draft) ≥<br>300,000 Btu/h | 0.07 Dth/unit      | 2019 Illinois Statewide Technical Reference Manual v7 |
| Gas Boiler (Steam)<br>(Natural Draft) ≥ 300,000<br>Btu/h       | 0.12 Dth/unit      | 2019 Illinois Statewide Technical Reference Manual v7 |
| Direct Contact Gas<br>Water Heater                             | 0.23 Dth/unit      | 2019 Illinois Statewide Technical Reference Manual v7 |
| Direct Fired Heater  | 0.83 Dth/unit      | 2017 Nexant Energy Model Estimate                     |
| Condensing Gas Water<br>Heater                                 | 10.2 Dth/unit      | 2018 Nexant Energy Model Estimate                     |
| Hybrid Water Heater  | 10.2 Dth/unit      | 2019 Illinois Statewide Technical Reference Manual v7 |
| Combined Space / Water<br>Heater                               | 18.7 Dth/unit      | 2019 Illinois Statewide Technical Reference Manual v7 |
| Unit Heater<br>(NonCondensing)                                 | 0.06 Dth/unit      | 2018 Nexant Energy Model Estimate                     |
| Unit Heater<br>(Condensing)                                    | 0.17 Dth/unit      |   |
| Green Certified New<br>Buildings                               | 0.0070 Dth/unit    | 2018 Nexant Energy Model Estimate                     |
| Infrared Heating System  | 0.48<br>Dth/system | 2019 Illinois Statewide Technical Reference Manual v7 |
| Modulating Infrared<br>Heaters (NC or<br>Replacing Non IR)     | .55 Dth/unit       | 2020 Illinois Statewide Technical Reference Manual v8 |
| Modulating Infrared<br>Heaters (<br>Replacing Non IR)          | .07 Dth/unit       | 2020 Illinois Statewide Technical Reference Manual v8 |
| Condensing RTU's   | .41 Dth/unit       | 2020 Illinois Statewide Technical Reference Manual v8 |

\*See Cadmus Phase II Evaluation

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|--------------------------------------|--------------------|---|
| Gas Boiler Outside Air Reset Control | 74.1 Dth/unit      | 2018 Nexant Energy Model Estimate   |
| Gas Boiler Tune-up – Tier 1          | 19.60 Dth/unit     | 2018 Nexant Energy Model Estimate   |
| Gas Boiler Tune-up – Tier 2          | 48.86 Dth/unit     | 2018 Nexant Energy Model Estimate   |
| Gas Boiler Tune-up – Tier 3          | 72.0 Dth/unit      | 2018 Nexant Energy Model Estimate   |
| Smart Thermostat                     | .007 Dth/sq. ft.   | 2016 Nexant Energy Model Estimate   |
| Gas Commercial Fryer                 | 40.4 Dth/unit      | ENERGY STAR® Gas Fryer Calculator   |
| Gas Commercial Fryer (Used)          | 40.4 Dth/unit      | 2018 Nexant Energy Model Estimate   |
| Gas Steam Cooker                     | 88.30 Dth/unit     | Illinois TRM V6 – savings, Case Studies: Restaurant Energy Efficiency PG&E – incremental cost   |
| Gas Steam Cooker (Used)              | 88.30 Dth /unit    | Illinois TRM V6 – savings, Case Studies: Restaurant Energy Efficiency PG&E – incremental cost   |
| Gas Convection Oven                  | 35.20 Dth/per vat  | Illinois TRM V6   |
| Gas Convection Oven (Used)           | 35.20 Dth /unit    | Illinois TRM V6   |
| Gas Combination Oven                 | 40.3 Dth/unit      | State of Minnesota TRM 2019 v3  |
| Gas Combination Oven (Used)          | 40.3 Dth/unit      | State of Minnesota TRM 2019 v3  |
| Gas Griddle                          | 14.9 Dth/unit      | Illinois TRM V6 – savings, ACEEE “Baseline Market Conditions for Efficient Commercial and Industrial Gas Technologies” – incremental cost |
| Gas Griddle (Used)                   | 14.9 Dth/unit      | Illinois TRM V6 – savings, ACEEE “Baseline Market Conditions for Efficient Commercial and Industrial Gas Technologies” – incremental cost |
| Wall Insulation (retrofit)           | 0.004 Dth/sq. ft.  | 2020 Illinois Statewide Technical Reference Manual v8   |
| Roof Insulation (retrofit)           | 0.0023 Dth/sq. ft. | 2017 Nexant Energy Model Estimate   |
| Charbroiler                          | 75 Dth/unit        | 2015 Nexant Energy Model Estimate   |
| Charbroiler (Used)                   | 75 Dth/unit        | 2018 Nexant Energy Model Estimate   |
| Conveyor Oven                        | 88.40 Dth/unit     | 2015 Nexant Energy Model Estimate   |
| Conveyor Oven (Used)                 | 88.40 Dth/unit     | 2018 Nexant Energy Model Estimate   |
| Gas Dryer Moisture Sensor            | 11.20 Dth/unit     | 2015 Nexant Energy Model Estimate   |
| Modulating Gas Dryer                 | 32 Dth/unit        | 2015 Nexant Energy Model Estimate   |

\*See Cadmus Phase II Evaluation

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|---|-----------------------|---|
| Solar Water Heater – Pool (business)                      | 68.90 Dth/unit        | 2015 Nexant Energy Model Estimate                     |
| Demand Control Ventilation Tier 2                         | .0068 Dth/CFM         | 2017 Nexant Energy Model Estimate                     |
| Demand Control Ventilation Tier 1                         | 27.2 Dth/unit         | 2017 Nexant Energy Model Estimate                     |
| Custom Measures   | 1,000 Dth/project     | 2020 Nexant Model Estimate                            |
| Pipe Insulation (Hot Water)                               | .84 Dth/ sq. ft.      | 2017 Nexant Energy Model Estimate                     |
| Pipe Insulation (Steam)                                   | 3.13 Dth/ sq. ft.     | 2017 Nexant Energy Model Estimate                     |
| Energy Recovery Ventilation                               | 9.1 Dth/unit          | 2018 Nexant Energy Model Estimate                     |
| Connected Advanced Rooftop Control ≥ 5 tons and ≤ 10 tons | 34.0 Dth/unit         | 2019 Illinois Statewide Technical Reference Manual v7 |
| Connected Advanced Rooftop Control ≥ 5 tons and ≤ 10 tons | 42.0 Dth/unit         | 2019 Illinois Statewide Technical Reference Manual v7 |
| Connected Advanced Rooftop Control > 15 tons              | 76.0 Dth/unit         | 2019 Illinois Statewide Technical Reference Manual v7 |
| Dual-Fuel Heating System                                  | 26.0 Dth/unit         | 2020 Nexant Model Estimate                            |
| <b>ThermWise® Builder Rebates</b>                         |                       |   |
| <b>SINGLE FAMILY</b>                                      |                       |   |
| <b>Measure</b>  | <b>Annual Savings</b> | <b>Source</b>   |
| Pay for Performance                                       | 20.00 Dth/unit        | 2019 Nexant Energy Model Estimate                     |
| ENERGY STAR® 3.0 Bonus                                    | 22.78 Dth/unit        | 2019 Nexant Energy Model Estimate                     |
| DOE Zero Energy Ready Bonus                               | 23.78 Dth/unit        | 2019 Nexant Energy Model Estimate                     |
| Natural Gas Furnace - 95% AFUE                            | 10.13 Dth/unit        | 2017 Nexant Energy Model Estimate                     |
| Natural Gas Furnace - 98% AFUE                            | 12.15 Dth/unit        | 2017 Nexant Energy Model Estimate                     |
| Gas Storage Water Heater                                  | 2.86 Dth/unit         | 2019 Illinois Statewide Technical Reference Manual v7 |
| Tankless Gas Water Heater                                 | 8.56 Dth/unit         | 2019 Illinois Statewide Technical Reference Manual v7 |
| Gas Condensing Storage Water Heater                       | 8.68 Dth/unit         | 2019 Illinois Statewide Technical Reference Manual v7 |
| Hybrid Gas Water Heater                                   | 8.68 Dth/unit         | 2019 Illinois Statewide Technical Reference Manual v7 |
| Gas Boiler Tier 1   | 9.06 Dth/unit         | 2019 Illinois Statewide Technical Reference Manual v7 |

\*See Cadmus Phase II Evaluation

|   |                       |   |
|---|-----------------------|---|
| Gas Boiler Tier 2                           | 16.11 Dth/unit        | 2019 Illinois Statewide Technical Reference Manual v7                   |
| Solar Assisted Gas Water Heating (domestic) | 17.5 Dth/unit         | DOE - Estimating the Cost and Energy Efficiency of a Solar Water Heater |
| Solar Assisted Gas Water Heating (pool)     | 68.9 Dth/unit         | DOE - Estimating the Cost and Energy Efficiency of a Solar Water Heater |
| 2X6 R-23 Walls                              | 5.4 Dth/unit          | 2020 Illinois Statewide Technical Reference Manual v8                   |
| Windows R-5                                 | 0.029 Dth/per sq. ft. | PECI Energy Model (REM/Design v. 12.61)                                 |
| Smart Thermostat                            | 4.3 Dth/unit          | 2020 Nexant Model Estimate  |
| Combined Space and Hot Water                | 18.3                  | 2017 Nexant Energy Model Estimate                                       |
| Smart Water Heater Controller               | 2.50 Dth/unit         | 2019 Nexant Energy Model Estimate                                       |
| Dual-Fuel Heating System                    | 29.0 Dth/unit         | 2020 Nexant Model Estimate  |
| Energy Recovery Ventilation                 | 10.4 Dth/unit         | State of Minnesota Technical Reference Manual v3                        |
| <b>MULTIFAMILY</b>                          |                       |   |
| <b>Measure</b>                              | <b>Annual Savings</b> | <b>Source</b>   |
| Pay for Performance                         | 10.00 Dth/unit        | 2019 Nexant Energy Model Estimate                                       |
| ENERGY STAR® 3.0 Bonus                      | 11.13 Dth/unit        | 2019 Nexant Energy Model Estimate                                       |
| DOE Zero Energy Ready Bonus                 | 12.26 Dth/unit        | 2019 Nexant Energy Model Estimate                                       |
| Natural Gas Furnace - 95% AFUE              | 7.6 Dth/unit          | 2017 Nexant Energy Model Estimate                                       |
| Natural Gas Furnace - 98% AFUE              | 9.1 Dth/unit          | 2017 Nexant Energy Model Estimate                                       |
| Gas Storage Water Heater                    | 1.39 Dth/unit         | 2019 Illinois Statewide Technical Reference Manual v7                   |
| Tankless Gas Water Heater                   | 5.4 Dth/unit          | 2019 Illinois Statewide Technical Reference Manual v7                   |
| Condensing Gas Storage Water Heater         | 5.4 Dth/unit          | 2019 Illinois Statewide Technical Reference Manual v7                   |
| Hybrid Gas Water Heater                     | 5.4 Dth/unit          | 2019 Illinois Statewide Technical Reference Manual v7                   |
| Gas Boiler Tier 1                           | 9.06 Dth/unit         | 2019 Illinois Statewide Technical Reference Manual v7                   |
| Gas Boiler Tier 2                           | 16.11 Dth/unit        | 2019 Illinois Statewide Technical Reference Manual v7                   |
| Solar Assisted Gas Water Heating (domestic) | 17.50 Dth/unit        | DOE - Estimating the Cost and Energy Efficiency of a Solar Water Heater |
| Solar Assisted Gas Water Heating (pool)     | 68.9 Dth/unit         | DOE - Estimating the Cost and Energy Efficiency of a Solar Water Heater |
| Windows R-5                                 | 0.021 Dth/unit        | 2020 Nexant Model Estimate  |
| Smart Thermostat                            | 1.7 Dth/unit          | 2020 Nexant Model Estimate  |

\*See Cadmus Phase II Evaluation

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|--|-----------------------|--|
| Combined Space and Hot Water             | 12.0 Dth/unit         | 2017 Nexant Energy Model Estimate                          |
| Smart Water Heater Controller            | 1.75 Dth/unit         | 2019 Nexant Energy Model Estimate                          |
| Energy Star High Rise                    | 1.13                  | 2017 Nexant Energy Model Estimate                          |
| Dual-Fuel Heating System                 | 15                    | 2020 Nexant Model Estimate                                 |
| Energy Recovery Ventilation              | 5.3                   | State of Minnesota Technical Reference Manual v3           |
| <b>ThermWise® Home Energy Plan</b>       |                       |  |
| <b>Measure</b>                           | <b>Annual Savings</b> | <b>Source</b>  |
| Kitchen Sink Aerator                     | 0.85 Dth/unit         | 2020 Illinois Statewide Technical Reference Manual v8      |
| Pipe Insulation                          | 1.4 Dth/system        | DOE Rebuild America Reenergize Energy Efficiency Guidebook |
| Faucet Aerator                           | 0.42 Dth/unit         | 2020 Illinois Statewide Technical Reference Manual v8      |
| Low Flow Shower Head                     | 2.56 Dth/unit         | 2020 Illinois Statewide Technical Reference Manual v8      |
| <b>ThermWise® Weatherization Rebates</b> |                       |  |
| <b>SINGLE FAMILY</b>                     |                       |  |
| <b>Measure</b>                           | <b>Annual Savings</b> | <b>Source</b>  |
| Windows – R-5                            | 0.0698 Dth/sq. ft.    | DOE Energy Savings Windows Worksheet                       |
| Wall Insulation                          | 0.0053 Dth/sq. ft.    | 2020 Illinois Statewide Technical Reference Manual v8      |
| Attic Insulation Tier 1                  | 0.0041 Dth/sq. ft.    | 2010 Deemed savings reduced by realization rate*           |
| Attic Insulation Tier 2                  | 0.0010 Dth/sq. ft.    | 2010 Deemed savings reduced by realization rate*           |
| Floor Insulation                         | 0.0068 Dth/sq. ft.    | 2010 Deemed savings reduced by realization rate*           |
| Duct Sealing & Duct Insulation           | 0.29 Dth/System       | 2019 Nexant Energy Model Estimate                          |
| Air Sealing                              | 0.0022 Dth/system     | 2019 Nexant Energy Model Estimate                          |
| Pipe Insulation                          | 0.19 Dth/sq.ft.       | 2017 Nexant Energy Model Estimate                          |
| <b>MULTIFAMILY</b>                       |                       |  |

\*See Cadmus Phase II Evaluation

| <b>Measure</b>                 | <b>Annual Savings</b> | <b>Source</b>                                    |
|--------------------------------|-----------------------|--|
| Windows – R-5                  | 0.0698 Dth/sq. ft.    | Nexant 2011 Engineering Calculation              |
| Wall Insulation                | 0.0053 Dth/sq. ft.    | 2010 Deemed savings reduced by realization rate* |
| Attic Insulation Tier 1        | 0.0053 Dth/sq. ft.    | 2010 Deemed savings reduced by realization rate* |
| Attic Insulation Tier 2        | 0.0013 Dth/sq. ft.    | 2010 Deemed savings reduced by realization rate* |
| Floor Insulation               | 0.0068 Dth/sq. ft.    | 2010 Deemed savings reduced by realization rate* |
| Duct Sealing & Duct Insulation | 0.29 Dth/system       | 2019 Nexant Energy Model Estimate                |

**Low Income Assistance Program**

| <b>Measure</b>                 | <b>Annual Savings</b> | <b>Source</b>                     |
|--------------------------------|-----------------------|-----------------------------------|
| Natural Gas Furnace - 95% AFUE | 11.77 Dth/unit        | 2017 Nexant Energy Model Estimate |
| Natural Gas Furnace - 98% AFUE | 13.85 Dth/unit        | 2017 Nexant Energy Model Estimate |
| Smart Thermostat               | 8.6 Dth/unit          | 2020 Nexant Model Estimate        |

**Note: An approved non-profit or governmental organization may apply for rebates under the ThermWise® Appliance and Weatherization programs for qualifying measures listed in sections 2.10 and 2.14 of the Tariff.**

**ThermWise® Energy Comparison Report**

| <b>Measure</b>           | <b>Annual Savings</b> | <b>Source</b>                     |
|--------------------------|-----------------------|-----------------------------------|
| Energy Comparison Report | 1.26 Dth/report       | 2020 Nexant Energy Model Estimate |

\*See Cadmus Phase II Evaluation



### MEASURE LIFE

| <b>ThermWise® Appliance Rebates</b>         |                 |   |
|---|-----------------|---|
| <b>SINGLE FAMILY</b>                        |                 |   |
| <b>Measure</b>                              | <b>Lifetime</b> | <b>Source</b>   |
| Natural Gas Furnace - 95% AFUE              | 20              | 2019 Nexant Energy Model Estimate                     |
| Natural Gas Furnace - 98% AFUE              | 20              | 2018 Nexant Energy Model Estimate                     |
| Gas Storage Water Heater                    | 13              | 2020 Illinois Statewide Technical Reference Manual v8 |
| Tankless Gas Water Heater                   | 20              | 2020 Illinois Statewide Technical Reference Manual v8 |
| Condensing Gas Storage Water Heater         | 13              | 2020 Illinois Statewide Technical Reference Manual v8 |
| Hybrid Gas Water Heater                     | 15              | 2020 Illinois Statewide Technical Reference Manual v8 |
| Gas Boiler Tier 1                           | 20              | 2020 Illinois Statewide Technical Reference Manual v8 |
| Gas Boiler Tier 2                           | 20              | 2020 Illinois Statewide Technical Reference Manual v8 |
| Solar Assisted Gas Water Heaters (domestic) | 20              | 2011 PECl estimate                                    |
| Solar Assisted Gas Water Heaters (pool)     | 20              | 2011 PECl estimate                                    |
| Direct Vent Natural Gas Fireplace           | 20              | 2020 Nexant Market Research                           |
| Smart Thermostat                            | 15              | 2017 Nexant Energy Model Estimate                     |
| Boiler Reset Control                        | 18              | 2017 Nexant Energy Model Estimate                     |
| Combined Space and Hot Water                | 15              | 2017 Nexant Energy Model Estimate                     |
| Smart Water Heater Controller               | 10              | 2019 Nexant Energy Model Estimate                     |
| Energy Recovery Ventilation                 | 15              | State of Minnesota Technical Reference Manual v3      |

\*See Cadmus Phase II Evaluation

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|---|-----------------|--|
| Dual-Fuel Heating System                      | 16              | 2020 Nexant Model Estimate   |
| <b>MULTIFAMILY</b>                            |                 |  |
| <b>Measure</b>                                | <b>Lifetime</b> | <b>Source</b>  |
| Natural Gas Furnace - 95% AFUE                | 20              | 2019 Nexant Energy Model Estimate  |
| Natural Gas Furnace - 98% AFUE                | 20              | 2018 Nexant Energy Model Estimate  |
| Gas Storage Water Heaters                     | 13              | 2020 Illinois Statewide Technical Reference Manual v8                        |
| Tankless Gas Water Heaters                    | 20              | Database for Energy Efficiency Resources (DEER) Estimated Useful Life Tables |
| Condensing Gas Storage Water Heater           | 13              | 2020 Illinois Statewide Technical Reference Manual v8                        |
| Hybrid Gas Water Heater                       | 15              | 2018 Nexant Energy Model Estimate  |
| Gas Boiler Tier 1                             | 20              | 2020 Illinois Statewide Technical Reference Manual v8                        |
| Gas Boiler Tier 2                             | 20              | 2020 Illinois Statewide Technical Reference Manual v8                        |
| Solar Assisted Gas Water Heaters (domestic)   | 20              | DOE - Estimating the Cost and Energy Efficiency of a Solar Water Heater      |
| Solar Assisted Gas Water Heaters (pool)       | 20              | DOE - Estimating the Cost and Energy Efficiency of a Solar Water Heater      |
| Direct Vent Natural Gas Fireplace             | 20              | DOE - Estimating the Cost and Energy Efficiency of a Solar Water Heater      |
| Smart Thermostat                              | 15              | 2017 Nexant Energy Model Estimate  |
| Combined Space and Hot Water                  | 15              | 2017 Nexant Energy Model Estimate  |
| Smart Water Heater Controller                 | 10              | 2019 Nexant Energy Model Estimate  |
| Energy Recovery Ventilator                    | 15              | State of Minnesota Technical Reference Manual v3                             |
| Duel Fuel Heating System                      | 16              | 2020 Nexant Model Estimate   |
| <b>ThermWise® Business Rebates</b>            |                 |  |
| <b>Measure</b>                                | <b>Lifetime</b> | <b>Source</b>  |
| Gas Storage Water Heater - (business) >75kBtu | 15              | 2020 Illinois Statewide Technical Reference Manual v8                        |

\*See Cadmus Phase II Evaluation

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| Gas Storage Water Heater - (business) Tier 2            | 15 | 2020 Illinois Statewide Technical Reference Manual v8                        |
| Commercial Tankless Water Heater - <200kBTU             | 15 | 2020 Illinois Statewide Technical Reference Manual v8                        |
| Commercial Tankless Water Heater - >200kBTU             | 15 | 2020 Illinois Statewide Technical Reference Manual v8                        |
| Commercial Tankless Water Heater >200kBTU 90%           | 15 | Database for Energy Efficiency Resources (DEER) Estimated Useful Life Tables |
| Commercial Clothes Washer                               | 10 | Database for Energy Efficiency Resources (DEER) Estimated Useful Life Tables |
| Low Flow Pre-Rinse Spray Valve                          | 5  | California Energy Wise 2019  |
| Natural Gas Furnace - 95% AFUE                          | 20 | Database for Energy Efficiency Resources (DEER) Estimated Useful Life Tables |
| Natural Gas Furnace - 98% AFUE                          | 20 | Database for Energy Efficiency Resources (DEER) Estimated Useful Life Tables |
| Boiler Hot Water < 300,000 Btu/h (business)             | 20 | Database for Energy Efficiency Resources (DEER) Estimated Useful Life Tables |
| Boiler Hot Water ≥ 300,000 < 2,500,000 (business)       | 20 | Database for Energy Efficiency Resources (DEER) Estimated Useful Life Tables |
| Boiler Hot Water ≥ 300,000 < 2,500,000 95% + (business) | 20 | 2020 Illinois Statewide Technical Reference Manual v8                        |
| Boiler Hot Water ≥ 2,500,000 Btu/h (business)           | 20 | 2020 Illinois Statewide Technical Reference Manual v8                        |
| Boiler Hot Water ≥ 2,500,000 Btu/h 95% + (business)     | 20 | 2020 Illinois Statewide Technical Reference Manual v8                        |
| Gas Boiler (steam)                                      | 20 | Database for Energy Efficiency Resources (DEER) Estimated Useful Life Tables |
| Gas Boiler (Steam) Except Natural Draft                 | 15 | Database for Energy Efficiency Resources (DEER) Estimated Useful Life Tables |

\*See Cadmus Phase II Evaluation

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| Gas Boiler (Steam)<br>Natural Draft                        | 15 | Database for Energy Efficiency Resources (DEER) Estimated Useful Life Tables |
| Direct Contact Gas<br>Water Heater                         | 20 | Database for Energy Efficiency Resources (DEER) Estimated Useful Life Tables |
| Direct Fired Heater  | 15 | 2018 Nexant Energy Model Estimate  |
| Condensing Gas Water<br>Heater                             | 15 | Database for Energy Efficiency Resources (DEER) Estimated Useful Life Tables |
| Hybrid Gas Water<br>Heater                                 | 15 | Database for Energy Efficiency Resources (DEER) Estimated Useful Life Tables |
| Combined Space /<br>Water Heater                           | 15 | Energy Trust of Oregon   |
| Gas Unit Heater<br>Condensing                              | 18 | Energy Trust of Oregon   |
| Gas Unit Heater<br>NonCondensing                           | 18 | Energy Trust of Oregon   |
| Infrared Heating<br>System                                 | 17 | 2014 Nexant estimate   |
| Modulating Infrared<br>Heaters (NC or<br>Replacing Non IR) | 17 | 2014 Nexant estimate   |
| Modulating Infrared<br>Heaters (<br>Replacing Non IR)      | 17 | 2014 Nexant estimate   |
| Condensing RTU's   | 15 | 2014 Nexant estimate   |
| Boiler Outside Air<br>Reset Control                        | 20 | 2019 Illinois Statewide Technical Reference Manual v7                        |
| Boiler Tune-up (tiers 1,<br>2, & 3)                        | 3  | 2019 Illinois Statewide Technical Reference Manual v7                        |
| Smart Thermostat   | 15 | 2017 Nexant Energy Model Estimate  |
| Gas Commercial Fryer                                       | 8  | State of Minnesota TRM 2019 v3   |
| Gas Commercial Fryer<br>(Used)                             | 5  | 2018 Nexant Energy Model Estimate  |
| Steam Cooker   | 10 | 2019 Illinois Statewide Technical Reference Manual v7                        |
| Steam Cooker (Used)  | 7  | 2018 Nexant Energy Model Estimate  |
| Convection Oven  | 12 | State of Minnesota TRM 2019 v3   |
| Convection Oven<br>(Used)                                  | 9  | 2018 Nexant Energy Model Estimate  |
| Combination Oven   | 12 | State of Minnesota TRM 2019 v3   |

\*See Cadmus Phase II Evaluation

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|---|----|--|
| Combination Oven (Used)   | 9  | 2018 Nexant Energy Model Estimate  |
| Griddle   | 12 | State of Minnesota TRM 2019 v3   |
| Griddle (Used)  | 9  | 2018 Nexant Energy Model Estimate  |
| Wall Insulation (retrofit)  | 35 | Energy Trust of Oregon   |
| Roof Insulation (retrofit)  | 35 | Energy Trust of Oregon   |
| Charbroiler   | 10 | 2019 Illinois Statewide Technical Reference Manual v7                        |
| Charbroiler (Used)  | 7  | 2018 Nexant Energy Model Estimate  |
| Conveyor Oven   | 12 | 2019 Illinois Statewide Technical Reference Manual v7                        |
| Conveyor Oven (Used)  | 9  | 2018 Nexant Energy Model Estimate  |
| Gas Dryer Moisture Sensor   | 10 | 2019 Illinois Statewide Technical Reference Manual v7                        |
| Modulating Gas Dryer  | 10 | 2019 Illinois Statewide Technical Reference Manual v7                        |
| Solar Water Heater – Pool (business)                                | 20 | 2015 PECE Energy Model Estimate  |
| Demand Control Ventilation Tier 2                                   | 10 | 2019 Illinois Statewide Technical Reference Manual v7                        |
| Demand Control Ventilation Tier 1                                   | 10 | 2019 Illinois Statewide Technical Reference Manual v7                        |
| Pipe Insulation (Hot Water)   | 10 | Database for Energy Efficiency Resources (DEER) Estimated Useful Life Tables |
| Pipe Insulation (Steam)   | 10 | Database for Energy Efficiency Resources (DEER) Estimated Useful Life Tables |
| Prescriptive ERV  | 15 | 2018 Nexant Energy Model Estimate  |
| Green Certified New Buildings                                       | 25 | 2018 Nexant Energy Model Estimate  |
| Business Custom   | 15 | 2018 Nexant Contractor Survey  |
| Dual-Fuel Heating System  | 16 | 2020 Nexant Model Estimate   |
| Connected Advanced Rooftop Control $\geq 5$ tons and $\leq 10$ tons | 10 | 2019 Illinois Statewide Technical Reference Manual v7                        |
| Connected Advanced Rooftop Control $\geq 5$ tons and $\leq 10$ tons | 10 | 2019 Illinois Statewide Technical Reference Manual v7                        |
| Connected Advanced Rooftop Control $> 15$ tons                      | 10 | 2019 Illinois Statewide Technical Reference Manual v7                        |
| <b>ThermWise® Builder Rebates</b>                                   |    |  |

\*See Cadmus Phase II Evaluation

| <b>SINGLE FAMILY</b>                       |                 |   |
|--|-----------------|---|
| <b>Measure</b>                             | <b>Lifetime</b> | <b>Source</b>   |
| Pay for Performance                        | 30              | 2019 Nexant Energy Model Estimate                                       |
| ENERGY STAR® 3.0 Bonus                     | 30              | 2019 Nexant Energy Model Estimate                                       |
| DOE Zero Energy Ready Bonus                | 30              | 2019 Nexant Energy Model Estimate                                       |
| Natural Gas Furnace - 95% AFUE             | 20              | 2019 Nexant Energy Model Estimate                                       |
| Natural Gas Furnace - 98% AFUE             | 20              | 2018 Nexant Energy Model Estimate                                       |
| Gas Storage Water Heater                   | 13              | 2011 PECl estimate  |
| Tankless Gas Water Heater                  | 20              | 2011 PECl estimate  |
| Condensing Gas Storage Water Heater        | 13              | 2011 PECl estimate  |
| Hybrid Water Heater                        | 15              | 2011 PECl estimate  |
| Residential Gas Boiler                     | 20              | 2011 PECl estimate  |
| Solar Assisted Gas Water Heater (domestic) | 20              | 2011 PECl estimate  |
| Solar Assisted Gas Water Heater (Pool)     | 20              | 2011 PECl estimate  |
| 2X6 R-23 Walls                             | 30              | 2011 PECl estimate  |
| Windows – R-5                              | 30              | 2011 Nexant estimate  |
| Smart Thermostat                           | 15              | 2014 PECl estimate  |
| Combined Space and Hot Water               | 15              | 2017 Nexant Energy Model Estimate                                       |
| Smart Water Heater Controller              | 10              | 2019 Nexant Energy Model Estimate                                       |
| Dual-Fuel Heating System                   | 16              | 2020 Nexant Model Estimate  |
| Energy Recovery Ventilation                | 15              | State of Minnesota Technical Reference Manual v3                        |
| <b>MULTIFAMILY</b>                         |                 |   |
| <b>Measure</b>                             | <b>Lifetime</b> | <b>Source</b>   |
| Pay for Performance                        | 30              | 2019 Nexant Energy Model Estimate                                       |
| ENERGY STAR® 3.0 Bonus                     | 30              | 2019 Nexant Energy Model Estimate                                       |
| DOE Zero Energy Ready Bonus                | 30              | 2019 Nexant Energy Model Estimate                                       |
| Natural Gas Furnace - 95% AFUE             | 20              | 2019 Nexant Energy Model Estimate                                       |
| Natural Gas Furnace - 98% AFUE             | 20              | Measure Life – Illinois TRM V6, incremental cost – Nexant Estimate 2018 |
| Gas Storage Water Heater                   | 13              | 2011 PECl estimate  |

\*See Cadmus Phase II Evaluation

|   |                 |  |
|---|-----------------|--|
| Tankless Gas Water Heater                   | 20              | 2011 PECl estimate   |
| Condensing Gas Storage Water Heater         | 13              | 2011 PECl estimate   |
| Hybrid Gas Water Heater                     | 20              | 2011 PECl estimate   |
| Gas Boiler                                  | 20              | 2011 PECl estimate   |
| Solar Assisted Gas Water Heaters (domestic) | 20              | 2011 PECl estimate   |
| Solar Assisted Gas Water Heaters (Pool)     | 20              | 2011 PECl estimate   |
| Windows – R-5                               | 30              | 2011 Nexant estimate                                       |
| Smart Thermostat                            | 15              | 2014 PECl estimate   |
| Combined Space and Hot Water                | 15              | 2017 Nexant Energy Model Estimate                          |
| Smart Water Heater Controller               | 10              | 2019 Nexant Energy Model Estimate                          |
| Energy Star High Rise                       | 30              | 2017 Nexant Energy Model Estimate                          |
| Dual-Fuel Heating System                    | 16              | 2020 Nexant Model Estimate                                 |
| Energy Recovery Ventilation                 | 15              | State of Minnesota Technical Reference Manual v3           |
| <b>ThermWise® Home Energy Plan</b>          |                 |  |
| <b>Measure</b>                              | <b>Lifetime</b> | <b>Source</b>  |
| Kitchen Sink Aerator                        | 10              | 2019 Illinois Statewide Technical Reference Manual v7      |
| Pipe Insulation                             | 10              | DOE Rebuild America Reenergize Energy Efficiency Guidebook |
| Faucet Aerator                              | 10              | 2019 Illinois Statewide Technical Reference Manual v7      |
| Low Flow Shower Head                        | 10              | 2019 Illinois Statewide Technical Reference Manual v7      |
| <b>ThermWise® Weatherization Rebates</b>    |                 |  |
| <b>SINGLE FAMILY</b>                        |                 |  |
| <b>Measure</b>                              | <b>Lifetime</b> | <b>Source</b>  |
| Windows – R-5                               | 30              | 2011 Nexant estimate                                       |
| Wall Insulation                             | 35              | Energy Trust of Oregon                                     |
| Attic Insulation                            | 35              | Energy Trust of Oregon                                     |
| Floor Insulation                            | 35              | Energy Trust of Oregon                                     |
| Duct Sealing & Duct Insulation              | 35              | 2019 Nexant Energy Model Estimate                          |

\*See Cadmus Phase II Evaluation

|  |                 |                                      |
|--|-----------------|--------------------------------------|
| Air Sealing                                | 35              | 2019 Nexant Energy Model Estimate    |
| Pipe Insulation                            | 10              | 2017 Nexant Energy Model Estimate    |
| <b>MULTIFAMILY</b>                         |                 |                                      |
| <b>Measure</b>                             | <b>Lifetime</b> | <b>Source</b>                        |
| Windows – R-5                              | 30              | 2011 Nexant estimate                 |
| Wall Insulation                            | 35              | Energy Trust of Oregon               |
| Attic Insulation                           | 35              | Energy Trust of Oregon               |
| Floor Insulation                           | 35              | Energy Trust of Oregon filing 2006   |
| Duct Sealing & Duct Insulation             | 35              | 2019 Nexant Energy Model Estimate    |
| <b>Low Income Assistance Program</b>       |                 |                                      |
| <b>Measure</b>                             | <b>Lifetime</b> | <b>Source</b>                        |
| Natural Gas Furnace - 95% AFUE             | 20              | 2019 Nexant Energy Model Estimate    |
| Natural Gas Furnace - 98% AFUE             | 20              | 2018 Nexant Energy Model Estimate    |
| Duct Sealing & Insulation                  | 20              | 2018 Nexant Energy Model Estimate    |
| Smart Thermostat                           | 15              | 2018 Nexant Energy Model Estimate    |
| <b>ThermWise® Energy Comparison Report</b> |                 |                                      |
| <b>Measure</b>                             | <b>Lifetime</b> | <b>Source</b>                        |
| Program Measures                           | 1               | 2018 Dominion Energy Report estimate |

\*See Cadmus Phase II Evaluation



**INCREMENTAL COST**

| <b>ThermWise® Appliance Rebates</b>         |                         |   |
|---|-------------------------|---|
| <b>SINGLE FAMILY</b>                        |                         |   |
| <b>Measure</b>                              | <b>Incremental Cost</b> | <b>Source</b>   |
| Natural Gas Furnace - 95% AFUE              | \$182/unit              | 2018 Nexant Energy Model Estimate   |
| Natural Gas Furnace - 98% AFUE              | \$683/unit              | 2018 Nexant Energy Model Estimate   |
| Gas Storage Water Heater                    | \$161/unit              | 2018 Nexant Market Survey Estimate  |
| Tankless Gas Water Heater                   | \$517/unit              | 2018 Nexant Market Survey Estimate  |
| Condensing Gas Storage Water Heater         | \$685/unit              | Illinois TRM V6   |
| Hybrid Gas Water Heater                     | \$878/unit              | 2018 Nexant Market Survey Estimate  |
| Gas Boiler Tier 1                           | \$452/unit              | 2018 Nexant Market Survey Estimate  |
| Gas Boiler Tier 2                           | \$1,123/unit            | 2018 Nexant Market Survey Estimate  |
| Solar Assisted Gas Water Heating (domestic) | \$4,500/unit            | ACEEE California's Solar Water Heating Program: Scaling Up to Install 200,000 Systems by 2020 |
| Solar Assisted Gas Water Heating (pool)     | \$2,250/unit            | ACEEE California's Solar Water Heating Program: Scaling Up to Install 200,000 Systems by 2020 |
| Direct Vent natural gas fireplace           | \$500/unit              | 2020 Nexant Market Survey Estimate  |
| Smart Thermostat                            | \$170/unit              | 2018 Nexant Market Survey Estimate  |
| Boiler Reset Control                        | \$500/unit              | 2017 Nexant Energy Model Estimate   |
| Combined Space and Hot Water                | \$1,722/unit            | 2017 Nexant Energy Model Estimate   |
| Smart Water Heater Controller               | \$150/unit              | 2019 Nexant Energy Model Estimate   |
| Dual-Fuel Heating System                    | \$1,039/unit            | 2020 Nexant Model Estimate  |
| Energy Recovery Ventilation                 | \$394/unit              | State of Minnesota Technical Reference Manual v3  |
| <b>MULTIFAMILY</b>                          |                         |   |
| <b>Measure</b>                              | <b>Incremental Cost</b> | <b>Source</b>   |
| Natural Gas Furnace - 95% AFUE              | \$182/unit              | 2018 Nexant Market Survey Estimate  |
| Natural Gas Furnace - 98% AFUE              | \$683/unit              | 2018 Nexant Energy Model Estimate   |
| Gas Storage Water Heater                    | \$161/unit              | 2018 Nexant Market Survey Estimate  |
| Tankless Gas Water Heater                   | \$517/unit              | 2018 Nexant Market Survey Estimate  |

\*See Cadmus Phase II Evaluation

|   |                         |   |
|---|-------------------------|---|
| Condensing Gas Storage Water Heater           | \$1,082/unit            | 2018 Nexant Market Survey Estimate  |
| Hybrid Gas Water Heater                       | \$1,413/unit            | 2018 Nexant Market Survey Estimate  |
| Gas Boiler Tier 1                             | \$452/unit              | 2018 Nexant Market Survey Estimate  |
| Gas Boiler Tier 2                             | \$1,123/unit            | 2018 Nexant Market Survey Estimate  |
| Solar Assisted Gas Water Heating (domestic)   | \$4,500/unit            | ACEEE California's Solar Water Heating Program: Scaling Up to Install 200,000 Systems by 2020 |
| Solar Assisted Gas Water Heating (pool)       | \$2,250/unit            | ACEEE California's Solar Water Heating Program: Scaling Up to Install 200,000 Systems by 2020 |
| Direct Vent natural gas fireplace             | \$500/unit              | 2020 Nexant Market Survey Estimate  |
| Smart Thermostat                              | \$170/unit              | 2018 Nexant Market Survey Estimate  |
| Combined Space and Hot Water                  | \$1,722/unit            | 2017 Nexant Energy Model Estimate   |
| Smart Water Heater Controller                 | \$150/unit              | 2019 Nexant Energy Model Estimate   |
| Dual-Fuel Heating System                      | \$833/unit              | 2020 Nexant Model Estimate  |
| Energy Recovery Ventilation                   | \$199/unit              | State of Minnesota Technical Reference Manual v3  |
| <b>ThermWise® Business Rebates</b>            |                         |   |
| <b>Measure</b>                                | <b>Incremental Cost</b> | <b>Source</b>   |
| Gas Storage Water Heater                      | \$400/unit              | 2019 Illinois Statewide Technical Reference Manual v7   |
| Gas Storage Water Heater (>75 kBtu)           | \$6.78/kBtu             | 2019 Illinois Statewide Technical Reference Manual v7   |
| Commercial Tankless Water Heater - <200kBTU   | \$4.24/kBtu             | 2018 Nexant Market Survey Estimate  |
| Commercial Tankless Water Heater - >200kBTU   | \$4.24/kBtu             | 2018 Nexant Market Survey Estimate  |
| Commercial Tankless Water Heater >200kBTU 90% | \$5.22/kBTU             | 2018 Nexant Market Survey Estimate  |
| Commercial Clothes Washer                     | \$136/unit              | Assume 14 pound capacity – Illinois TRM V6  |
| Low Flow Pre-Rinse Spray Valve                | \$32/unit               | AM Conservation Market Cost   |
| Natural Gas Furnace - 95% AFUE                | \$182/unit              | 2018 Nexant Contractor Survey   |
| Natural Gas Furnace - 98% AFUE                | \$683/unit              | 2018 Nexant Contractor Survey   |
| Boiler (steam)                                | \$4.22/kBTU             | 2014 Nexant Engineering Estimate  |

\*See Cadmus Phase II Evaluation

|   |                |   |
|---|----------------|---|
|   | \$5.39/kBTU    |   |
| Boiler Steam <300,000 Btu/h (business)                  | \$5.08/kBTU    | 2019 Nexant Engineering Estimate                      |
| Boiler Hot Water < 300,000 Btu/h (business)             | \$5.08/kBTU    | 2019 Nexant Engineering Estimate                      |
| Boiler Hot Water ≥ 300,000 < 2,500,000 (business)       | \$6.50/kBTU    | 2019 Nexant Engineering Estimate                      |
| Boiler Hot Water ≥ 2,500,000 Btu/h (business)           | \$6.50/kBTU    | 2019 Nexant Engineering Estimate                      |
| Boiler Hot Water ≥ 300,000 < 2,500,000 95% + (business) | \$8.00/kBTU    | 2019 Nexant Engineering Estimate                      |
| Boiler Hot Water ≥ 2,500,000 Btu/h 95% + (business)     | \$8.00/kBTU    | 2019 Nexant Engineering Estimate                      |
| Direct Contact Gas Water Heater                         | \$2.17/kBTU    | 2014 Nexant Engineering Estimate                      |
| Direct Fired Heater                                     | \$7.50/kBTU    | 2018 Nexant Contractor Survey                         |
| Condensing Gas Storage Water Heater                     | \$685/unit     | 2019 Illinois Statewide Technical Reference Manual v7 |
| Hybrid Gas Water Heater                                 | \$878/unit     | 2018 Nexant Engineering Estimate                      |
| Combined Space / Water Heater                           | \$1,722/unit   | 2014 Nexant Engineering Estimate                      |
| Unit Heater (Non Condensing)                            | \$2.50/kBTU    | 2014 Nexant Engineering Estimate                      |
| Unit Heater (Condensing)                                | \$12.00/kBTU   |   |
| Infrared Heating System                                 | \$11.43/kBTU   | 2014 Nexant Contractor Survey                         |
| Modulating Infrared                                     | \$10.01/unit   | 2014 Nexant Contractor Survey                         |
|   | \$21.44/unit   |   |
| Condensing RTU's  | \$25/unit      | 2014 Nexant Engineering Estimate                      |
| Boiler Outside Air Reset Control                        | \$835/unit     | 2014 Nexant Engineering Estimate                      |
| Boiler Tune-up – Tier 1                                 | \$169          | 2018 Nexant Contractor Survey                         |
| Boiler Tune-up – Tier 2                                 | \$309          | 2018 Nexant Contractor Survey                         |
| Boiler Tune-up – Tier 3                                 | \$607          | 2018 Nexant Contractor Survey                         |
| Smart Thermostat  | \$0.23/sq. ft. | 2014 Nexant Engineering Estimate                      |
| Gas Commercial Fryer                                    | \$1,219/unit   | 2019 Illinois Statewide Technical Reference Manual v7 |

\*See Cadmus Phase II Evaluation

|                                      |                  |   |
|--------------------------------------|------------------|---|
| Gas Commercial Fryer (Used)          | \$610            | 2018 Nexant Engineering Estimate  |
| Gas Steam Cooker                     | \$2,500/unit     | Illinois TRM V6 – savings, Case Studies: Restaurant Energy Efficiency PG&E – incremental cost   |
| Gas Steam Cooker (Used)              | \$1,250          | 2018 Nexant Energy Model Estimate   |
| Gas Convection Oven                  | \$1,572/per vat  | 2014 Nexant Engineering Estimate  |
| Gas Convection Oven (Used)           | \$786            | 2018 Nexant Engineering Estimate  |
| Gas Combination Oven                 | \$5,717/unit     | State of Minnesota TRM 2019 v3  |
| Gas Combination Oven (Used)          | \$2,859          | 2018 Nexant Engineering Estimate  |
| Gas Griddle                          | \$902/unit       | Illinois TRM V6 – savings, ACEEE “Baseline Market Conditions for Efficient Commercial and Industrial Gas Technologies” – incremental cost   |
| Gas Griddle (Used)                   | \$451            | 2018 Nexant Energy Model Estimate   |
| Gas Charbroiler                      | \$7,500          | 2016 Nexant Contractor Survey   |
| Gas Charbroiler (Used)               | \$3,250          | 2018 Nexant Energy Model Estimate   |
| Gas Conveyor Oven                    | \$4,731          | 2017 Nexant Engineering Estimate  |
| Gas Conveyor Oven (Used)             | \$2,366          | 2018 Nexant Energy Model Estimate   |
| Gas Dryer Moisture Sensor            | \$199            | Gas Technology Institute (GTI) - Technology Snapshot TS-C17   |
| Modulating Gas Dryer                 | \$525            | Gas Technology Institute (GTI) - Technology Snapshot TS-C11   |
| Solar Water Heater – Pool (business) | \$2,250          | 2015 PECE Energy Model Estimate   |
| Wall Insulation (retrofit)           | \$0.64 sq. ft.   | Database for Energy Efficient Resources (DEER), California Energy Commission (CEC), and California Public Utilities Commission (CPUC). 2006 |
| Roof Insulation (retrofit)           | \$0.20 sq. ft.   | Database for Energy Efficient Resources (DEER), California Energy Commission (CEC), and California Public Utilities Commission (CPUC). 2006 |
| Demand Control Ventilation Tier 2    | \$0.19 CFM       | 2019 Nexant Contractor Survey   |
| Demand Control Ventilation Tier 1    | \$1,500 unit     | 2017 Nexant Energy Model Estimate   |
| Custom Measures                      | \$28,000/project | 2018 Nexant Contractor Survey   |
| Pipe Insulation (Hot Water)          | \$8.50/sq. ft.   | 2017 Nexant Energy Model Estimate   |
| Pipe Insulation (Steam)              | 13.35/sq. ft.    | 2017 Nexant Energy Model Estimate   |

\*See Cadmus Phase II Evaluation

|   |                         |   |
|---|-------------------------|---|
| Prescriptive ERV                                  | \$300                   | 2018 Nexant Energy Model Estimate   |
| Green Certified New Buildings                     | \$0.36                  | 2018 Nexant Energy Model Estimate   |
| Dual-Fuel Heating System                          | \$1,039/unit            | 2020 Nexant Model Estimate  |
| Advanced rooftop controls ≥ 5 tons and ≤ 10 tons  | \$1,954/unit            | 2019 Illinois Statewide Technical Reference Manual v7   |
| Advanced rooftop controls > 10 tons and ≤ 15 tons | \$1,954/unit            | 2019 Illinois Statewide Technical Reference Manual v7   |
| Advanced rooftop controls > 15 tons               | \$1,954/unit            | 2019 Illinois Statewide Technical Reference Manual v7   |
| <b>ThermWise® Builder Rebates</b>                 |                         |   |
| <b>SINGLE FAMILY</b>                              |                         |   |
| <b>Measure</b>                                    | <b>Incremental Cost</b> | <b>Source</b>   |
| Pay for Performance                               | \$1,080/unit            | 2019 Nexant Energy Model Estimate   |
| ENERGY STAR® 3.0 Bonus                            | \$1,209/unit            | 2019 Nexant Energy Model Estimate   |
| DOE Zero Energy Ready Bonus                       | \$1,309/unit            | 2019 Nexant Energy Model Estimate   |
| Natural Gas Furnace - 95% AFUE                    | \$182/unit              | 2014 PECl estimate  |
|   |                         |   |
| Natural Gas Furnace - 98% AFUE                    | \$683/unit              | 2018 Nexant Energy Model Estimate   |
| Gas Storage Water Heater                          | \$161/unit              | 2018 Nexant Market Survey Estimate  |
| Tankless Gas Water Heater                         | \$517/unit              | 2018 Nexant Market Survey Estimate  |
| Condensing Gas Storage Water Heater               | \$685/unit              | Illinois TRM V6   |
| Hybrid Gas Water Heater                           | \$878/unit              | 2018 Nexant Energy Model Estimate   |
| Gas Boiler Tier 1                                 | \$452/unit              | 2018 Nexant Market Survey Estimate  |
| Gas Boiler Tier 2                                 | \$1,123/unit            | 2018 Nexant Market Survey Estimate  |
| Solar Assisted Gas Water Heating (domestic)       | \$4,500/unit            | ACEEE California's Solar Water Heating Program: Scaling Up to Install 200,000 Systems by 2020 |
| Solar Assisted Gas Water Heating (pool)           | \$2,250/unit            | ACEEE California's Solar Water Heating Program: Scaling Up to Install 200,000 Systems by 2020 |
| 2X6 R-23 Walls                                    | \$500/unit              | 2016 CLEAResult Energy Model Estimate   |
| Windows – R-5                                     | \$3.50/ sq. ft.         | Incremental cost – DOE – Cost-Effective Triple Pane and Low E Storm Windows                   |
| Smart Thermostat                                  | \$170/unit              | 2018 Nexant Market Survey Estimate  |

\*See Cadmus Phase II Evaluation

|   |                         |   |
|---|-------------------------|---|
| Combined Space and Hot Water                | \$1,722/unit            | 2017 Nexant Energy Model Estimate   |
| Smart Water Heater Controller               | \$150/unit              | 2019 Nexant Energy Model Estimate   |
| Energy Recovery Ventilation                 | \$394/unit              | State of Minnesota Technical Reference Manual v3  |
| Dual-Fuel Heating System                    | \$1,039/unit            | 2020 Nexant Model Estimate  |
| <b>MULTIFAMILY</b>                          |                         |   |
| <b>Measure</b>                              | <b>Incremental Cost</b> | <b>Source</b>   |
| Pay for Performance                         | \$480/unit              | 2019 Nexant Energy Model Estimate   |
| ENERGY STAR® 3.0 Bonus                      | \$550/unit              | 2019 Nexant Energy Model Estimate   |
| DOE Zero Energy Ready Bonus                 | \$650/unit              | 2019 Nexant Energy Model Estimate   |
| Natural Gas Furnace - 95% AFUE              | \$182/unit              | 2018 Nexant Market Survey Estimate  |
| Natural Gas Furnace - 98% AFUE              | \$683/unit              | Measure Life – Illinois TRM V6, incremental cost – Nexant Estimate 2018                       |
| Gas Storage Water Heater                    | \$161/unit              | 2018 Nexant Market Survey Estimate  |
| Tankless Gas Water Heater                   | \$517/unit              | 2018 Nexant Market Survey Estimate  |
| Condensing Gas Storage Water Heater         | \$685/unit              | 2018 Nexant Market Survey Estimate  |
| Hybrid Gas Water Heater                     | \$878/unit              | 2018 Nexant Energy Model Estimate   |
| Gas Boiler Tier 1                           | \$452/unit              | 2018 Nexant Market Survey Estimate  |
| Gas Boiler Tier 2                           | \$1,123/unit            | 2018 Nexant Market Survey Estimate  |
| Solar Assisted Gas Water Heating (domestic) | \$4,500/unit            | ACEEE California's Solar Water Heating Program: Scaling Up to Install 200,000 Systems by 2020 |
| Solar Assisted Gas Water Heating (pool)     | \$2,250/unit            | ACEEE California's Solar Water Heating Program: Scaling Up to Install 200,000 Systems by 2020 |
| Windows – R-5                               | \$3.50/ sq. ft.         | Incremental cost – DOE – Cost-Effective Triple Pane and Low E Storm Windows                   |
| Smart Thermostat                            | \$170/unit              | 2020 Nexant Market Survey Estimate  |
| Combined Space and Hot Water                | \$1,722/unit            | 2017 Nexant Energy Model Estimate   |
| Smart Water Heater Controller               | \$150/unit              | 2019 Nexant Energy Model Estimate   |
| Energy Star High Rise                       | \$170/unit              | 2017 Nexant Energy Model Estimate   |
| Energy Recovery Ventilation                 | \$199/unit              | State of Minnesota Technical Reference Manual v3  |

\*See Cadmus Phase II Evaluation

|  |                         |  |
|--|-------------------------|--|
| Dual-Fuel Heating System                 | \$1,039/unit            | 2020 Nexant Model Estimate   |
| <b>ThermWise® Home Energy Plan</b>       |                         |  |
| <b>Measure</b>                           | <b>Incremental Cost</b> | <b>Source</b>  |
| Kitchen Sink Aerator                     | \$2.65/unit             | 2020 Nexant Market Survey Estimate   |
| Pipe Insulation                          | \$3.35/unit             | US Department of Energy's Rebuild America Reenergize Energy Efficiency Guidebook |
| Faucet Aerator                           | \$2.75/unit             | 2020 Nexant Market Survey Estimate   |
| Low Flow Shower Head                     | \$4/unit                | 2020 Nexant Market Survey Estimate   |
| <b>ThermWise® Weatherization Rebates</b> |                         |  |
| <b>SINGLE FAMILY</b>                     |                         |  |
| <b>Measure</b>                           | <b>Incremental Cost</b> | <b>Source</b>  |
| Windows – R-5                            | \$3.52/sq.ft.           | 2018 Nexant Market Survey Estimate   |
| Wall Insulation                          | \$0.64/sq.ft.           | RMP Home Energy Savings Program Filing 1   |
| Attic Insulation                         | Tier 1 - \$0.30/sq.ft.  | 2017 Nexant Energy Model Estimate  |
|  | Tier 2 - \$0.09/sq.ft.  |  |
| Floor Insulation                         | \$0.42/sq.ft.           | RMP Home Energy Savings Program Filing 1   |
| Duct Sealing & Duct Insulation           | \$14/ln.ft.             | 2019 Nexant Energy Model Estimate  |
| Air Sealing                              | \$0.25/sq.ft.           | 2018 Nexant Market Survey Estimate   |
| Pipe Insulation                          | \$2.61/unit             | 2017 Nexant Energy Model Estimate  |
| <b>MULTIFAMILY</b>                       |                         |  |
| <b>Measure</b>                           | <b>Incremental Cost</b> | <b>Source</b>  |
| Windows – R-5                            | \$3.52/sq.ft.           | 2018 Nexant Market Survey Estimate   |
| Wall Insulation                          | \$0.64/sq.ft.           | RMP Home Energy Savings Program Filing 1   |
| Attic Insulation                         | Tier 1 - \$0.34/sq.ft.  | 2018 Nexant Market Survey Estimate   |
|  | Tier 2 - \$0.11/sq.ft.  |  |
| Floor Insulation                         | \$0.42/sq.ft.           | RMP Home Energy Savings Program Filing 1   |
| Duct Sealing & Duct Insulation           | \$14/ln.ft              | 2019 Nexant Energy Model Estimate  |
| <b>Low Income Assistance Program</b>     |                         |  |
| <b>Measure</b>                           | <b>Incremental Cost</b> | <b>Source</b>  |
| Natural Gas Furnace - 95% AFUE           | \$182/unit              | 2018 Nexant Market Survey Estimate   |
| Natural Gas Furnace - 98% AFUE           | \$1,105/unit            | 2018 Nexant Market Survey Estimate   |

\*See Cadmus Phase II Evaluation

|  |                         |                                      |
|--|-------------------------|--------------------------------------|
| Duct Sealing & Insulation                  | \$657/system            | 2019 Nexant Energy Model Estimate    |
| Smart Thermostat                           | \$170/unit              | 2018 Nexant Market Survey Estimate   |
| <b>ThermWise® Energy Comparison Report</b> |                         |                                      |
| <b>Measure</b>                             | <b>Incremental Cost</b> | <b>Source</b>                        |
| Program Measures                           | \$2.17/project          | 2020 Dominion Energy Report estimate |

\*See Cadmus Phase II Evaluation